Towards appropriate institutional linkage structures for effective participatory and coordinated agricultural extension in Malawi

By

Dennis Lusekelo Mwangwela

Submitted in partial fulfilment of the requirements for the degree of

MSc. AGRIC (AGRICULTURAL EXTENSION)

in the

Department of Agricultural Economics, Extension and Rural Development

Faculty of Natural and Agricultural Sciences

University of Pretoria

Pretoria

Republic of South Africa

February 2006

DECLARATION

"I declare that this thesis which I am submitting to the University of Pretoria for the Master of Science (MSc.) degree represents my own work and has never been submitted by me to any other tertiary institution for any degree"

_____

Dennis Lusekelo Mwangwela

February 2006

DEDICATION

To my dear wife Honeydee Agnes Mbachi

ACKNOWLEDGEMENTS

I am grateful to many people and institutions for making this thesis possible. Profound thanks and gratitude go to my supervisor and promoter, Professor Gustav Henrich Düvel, for his untiring support throughout my MSc. programme. I would like also to acknowledge with thanks his intellectual guidance and importantly, patience throughout the course of my work. His enormous contribution has really shaped this work to what it is.

This study benefited from financial and logistical support from World Relief Malawi during the research process, for which I am very grateful. Particularly, I would like to extend my heart felt thanks to Stella Kasirye, Country Director of World Relief Malawi for her significant role in ensuring that the study is supported and Gibson Nkanaunena for providing information when requested to do so. I sincerely acknowledge my employers World Relief Malawi for granting me study leave to purse my post-graduate studies at University of Pretoria.

The wonderful atmosphere in the department contributed a lot to progress made in this study. Special thanks should go to Dr. Fanie Terblanche and Mr. Joe Stevens for their encouragement and support. Professor Styn is acknowledged for his valuable contribution is the process of putting together the thesis. I am deeply indebted to Mrs. Jo Coerste, for her untiring support to post-graduate students. You made the South African Institute for Agricultural Extension a wonderful place to be.

Many thanks should go to these fellow postgraduate students for their support and encouragement: Rapelang Sebadieta, Catherine Msuya, David Magano, Max Mzibi Mokhale and Kedir Bati. I have also treasured the encouragement received from the following friends: Erick and Alice Mkanda, Teddie and Candida Nakhumwa, Charles and Janet Chasela, Timothy and Rose Tieku and Grace Ndungu.

Finally, the love and great strength of my wife and best friend Agnes Mbachi motivated and inspired me throughout the study period. I really thank you for your financial support towards my study as well as your enduring love and understanding.

Towards appropriate institutional linkages structures for effective participatory and coordinated agricultural extension in Malawi

Degree: **MSc**

Department: **Agricultural Economics, Extension and Rural development**

Promoter: **Professor Gustav Henrich Düvel**

Abstract

The department of agricultural extension services (DAES) has been the central implementing agency responsible for agricultural extension services in Malawi. However, since 1990s many changes have taken place leading to the development of new national extension policy, which was launched in 2000, under the heading *Agricultural Extension in the New Millennium: Towards Pluralistic and Demand-driven Services in Malawi*. This is an opportunity to bring the control of extension closer to the grassroots community. One of the biggest challenges in operationalising the new system is the facilitation of farmers' involvement at all stages. This may not be achieved without appropriate functional structures from the grassroots community. And in light of the pluralism in extension service delivery, co-ordination of agricultural extension has become another challenge extension has to deal with. The aim of this study was to investigate the level of farmers' involvement in agricultural extension services, search for an appropriate institutional linkage structure for effective participatory and coordinated agricultural extension as well as identify major factors affecting coordination of pluralistic agricultural extension services in Nkhotakota district.

A total of 135 respondents were involved in group interview sessions allowing extensive interaction and discussion before individuals were requested to record their viewpoints regarding various alternatives in documents (questionnaires) prepared for that purpose and which were subsequently analysed.

The survey results reveal that agricultural extension has not been very participatory and the level of farmers' involvement is very low. What is positive, however, is the high degree of willingness of farmers to be involved in agricultural extension. This is an opportunity that extension organisations must take advantage of.

The survey found wide scale support (87.2 percent) for the necessity of a proposed community linkage structure, which, as a mouthpiece, represents the community, coordinates its interests and programmes and functions in partnership with the service provider(s). This allows for a partnership relationship that lead towards the empowerment of the communities to take ownership of the development process.. There is support also for the identified principles regarding this proposed linkage structure. These include a clear differentiation between the coordinating and operational functions and a positioning of the structures as close to the grassroots community as possible, but not to the level of unnecessary duplication and consequently poor coordination. There is general agreement that coordination should not be limited to one commodity or even agriculture, but should be all embracing. Some reservation in this regard can be attributed to fear of agriculture being marginalised. For a country that relies predominantly on agriculture care should be taken to ensure that this does not happen. In general, farmers are more supportive of the principles of effective linkage structures than the service providers.

According to the results, coordination of extension among service providers is still poor, but is likely to increase as the policy of pluralism and decentralization continues to unfold.

TABLE OF CONTENTS

CHAPTER 6: FARMERS' VIEWS ON PARTICIPATION IN EXTENSION

CHAPTER 7: COMMUNITY PARTICIPATION AND INVOLVEMENT

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ADD	Agricultural Development Division
ADMARC	Agricultural Development and Marketing Corporation
AIDS	Acquired Immuno-Deficiency Syndrome
APIP:	Agricultural Productivity Investment Programme
ARET	Agricultural Research and Extension Trust
ARET	Agricultural Research and Extension Trust
ASSMAG	Association of Smallholder Seed Multiplication Action Group
BSc	Bachelor of Science
CBOs	Community Based Organisations
CDA	Cotton Development Association
CDC	Central Development Council
CF	Commercial farmers
COMPASS	Community Partnerships for Sustainable Resource Management in Malawi
DAD	Department of Agricultural Development
DAES	Department of Agricultural Extension Services
DAESCC:	District Agricultural Extension Coordinating Committee
DC	Development Committees
EPA	Extension Planning Area
FA	Field Assistant
FHA	Farm Home Assistant
FINCA	Foundation for International Community Assistance
GDP:	Gross Domestic Product
GO	Government Organisations
HA	Hectares
HIV	Human Immunodeficiency Virus
IDEEA	Initiative for Development and Equity in African Agriculture
IFAD	International Fund for Agricultural development
JCE	Junior Certificate Education
MASAF	Malawi Social Action Fund
MOA	Ministry of Agriculture
MRCS	Malawi Red Cross Society

MRFC	Malawi Rural Finance Company
MSc	Master of Science
MSCE	Malawi Schools Certificate of Education
NASFAM	National Association of Smallholder Farmers in Malawi
NASO	Nkhotakota AIDS Support Organization
NEC	National Economic Council
NGO	Non Governmental Organization
NICE	National initiative for civic Education
NRDP	National Rural Development Programme
NSO:	National Statistical Office
PAM:	Participative Action Management
PC:	Programme Committee
PRA:	Participatory Rural Appraisal
SARRNET	Southern Africa Root Crops Research Network
SH – CF	Smallholder commercial farmers
SH – FS	Smallholder food security farmers
SMS	Subject Matter Specialist
SPI:	Starter Pack Initiative
T & V:	Training and Visit Extension
UNDP	United Nations development Programme
USAID	United States Aid for International Development
VDC	Village Development Committee
WESM	Wildlife and environmental society of Malawi
WRM	World Relief Malawi
WVI	World Vision International

CHAPTER 1

INTRODUCTION

1.1 Background to the study

Malawi, a former British colony, located in sub-Saharan Africa, covers an area of 11.85 million hectares (NSO, 2002). With a population of 10.8 million people, Malawi is among the poorest countries in Africa. Eighty-five (85) per cent of this population live in the rural areas where their main source of livelihood is agriculture (World Bank, 2002). More than half of the population lives below the poverty line (less than U$ 40 per capita per annum) (World Bank, 1998). Like most of the developing countries in Africa, the Malawi economy is largely dominated by the agricultural sector in terms of output, foreign exchange earnings and employment. The sector accounts for about 35 percent of the gross domestic product (GDP), more than 90 percent of the country's foreign exchange earnings and provides paid and self-employment to 80 percent of the population which is rural (Chilowa, 1998).

