

A PLANNING PROCESS FOR IMPROVING DECENTRALISED AGRICULTURAL EXTENSION PROVISION BASED ON A GHANAIAIAN CASE STUDY

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ABSTRACT

To improve agricultural productivity and the livelihood security of farm households, the Ministry of Food and Agriculture in Ghana decentralized its extension service in 1997. Although this was a critical change in agricultural policy, the extension service has struggled to plan and implement this policy at the local level. Further improvement in the situation is hampered because there has been little empirical work on the extension program planning processes. To contribute in providing this understanding, a single-case study of a successful decentralized district level agricultural extension organization in Ghana was used to identify the processes and key factors that contribute to effective extension program planning. To ensure effective planning, the case study emphasized the importance of involving all levels of extension staff in the planning process, using both formal and informal meetings with stakeholders in farmer needs assessment, a role determination process that takes into consideration the government's, farmers', and other stakeholders' needs. The findings provide lessons for decentralized extension organizations in developing countries that want to improve their program planning processes.

Keywords: Agricultural Extension; Program Planning; Decentralization; Participation

INTRODUCTION

Some case studies by the World Bank (Rivera & Alex, 2004) of extension reforms of a number of countries, showed that although many of the countries, including Ghana, have adopted a decentralized extension approach with an expanded livelihood security focus, none of the countries studied could show how this can be planned and implemented. As commented by some authors (Sulaiman & Hall, 2005), adopting an extension policy is not a sufficient condition to guide change; strategies for planning and implementation, supported by sound organizational principles are equally important for the change process. Undoubtedly, a major information gap yet to be filled adequately in the extension literature is how a decentralized extension organization in developing countries can develop extension plans that take into consideration the current realities of extension in a developing country for effective and efficient implementation of extension programs.

In general, extension program planning is seen as a process and a social practice (Cristóvão, Koehnen, & Portela,

1997). As a process, Cristóvão, Koehnen, and Portela (1997) described it as a dynamic effort of identifying farmers' problems and the taking of decisions and actions to address them. From a social practice view, extension program planning is seen as a negotiation process and a working platform involving different stakeholders, including researchers, subject-matter specialists, opinion leaders, representatives of farmers' organizations and groups, and other stakeholders (Cristóvão, Koehnen, & Portela, 1997). Program planning is considered an essential process of an extension organization's operation. This is because it provides direction for the organization, contributes to learning and development among planning participants, allows for selection of relevant extension activities and management of programs, and ultimately facilitates the social and economic progress of rural communities and families (Bennett & Kay, 1995; Cristóvão, Koehnen, & Portela, 1997; Oakley & Garforth, 1985).

Theoretically, extension program planning involves specific activities and steps. Depending on whether it is for a new program or a review of an existing one, these may include: identification of the basis for programming – philosophies, policies, and procedures; situation analysis of community and clientele; identification of desired outcomes; identification of resources and support; design of an instructional plan; design of program of action – calendar of events and activities; and evaluation – accountability of resources (Bennett & Kay, 1995; Cristóvão, Koehnen, & Portela, 1997; Oakley & Garforth, 1985). Bennett and Kay (1995) put the program planning process into three major steps: selecting needs, delivery methods, and targets for program accomplishments. The different steps of the program planning are interrelated and the process does not always proceed neatly from one step to another; therefore, objectives set during the needs selection stage may later be altered as new insights and fuller understanding of the situation are gained in the process (Oakley & Garforth, 1985).

Although Ghana has adopted the decentralization policy to improve extension delivery, some reports (Ministry of Food and Agriculture, 2002a; Ministry of Food and Agriculture, 2003) have suggested that the Ghanaian extension service is having difficulties planning responsive local level programs. Interestingly, the prescriptive literature (Bennett & Kay, 1995; Boleman, Cummings, & Pope, 2005; Boone, Safrit, & Jones, 2002; Cristóvão, Koehnen, & Portela, 1997; Diem, 2003; Oakley & Garforth, 1985) describes the general process which extension organizations can use to develop an extension program, but little, if any, empirical work has been conducted on program planning for extension organizations in a decentralized extension context in developing countries, including Ghana. However, anecdotal evidence suggests that some district extension organizations in Ghana are performing better than others in the decentralized extension environment. As had been argued by Okorley, Gray, and Reid (2009), if a successful district extension organization could be identified and studied, it would be possible to understand the processes and factors that are important for planning a successful district level extension program in such an environment. Interestingly, Okorley, Gray, and Reid (2009) identified planning of the extension program as a key factor of success for decentralized public agricultural extension.

PURPOSE

Given the background provided, the purpose in this research is to use a case study to provide an understanding of the

critical factors that can contribute to effective planning of extension programs that meet the needs of farm households. The intention is to use the information to develop a theoretical model that could help other decentralized extension organizations seeking to improve their planning process at the local level.

