INNOVATIONS IN EXTENSION AND ADVISORY SERVICES INTERNATIONAL CONFERENCE

PROCEEDINGS

BUILDING THE CAPACITIES OF STAKEHOLDERS IN A FARMER-TO-FARMER EXTENSION SYSTEM FOR ENHANCED LIVELIHOODS IN KAMULI DISTRICT, UGANDA

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ABSTRACT

Many countries in Eastern Africa have experienced a decrease in public funding for extension services, leading to a drop in the quality of services provided. Non-government organisations (NGOs) have increasingly stepped in to fill the void. In Kamuli district in Uganda, VEDCO (an indigenous NGO) with Makerere University and Iowa State University, have been working to enhance local capabilities of 1,200 small-scale farmers organised in groups to foster sustainable livelihood improvements. VEDCO has been training and supporting volunteer farmer trainers (VFTs) to act as learning catalysts for community members using a farmer-to-farmer extension approach since 2004. We used action research, focusing on 21 groups, 49 VFTs and seven VEDCO staff, to establish (i) group members' perceptions of the quality of services provided by VFTs, (ii) VFTs' perceptions of the quality of training provided by VEDCO, (iii) capacity needs of VFTs and VEDCO staff. Results indicated improved access to quality services, but also identified a need for better VEDCO staff skills in facilitating learning and for improved competencies of VFTs in handling some subject matter and in addressing negative attitudes that could limit the effectiveness of their work. We discuss how the gaps are being innovatively addressed to enhance effectiveness of the extension services during Phase II (2010–2014).

KEY WORDS: *INNOVATION, SUSTAINABLE LIVELIHOODS, RURAL DEVELOPMENT, VOLUNTEER TRAINER*

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INTRODUCTION AND OBJECTIVES

Agricultural extension plays a central role in improving the livelihoods of farmers and others involved in the agricultural sector by supporting and facilitating them to solve problems and to obtain the necessary information, skills and technologies. In Uganda, the mode of delivery of extension services delivery has progressed through a number of phases. Up to the 1980s, provision of agricultural extension services was the domain of the Ministry of Agriculture, with both fiscal and political support from the central government (Kidd, 2001; NAADS, 2009). However, during the 1990s, increasing costs of running the public extension service and its failure to increase production resulted in less fiscal and political support, leading to downsizing of its staff. The 1990s was also a recovery period in Uganda's history, partly characterised by increased involvement of non-governmental organisations (NGOs) in agricultural service delivery to complement efforts of government agencies that were perceived to have low coverage and impact on communities (Feder *et al*., 1999).

One of the key features of extension services offered by NGOs in Uganda is farmer-to-farmer extension (FFE). FFE is one of the innovative models of 'farmer-led extension' – a multidirectional communication process between and among extension staff and farmers – involving the sharing, sourcing and development of knowledge and skills to meet farmers' needs and develop innovative capacity among all actors (Scarborough *et al*., 1997). In this form of extension, farmers play key roles in technology development and delivery, training other farmers and sharing, sourcing and transferring knowledge and skills.

Although FFE has been in existence for a number of years, there has been a dearth of research or reviews on its efficacy, especially with respect to quality of services, performance, motivation and capacity gaps of community-based extension workers in agriculture in sub-Saharan Africa (Lodenstein and Mur, 2010). In this paper we share our experiences of working with FFE in a community-based livelihoods programme in Uganda. The programme focuses on food security, nutrition and health and access to markets. It is jointly implemented by a Ugandan NGO, Volunteer Efforts for Development Concerns (VEDCO), the Center for Sustainable Rural Livelihoods at Iowa State University, USA and Makerere University, Uganda.

The programme, which started in 2004 in Kamuli district, southeast Uganda, works with communities through existing and new farmers' groups (Mazur *et al*., 2006). The groups are encouraged to operate with an appropriate level of formal organisation (constitution, elected leadership, etc.) and officially register with local administration. In addition to providing support in technical areas, the programme enhances the capability of the groups in terms of internal management procedures and competencies. This approach to working with groups rather than individual households is based on the assumption that group strengthening will increase the likelihood of achieving more sustainable development. The key element in this group approach is training of volunteer farmer trainers (VFTs). The VFTs are of two types: (a) Rural development extensionists (RDEs) who, in turn, train members of the farmer groups in agricultural production, animal husbandry, and marketing; and (b) Community nutrition and health workers (CNHWs) who, in turn, train members of the broader community in aspects of diet, nutrition and health. The VFTs are selected from among group members, on the recommendation of their peers. We focused on (i) group members' perceptions of the quality of services provided by the VFTs, (ii) VFTs' perceptions of the quality of training provided by VEDCO staff, (iii) capacity needs of both VFTs and VEDCO staff.