1.2 Importance of agriculture in national development

Agriculture will continue to be the backbone of Malawi's economy, since the country is not well endowed with mineral resources. (NSO, 2002). Since political independence in 1964, Malawi's agricultural sector has developed along a dualistic structure comprising the smallholder and estate sub-sectors. The two sub-sectors are largely differentiated because of landholding and the legal and institutional rules regulating to land tenure, and until recently, crop production and marketing, input supply and pricing as well as provision of extension services. There has been relaxation of restrictions separating the two; but the sector remains highly dualistic.

1.2.1 Smallholder sub-sector

The smallholder sub-sector comprises about 2.6 million faming families locked into subsistence-oriented agriculture on 1.8 million hectares of land under customary land tenure system. Use of simple and traditional technologies characterises the smallholder production systems having low returns, high seasonal labour

fluctuations, and women playing a vital role in production. Smallholder agriculture accounts for 80 percent of the countries food production, 10 percent of export earnings and 80 percent of the country's workforce. The sub-sector contributes more than 70 percent of agricultural GDP, more than 29 percent of the total GDP and 90 percent of the agricultural employment (NEC, 2003).

1.2.2 Estate sub-sector

The estate sub-sector takes up 13 percent of the total land area of Malawi under leasehold or freehold land tenure system, mainly for growing cash crops. Estate agriculture accounts for more than 25 percent agricultural GDP, 10 percent of agricultural employment, 9 percent of total GDP and 90 percent of export earnings. This sub-sector generates 45 percent of formal employment (NEC, 2003). As a result of using higher levels of technology, and having relatively easy access to imports, credit, agricultural extension services and markets, productivity on the estates is higher than in the smallholder sub-sector.

1.3 Historic perspective of agricultural extension and training in Malawi

1.3.1 Agricultural extension under the colonial regime

Extension work began in colonial times (1907) as a result of the need for better and higher agricultural productivity. At that time the government sent out instructors to teach crop production practices following a coercion approach because it was considered as the only way to get farmers to follow recommended practices. Violation of these practices resulted in court sentences, which ranged from payment of fines to imprisonment (DAES, 2000). Later the concept of master farmers was incorporated into the mainstream of extension activities. These farmers were better off and innovative, received government support in terms of inputs and extension services. They followed recommended practices and therefore the rest of the farmers were supposed to follow their example. To enhance increased production, in 1948, agricultural cooperatives were instituted. The cooperatives were involved in input supply, commercial crop production, dairy farming and marketing.

1.3.2 Agricultural extension after independence

The department of agriculture was reorganised soon after attaining self rule in 1964 and an extension and training system for smallholder farmers started developing. Two departments were created; one responsible for extension and training (Department of Extension and Training) and another responsible for land husbandry, irrigation and settlement schemes (Department of Agricultural Technical Services). These two departments functioned side by side until 1978 when they amalgamated effectively into a new Department of Agricultural Development (DAD), which was responsible for the overall implementation of the National Rural Development Programme (NRDP). Following a review of the NRDP in 1982, the DAD has been renamed the Department of Agriculture (DAES, 1998).

Extension in Malawi has to a great extent been based on the *transfer of technology model.* This technology transfer model was also dominating international research and extension at least until the late 1970s (Kaarhus, 2004). In Malawi, the model was implemented through a *top-down supply-oriented* approach, aimed at transferring messages on new technologies and practices *from* extension officers *to* farmers (DAES 2003). Throughout these stages, the predominant extension approach was individual contact and coercion. The importance of group approaches was recognized in the 1970s as a faster way of spreading messages to a wider farming community during a period when major integrated projects were being introduced. In the early 1980s, in trying to enhance the group approach, a modified version of the *training and visit* approach, was introduced and adopted with the sponsorship of the World Bank. It was called the "Block Extension System", a basic idea behind was to reach a wider range of farmers (Kaarhus, 2004). However, it was observed that the majority of the resource poor farmers were not reached with extension messages because of the top-down approach and consequently the adoption rate did not improve (DAES, 2000).

1.3.3 The current situation

The Department of Agricultural Extension Services (DAES) in the Ministry of Agriculture, Irrigation and Food Security is the public institution with the overall responsibility for disseminating new and appropriate agricultural technologies to

farmers. DAES is also responsible for developing methodologies that facilitate the actual *delivery of services* to farmers (DARTS 2002). Until 2004, DAES has also been the central implementing agency responsible for frontline extension staff throughout the country. At present the Department is, however, in the midst of a thoroughgoing change process.

This change process started in the late 1990s, with preparations for developing a new national extension policy (Kamputa, Ehret, & Walker 2004). A number of challenges were addressed through this process. One basic challenge was associated with the democratisation process that started taking place in Malawi after 1994. Previously extension services were mainly provided in a top-down manner, with the major decisions being made at a central level. This is no longer in line with democratic principles and the country is, hence the change towards a more participatory and pluralistic approach to service delivery (Kaarhus, 2004).

The new national extension policy was finalized and launched in 2000, under the heading *Agricultural Extension in the New Millennium: Towards Pluralistic and Demand-driven Services in Malawi* (DAES 2000). It aims to address the complex challenges faced by the agricultural sector in Malawi. The policy includes a number of basic guiding principles such as:

- Shifting from supply-driven to demand-driven extension service provision
- "Those who benefit pay", implying that the government will not pay for the cost of all extension services.
- Promotion of pluralism, which implies that the role of DAES will shift from being an implementing agency towards facilitating and coordinating the work of other players in this field, such as private sector, farmers organisations, and NGOs.
- Decentralisation, which means that the 27 Districts will be responsible for organising and coordinating extension services at the local level.

Since 1982 extension in Malawi has been organised into 8 Agricultural Development Divisions (ADDs), which again are subdivided into Extension Planning Areas (EPAs). EPAs are further subdivided into Sections that operate as the "frontline extension staff's" level of service delivery. The decentralisation process being

implemented now implies that the Districts will take over the fundamental role in extension service provision and coordination. The future role of the ADDs will primarily be one of supervising activities in the districts. Decentralization shall, according to plans, be accompanied by more participatory approaches in planning, organization, and provision of services. At the District level, Stakeholder Panels shall be organized to represent all actors in the agricultural sector (DAES 2003) comprising, farmers, farmers' organisations, NGOs, agribusiness, and the public sector, with farmers constituting fifty (50) percent of the membership.

A pilot project to test and try out the practical implications of the planned decentralized system of extension was carried out in 4 districts during a relatively short period (less than a year) in 2003-2004. In 2004, the new decentralized system was extended to all the districts in Malawi. To have this new system organized and operative in such a short period of time is definitely a great challenge taken up by the Department of Agricultural Extension (DAES) in the Ministry of Agriculture, Irrigation and Food Security.

1.3.4 The rising demand on extension for agriculture development

The agricultural sector in Malawi and farmers themselves are facing many challenges to which agricultural extension can make an important contribution in response. Not only are farmers facing new issues such as dwindling land holding and soil fertility declines, but the HIV/AIDS crisis is also causing significant demographic changes among the farming population. In addition, the macro-economic environment has changed substantially over the past decade. Among the major changes are; market liberalization; removal of subsidies on agricultural inputs; de-linking of agricultural credit from extension services; and the introduction of Malawi Rural Finance Company (MRFC), a market-oriented credit company which charges market interest rates. These changes have on one hand created new opportunities for farmers to market their produce but on the other hand have created constraints and new challenges for them. In order to respond to these changes effectively farmers will demand access to sound advice and support. Given the many challenges that farmers face now, extension services need to be more diverse in order to respond to the demands of different farmers and to bring sustained impact.

1.3.5 Agricultural extension in a broader policy framework

Malawi as a country faces a serious development challenge. Sixty (60) percent and 65 percent of its rural and urban population respectively live below the poverty line (UNDP, 2001). The appalling levels of poverty manifest itself among many ways through the high levels of both food insecurity and malnutrition especially among children under the age of five and mothers. Some 48 percent of the children nationally are physically stunted due to malnutrition (NSO, 2001).

One major policy objective of the government is poverty reduction. This calls for improved food security and increase on farm and off farm incomes for the farmers in Malawi. Broadly speaking, poverty reduction will be achieved through good governance and development management in order to achieve sustainable livelihoods in both rural and urban households (DAES, 2000). Among the many strategies through which this objective is going to be achieved is increased agricultural production to ensure food security. This is manifested through such safety nets as the Starter Pack Initiative (SPI), the agricultural productivity investment programme (APIP), and food for work programmes (DAES, 2000). The success of all these programmes is, among other things, dependent on the type and amount of support farmers receive from extension services. In this way high quality extension services can make an important contribution to achieving the objective of poverty reduction. But changes will be required in the provision and delivery of extension.