METHODS

This article is a product of a major scholarly work (Okorley, 2007) conducted over a period of three years (2004 – 2007), and a follow-up to an earlier article that broadly described key factors of success for decentralized public agricultural extension in Ghana (Okorley, Gray, & Reid, 2009). A single-case study method was adopted. This was considered appropriate for an in-depth study of a complex organizational process, such as planning. To select a case for this study, the determining criteria were seen as: successful in terms of increased stakeholder participation and enhanced contribution to the farmer's household livelihood security; having staff that could articulate why the organization was successful; having the majority of the staff - particularly senior staff - who had worked for the organization from the inception of decentralization; and having good archival records of its extension activities. The Ministry of Food and Agriculture staff was asked to use these criteria to rank the four most successful district extension organizations within the central region that was comprised of 13 district extension organizations. Based on a preliminary investigation on their suitability for the study, one case was selected because it was the most successful and accessible. Additionally, the staff members of this case organization were receptive, and as an added advantage for rapport building, two of them were known to the researcher.

The primary data was collected between May 2004 and January 2005. A key issue with a study such as this is how to obtain a "true" perspective of what is happening, given that 40+ people work in the case organization and the organization services over 100,000 farmers in collaboration with 20+ stakeholder organizations and 40 farmer-based organizations. Miles and Huberman (1994) indicated that an important source of information in qualitative research is a good cross-section of key informants. Participants for the study were selected from within the case organization and outside using a stratified sampling technique. The aim in the stratification process was to obtain information from both key informants at different levels of the organization and different stakeholders that are involved in the planning process. In separate consultations with the stakeholders, a total of 32 key informants made up of 8 staff from the case organization, 9 farmer representatives, and 15 representatives of other stakeholder organizations were selected and interviewed for the study. An interview took between 1-2 hours. After each interview, the results were summarized and sent back to the key informants for verification and correction.

The qualitative data analysis process involved coding data, searching for themes and relationships between them, cross-checking of themes, and summarizing and integrating the themes into common coherent explanatory models to explain the planning process of the case organization. The computer program, NVivo, was used to undertake the qualitative data analysis. To ensure a credible case study, several strategies, including data triangulation, establishment of a chain of evidence, and explanation-building analytic strategy were used to reduce threats to reliability and validity in the study.

FINDINGS

The Context of the Case

Extension services are directly influenced by the government's rural and agricultural development policies under which they operate (Peterson, 1997). The organization under study is a decentralized agricultural extension unit representing the Ministry of Food and Agricultural (MoFA) at the district level in Ghana. The national extension system was decentralized in 1997. Thus, the organization functions under the umbrella of MoFA in Ghana. Its mission is to promote sustainable agriculture and agribusiness through research and technology development, effective extension, and other support services to farmers, fishermen, processors, and traders for improved human livelihoods (Ministry of Food and Agriculture, 2002b).

Whereas MoFA, at the national and regional levels, focuses on policy planning, co-ordination, technical support, and monitoring and evaluation of general agricultural development in Ghana, the District Agricultural Development Unit (DADU), which operates at the district level, is responsible for administration and provision of extension services to its district. As such, the DADU represents the MoFA in the District Assembly. As part of the Assembly, the DADU performs leadership roles in the planning and implementation of the district's agricultural development program. It plans and organizes local development activities with farmer groups (FGs) in the sub-districts, under supervision of the MoFA at the regional level, and general oversight by the national directorate. The FGs are made up of farmers with a common interest, who undertake learning projects with the objective of addressing a particular need, problem, and/or learning about particular techniques or technology.

The organization under study is in the Assin District of Ghana. It has limited number of staff, and funding from the government is inadequate and uncertain. Yet, it has the mandate to increase food security, reduce poverty, and improve the livelihoods of farmers in the district. Thus, the organization must service a large number of farmers over a large geographical area where the road network is poor. The agroecological environment is diverse; therefore, there is a diversity of farming systems. Farmers in the district are generally poor, illiterate, and have small plots (≤ 4.0 ha). They practice mainly subsistence agriculture, that is crop-based and mixed-cropping systems. The district has farmer organizations, NGOs, some support organizations (e.g. banks, agro-industries, and input shops) and several decentralized government departments (e.g. health, forestry, cooperatives, and education) under the District Assembly.

The Planning Process Used by the Case Organization

The discussion of the results is done with the understanding that the case organization was one of the most successful district level extension organizations in the central region of Ghana according to the regional Ministry of Food and Agriculture. This organization was working in collaboration with 20+ stakeholders and 40 farmer-based organizations, and perceived by stakeholders, including farmers, to contribute better to farmer household livelihood security in the district. As highlighted by Okorley, Gray and Reid (2009), the development of needs-based

extension program is one of the key factors of success to decentralize agricultural extensions in Ghana. The focus is to provide an in-depth understanding of the planning process used by a decentralized public agricultural extension organization in Ghana. The case organization stresses the importance of developing a needs-based extension program. That is, it goes to great lengths to ensure that the needs of the farmers with whom it works, form the basis for the development of their extension program to ensure that the resulting program is relevant to their needs.

