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## Rural household capacity building: Innovative approaches to ensure adoption of record keeping by farm households

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### ABSTRACT

Externally designed strategies for improving the farm enterprise and reduce poverty among rural households may not produce desired results. For farm households to adopt economic approaches such as record keeping and management, innovative approaches that are participatory and which build on their indigenous knowledge are better. The value of farm level record keeping has been known for many decades now, yet many farmers in developing countries do not keep records. This paper presents the outcome of using innovative approaches that involved a rural community in a rural Ghanaian community. This research used consultation, village level meetings and participatory approaches to design user-friendly systems. This resulted in systems with which they can cope and which continued after the programme was over. There is the need to improve rural livelihoods by building on indigenous knowledge and using approaches that achieve greater productivity, efficiency, equity, profitability and sustainability. The findings show that rural households are knowledgeable and have the ability to decide on data collection formats that suit their needs.

**KEYWORDS:** High value markets; participatory approaches; Ghana; farmer decision-making; household economic management; indigenous knowledge

### Introduction

Ensuring that rural households adopt approaches that enhance their income situation depends on the methods used. For rural households to adopt economic approaches such as record keeping requires innovative approaches that are participatory and which build on their indigenous knowledge. This has implications for achieving poverty reduction, which depends largely on what poor rural communities are able to do for themselves. Gillespie (2004) asserted that poor people are prime actors in the development process, not targets of externally designed poverty reduction efforts. The cornerstone of community-based development initiatives is the active involvement of a defined community in at least some aspects of project design and implementation (Mansuri and Rao, 2004). Presenting structured programmes to rural people does not produce sustainable outcomes because communities are aware of their desired developmental goals and embrace initiatives that reflect such goals. With high rural poverty in Ghana, there is the need to improve rural livelihoods by building on indigenous knowledge and using approaches that achieve greater productivity, efficiency, equity, profitability and sustainability (PEEPS).

The value of farm level record keeping has been established for several decades now. However, many farmers do not keep records, especially in developing countries. A variety of efforts have been made in the past to ensure that rural households keep records in Ghana, yet many do not do so. Capacity building programmes that enable farmers in making informed decisions need to focus on the availability of timely and adequate data – both externally provided and internally generated within the farm household. As James (2002) described it, if capacity building is a process, then learning must be at the heart of that process. Data on farmers' own economic activities helps them determine the profitability of the various enterprises, and make decisions to concentrate on those that result in maximum benefit for the household. Though rural people can do very little about the global production environment and adverse weather conditions, they can be responsible for making economic decisions and in managing their financial resources effectively.

Farm level record-keeping is mostly found among large-scale farmers in Ghana but rare among small-scale farmers. Many of the initiatives used to reach farmers with this economic technique failed because of low levels of adoption, high cost of supervision, and farmers'

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inability to cope with the systems, which were developed with limited community involvement.

This paper presents the findings from an innovative initiative to ensure the adoption of record keeping approaches in a rural community in Ghana, which used participatory methods to build on their indigenous knowledge. It presents the process used to design user-friendly record keeping systems with the rural households, moving from what they knew to what was not well known, which ensured sustainability of the system. This initiative was designed as a supporting activity in a community in which the World Vision Ghana had been involved with the provision of portable water. It was realised that the effective management of economic resources was important for enhancing the livelihoods of the community members in a sustainable way. The paper shows that getting to rural communities with already prepared systems may not lead to sustainable adoption levels and documents reasons for success in approaches used. This project serves as an example for future developmental programmes and in promoting similar programmes in other locations.

## Community Capacity Building

Many countries still struggle with getting farmers to keep records, yet record keeping has the potential of empowering rural households. Though these skills are not new, acquiring them is an added ability, and enables them to make informed and economically responsive decisions that can lead to reduction of poverty. The next few years will see much more detailed reporting of agricultural chemical use (Frisvold, 2000) especially with the increasing concerns about climate change and meeting the millennium development goal of ensuring environmental sustainability. Besides, record keeping at the farm level has become complex because more and more information is being required by importers to satisfy retailers (Fulponi, 2007). The most difficult task of Vietnam's efforts to improve small farmer access to export markets through attainment of group EUREPGAP certification was getting farmers adopt record-keeping practices (Thao, *et al.*, 2010). In accessing the success and failure factors of several small farm initiatives, Fulponi (2007) identified record-keeping as a key element.

Efforts to extend the techniques to as many farmers as possible must be intensified at regional, district and local levels. Inability to keep records leads to the inability of small farmers to meet export requirements and to access local high value markets such as supermarkets and hotels. According to Crane (2010), a major management challenge is to collect, sort, and use accurate information for decision-making, while ignoring volumes of useless, time-consuming and erroneous information. He added that although information is power, record keeping is not particularly exciting and has few immediate tangible benefits.