1.3.6 Agricultural extension challenges

There are a number of challenges facing extension in Malawi. These changes require a response from the public sector and other stakeholders. A clear and positive change to these challenges will help shape the future of agricultural extension in Malawi for the benefit of all farmers. The following are the key challenges facing extension: democratization, market liberalization, decentralization, HIV/AIDS crisis, shrinking public resources, public sector reform, coordination, difficulty to assess extension impact, high malnutrition level among the farming communities, low literacy level of farmers and shrinking production resources.

In response to these challenges, a clear vision of agricultural extension in Malawi has been the first step for managing positive change. The vision for agricultural extension in Malawi is;

- All farmers are able to **demand and have access to high quality** extension services from those best able to deliver them.
- There is **pluralism** in the provision and delivery of the extension services that builds on the distinctive competence of the public sector, the private sector and farmer organizations and allows for a dynamic and evolving service-offer at decentralized levels.
- Extension services are **accountable** to those demanding and using them, and are able to make a significant contribution to **addressing national concerns** for the improvement of rural as well as urban livelihood, increased food security and reduced poverty in Malawi.

This vision of pluralistic, decentralized and demand-driven extension in Malawi is a bold statement of intent and the enormity of the task must not be underestimated. For it to become a reality, a broad coalition of stakeholders is necessary, each making an important and distinctive contribution. Both the farming communities and the service providers need to be transformed to realize this vision.

The key stakeholders in the provision and delivery of the extension services in Malawi are; the public sector, the private sector and farmer organizations. Implementation of this new agricultural system has just started. The local Government Act stipulates that the districts are responsible for extension services. In the new district agricultural extension system, farmer organizations will be central to developing client-oriented extension services and fostering farmer empowerment.

1.4 Problem statement

Agriculture remains the mainstay of the economy of Malawi. Consequently agricultural development and the critical role of agricultural extension can not be overemphasized. The current pluralistic and demand-driven extension policy, which is being implemented throughout the country, was introduced to promote the extension impact.

This new extension policy in Malawi, envisages farmers to participate and get more involved in development and extension services, and thus become empowered and take ownership of their development. This, however, is not possible without the appropriate institutional and linkage structures. The problem is that little is known about such structures, the principles involved and how best to implement them. The intention of the study was therefore to identify appropriate structures and the underlying principles, as well as their acceptability.

1.5 Objectives of the study

The purpose of the study was twofold: to examine the level of farmers' involvement in agricultural extension services and search for appropriate community institutional linkage structures for effective participatory agricultural extension services and to identify major factors affecting coordination of pluralistic agricultural extension services and associated constraints in Nkhotakota district.

Specifically, the study was designed

1.5.1 to find out farmers' and extension workers' views regarding participatory agricultural extension,

1.5.2 to determine the current level or degree of farmers' involvement in agricultural extension services,

1.5.3 to determine the willingness of farmers to participate in agricultural extension services,

1.5.4 to identify major factors affecting coordination of agricultural extension services and the associated constraints among extension organisations,

1.5.5 to determine appropriate means of improving coordination and partnerships in extension, and

1.5.6 to identify and propose an organizational framework which provides for institutional linkage structures extending from the grassroots community up to at least district.

1.6 Significance of the study

With emphasis on demand and not supply driven extension services, the new extension policy in Malawi, envisages the farmers having more control over extension services. Farmers cannot participate in all stages of agricultural extension services if appropriate structures are not available to facilitate their involvement. This study will contribute towards identifying and proposing a linkage structure that will allow farmers involvement in extension services to the point of ownership.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature in two main areas. In section one, an investigation of various participation models has been made with the purpose of identifying an appropriate approach for the study. Section two reviews empirical studies conducted in the area of community participation and empowerment, institutional linkages and structures, and coordination of agricultural extension, which finally led to the formulation of research hypotheses.

2.2 Participation approaches and models

Approaches in this context in extension refer to the fundamental, conceptual and functional method of extension adopted to fulfill its aims. Perhaps the two most prominent approaches to agricultural extension are production technology or technology transfer, and the problem solving approaches (Düvel, 2000).

2.1.1 Production-technology or technology transfer model

This centralized, top-down and blueprint approach corresponds to the so called conventional extension approaches. Examples are the training and visit (T&V) system and other conventional models stressing the transfer of technology and information dissemination. Researchers develop technologies, which frontline extension staff take to the clients at the communities. The role of the frontline extension workers is to implement the activities according to fixed work schedules, under close supervision and leadership, farmers' involvement is not a priority at all (Düvel, 2000). According to Dusseldorp & Zijderveld, 1991 as cited by Düvel, 2002, this approach is characterized by the following:

- Clearly defined and generally accepted objectives,
- A detailed and precise knowledge of the process to be implemented in order to reach the objectives,

- The political will to use the available power and resources; and there is a predetermined timetable and well-known resources

The technology transfer approach has some advantages, and these are:

- It facilitates management, monitoring and evaluation tasks because activities and expected outcomes are defined and a chain of responsibilities and duties is well identified.
- It can be best implemented where a strong management is required to attain objectives in a timely and highly organized manner or where there is pressure for accountability.

However, as observed by Düvel (2000), the approach has been criticised because:

- It is too uniform and does not take into due account the socio-cultural environment, the particular circumstances in which project implementation occurs, and the characteristics of the different clientele groups.
- Dissemination of technology is planned without adequate understanding of the farming systems and the diversity of farmers' problems and potentials.
- The approach assumes a high degree of simplicity, is rigid and assumes a high level of stability regarding problems that will not change.

The recent paradigm shift towards more participatory problem solving approaches has resulted in the questioning of many traditional approaches.

2.1.2 The problem solving approaches

The problem solving approach also known as decentralised, bottom-up participatory approaches, generally corresponds to what has been called participatory planning, currently proposed as a key element in farming systems development, farmer- first models (Chambers, Pacey & Thrupp, 1989), participatory technology development (Farrington & Martin, 1993 and Reintjes, Haverkort & Waters- Bayer, 1992), or local process facilitation activities (Röling, 1994). These approaches arise from the recognition by many agricultural researchers, extension personnel, and farmers of the need to view ill-defined agricultural problems as a complex human activity system. According to Bergdall (1993), Dusseldorp & Zijderveld (1991) and Korten (1991), as

cited by Düvel, (2000), these approaches are quite different from the top-down perspective and have the following principles:

- Development is regarded as a long-term effort and process requiring continued commitment and collective responsibility.
- Programme personnel should act as partners and facilitators rather than experts.
- Participation of local actors is stressed.
- More time should be spent on needs identification and project preparation, with the active involvement of the intended beneficiaries.
- Programmes should grow step-by-step, securing close linkages to the felt needs and the local environment.
- The ultimate goal of the programme is to increase the power of the local actors to plan and implement their own improvements.

With the problem-solving approach, it is the definition of problems that is the cardinal point in the planning and implementation of the extension project.

2.1.3 Problem solving (participatory) models

Three basic models of problem solving in agricultural extension are discussed in this section and these are: Participative action management model by Chamala, Participatory innovation development and extension model by Hagmann, Murwira, & Chuma and Düvel's organisational model.

2.1.3.1 Participative action management model

Based on the weaknesses of the technology transfer approach, Chamala (1990) developed the Participative Action Management (PAM) model. This is a major paradigm shift in the way technology is developed and adopted by stakeholders. It emphasizes the use of adult-learning principles and action-learning processes. The PAM model is a working-together (or convergence) model where stakeholders' interests are focused on a specific issue, problem or opportunity. This convergence creates energy and the group plans and guides how this new energy is diverted. The group thus acts as a lens for the collection (convergence) of weak energy and distribution (divergence) of stronger energy. The PAM model is a management model where all relevant agencies, groups and individuals with a common interest in

development come together. They form a platform to facilitate joint problem solving. The group works for the mutual benefit of the partners. The philosophy of the PAM model comprises the following ten (10) principles:

- It starts with a systems approach.
- It involves all stakeholders.
- It involves the principle of convergence and directed divergence.
- Empowerment is the cornerstone of this model.
- It has place for individual rights and responsibilities.
- It aids in building empowering structures.
- It works on networking with other agencies.
- It encourages action learning among groups.
- It builds group management capacities.
- Sharing the credit/profits is done in a fair way between the project members.