MATERIALS, METHODS AND DATA SOURCES

The study involved interactions with a number of stakeholders involved in the programme who included VEDCO field staff, members of groups participating in the programme and VFTs (RDEs and CNHWs).

Selection of respondents

All seven VEDCO field staff working with the

TABLE 1: NUMBER OF GROUPS SAMPLED PER SUB-COUNTY

Sub-county	Number of farmers' groups	Number of groups sampled
Butansi	25	8
Namasagali	19	7
Bugulumbya	18	6
Total	**62**	**21**

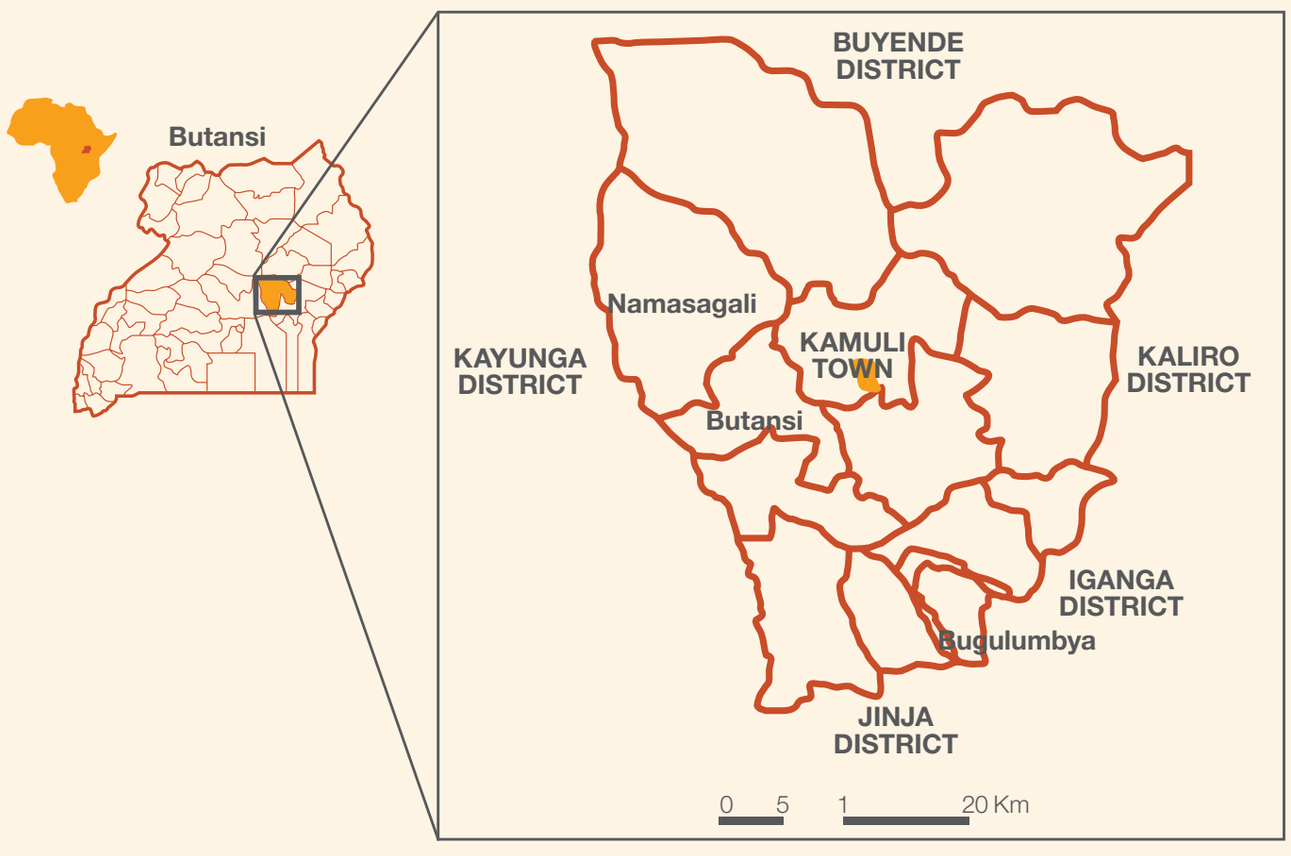

FIGURE 1: LOCATION OF PROGRAMME SUB-COUNTIES IN KAMULI DISTRICT, UGANDA

programme were involved in the study. By 2009, the programme was working with 62 farmers' groups in three sub-counties (Figure 1) represented by 800 households. Of the 62 groups, 21 were randomly selected by considering the total number of groups in each sub-county and then selecting a representative sample. Table 1 shows the total number of groups per sub-county and the subsequent sample size. For each selected group, meetings were scheduled with all members. Since the total group membership varied from 12 to 30, it was deemed unnecessary to leave out some members. Thus, all members of the selected groups were invited to the meetings.