Data collected at farm level can become a valuable tool for regulating input use, natural resource management, and ensuring product quality for meeting quality demands of high value markets (supermarkets and export markets). A system can be created in future to make data collected at the farm level available for wider use. First, it makes it possible to link farmers to input providers in new and dynamic ways. Second, it could increase the

confidence of high value markets in the produce from the community as information about the production practices becomes available. Third, it gives opportunities for more targeted support, which can further develop the capacity of the participating households. Eventually, the systems of data collection can be improved and made uniform for effective planning at the household, community, district and national levels. A good monitoring system of chemical use by small-scale farmers can be another benefit.

Vollmers and Tyson (2004) are concerned about studies in accounting focusing on large companies and institutions and revealing few insights about the working life of farmers, villagers and the rural populace. Frisvold (2000) stated that farmers are coming under greater competitive pressure to keep much better track of where and when they use material inputs, making record-keeping become even more critical.

## The Training Workshop

The interest and willingness of households was particularly important and this formed the basis for household selection. The households would be part of the design of the systems, ensure continuity of the programme, and help evaluate them for improvement and wider use. The activity was carried out in the Watro community in the Atebubu district of Ghana. World Vision Ghana and the Agricultural Extension Agents (AEAs) facilitated the village entry dynamics. They made the initial negotiations with the community to determine their interest and willingness and planned the community meetings based on dates suitable for everyone.

Participatory adult learning approaches were used at community meetings to first document their indigenous knowledge and traditional systems of keeping data before the 'new' systems were designed. The activities engaged both men and women. The participants used role plays to show the importance of information documentation and to enhance the learning process. The designed systems made minimal demands on literacy. The methodology seeks to understand the preferred approach from the perspective of the rural households themselves, resulting in increased commitment and ownership of the process.

Several more families joined the training and it was difficult to restrain them. They were willing to purchase their own cashbook. The record-keeping activity was carried out in families with each member participating either by providing the information or doing the recording. Watro was known as a progressive community in the district and plays prominent roles in their annual Yam festival celebration. At the time of the project, there were 144 households with an estimated 482 registered adults of eighteen years and older. Agriculture is the major economic activity in the community with most adults engaged in some form of farming. Non-farm activities were also present. Their major crops are yam, cassava and groundnuts, with vegetables and some tree crops found in the farming systems. Though the community is a remote community and difficult to access by road, it produces a lot of food for urban populations.

## Recording Systems

The records to be kept were discussed thoroughly and how the data should be kept. Cash books were used for

recording because they are cheap and available in nearby markets. The use of pocket notebooks was encouraged for keeping information on activities that occurred outside the house. It was discovered that rural households have the ability to translate their indigenous knowledge into practical systems that can be used on a sustainable basis.

A group assignment was given for participants to categorise the costs of farm enterprises and the results presented the following day. Presentations were made to the plenary and some groups presented their work in written form. Participants then agreed on the formats for recording information for crop enterprises. Various types of expenditure were to be recorded on one page and the various kinds of revenues, incomes and receipts were to be recorded on another page. Care was to be taken in intercropping situations in order to allocate the costs to the various crops. Information about assets and farm implements were to be recorded on a separate sheet because they are likely to be owned by the farmer for more than one year. Flexibility was encouraged so they could use systems that they find convenient and understandable. Some participants demonstrated the calculation of profit and loss to the whole group. Female participants were very active and freely expressed their views.

### **Moving From the Known to the Less Known**

Mansuri and Rao (2004) had shown that the key objective of participation is the incorporation of local knowledge into the project's decision-making processes. Initial discussions with the households showed that most of them kept mental records. Some of the participants indicated that they have used symbols, wrote on calendars, transferred knowledge by mouth from one generation to another, recorded in notebooks and consulted educated family members and friends to assist. Further discussions and role plays helped reveal some limitations of keeping records mentally, which include forgetfulness and inability to capture small costs and revenues. They recognised the need for a better way that could be more comprehensive and serve as a reference document.

The research team then introduced the concept and importance of record-keeping. They were encouraged to see their farming as a business by planning, properly organising their activities, keeping records and adopting demand-driven production practices. Mixed views were expressed on what constitutes a business. Discussions among participants led to the conclusion that any activity undertaken to make a profit is a business and that includes farming. Everyone agreed that it is good to know that one is making a profit and the ability to measure the level of the profit was necessary.

The formats for recording information on assets, costs, and revenues were agreed upon after several deliberations. Care is to be taken in intercropping situations. Some participants indicated that they were previously not recording items such as feeding costs for labour employed but now realise it was a large expense being overlooked. Traditionally the farmers used output as a measure of profit and treated all revenue as profit without subtracting expenditures. They claimed that the initiative led to increased transparency and therefore united families.

### **The use of Role Play**

Three groups were formed and each group given a role play scenario to discuss and share lessons learned with the rest of the participants. The role plays were adapted from an FAO manual (FAO, 1994). The scenarios were later converted into short skits, which were performed at various stages of the meetings. These plays were highly enjoyed and extensively discussed, resulting in increasing understanding of critical issues regarding record-keeping and its benefits.