2.1.3.2 Participatory innovation development and extension model

Hagmann, Murwira, & Chuma (1996) came up with the concept of participatory innovation development and extension in Zimbabwe (Figure 2.1). This model is based on dialogical communication, farmer experimentation and strengthening of self-organisational capacities of rural communities. Encouragement of active participation and dialogue as partners among all actors on the local level is emphasized. Farmers and their institutions, extensionists and researchers are the main stakeholders.

The participatory innovation development and extension model was initiated to change from conventional extension towards more participatory extension. The "Conservation Tillage Project" and the "Food Security Project" developed such an approach and have embarked on institutionalization of this approach into the agricultural extension service in Masvingo Province in Zimbabwe. Dialogue with farmers, farmer experimentation and the strengthening of self-organisational capacities of rural communities are the major elements to improve development and spreading of innovations and thus the efficiency of extension (Hagmann *et al*, 1996). The approach requires a role change of agricultural extension workers from teacher to facilitator as well as appropriate methods and tools. Elements of "Training for

Transformation" and Participatory Rural Appraisal (PRA) are tested and developed and have been found to be effective tools. The strategy to institutionalize participatory extension is based on joining efforts and networking with other organizations, a campaign to familiarize institutional staff and a training and follow-up programme for staff in the framework of organisational development.

Experiences with this model show that the attitudinal change required to implement participatory approaches is highly dependent on personalities. To have an impact on the change of attitudes a continuous medium-term training process with a close follow-up is required. Hagmann *et al* (1996) conclude that institutionalization of participatory approaches into hierarchically structured organizations is a highly complex intervention. In order to be successful, major changes in planning, implementation, monitoring and evaluation procedures are required. Changes of that nature require a process of at least 5 to 10 years and high commitment on the side of institutional staff on all levels and donors as well.

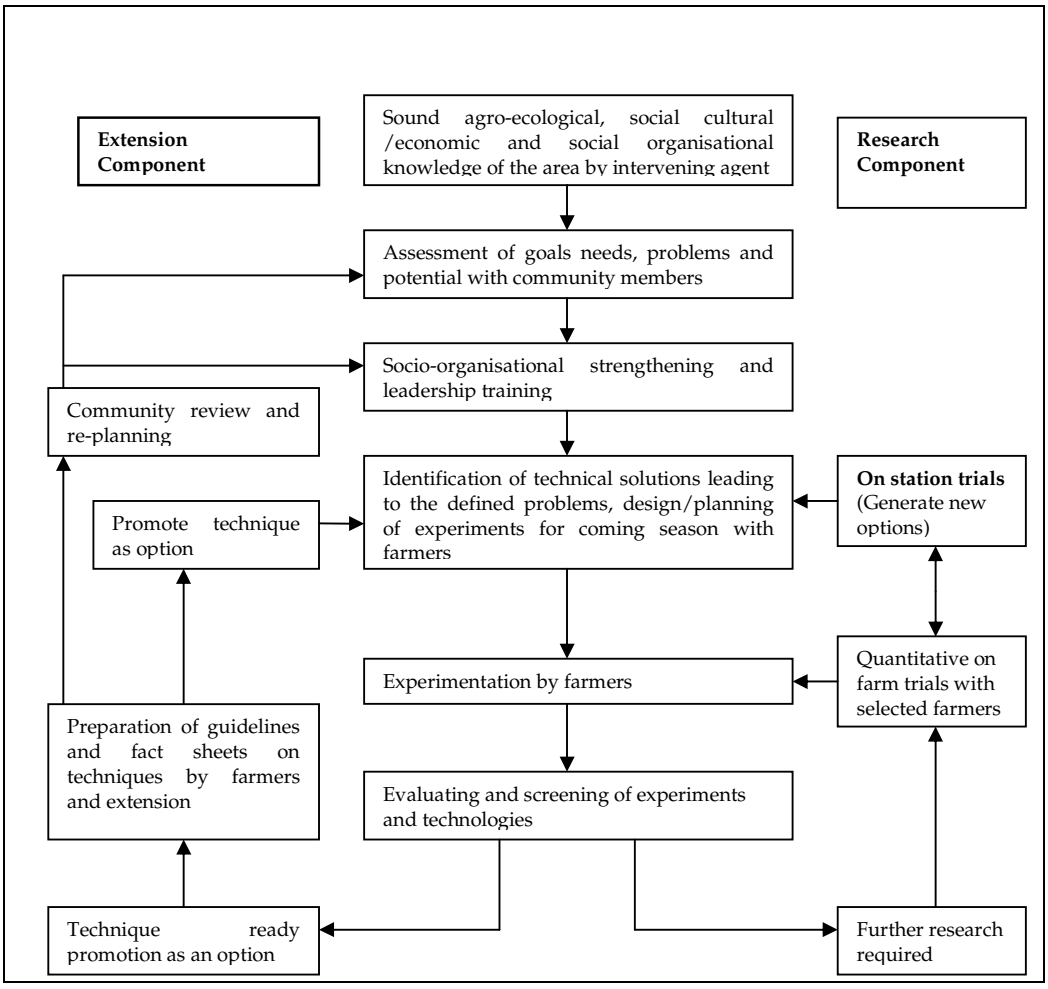


Figure 2.1: Participatory research and innovation development and extension conceptual model (Hagmann et al, 1996)

Both the PAM and Hagmann *et al* models are good and participatory in nature; however, the following concerns are raised:

- The PAM model, though participatory in its nature, is according to Düvel (2000), initiated at a national or macro-community level and is thus essentially of a top-down nature as it unfolds and converges on communities at grassroots level. It would therefore not lead to ownership of extension services by the community.

- The PAM model converges the interests of a large number of mainly external role players, with the community being only one of many partners.

- Hagmann' model is a good example of involvement from the community's grassroots, since its structure is at the lowest level, namely at village level. This would be ideal in Malawi resources permitting. However, the situation is different; several villages usually comprise an extension service area (section). This type of structure at village level would not be the solution, since the implementation of such a structure would not only be expensive and costly hence not possible because of shrinking extension resources, but also according to Düvel (2000), duplication of these structures in every village would clearly fragment the extension and development process, preventing effective co-ordination and responsible ownership and self-determination.

2.1.3.3 Düvel's organizational model

Based on the two models discussed above, it became possible for Düvel (2000) to establish a conceptual framework (Figure 2.2) that can be used as a structure for better interaction between extension organisations and their clients leading to community ownership and empowerment. According to Düvel, (2000), the framework which can serve at community level, has naturally to be adapted to fit the varying and often unique specific situations. An important adaptation of Düvel's organisational model is the delimitation of service areas. Düvel (2000) points out that a compromise has to be found between what is identifiable as a potentially cohesive and functional community and what is practical in terms of the size of the service area for a frontline extension worker. In practice this implies a grouping of several sub-communities, like villages, into a larger community that will function as a dynamic and cohesive unit. This is typical of what is happening in Malawi because an extension service area comprises several sub-communities or villages.