The planning process used by the case organization (called DADU) is similar to others prescribed in the literature (Boleman, Cummings, & Pope, 2005; Cristóvão, Koehnen, & Portela, 1997; Diem, 2003; Oakley & Garforth, 1985), though some important differences were identified. The program planning process used by DADU can be usefully separated into three distinct, yet related, phases: (1) a situation analysis of the district agricultural extension and rural development (AgE&RD) system phase; (2) a needs prioritization and role identification phase; and (3) an action plan development phase (Figure 1). The process starts in August and ends in December each year with the production of an annual district plan for agricultural development.

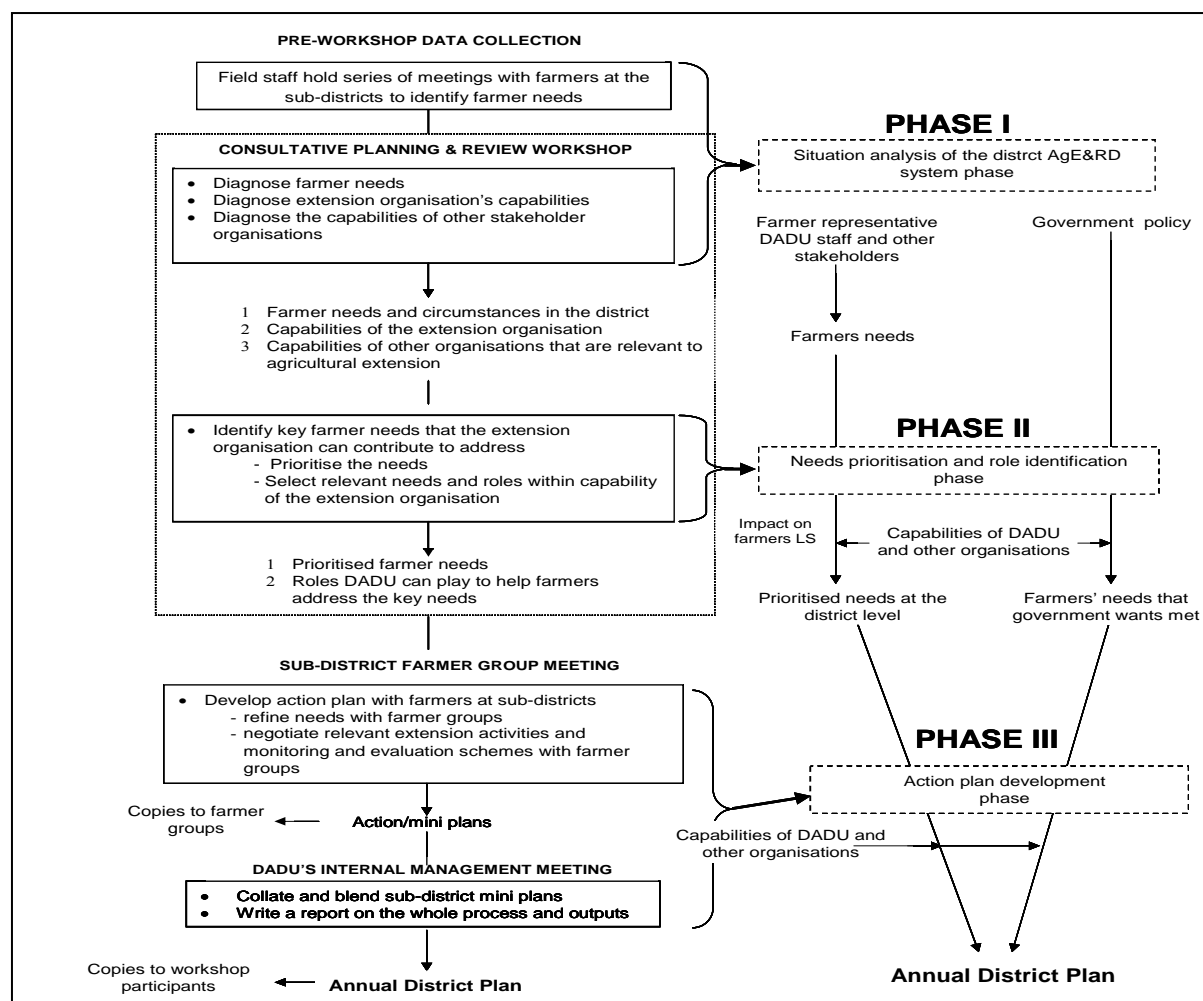


Figure 1: The program planning process used by DADU

Situation Analysis of District Agricultural Extension and Rural Development System Phase