In 2008, the programme was working with 92 VFTs (56 RDEs and 36 CNHWs). By 2009, 23 of them (17 RDEs and 6 CNHWs) had been discontinued due to illiteracy, non-performance or unacceptable conduct. The remaining 69 volunteers (39 RDEs and 30 CNHWs) were commissioned and given certificates after completion of the training programme. The plan was to interview all of them for this study, but some were not available during the data collection period. Consequently, 34 RDEs and 25 CNHWs were interviewed.

Data collection instruments

The data collection instruments used included three separate interview schedules for VEDCO staff, group members and VFTs, which were jointly developed by the authors. They were then shared

with VEDCO, Makerere University (School of Agricultural Sciences) and CSRL staff to gauge their appropriateness for the required data.

Data collection

Data collection activities were conducted from January to March 2009. Data from VEDCO staff were collected through interactions with them at the Kamuli field office. They also provided access to documents (monthly and quarterly monitoring and community meeting reports) that were reviewed. Group members were mobilised and meetings were subsequently held at their usual meeting places. The VFTs were interviewed individually, each was met at their respective place of work or at their home.

Data analysis

The data were transcribed in preparation for analysis. The process of analysis involved manual coding of data at various stages, out of which themes relating to the study objectives emerged. Initially, data from each group were openly coded using word-by-word, line-by-line and paragraph-by-paragraph coding. The second stage involved use of focused coding to generate common categories and themes relevant to the study objectives.

RESULTS AND DISCUSSION

Selection and training of VFTs

Selection of the VFTs (RDEs and CNHWs) was based on a number of individual qualities, notably hard work, approachability and residence in the area. The programme also considered educational qualifications – the candidate needed to be literate so that he/she could record the proceedings of the training by VEDCO staff, and write reports on his/her work, which were submitted on a monthly basis to the VEDCO office. On average, the education attainment of RDEs was 9 years of school (10 for males and 8 for females), the lowest level for males was 6 years and 5 years for females. For CNHWs, the average educational attainment was 8 years (9 for males and 7 for females), with the lowest being 8 years for males and 4 years for females (Sseguya, 2008). In one of their meetings, group members and VEDCO staff met to select suitable VFTs based on the criteria.

Trainees were exposed to the theory behind each subject, followed by 'hands on' practical training in application of the concepts. The training mostly took place in the community and a variety of approaches were used: lectures, group-based activities, demonstrations and experiential techniques. Exposure visits to other groups and communities were organised to enhance learning. The duration of the training was approximately three years for the complete curriculum. For RDEs, curriculum in the first year included: farmer-to-farmer extension, communication skills, group dynamics and leadership, low external input sustainable agriculture, soil and water conservation, farm planning and layout, and farm records and accounts. In the second year, key concepts relating to group dynamics, leadership, and gender and development, in addition to natural resource management, animal draught power, and nutrition and health were covered. In the third year, topics covered included: post-harvest management, livestock production, animal health and diseases and farm business education. The course content is flexible and can be adapted according to community needs and level of development.

The first year of training of CNHWs focused on group dynamics and leadership, food nutrients and their sources, nutrition, planning an adequate diet, malnutrition and community nutrition, and health extension. In the second year, they studied hygiene and sanitation in the home, assessing nutritional status, effects of infections/diseases and alcohol/drugs on nutrient digestion and effects of inadequate nutrient intake. The third year curriculum included nutrition and HIV/AIDS, nutrition-based management of HIV/AIDS-related complications, and nutrition for children and expectant mothers. The curriculum for RDEs and CNHWs is reviewed annually within the organisation and with community members.

Perception of the quality of training provided by VFTs

The RDEs and CNHWs use a variety of training methods, including lectures, demonstrations and

home visits. In all of the groups, it was noted that the training programme is flexible and is based on the demands of the farmers as these relate to the farming season. For instance, during the planting season, less training sessions may be held compared to the pre-planting season, when the demand for production knowledge and skills is higher and labour requirements in the fields are less intensive.

There were variations in the perception of the quality of VFTs' services, with 14 groups expressing satisfaction with the level of training and seven groups reporting low satisfaction with training quality. However, for the groups that reported satisfaction, there was concern about how quality was determined as each group had only one trainer (i.e., one RDE and one CNHW). It was also noted that their work needed complementary visits by programme staff since:

[VFTs] are not as knowledgeable as programme staff and since they are our peers, some members despise their work – they do not consider their training as being very important.

Five of the seven groups that complained about the low quality of VFTs' work cited irregular training and visitation sessions and in some cases, non-performance of the VFTs. Some of the revelations by group members focusing on poor quality were interesting. For instance, in one meeting which was indicative of sentiments in other meetings, it was noted that:

Our VFT just comes to us to get information for the monthly report that is submitted to VEDCO… When she comes to my home, she says 'I have come to see how you are doing', and she does not give advice on what I may not be doing well. She just says that … you are not doing well there… She then asks for the visitors' book to sign and then goes away… is that service? (Anon, participant in group meeting in Namasagali sub-county).