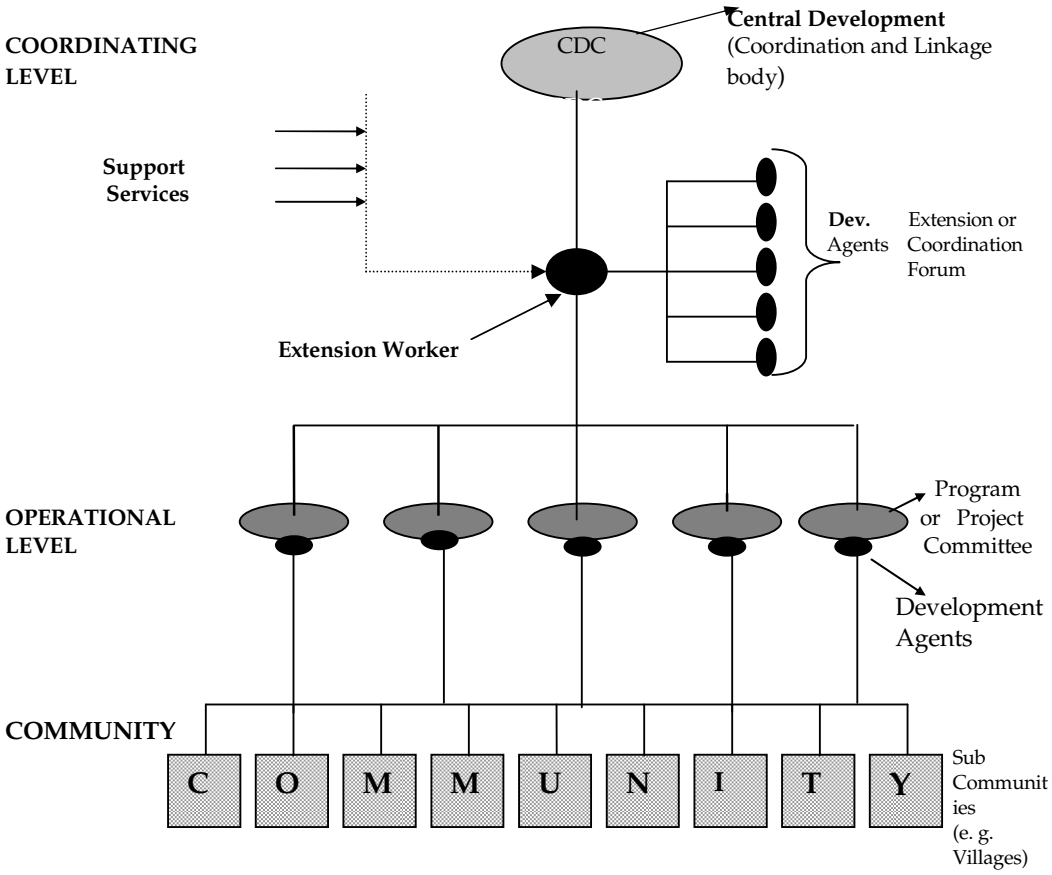


Figure 2.2: Düvel's organisational model for participatory development empowerment of communities and for facilitating partnerships and coordination with and between development organisations or agents

The salient features of Düvel's organizational model are: the overarching central development council (CDC) representing and serving as mouthpiece of the community (coordinating body) and the programme committees (PC), which are at operational level. The CDC is characterized by the following:

- It should be representative of the whole community and especially of the various interest groups and local institutions. As an advisory rather than operative body, the size is inconsequential. What is of paramount importance is that the community regards it as representing it and its interests.

- It accepts full responsibility for the development of its community as a whole. This can refer to development in general, or, if restricted to agriculture, a link-up with a more over-arching development body has to be found. It is through this body that the community assumes ownership of its own development and becomes empowered to take major decisions, negotiate with development organizations and commission development projects.

- Its main function is consequently to identify, initiate, negotiate, commission and co-ordinate all development priorities and actions.

The programme committees (PC) comprise members of the community and are with the help and support of development agents commissioned to implement and execute agreed programmes and projects and provide regular feedback to the CDC. Initially at least, the extensionist or development worker, will function as a development manager or executive operating for and on behalf of the development council, and reporting back to it regularly. Together with programme development committees, all other available development agents or organizations that are willing to become involved will take responsibility for the planning and execution of development programmes, which have been identified and commissioned by the central development council. In this manner all development is coordinated under the direction and regulation of the community itself, i.e. its central development council.

2.2 The study conceptual model

After reviewing various models focusing on their contributions, strengths and weaknesses, the conceptual framework for this study was based on Düvel's organisational model. The model seems to have a successful combination of Chamala's and Hagmann *et al*, models in that it is very participative in nature. At the same time its location is at grassroots level, which promotes involvement to the point of ownership. Most importantly the model is significant because of its emphasis on delimitation of an extension service area to a combination of sub-communities or villages into reasonable sizes. This is not only important because it has potential to save the already scarce extension resources, but also avoid duplication of the structures in every village leading to less fragmentation of the extension and development process. Düvel's organizational model would likely enhance effective co-ordination and responsible ownership and self-determination.

2.3 Empirical studies conducted in areas of participation and institutional linkages and structures

2.3.1 The concept of participation

In recent years, there has been an increasing number of comparative studies of development projects showing that "participation" is one of the critical components of success. It has been associated with increased mobilization of stakeholder ownership of policies and projects; greater efficiency, understanding and social cohesion; more cost effective services; greater transparency and accountability; increased strengthened capacity of people to learn and act (Montgomery, 1983; Paul, 1987; World Bank, 1994). As a result the terms "people's participation" and "popular participation" are now part of the normal language of many development agencies, including non-governmental organizations (NGOs), government departments and banks (World Bank, 1994). This paradigm shift towards more participatory approaches in extension and rural development has re-enforced the original philosophy of extension, which seeks "to help people to help themselves" (Düvel, 2002). Different scholars (Oakley and Garforth, 1985) are in agreement regarding the necessity of participation in development.

An increasing number of analyses of projects have shown that participation by local people is one of the critical components of success in various agricultural sectors (Pretty, 1995). It is worth noting, however, that the concept of participation has become such a fashion that almost every organisation says participation is part of their work. This has created many paradoxes. The term "participation" has been used to justify the state control of extension as well as to build local capacity and self-reliance; it has been used to justify external decisions as well as to devolve power and decision making away from external agencies; it has been used for data collection as well as for interactive analysis (Pretty, 1995). But "more often than not people are asked or dragged into partaking in operations of no interest to them in the very name of "participation" (Rahnema, 1992).

The concept of "participation" has been defined and interpreted in many various ways by many scholars. Cernea (1995) defines "participation as empowering people to mobilize their own capabilities be social actors, rather than passive subjects, manage resources, make decisions and control the activities that affect their lives".

Many development organizations interpret and use the term participation in many ways. Ewang and Mtshali (2000) point out that participation can be understood to vary from minimal/passive participation to full participation or self-mobilization. Pretty (1995) suggests that the interpretations can be resolved into seven clear types. These range from manipulative and passive participation, where people are told what is to happen and act out predetermined roles, to self-mobilization, where people take initiatives largely independent of external institutions (see Table 2.1). This typology suggests that the term "participation" should not be accepted without appropriate clarification. The problem with participation as used in types one to four is that any achievements are likely to have no positive lasting effect on people's lives (Rahnema, 1992). The term participation can be used, knowing it will not lead to action. Indeed, some suggest that the manipulation that is often central to types one to four means they should be seen as types of non-participation (Hart, 1992).

Table 2.1: A typology of participation: how people participate in development programs and projects

Typology	Characteristics of each type
Manipulative participation	Participation is simply pretence, with "people's" representatives on official boards but who are un-elected and have no power.
Passive participation	People participate by being told what has been decided or has already happened. It involves unilateral announcements by an administration or project management without any listening to people's responses. The information being shared belongs only to external professionals.
Participation by consultation	People participate by being consulted or by answering questions. Consultation External agents define problems and information gathering processes, and so control analysis. Such a consultative process does not concede any share in decision-making, and professionals are under no obligation to take on board people's views.
Participation for material incentive	People participate by contributing resources, for example, labor, in Material incentives return for food, cash or other material incentives. Farmers may provide the fields and labor, but are involved in neither experimentation nor the process of learning. It is very common to see this called participation, yet people have no stake in prolonging technologies or practices when the incentives end.
Functional participation	Participation seen by external agencies as a means to achieve participation project goals, especially reduced costs. People may participate by forming groups to meet predetermined objectives related to the project. Such involvement may be interactive and involve shared decision making, but tends to arise only after major decisions have already been made by external agents. At worst, local people may still only be co-opted to serve external goals.
Interactive participation	People participate in joint analysis; development of action plans Participation and formation or strengthening of local institutions. Participation is seen as a right, not just the means to achieve project goals. The process involves interdisciplinary methodologies that seek multiple perspectives and make use of systemic and structured learning processes. As groups take control over local decisions and determine how available resources are used, so they have a stake in maintaining structures or practices.
Self-mobilization	People participate by taking initiatives independently of external institutions to change systems, they develop contacts with external institutions for resources and technical advice they need, but retain control over how resources are used.

Source: adapted from Pretty (1994), Sattetthwaite (1995) Adnan, Alam and Brustnow (1992) and Hart (1992).

A study of 230 rural development institutions employing some 30,000 staff in 41 countries of Africa found that participation for local people was most likely to mean simply having discussions or providing information to external agencies (Guijt, 1991). Government and non-government agencies rarely permitted local groups to work alone, some even acting without any local involvement. These external agencies did permit some joint decisions, but usually controlled all the funding. Another

study of 121 rural water supply projects in 49 countries of Africa, Asia and Latin America found that participation was the most significant factor contributing to project effectiveness and maintenance of water systems (Narayan, 1993). Most of the projects referred to community participation or made it a specific project component, but only 21 percent scored high on interactive participation. Clearly, intentions did not translate into practice. It was when people were involved in decision making during all stages of the project that the best results occurred. If they were just involved in information sharing and consultations, then results were much poorer. It is quite clear from this study that moving further down the typology moves a project from a medium to highly effective category. Great care must, therefore, be taken when both using and interpreting the term participation. It should always be qualified by reference to the type of participation, as most types will threaten rather than support the goals of participation. What will be important is for institutions and individuals to define better ways of shifting from the more common passive, consultative and incentive-driven participation toward the interactive end of the spectrum. It is believed that rural people are more prepared to participate when they feel the need to do so (Oakley, 1991).