The first step in DADU's planning and reviewing process is the situation analysis of the district agricultural extension and rural development (AgE&RD) system phase. Here, DADU diagnoses the needs of farmers and the capabilities of other key players in the AgE&RD system. The concept of the situation analysis of the District AgE&RD System phase is used here because that describes the phase clearly not only in terms of analyzing and selection of farmer needs, but a thorough analysis of both the farmer needs and the organizational capabilities that are available or need to be mobilized to assist farmers to meet these needs. Furthermore, the concept is more appropriate because it describes what is occurring during this process. The goal of this situation analysis during the district AgE&RD system phase is for DADU to accurately identify farmer needs within the district. Second, it is to assist the organization to accurately assess their current extension capability. Finally, it is to accurately assess the capabilities of other organizations within the district AgE&RD system that is relevant for improving the contribution agriculture makes to farm household livelihoods in the district. The situation analysis of the district AgE&RD system phase of the case organization's planning process is similar to what is in the literature (Bennett & Kay, 1995; Cristóvão, Koehnen, & Portela, 1997; Oakley & Garforth, 1985).

The first step in the situation analysis process begins in August each year, a month prior to the consultative planning and review workshop when the field staff is requested by DADU to hold a series of meetings with local farmer groups at the sub-district level to gather information on farmer needs. The field staff holds the general community fora with farmers, and also meets with their regular farmer-groups to identify and discuss their needs relating to agriculture. The outputs of the discussion form part of the discussion at the consultative planning and review workshop, which is organized in September each year. This is an important departure from what used to happen prior to 1997 when field staff had little input into the identification of farmer needs for the development of the district extension program. The reason for this action is well expressed in a statement of a key informant that:

...each area has its peculiar problems and so we must give everybody (field staff) the right to be part of this discussion because each AEA (field staff) is coming from a different operational area
(Former District Director, personal communication, July 15, 2004 para. 16).

DADU initiates the consultative planning and review workshop in September each year after the pre-workshop data collection exercise (See Figure 1). This is a 2-3 day workshop where representatives from local and regional organizations and farmer groups are invited to attend. Organizational representatives are identified through DADU's database and include individuals from both public and private sector organizations. Figure 2 shows the stakeholder organizations with which DADU participates in order to improve the contribution agriculture makes to the livelihood security of farm households. The literature (Rivera & Alex, 2004; Rivera & Qamar, 2003; World Bank, 2000) suggested in developing a needs-based extension program that the needs will have to be identified jointly by extension staff and stakeholders (farmers and other organizations).

