

RESEARCH WITH SUBSISTENCE FARMERS: LESSONS FROM THE EDGE***Abeje Berhanu¹, Donald Cameron¹, Jeff Coutts²,****¹University of Queensland, ²Coutts J & R, Pty Ltd***Abstract**

The paper highlights recent fieldwork experiences among subsistence farmers in north-central Ethiopia. It begins by describing two interrelated aspects of subsistence farmer-oriented research. These are planning the fieldwork and increasing farmer response. It is noted that activities relating to each of these two have been mainly influenced by two conventional assumptions: one is the view that farmers will not refuse to provide free information, and the other is the notion that the 'village' provides the appropriate setting for gathering information. Challenges to both assumptions came in the wake of sustained fieldwork-focused interaction with subsistence farmers.

Introduction

One of the characteristic features of research with subsistence farmers has been the use, among most researchers, of an inflexible research design mostly prepared in 'office' as part of desktop research. Research instruments are often prepared in office that is far removed from the context in which they are implemented. Very little opportunity exists for the local people to participate in identifying research topics, formulating research problems, and prioritising issues to be addressed by the research. Too often, farmers are regarded as willing discussion partners to provide the truth (Cornwall et al, 1994). Early attempts at involving farmers have been extractive, characterized usually by researchers mining data from people and then taking it away to process (Chambers, 1993).

A second major feature of subsistence farmer-oriented research has been its emphasis on the village community as a unit of analysis rather than the farming community. As a 67 year-old farmer from the fieldwork area, north Shewa, Ethiopia, stressed, there is a difference between studying people-in-villages and studying farmers-in-farms. In the case of the former, researchers tend to conduct most of their interviews and observations in and around hamlets that provide a partial view of how farmers work both individually and collectively to manage their farms, protect their land; how they combine farming and livestock together, practice agro-forestry, and so on. While in the case of the latter attention is given to actual and practical problems facing subsistence livelihoods (e.g. farms, livestock, land, trees, water, pasture), most of which are located away from the villages where farmers reside. The ingenuity and diversity of indigenous farming systems as foundations of subsistence agriculture can be fully appreciated if research is conducted in settings where such knowledge is produced, experimented, and implemented.

A rethinking of these two orientations can contribute to improvements in the process and methods of data collection, quality of data gathered, and overall understanding of rural communities. Therefore, the main purpose of this paper is to contribute to the process of initiating and forming such an understanding by drawing on recent lessons gained from fieldwork undertaken in 2001. The fieldwork was initiated as part of a PhD candidature. The topic of the thesis is *Rural Householder Perspectives on Agricultural Extension Programs in Ethiopia: Beyond Technology Packages*.

What follows is a brief background description of the status of agricultural extension in Ethiopia, followed by definition of contextualism as the conceptually appropriate methodological approach to subsistence farmer-oriented research, and description of planning strategies used in accessing rural households. Practicalities involved in undertaking research with subsistence farmers as well as measures taken to increase farmer response are also discussed. The two themes identified above will serve as reference points in organizing and presenting lessons from the fieldwork.

The state of agricultural extension in Ethiopia

Agricultural extension has existed in Ethiopia has more than half a century. However, during this time its contribution to subsistence farming has been limited. This can be seen at two levels: (1) by looking at evidence of poor performance and (2) by considering some persistent orientations characterizing extension program activities. Each of these two points is addressed below.

Some of the indicators that point to the poor performance of extension programs in Ethiopia include:

- Only 24 % of the farmers use fertilisers – and in this study nearly half of the sampled households had never used fertilisers.
- Aggregate fertiliser use has increased more slowly than in some comparable countries – for example, consumption reached 10 kg/ha only as recently as 1993, whereas this figure was reached in Kenya in 1969, and in Zimbabwe in 1961 (Reeves et al. 2002).
- Fewer than 10 % of farmers use seed of ‘improved’ crop varieties.
- Yields of major crops have stagnated, and in some cases declined, despite increased consumption of fertilisers.
- Periodic episodes of famine continue in the country – for example, food aid was required for 12% of the population in 2000, and in 2002-03, the figure was 22%.
- The size of food-needy population between 1985 and 1996 stood somewhere between 3.5 and 26 % (Clay et al. 1999).

The design and implementation of most extension programs has been characterized by policy, technical and physical constraints, with the consequence that programs are typically:

- technology and crop production-driven;
- uniform packages given to farmers from above as instructions;
- under-resourced, with one development agent (DA) required to cover as many as 1600 rural households;
- compromised further by the overlay of political and administrative functions onto the DAs' field role;
- unstable, as a result of faulty design and implementation;
- limited in potential benefits from package recommendations by the frequently restricted soil moisture availability due to the rain-fed nature of farming;
- limited in relevance through farmers' aversion to risk limiting their interest in fertiliser application on rugged and steep plots.