According to Düvel (2000), the principle of maximum community participation is based on the notion of self-determination, self-reliance, self-responsibility and self help as normative goal. A further reason for emphasizing participation is that it is associated with greater effectiveness, and thus not an end in itself, but a means to an end. The reasoning beyond this is that, according to Cohen & Uphoff, (1980), people adjust to change most rapidly when they initiate, identify and solve problems that directly affect their welfare. Furthermore deliberate and continuous involvement contributes to understanding and commitment.

2.3.2 Institutional linkages and structures for participatory extension

There is general agreement among extensionists that extension is understood to be partnership between the extension service providers and the community. For such a partnership to be possible and effective, the partners have to interact in order to establish needs, to identify and agree on priorities, procedures and to process to pursue them (Düvel, 2000). The shift in emphasis in extension from technology transfer to a more participative and facilitative approach has, particularly, where

extension is focused on communities implications as far as institutional linkage structures are concerned (Düvel, 1999). According to Düvel, (1999) participative development to the level of empowerment and ownership is not possible with appropriate institutional structures.

The necessity for linkage structures is increasingly recognized internationally (Hagmann, et al, 1997 and Chamala, 1990) but their correct positioning in terms of level or proximity to the community is paramount. Düvel, (2000) argues that if organizational linkage structures are to facilitate maximum participation and ownership, it stands to reason that they should be as close to the grassroots community as possible. Unless community members regard such organizational structures as their own, they will have difficulty relating to them and effectively participating through them (Düvel, 2000). In view of this, linkages at regional, sub-regional, or even at district level are not the solution, unless they have a coordination function of and arise out of the grass root communities.

The institutional linkage structures are a means of assisting the organisation of communities to become functional in terms of acceptance of responsibility and ownership of the development process as well as becoming operative through commissioned committees. In this way the community becomes involved in identifying problems, establishing priorities, participating in on-farm research and demonstrations and of course in the running of community based and owned extension and other development programmes

2.3.3 Coordination in agricultural extension

Many developing countries including Malawi are going through many policy reforms. These reforms greatly affect organisational and managerial structures of agricultural extension. Some of these policies are part of the macro- and micro-economic policies and institutional reforms within the World Bank and IMF structural adjustment programmes (Mwanje & Düvel, 2001). The policy reforms include; decentralisation, privatisation, liberalisations, civil service reform programme, and unification of extension services among others. Most of these reforms, especially liberalisation and privatisation, have encouraged increased

participation of farmers, public and private institutions in the delivery of agricultural extension services. In view of pluralism of extension services delivery co-ordination becomes a challenging role, especially because unlike in the more industrialised countries, pluralistic systems of social services delivery are still novel phenomena in many developing countries.

There are several types of coordination, however, inter-organizational coordination is of great importance. According to Mulford & Klonglan (1982) inter-organizational coordination, is defined as "the process of ensuring, through various means, that extension programmes, projects, and activities of a particular organisation do not unnecessarily conflict with or duplicate those of other organisations operating in the same target area, but instead complement or supplement each other".

The problem of ineffective coordination is a global one. For example, according to Düvel (1995), "a problem presently facing many traditional communities is the chaotic confusion arising from unplanned and uncoordinated effects of development. This results in tremendous duplication and eventually a largely reduced development impact". In pluralistic extension, lack of coordination between different extension organisations often results in unnecessary duplication or working at cross-purposes, with the result that the frequently scarce extension resources are not effectively utilized, thereby seriously reducing or undermining the potential extension input (Düvel 2002). In light of the diversity of organisations involved in agricultural services delivery, improved co-ordination among different organisations involved in agricultural extension would improve the performance of the agricultural sector.

2.4 Towards identification of principles and their acceptability

Against the theoretical background of this chapter and different participation models and empirical studies reviewed, certain principles regarding effective linkage structures emerge. These are mostly based on participation and institutional linkage structure principles that were identified from literature (Düvel, 2002).

Principles regarding an effective linkage structure

The most important principles relating to effective institutional linkage structures and whose acceptability is to be tested in this research are the following:

1. In an effective linkage structure a clear provision for differentiation should be made between the coordinating and operational functions.

2. Institutional linkage structures should be located as close to the grassroots community as possible, however, there should be a compromise between proximity to the community and effective coordination.

3. For purposes of coordination and integration of development it is important that the linkage structure is not isolated. It should be integrated or embedded in a hierarchy or ladder of similar linkage structures extending from the grassroots community up to higher level e.g. District, ADD or even national level.

4. An effective linkage structure should provide for linkage between agriculture and other development issues that targeted communities might be interested in.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

Chapter three briefly describes the area where the research was conducted as well as the criteria for selection of the area. This is followed by the research design, which includes, sampling, data collection procedures and data processing and the statistical analysis procedure employed.

3.2 The Study area

3.2.1 Description of the study area

For reasons of practical accessibility, Nkhotakota district was selected as a survey area from December 2004 to March 2005. Nkhotakota is one of the nine (9) districts in the central region (province) of the Republic of Malawi. It is located along Lake Malawi, the third largest lake in Africa, and is bordered in the south by Salima district, Ntchisi district in the southwest, Kasungu district in the west, Mzimba district in the northwest, and Nkhata bay district in the north. Nkhotakota also shares an international boundary with the Republic of Mozambique in the east (see Figure 3.1).

Nkhotakota district with an average land holding of 1.8 ha per family has 207,413 ha of its total land for cultivation. Agriculture is the main economic activity carried out by an estimated 83,302 farm families in the district. The majority of the 283, 761 people of Nkhotakota, consisting of 49 percent and 51 percent men and women respectively, live in the rural areas. They cultivate a variety of crops such as maize, cassava, rice, cotton, tobacco, groundnuts and horticultural crops. Cattle, chicken, goats, sheep and guinea fowls dominate the livestock enterprises.