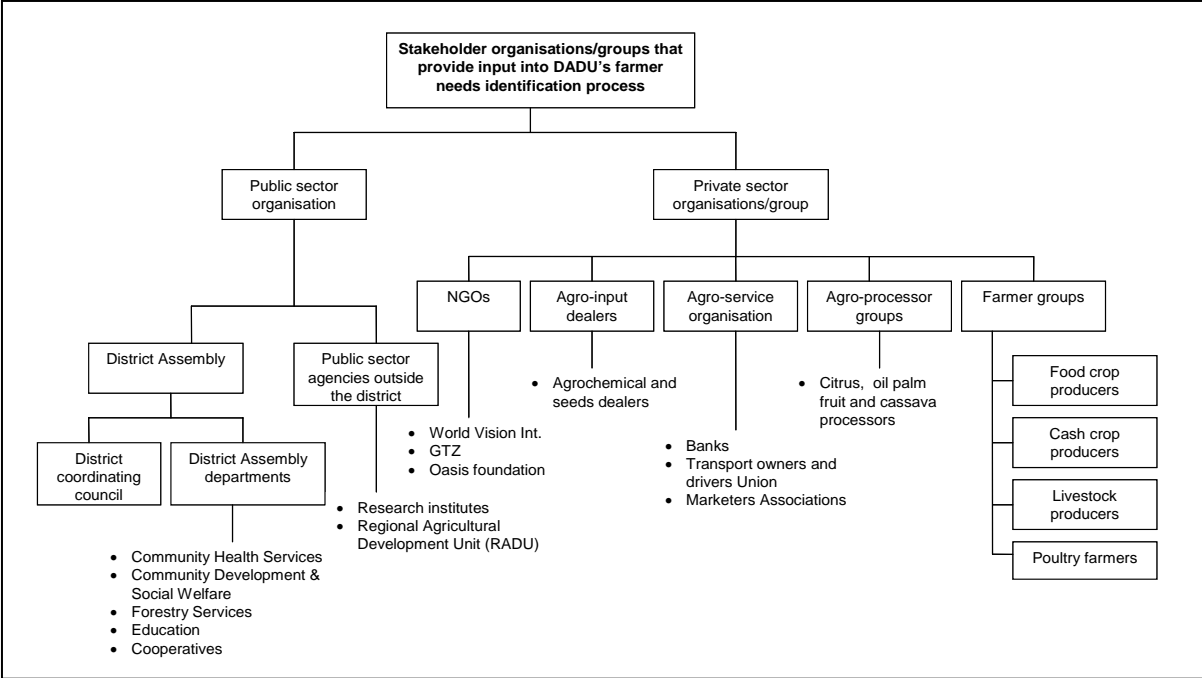


Figure 2: The major stakeholders DADU consults to identify farmer needs

To help ensure the involvement of multiple stakeholders in its needs identification process, the organization under study compiles a database of the organizations that are either ran by farmers or work with farmers in the district. It requires its field staff to maintain and update the database, which is referred to by the organization as “listing”. The database contains the name of each organization, what it does, and key representatives.

Central to DADU’s farmer needs identification process is the commitment to involve farmers. To ensure it has a broad cross-section of the views of farmers from the district, DADU has developed a farmer classification schema based on a farm enterprise type, geo-political area, and gender. For example, farmers are first classified by their main enterprise type (e.g. livestock farmer, maize farmer, cassava farmer, etc.). Farmers are then classified by geo-political area, and gender. DADU believes that farmer needs will vary in response to farm enterprise type, geo-political location, and gender. Thus, apart from ensuring that the farmers from different enterprises and geo-political locations in the district are represented, it also ensures that women have a voice in the planning process. To this end, DADU has supported the formation of all-women producer groups. These groups are mainly those involved in food crop production and agroprocessing determined by gender roles in the division of labor and production systems in the study area. Representatives from these groups are invited to attend the annual consultative planning workshop.

DADU uses the criteria farm enterprise type and geo-political location to decide which farmer groups to invite to attend the planning and review workshop to ensure it will obtain a good cross-section of farmers' views. However, DADU leaves the selection of the farmer representatives who attend the workshop up to the respective groups. The groups select the person they think is most suitable to represent their views at the workshop. From the experiences

of the organization, workshop attendance is higher when the farmers are allowed to appoint their own representatives. DADU does not actively encourage poor farmers or women to attend the workshop as a group. Rather, the staff believes that because a high proportion (32%) of the people in the district are poor, and have all-women farmer groups who send their representatives, they do not need to actively recruit these categories of farmers. It is assumed that most farmer groups are comprised of a high proportion of farmers who would be classified as poor.

To encourage farmer attendance at the workshop, it has been separated into two 2-3 day workshops. Experience has shown that farmers do not like to be away from their farms for more than 3 days and, as a result, they will not attend workshops that extend beyond this time frame. Furthermore, to ensure that stakeholder representatives who attend the planning and reviewing workshops participate in discussion, DADU adopts three key measures: 1) it uses experienced workshop facilitators; 2) it divides participants into small, mixed sub-groups to facilitate discussion and ensure that there is the opportunity for individual contributions; and 3) it uses the local language during the workshop to make it possible for every participant to express his/her opinions without difficulty.

At the start of the workshop, the chief facilitator welcomes the participants, explains the objectives of the meeting, and divides participants into sub-groups for group discussions. The facilitator, then, discusses the workshop methodology with the participants. The workshop follows what DADU calls a “group learning and sharing methodology”. In this methodology, the facilitator aims to ensure that the participants are engaged in collaborative activities in smaller groups in a relaxed and positive atmosphere. The facilitator encourages the group to show mutual respect for one another, share their experiences with one another, and endeavors to learn from this interaction. The facilitator stresses that every participant has some valuable experience to share and that the information they provide will be important to the development of a comprehensive and realistic needs-based plan.

Once the sub-groups are formed, they choose their own group leaders who serve as reporters. These individuals guide the groups through a brainstorming session to elicit participants’ views and opinions about farmer needs and circumstances in the district. The group members are asked to use the ‘problem tree’ approach as a tool to diagnose the farmer needs and circumstances. In this approach, the group leader asks the participants to identify the major farmer needs in the district, the causes of such needs, and the effects these needs have on farm households in the district. For example, an open-ended question usually asked to all key informants is “In your opinion, what are some of the major needs/issues facing farm families in the district?” Furthermore, for participants from organizations who are known to work with farm families in the district, a second question is asked is “Are there specific issues or needs you see confronting the farm families in the district?” Once these questions are addressed, and the session is done, all the participants get together in a general plenary session to deliberate on the outputs from the sub-group discussions. The aim of this session is to reach some agreement and understanding about the needs and circumstances of farmers in the district.