Research project justification

These two aspects in combination seem to depict an underdeveloped extension scene that is imperfectly linked to the needs of subsistence farmers. A study focused on exploration and documentation of farmer perspectives of agricultural extension programs was designed, with the intention to explore the contextual process factors underlying interactions between farmers and extension programs. This was considered an appropriate policy-oriented research intervention.

Research objectives

Two research objectives formed the basis of the study. These were:

1. To appraise the effectiveness of the current agricultural extension package program in improving the food situation of rural households as seen by rural householders.
2. To explore the socio-economic and agro-ecological factors likely to affect the effectiveness of the package program.

In line with the above two research objectives, contextualism has been used as the main theoretical framework for the study. As a tool of social inquiry, contextualism:

- is grounded in the belief that human conduct is explicable only if the context within which it is embedded are systematically explored (Little, 2000);
- is formulated in appreciation in terms of wholes – to see events in their interrelatedness or to see people's lives as a whole by uncovering what is meaningful to them in terms of social rules and practices (Flood, 1999);
- recognizes the intrinsic interrelationship among the socio-economic and agro-physical factors within which human action is embedded (Foley, 2000).

Perhaps the most important attribute of contextualism is that it is committed to understanding the different epistemological bases of knowledge, by combining positivism and post-positivism and also by employing qualitative and quantitative research methods.

A case study method focusing on the recent agricultural package program was selected, to see how rural householders perceive the program. With this in mind, fieldwork was positioned within a sub-region of north central Ethiopia, North Shewa, with a population of 1.8 million and a subsistence livelihood. Both qualitative (interviews and observation) and quantitative (survey questionnaire) methods have been employed in gathering data. Data was collected through fieldwork undertaken from February through to November 2001.

Designing subsistence farmer-oriented research

The design of subsistence farmer-oriented research took into account at least three major activities. These are (1) establishing a proper theoretical grounding of the study through review of related literature, (2) familiarization with the research setting before launching the actual fieldwork and (3) the fieldwork. The remainder of this paper focuses on aspects of the third activity, fieldwork.

The various activities of fieldwork were aimed at obtaining good quality data. Such data would depend on good informants – informants who are willing to talk and who know about the subject being studied (Bernard, 1995: 166). Good and resourceful informants can be cultivated, and this in turn depends on the approaches used by the researcher in dealing with the rural people. Good and respectful approaches can facilitate smooth interaction between researchers and subsistence farmers and ease flow of ideas and information between the two groups. Also, this requires an open and genuine engagement on the part of researchers with the people.

Some approaches to research with subsistence farmers

In a qualitatively oriented research with subsistence farmers, data is gathered through interaction with the local people. Here, the researcher has the responsibility to engage the people in a healthy relationship. Assumption of the farmer as provider of free information should not be entertained; instead, the researcher should engage farmers in conversations on important issues. The willingness of farmers to provide reliable information should not be taken for granted. Farmers are no longer passive subjects trying to please the interest and curiosity of researchers. They have become critical of past research that has not addressed their real needs.

The cooperation of farmers in research very much depends on approaches (i.e. ways of dealing with interaction) the researcher uses. Some of these can be seen as elements of the planning stage of the fieldwork; others can be discovered during fieldwork and then become integrated into the strategy of increasing farmer response. For convenience, these

approaches have been classified as (1) matters dealing with planning of interaction and (2) matters dealing with increasing farmer response. Each is discussed below as applied during a study focusing on farmer perspectives on agricultural extension programs in Ethiopia.

Matters dealing with the planning of research-oriented interaction

These are activities that the researcher ought to consider before seeking to acquire any information from farmers. Some of these include:

- *Designing interview themes that appeal to farmers.* This means asking questions about issues that affect people's lives. Practical and problem-oriented questions can yield more reliable responses than theoretical questions. For example, it was found less useful to ask questions about the availability of fertiliser credit where the use of fertiliser is perceived as risky because of rugged and steep plots or acute shortage of rainfall.
- *Paying attention to contextual factors in framing interview questions.* Wilson (1977; quoted by Marshall & Rossman, 1995) argues that human action is setting-dependent, with attributes of not only the physical setting (space, rewards, schedules, and pay) but also the internalised notions (of norms, roles, and values) as crucial contextual factors. In extension, contextual factors are embedded in social, economic and ecological dimensions.
- *Proper entry of the study community.* Bernard (1994: 143-44) specifies 5 rules to follow: selecting a site with the easiest access to data; going to the field with sufficient documentation (including letter of support); utilizing personal contacts to ease initial interaction; making a point to explain the project (including funding and institutional affiliation); and allowing time getting to know the physical and social layout of the study area. During the fieldwork in 2001 most of these issues were dealt with before or following a pilot visit to the study area.