The scenario for the first group was about a woman who was actively engaged in trading, but did not record anything. When it was time for her to pay her child's school fees, she realised that although she traded, she did not have enough money to pay the education expenses. She became confused and did not know what to do. Lessons learnt from this scenario included the need to keep records of trading activities to know whether one was making profit or losses. Another lesson was the need to keep records of household expenditure as it will help in planning. Not keeping records left her wondering about what might have happened to her money. She could not plan and was therefore not ready for very important expenditure items. The woman was said to have family problems due to poor record keeping. In effect, they understood that record keeping is vital for household level planning.

The second group's scenario was the sale of a piece of furniture on credit without any records. A carpenter sold the furniture to a woman on credit for fifteen thousand cedis (Ghana's currency). Later when the woman came to pay, she brought thirteen thousand cedis, arguing that they had agreed on that amount. This resulted in a disagreement and a dispute between them. Lessons learned from this scenario included the need to keep records, to serve as evidence for business transactions and the need for traders to put price tags on their goods.

The third group's scenario involved a group that had decided to undertake baking activities together with the aim of generating income. Within this group, there were the bakers, those who sold the raw ingredients for baking and those who bought the raw materials. The group had a treasurer who did not keep records. Any money which was collected or brought was not recorded because the group had total trust in the treasurer. When the time came to render accounts, the group was surprised to find less money than they had expected and this generated a dispute within the group. Lessons learnt from this role play included the fact that no one can be totally trusted when it comes to money and it is important to record every transaction within any group. They showed the need to put order in any group so that people will act according to rules not by their own will.

They balloted for the position in performing the skits. The lessons learnt after each skit was the result of a general discussion and the importance of record keeping that was emphasised in the skit. Credit was raised as an issue and its importance was explained as well as situations that could require late payments, deferred payments, and borrowing and how such records should be kept. Family members were encouraged to support each other in keeping the records. Generally, it was concluded that records are needed in all economic activities. They help in planning and serve as evidence that can avoid disputes.



## Strengths of the Approach to Record Keeping

This approach and the aspect of flexibility may not make the records identical for achieving aggregate data for use in regional and national level policy making. However, the benefit to the farmer who keeps the records using a system with which they can cope outweighs the potential benefits of wider use, at least in the short term.

The initiative has the potential for achieving collective empowerment, connecting individuals within a household with each person having a clear conception of their roles (Kirk and Shutte, 2004). Both parents and children are actively engaged in the recording process. According to Miller (2003), young people are competent citizens and have the capacity to engage in local issues. The use of participatory methods increases the engagement of young people and their active participation in the programme confirms this.

Field results show that record-keeping is necessary for planning both at individual and family levels, for trust building, for improvement in knowledge, and for creation of harmony in society as it can reduce disputes. Frisvold, (2000) noted that a key to using inputs more efficiently is information. He argued that improved information systems and the use of precision technologies will allow farmers be able to monitor their field conditions closely and use inputs more efficiently. Records help the rural farmers in estimating profit and loss of their economic activities and in recalling past ones. In handing over farming activities from one generation to another, records become particularly important. As such, it helps in generational capacity building.

Records are important for strengthening rural community based organisations and can result in effective lobbying and advocacy. Without farm level records, how could governments understand the nature of the small-scale farmer and the challenges faced by this group of people. Personal accounts provide a window into the working life of families who have to combine a variety of activities to ensure a descent livelihood (Vollmers and Tyson, 2004). It is worthwhile exploring options of extending record-keeping initiatives to many rural communities in Ghana and other developing countries.

## Conclusions

The importance of farm records cannot be overemphasised. The benefits for the farmer, the researcher, NGOs, governments and donor agencies are many. But why are so many small-scale farmers not keeping records though the concept has been introduced to them? Using an approach that involves rural communities and builds on their indigenous knowledge can result in the adoption of economic concepts. Strategies that do not involve community members cannot ensure ownership of the process and its sustainability.

The initiative discussed in this paper was used to improve the welfare of the rural people and enable them to become better managers of their financial and natural resources. Policies intended to benefit the agricultural sector may not be relevant to the sector if they are not based on appropriate information from the field. The outcomes of the workshops used in this research show

that rural households have the ability to decide on data collection formats that suit their needs and with which they can cope. Rural households are very knowledgeable and need to be part of development programmes designed for them. Gillespie (2004) puts it as “poor communities have greater capacity than generally recognized”. The ability of rural households to keep and analyse simple financial information on their economic activities can lead to improved livelihoods.

## About the author

**Dr. Ivy Drafor** (ivydrafor@yahoo.com) has a B.Sc and M.Sc. from the University of Guelph, and a PhD from University of Ghana in collaboration with Cornell University. She has been on full-time university faculty since 1995 and has carried out research on food security, gender and farming systems, water and sanitation for persons with disabilities, and community development initiatives. She is concerned about issues in rural development and the progress of the rural populations. She has led research initiatives, working with inter-disciplinary and inter-institutional teams as a consultant for national and multinational organizations. Dr. Drafor is a 2008-2010 African Women in Agricultural Research and Development (AWARD) Fellow, which is under the Consultative Group for International Agricultural Research (CGIAR)'s Gender Diversity Programme. She has published a number of articles and made presentations at national and international conferences. She spent about six months at the University of Pretoria as a Post-doctoral fellow.

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