At the start of the plenary session, representatives from each sub-group presents a group report for a discussion. After this, a representative of DADU summarizes the main results from their internal review of the previous year's extension activities. Participants are also provided with a summary of information about the policy mandate. Information is then provided on farmer needs that were identified through the farmer workshops conducted by the field staff the previous month, and from various fora throughout the previous twelve months. These fora are organized in conjunction with organizations and often focus on specific projects. With inputs from participants, DADU evaluates its previous year's plan. How the government agricultural extension policy will define what they can or cannot do (policy constraints) and how the resources it has available for the next twelve months will define what it can do (DADU's capabilities). DADU also discusses the stakeholder organizations it is currently collaborating with and in what way. The purposes of the evaluation of DADU's capability and previous year plans are to: 1) ensure that farmer needs that were not met in the previous year's plan can be captured in the current year; 2) define the limits of their operation within government policy; and 3) let participating farmers and other stakeholders in the District AgE&RD System understand DADU's limitations, and to identify opportunities for collaboration with other organizations for extension provision in the district.

After an evaluation of DADU's capability and previous year's plan, the next step in the plenary session of the workshop is to give the representatives of the participating organizations the opportunity to describe their roles in the district and outline their activities for the coming year. From this information, DADU and other participants build up an understanding about the role stakeholder organizations in the AgE&RD system are playing, or could potentially play, in the district. This information, together with that mentioned above, is summarized into three key areas: 1) farmer needs and circumstances; 2) DADU's current capability for extension; and 3) roles and activities of major organizations in the district AgE&RD system.

Prioritization and Role Identification Phase

The concept prioritization and role identification is not clearly distinguished in the earlier extension planning models (Oakley & Garforth, 1985; Bennett & Kay, 1995; Cristóvão, Koehnen, & Portela, 1997; Diem, 2003; Boleman, Cummings, & Pope, 2005). The concept used is more appropriate because it describes what is occurring during this process – it describes clearly how needs that are identified in the situation analysis of the district AgE&RD system phase are prioritized and how DADU determines which roles to play to meet each prioritized need.

Once the farmer needs and the capabilities of the extension organization and other stakeholder organizations have been identified, DADU - with input from farmers and stakeholder representatives- ranks the farmer needs in order of priority for the district. Once the needs are prioritized, the case organization assesses whether it has the capabilities and the government mandates to address these needs and determines what role, if any, it will play in meeting them. It is interesting that these steps are not made explicit in any of the planning models reviewed (Oakley & Garforth, 1985; Bennett & Kay, 1995; Cristóvão, Koehnen, & Portela, 1997; Diem, 2003; Boleman, Cummings, & Pope, 2005).

The criterion DADU used to rank these needs is the impact a need has on the livelihood security of farmers in the district. As such, district-wide problems or needs will have a greater priority than problems or needs that occur at a more localized sub-district level. The participants in the consultative planning workshop discussed, summarized, and ranked through consensus building to produce a list of prioritized farmer needs. However, the needs that the government has specified in the policy (e.g. HIV/AIDS awareness) are ranked first before those identified through the needs of a diagnosis process. This supports Garforth's (2004) comment that where a government funds most of an extension organization's activities, it has a strong voice in what activities the extension organizations undertake.

Given its broader livelihood security focus to extension delivery, DADU has found that to meet the needs of farmers, it must take on roles other than its traditional extension provider role. Although other authors (Pasteur, 2001; Rivera & Qamar, 2003) have identified that under a livelihood security focus to service provision, extension providers will need to take on multiple roles. The process by which these multiple roles are determined is not explicit in the prescriptive planning models (Oakley & Garforth, 1985; Bennett & Kay, 1995; Cristóvão, Koehnen, & Portela, 1997; Diem, 2003; Boleman, Cummings, & Pope, 2005) or reported in the empirical literature.

To determine what roles it undertook, the case organization needed a clear understanding of its mandate, its own capabilities, and the capabilities of other extension providers and organizations in the district. This information obtained during the situation analysis of the district AgE&RD system phase of the consultative planning workshop to determine which role it will adopt for a specific farmer need. The criteria for the role selection were identified to include whether or not the need is within the government extension policy, is a public need, is being met adequately by other extension providers, can be met by the case organization's working with other extension providers, can be met with the current capability of the case organization, is important enough to require the case organization to develop the capability in the long-run to meet it, and is important enough to require the case organization to purchase expertise from other extension service providers (Figure 3). Based on these criteria, the study identified a broader typology of the roles an extension organization can adopt to ensure it meets the needs of farmers in a decentralized extension context. Its role may not only be to transfer agricultural technologies, but in this broader approach, it may act as a farmer advocate, a linkage broker between farmers and support organizations, a contractor of extension services, a collaborator with other extension providers, and a provider of for-fee inputs or services. The model, as shown in Figure 3, is complex, ongoing, and occurs at different stages of the planning process spanning from August to December each year.