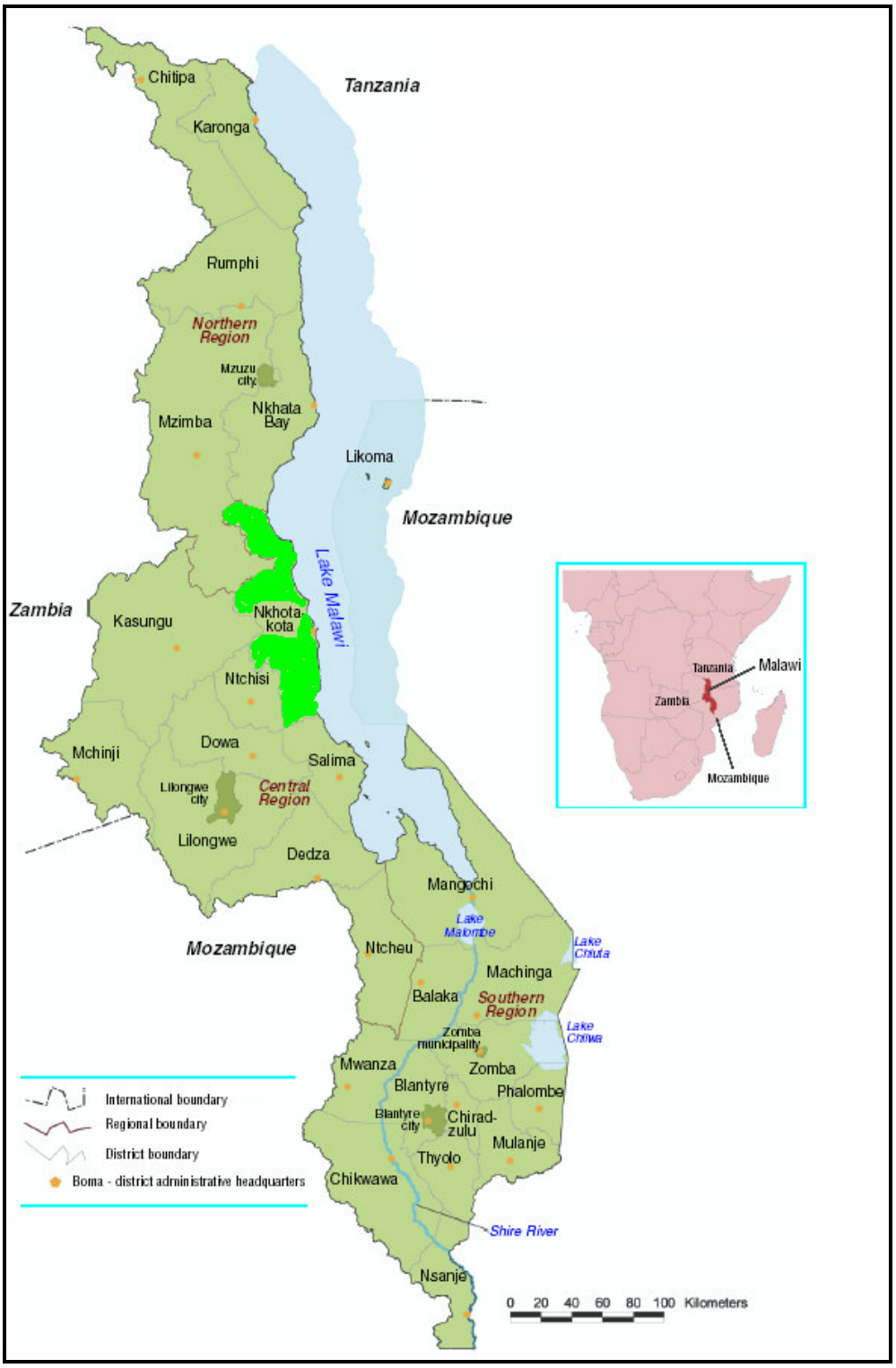


Figure 3.1: Map of Malawi and location of Nkhotakota district

3.2.2 District agricultural development strategy

Agricultural services are delivered through the Nkhotakota Rural Development Project (RDP) of the Salima Agricultural Development division. Nkhotakota RDP has four (4) Extension planning areas (EPAs), namely Nkhunga to the north, Linga in the centre, Zidyana to the south, and Mwansambo to the southwest (Figure 3.2) The EPAs are further subdivided into Sections. A frontline extension worker is responsible for one section, which is his/her extension service area. The interaction between extension staff and the farming community takes place at the Section level. The link between the farming community and frontline extension workers is established through the creation of blocks and farmers clubs. A block is organized on a sub section basis and becomes a unit of agricultural operations. There are 58 Sections and 320 blocks now with a total of 83, 302 farm families in the district.

3.2.3 Agricultural extension

The current agricultural extension worker to farmer ratio is estimated a 1:1,771, exceeding the recommended ratio of one extension worker for every 750 farmers (Decentralization Secretariat, 2002). In Linga and Mwansambo EPAs, the ratio is lower than the district average as more extension workers are deployed. However, in Nkhunga and Zidyana EPAs where only 37 percent of the agricultural extension complement is assigned, the ratio has gone beyond 2,000 farm families. This is a clear indication that the majority of the farmers in the district are unlikely to have access to agricultural extension services.

The problem of shortage of personnel severely affects the provision of the agricultural extension services leading to farmers' negative perception of not being afforded with the necessary support. This is aggravated by the limited mobility of extension workers who use bicycles as means of transport in conducting farm visitations.

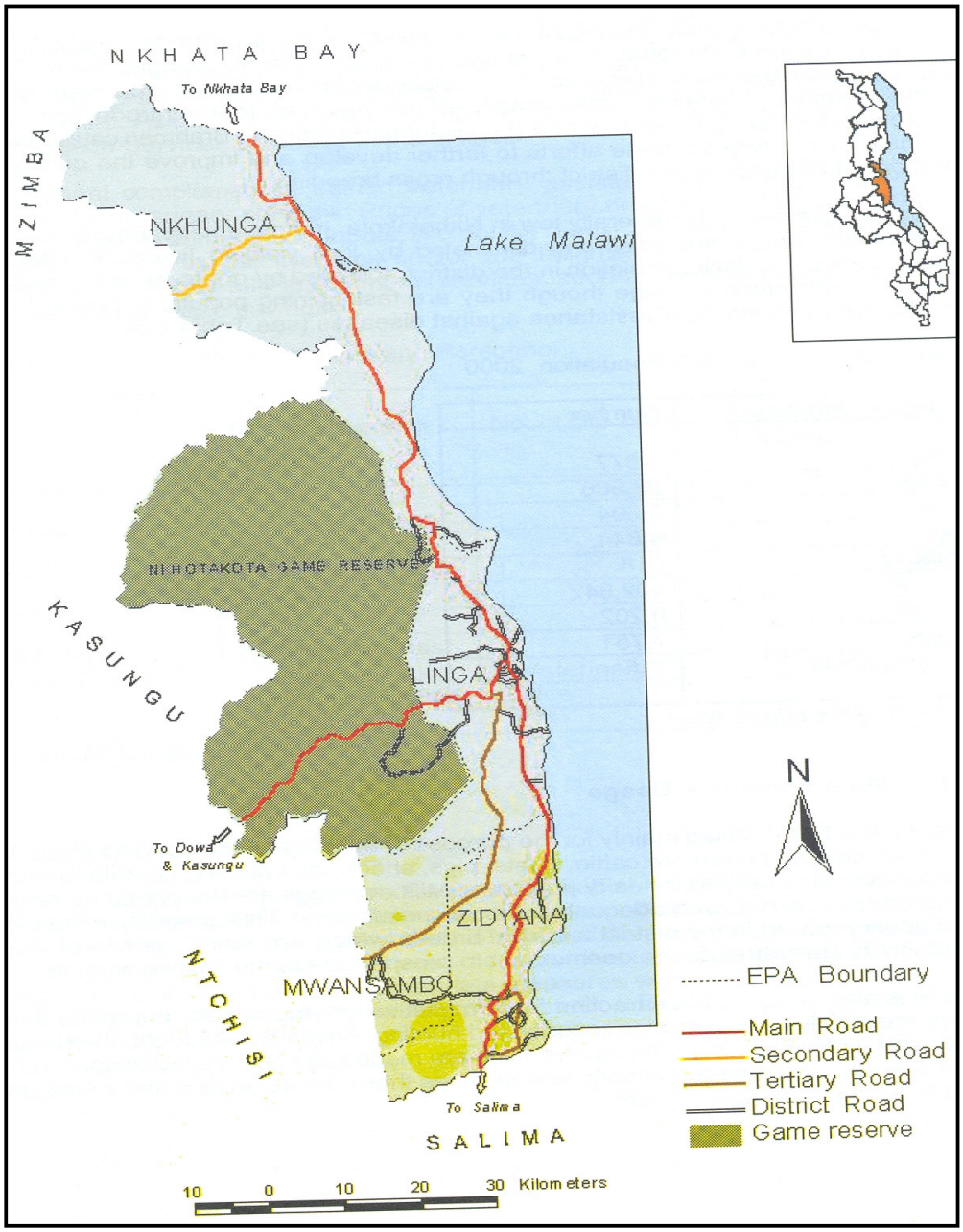


Figure 3.2: Map of Nkhotakota district and location of Extension Planning Areas (EPAs)

3.3 Sampling and data collection procedures

3.3.1 Sampling

The research involved extension staff from several extension organizations as well as leaders of farming groups in the district. The formal field survey started with a week of discussions with officials from Department of Agriculture at the district. Having

observed the number of extension staff in the district it was decided that all available extension staff be interviewed. This means that all extension workers that were found at their duty stations during the agreed date of the survey were interviewed and this amounted to a total of 85 percent of all extension staff. Extension staff from all four EPAs in the district were involved in the study.

A survey capturing the views of all the clients or even a representative sample would have had to be very extensive and not possible within the limited resources of time and finances available. For this reason and because of limited value of uninformed opinions the focus was on farmer leaders. Twenty-six (26) randomly selected farming group leaders from two randomly selected extension planning areas (EPA) were interviewed. It was assumed that farmer leaders would be able to provide more informed opinions and have more influence on their communities.

3.3.2 Data collection tools

A structured questionnaire was developed and used for to collect data from extension staff as well as farmers. The questionnaire (Appendix A) was validated and thoroughly discussed with selected managers, subject matter specialists and frontline staff working in agricultural extension prior to the survey.

3.3.3 Data collection

Data collection is a very costly and time consuming exercise especially when structured questionnaire interviews are the main source of information as it was the case in this survey. Two methods of interviews were employed, namely the group interviews (i.e. having individual interview schedules completed within a group situation) and the individual interviews. According to Düvel (1992), attractiveness of the group interview technique lies in the substantial saving in time and costs, while little if anything is forfeited in terms of reliability and validity.