Matters dealing with ways to increase farmer response

Dealing successfully with most of the issues discussed above can contribute to improved farmer response. However, there are additional matters (of politeness and respect) that need to be taken into account in efforts to access information from reliable data sources. In this regard, I found the following to be useful:

- *Making farmers comfortable with the topics about to be discussed* (including assuring and maintaining confidentiality of their views and ideas, relying on their willingness, etc.).
- *Listening to and showing interest in the story people tell.* It is important to recognize that farmers can be regarded as competent on issues they are familiar with – allowing them to talk in considerable detail can reveal valuable information.
- *Drawing experience from adjacent communities* (e.g. reflecting on positive experience gained from fellow farmers or villagers – how so-and-so cooperated in providing information without causing bias).
- *Asking questions-in-context.* The 67 year-old farmer, mentioned in the introduction, claims that most researchers have so far studied farmers around their villages while most questions address issues relating to crop

production, livestock assets, and so on. Researchers trying to understand subsistence livelihoods should see in their own eyes how farmers use and conserve land and allied resources, according to the farmer.

- *Willingness to do some small favours* (e.g. taking pictures and sending them in time or taking them in the next trip).

Some traps and tips to overcome them

It seems almost unavoidable that some problems will occur, no matter how carefully the fieldwork is planned and contingencies provided for. In this case, the following are the main issues worth mentioning:

- *Deliberate understatement of assets.* Some questions like size of land owned would be likely to raise eyebrows in a community where average landholdings are just under 1 ha and where frequent land redistribution occurs. To deal with this problem, I asked farmers to indicate plots by different land uses (i.e., land cultivated with different crops in the previous season, land used for grazing) rather than aggregate holdings often susceptible to underreporting. Also, I found it useful to ask sensitive questions in a conversational manner rather than in a formal interviewing style – sandwiching them between two or more less threatening conversations (for example, posing question regarding farm output after the farmer has described the adequacy of rainfall).
- *General suspicion toward urban people in general and local officials in particular.* Rural people generally tend to regard urban people as not trustworthy. At times this could be frustrating. To ameliorate this problem and break barriers to initial communication, proper introduction (including institutional affiliation, purpose of the research) was found to be helpful.
- *Confusion with local measures.* Rural people use local measures that often vary from farmer to farmer, or place to place. For example, plots are measured using a less precise local unit – *timad* (approximately 250 m² or a size of plot that can be ploughed during a day using a pair of oxen). To deal with this problem, counterchecking and obtaining the opinion of a group local people (e.g. focus-group participants) were used.
- *Dissatisfaction with past interventions or unfulfilled expectations:* Most of the farmers contacted for information indicated that they have been asked similar questions before. Some farmers asked me what they would get as a result of providing information. I always stressed that the goal of my research was to produce a dissertation that would reflect the perspectives of those who provided information with an intention to assist policy makers to understand the problem of program implementations.
- *Systematic misinformation or even lying:* Bernard (1994) warns that researchers should not be surprised if informants lie. The likelihood of collecting false information is always there; it is good to be aware of this and take extra care. One day I was interviewing a single mother outside her house whether the household has enough crops to get through to the next harvest. The answer was “No.” At the end of the interview, she invited me to her house only to discover sacks of wheat all over the floor.

- *Some events disappear from memory.* When asked to recall input costs of the preceding season, most farmers found difficulty. Women appeared to be quicker in remembering input expenses than men and this might be due partly to the fact that the former manage most of the cash sales obtained from the sale of crops. The problem is compounded further by prevalence of high illiteracy rate where financial accounting at the farm household level is almost non-existent.
- *Problems of logistics and inaccessibility.* In the study area, most rural villages are scattered and surrounded by deep valleys and gorges that make travel by vehicle difficult. In some cases, farmers selected for the survey questionnaire had to be brought to a central location to make them accessible for interviewing. But the problem with this kind of arrangement was that it was not fair to cause farmers any inconvenience.

Summary

Subsistence farmer-oriented research needs to be liberated from the deep-seated notion that farmers are always there to provide information at researchers' will. It is important to realize that farmers, frustrated by lack of tangible past research outcomes, might choose to withdraw their support to any proposed research. In order to undertake credible social research, researchers must improve their relations with farmers by giving due recognition to the human aspects (people's perspectives, knowledge, and values) of research.

Fontana & Frey (2000) argue that if researchers want people to share their knowledge so that they can produce good quality research work, it is absolutely essential that they give respect to the views, perspectives, and values of people. They state further that ... *to learn about people we must treat them as people, and they will work with us to help us create accounts of their lives. As long as many researchers continue to treat respondents as unimportant ... the answer we, as researchers, get will be commensurable with the questions we ask and the way we ask them* (Fontana & Frey, 2000: 668). Respect is a reciprocal thing - if we do not give what is due from us to the people in terms of treating them deservedly, it is hard to expect farmers to respect us, and give us valuable information as well as to respect our work. This is particularly true in rural communities where the principle of reciprocity is at the centre of human interaction.

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