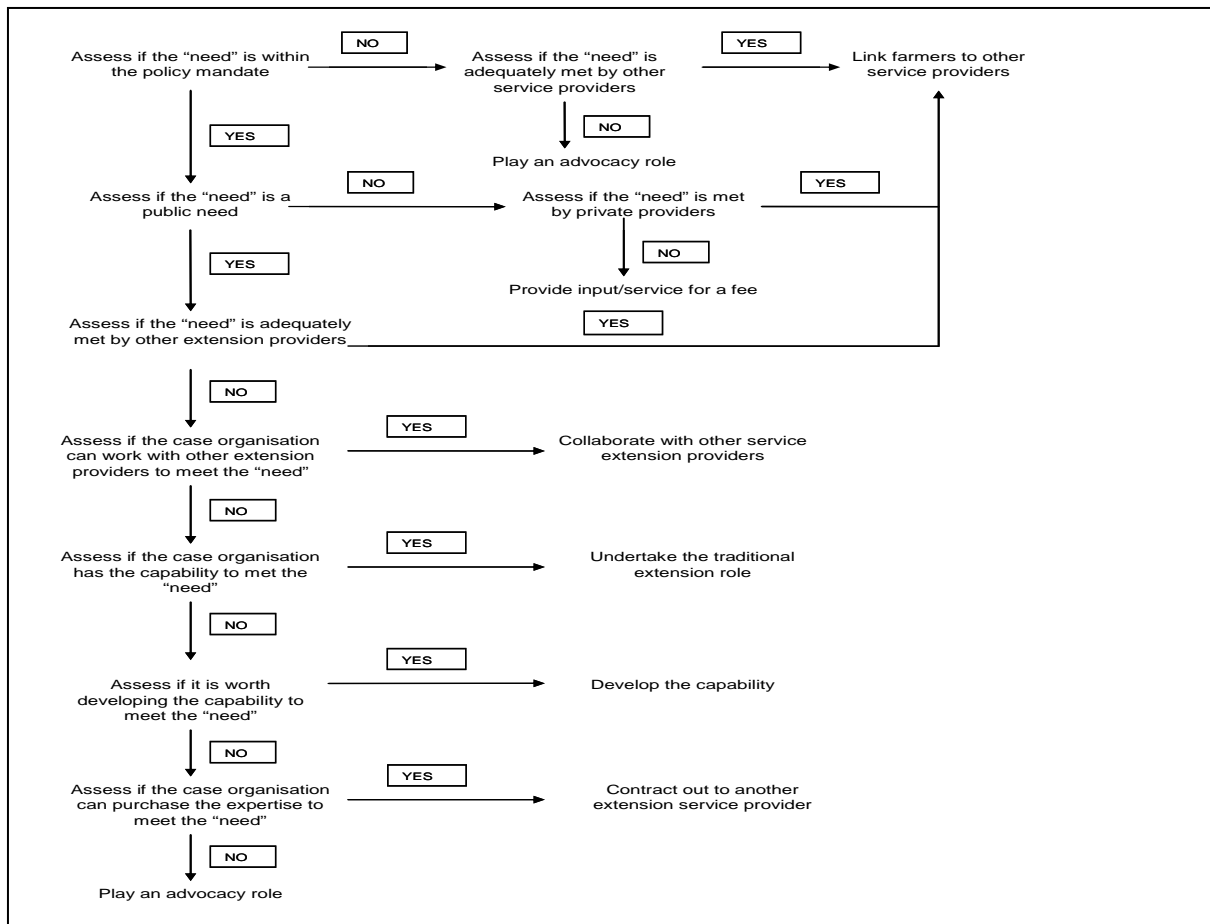


Figure 3. A simple representation of the extension role selection process of DADU

Action plan development phase

The final phase of DADU's planning process is the action plan development phase. This phase takes some time to complete. It is done between September and December each year. Uniquely, the organization develops an action plan through a process of negotiation between its field staff, supervisors, and farmer groups at the sub-district level. A key issue here is that because of the diversity of soil types, micro-climates, crop types, and sociocultural characteristics in the district, the priorities of farmers at the sub-district level may be somewhat different from those established for the whole district through the consultative planning workshop. To overcome this problem, field staff takes back DADU's priorities in terms of key farmer needs and the role it intends to play, and discusses these with farmer groups it works with at the sub-districts level. The field staff and supervisors negotiated with the farmer groups what extension activities (mini-plans) they will actually undertake at the sub-district level. These "mini-plans" are a compromise between the district priorities and farmers' specific needs at the sub-district level. Resourcing issues are also important, which is why the supervisor is involved in the process. He has a clearer idea of resources the field staff have at their disposal. Although local level farmer participation in extension program planning is stressed in the extension literature (Cristóvão, Koehnen, & Portela, 1997; Garforth, 2004; Pretty, 1995; Pretty, 2003; van den Ban & Hawkins, 1996), few specifics are provided on how this might be achieved. One

exception to this was a case study by Obaa, Mutimba & Semana, (2005) who reported that to better empower farmers and ensure their needs are met, extension organizations should delegate the authority for program planning to the village and group levels where farmers have greater opportunity to participate.