Another observation in ten groups was that VFTs were not full-time staff, and they needed to dedicate time to other responsibilities such as farming. To facilitate their activities, VFTs were provided with kits (a wheelbarrow, bicycle, wellington boots and a watering can for RDEs and CNHWs; CNHWs also received a measuring scale and measuring tape). VFTs were also provided with training materials such as posters, chalkboards and brochures. However the distribution was not comprehensive; some people were left out since they had not attained minimum standards set by the programme. As a result, members noted that the training quality and intensity was affected. VFTs who did not receive kits were demotivated since they felt unappreciated.

VFTs' perceptions of training and preparations provided by VEDCO staff

All 49 VFTs indicated that in most cases, lectures were the main method of training used, although a number of subjects required practical skills training. This meant that the course content was not adequately covered by VEDCO staff. VFTs were reluctant to undertake training community members/groups as they were unfamiliar with some of the course content and they did not know exactly what content they were supposed to cover. In addition, at the beginning of the training, some VFTs (specifically RDEs who were trained first) were poorly motivated, but they eventually became more interested. They were poorly motivated because they were forced to travel to training sites that were far from their homes and were subjected to negative approaches used by the first team of VEDCO trainers during the training. The RDEs lost interest because the training was conducted solely in English, too many topics were covered in a short time and there was occasional use of disrespectful, threatening and abusive language toward them. Trainees became less engaged and did not understand the course content. However, these problems were subsequently addressed when some of the team members were replaced by programme officials.

Most of the VFTs (35 of the 49) felt that they were doing an important job in contributing to the programme, yet they were not remunerated, in contrast to the programme staff. There was a general feeling that the VFTs were contributing time to the programme activities and in the process, forfeiting contributions to other

development activities. Although it was agreed that they were selected in the first place as volunteers and were provided with kits to boost their activities, it was noted that a small remuneration would motivate them further, and would act as an acknowledgement of their contribution to programme activities. Finally, some of the teaching aids were viewed by the VFTs as being bulky and not applicable to most training situations.

Capacity needs of VFTs and VEDCO staff

Data on specific capacity needs were collected to enhance the contributions of staff to rural development through extension. For VFTs, most of their concerns were about improving their job. Their capacity needs included: how to (i) effectively mobilise communities, (ii) effectively teach adults, (iii) deal with conflict management, (iv) plan, and (v) write reports. The evaluation team for the first phase (Isubikalu, 2009) established that VEDCO staff had relatively limited understanding and competence in adult learning techniques. All seven extension staff were unfamiliar with the concepts of adult training and learning. They were unable to differentiate between training and lecturing. Consequently, most of the training activities that they conducted were largely theory and instruction-based, which did not allow learners to reflect and internalise the content.

CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS

Our assessment established that the FFE approach is an effective and innovative way of improving the intensity and quality of extension services and capacity-building. By integrating VFTs from the community into the extension system, sustainability of interventions was assured, since these members remain in their respective communities and may continue their active extension-related role after programme interventions have ended. In general, most community members appreciated the increased intensity and quality of extension services provided through the FFE approach. Preparation of the VFTs for their role is a challenging task because the focus must be mainly on teaching skills backed up by theory. In this programme the staff have always had difficulty in effectively preparing the VFTs, because of the inadequate training methods used. There are also issues about how much time the VFTs can dedicate to extension work, their acceptability in their communities, and whether they need to receive any incentive for their work.

Despite its promise as an effective way of providing extension services, there are challenges of how to best prepare VFTs, what their actual role and time allocation should be in the extension system, and whether they should be compensated (and, if so, how). In this programme, key actions have been adopted to address some of the challenges. The VEDCO staff members have received training in adult learning facilitation principles and curriculum development. This has given them an opportunity to choose appropriate training methods that suit the content and training goals. In consultation with other organisations, appropriate teaching aids have been developed for each theme and key enterprise to be used by VFTs and VEDCO staff.

To further augment the VFT position in the extension system, community-based trainers (CBTs) have been recruited from among RDEs, CNHWs and other community members. CBTs are educated at a higher level (10 years of formal education). They are deployed in a neighbouring community of about 100 households and are given a token remuneration. However, they are expected to continue residing in their original community. They are expected to dedicate a few days (currently two) a week to extension activities, using the other days for their farm work and other domestic roles. The key challenges remaining will be to fully understand the factors that motivate some of the VFTs to drop out or to 'graduate' (i.e. move from the programme of one NGO to another or reduce their commitment as they become increasingly successful in production and marketing) and to establish a system for documenting successful cases and creative solutions to problems encountered.

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