The final phase allows the DADU to refine their priorities by involving those who will be directly affected by the DADU's extension program in the sub-district. The aims in this phase are to ensure that extension activities are based on local constraints and opportunities, to develop an annual district plan that is driven by the real needs of farmers in the sub-district, and to encourage ownership of the extension program by the farmer groups who will benefit from it. DADU has realized that this is critical in ensuring farmers' commitment and support for its program implementation. After the prioritization and role extension determination phase, when important farmer needs and extension priorities for the district are established, the field extension agents, with their supervisors, go back to farmers in the villages and through participatory processes (e.g. PRA and group discussions), clarify, and update the needs of farmers in the groups. The main purpose of this exercise is to ensure that DADU's extension priorities are relevant to the needs of farmer groups in each village.

Once sub-district farmer needs are updated, the field staff matched the needs with the district level's priorities and negotiated with each group an activity plan that can best meet the farmer's needs. At this stage, the farmers are able to clearly define the nature of support they expect from the extension agents. At the end of the sub-district's farmer group meeting, the field staff and farmers produce a collaborative and result-oriented daily and monthly activity plan, which is called a mini-plan. The mini-plans spelt out the sub-district extension activities, methods, and timelines to meet specific needs, and how to know whether specific activities are performing well and needs are being met. The mini-plans ensure that both the extension agents and the farmers are clear about their roles and the indicators and criteria (monitoring and evaluation schemes) for determining the success of specific extension activities in the coming year. The term 'collaborative' is used because the mini-plan is developed by both DADU field staff and farmers. The mini-plan is result-oriented because it is under regular review to check whether it is accomplishing the desired results (goals) effectively and efficiently, and if not, DADU will find out what to do to achieve the goals.

When the mini-plans are completed, the farmer groups that were involved in their development are given copies for reference. DADU, at the district level, organizes internal management meeting to synthesize the mini-plans into a district action plan and program for the year. DADU compiles and writes a report on the outputs of the consultative planning and review process to produce the district annual extension plan or program document. Copies of the program document are sent to all the participants and organizations that attended the district planning and review workshops to ensure transparency and provide good basis for social accountability.

CONCLUSIONS

A useful planning process for decentralized extension provision in a developing country's context can be complex and which can partly be due to the diverse and complex agro-ecological and socio-cultural environment. To plan a workable needs-based extension program in this context, an extension organization can adopt several mechanisms, formal and informal, at district and village levels. These can be usefully separated into three distinct, yet related, phases: a situation analysis of the district agricultural extension and rural development system phase, a needs prioritization and role identification phase, and an action plan development phase. In the first phase, farmer needs can be identified informally through contact between field staff and farmers. At a more formal level, farmer and stakeholder organization representatives can be invited to fora on specific issues that affect farmers to identify farmer needs. At the most formal level, farmer and representatives of stakeholder organizations can also be invited to participate in the planning of the district extension program. A recurrent evaluation process is also necessary for timely identification of emerging the farmer needs down the year.

Although fora constitutes as one of the mechanisms by which stakeholders participate in the extension system, key mechanisms that can be adopted by an extension organization included the use of consultative program planning and evaluation processes. To ensure greater stakeholder participation, a pre-planning meeting was undertaken with farmers where extension field staff consulted farmers to obtain a wide cross-section of views at the village level. All field staff was invited to a consultative annual planning workshop so that the views from each sub-district are represented. To conduct the annual planning workshop, the extension organization can invite farmer representatives who are chosen on the basis of the type of enterprise and location to provide a broad cross-section of views at the district level. The mechanisms helped improve farmer participation during the planning process included allowing groups to select their own representatives for the consultative planning workshop, dividing the planning workshop into shorter (1-3 days) workshops so that farmers are not away from their farms for too long, and the use of the local language during the planning workshop for better interactions. Furthermore, organizations can help develop needs-based groups, both general and gender-based, to represent their interests in a consultative planning workshop.

The needs prioritization and role identification phase can be carried out as part of the consultative and review workshop where the extension organization can assess whether it has the capabilities and the mandate address identified farmer needs and determined which role it will adopt for a specific farmer needs. From the study, decentralized extension organizations can play multiple roles, including agricultural technology transfer, advocacy, linking farmers to support organizations, outsourcing of extension services, collaborating with other extension providers, and provision of for-fee inputs or services. Regarding the final phase, an extension organization can also undertake its action planning process at the sub-district or village level where its field staff can negotiate with farmers through collaboration to tailor their action plans to specific local needs.

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