Data for The individual interviews schedules were used to collect data from the randomly selected leaders of farmers and the remainder of extension staff especially

those from the private sector. Two enumerators assisted in this regard. The researcher interviewed most of the extension staff using the group interview.

Prior to data collection, two days of training were organized and provided by the researcher for the two enumerators that collected data from leaders of farmers. The emphasis was on understanding the questions, their purpose and the use of relevant scales. This was followed by the pre-testing of the questionnaire at one of the communities outside the survey area and included both farmer leaders and extension staff. The pre-test results were discussed and necessary changes made to the measuring instrument.

3.4 Data processing and analysis

The analysis of data involved the use of Statistical package for social sciences (SPSS) version 13. Prior to the analysis, the data was entered into a computer using Microsoft Excel. The data was then imported into SPSS. Editing (checking the questionnaire repeatedly to ensure that data is free from error), data cleaning (running frequency tables and inspect the outputs to check if mistakes were made during entry) and finally modifications regarding the collapsing or creation of new variables formed part of the data quality control process. All the outliers were discarded after verification with actual questionnaires.

The main techniques used for data analysis included: frequency distribution with the use of graphic displays, tables and charts to illustrate data and facilitate analysis and correlation analysis and significant tests such as correlation and Chi square (X^2) tests depending on the nature of the variables.

Transforming the scale points to percentage scale points was done in Microsoft Excel spreadsheets making use of the following formula:

$$\textbf{Percentage scale point} = \frac{\textbf{(Scale point} - 1) * 100}{\textbf{(Maximum scale point} - 1)}$$

CHAPTER 4

SOCIO-ECONOMIC PROFILE

4.1 Introduction

This chapter provides an overview of the respondents (study sample) as an orientation to the reader and as an introduction to the various demographic and other characteristics, which will later be analyzed in terms of their relationships with participatory and coordinated extension services.

4.3 Functional categories

An overview of respondents according to their functions is presented in Table 4.1 below.

Table 4.1: Distribution of respondents according to their operational functions (N = 135)

Respondent Operational Categories	N	Percentage
Frontline Extension Workers	**46**	**34.0**
Extension Managers	**17**	**12.6**
Managers	**16**	**11.9**
Subject matter specialists	**30**	**22.2**
Farmers	**26**	**19.3**
Total	**135**	**100.0**

More extensionists were interviewed than farmers. All extension workers that were available at their duty stations during the planned visits were interviewed. Most of these (65 percent) are government employed. This is because until recently the government was the sole provider of agricultural extension services in Malawi. The biggest category is frontline extension workers (34 percent), followed by subject matter specialists (22.2 percent). The other section of respondents (19.3 percent) comprised twenty-six leaders randomly selected from farming groups.

4.3 Gender

Although seventy-five percent (75 %) of the farming families in Nkhotakota are male headed, women do most of the farming (Decentralization Secretariat, 2002). According to the Malawi country report on human rights practices of 2004, 52 percent of Malawi's full-time farmers are women (USAID, 2004). Table 4.2 shows the distribution of respondents' operational functions and gender.

Table 4.2: Distribution of respondents according to their operational functions and gender (N=135)

Sex	Farmers		Frontline Extension Workers		Extension Managers		Managers		Subject Matter Specialists		Total	
	n	%	n	%	n	%	n	%	n	%	N	%
Male	19	73	39	84.8	14	82.3	14	87.5	27	90	**113**	**83.7**
Female	7	26	7	15.5	3	17.7	2	12.5	3	10	**22**	**16.3**
Total	**26**	**100**	**46**	**100.0**	**17**	**100.0**	**16**	**100.0**	**30**	**100**	**135**	**100**

Chi^2 =3.255; df=4; p=0.516

The large majority of extension staff as well as farmers are male (83.7 percent) and only 16.3 per cent are female. The small representation of women extensionists in the survey is due to the fact that there are very few women extension workers in the district. For instance, out of 78 extensionists from the public sector in the district, only 12 are female (SLADD - RDP, 2005). The poor representation of females extends also to all the other operational function categories. This is a weakness of agricultural extension services, because women contribute to over a half of agricultural production in Malawi (USAID, 2004). Even in sub-Saharan Africa, according to Saito & Spurling (1992), women account for 70 to 80 percent of household food production. Swanson (1983) also acknowledges the fact that a significant proportion of small farmers and farm workers in the Third World are women. But although women make a major contribution to world food production, they benefit much less from agricultural extension services.

As far as farmers are concerned, only leaders of farming groups were considered as respondents. Three positions of farmer committees were considered, namely those of chairperson, secretary and treasurer. The results above are a clear indication that the

imbalance between men and women is even bigger within the key leadership positions.

4.4 Age

Age, which is often regarded as an important behaviour determinant is another characteristic that this survey looked at. An overview of the age of respondents is presented in Table 4.3 below.

Table 4.3: Distribution of respondents according to their age and their operational functions (N=135)

Age	Farmers		Frontline Extension Workers		Extension Managers		Managers		Subject Matter Specialists		Total	
	n	%	n	%	n	%	n	%	n	%	N	%
< 35	12	46.1	17	37.0	6	35.3	10	62.6	15	50.0	**60**	**44.4**
36 – 45	5	19.2	20	43.5	6	35.3	3	18.7	7	23.3	**41**	**30.4**
46 - 60	9	34.7	9	19.5	5	29.4	3	18.7	8	26.7	**34**	**25.2**
Total	**26**	**100**	**46**	**100**	**17**	**100**	**16**	**100**	**30**	**100**	**135**	**100**
Mean	**40.1**		**38.7**		**39.9**		**36.4**		**37.0**		**38.4**	

Chi^2 =9.205 df= 8; p=0.325

The larger majority of the extensionists have the necessary age to command respect in their work environment. 56 percent of all the extension staff are thirty-six (36) years or above. The mean age is 38.4 years but there are big variations, the oldest being 60 and the youngest 22 years old. There is no significant difference between the frontline extension staff and their supervisors in terms of age, which seems to indicate that competence rather than age is the criterion for promotion.

Most of the farmers are in an age group where one could expect them to still be able to carry out the necessary activities associated with farm work. This age is regarded to be not more than 60 years and all the respondents fall into this category.

4.5 Qualifications and training

Other attributes of assumed importance that were looked at in this survey pertain to the level of formal education and training attained by the respondents. The highest level of formal education of the survey's respondents consisting of farmers' group leaders, frontline extension staff and their supervisors, managers, and subject matter specialists are summarised in Table 4.4 below.

Table 4.4: Distribution of respondents according to their operational functions and formal education (N=135)

Formal Education	Farmers		Frontline extension workers		Extension managers		Managers		Subject matter specialists		Total	
	n	%	n	%	n	%	n	%	n	%	N	%
Standard 1 – 8	17	65.4	0	0	0	0	0	0	0	0	**17**	**12.6**
JCE	5	19.2	11	23.9	1	5.9	0	0	3	10.0	**20**	**14.8**
MSCE	4	15.4	35	76.1	16	94.1	16	100	27	90.0	**98**	**72.6**
Total	**26**	**100**	**46**	**100**	**17**	**100**	**16**	**100**	**30**	**100**	**109**	**100**

Chi^2 =93.729 df=8; p=0.000

The overall findings show that the large majority of respondents (72.6 percent) have MSCE[1] (Malawi school certificate of education) and are thus high school graduates. Even 15.4 percent of the farmers have this qualification. However, the findings indicate significant differences between the various categories (Chi^2=93.729; df=8; p=0.000). Especially the farmers have a significantly lower level of qualification, but the difference between the extension categories is much less, with only the managers a little more superior in the sense that all of them have are high school graduates, while between 5 and 10 percent of the other extension categories have a JCE (Junior certificate of education) qualification. A further analysis was conducted to find out if there were differences in terms of formal education between different categories of extension staff. Findings follow in Table 4.5 below.

[1] Malawi school certificate of education (MSCE) is an equivalent of Matric in South Africa

Table 4.5: Distribution of extensionists according to their operational functions and formal education (N =109)

Formal Education	Frontline extension workers		Extension managers, managers and Subject matter specialists		Total	
	n	%	n	%	N	%
JCE	11	23.9	4	6.3	15	13.8
MSCE	35	76.1	59	93.7	94	86.2
Total	46	100	63	100	109	100.0

Chi^2 =6.911; df =1; p=0.009

The extension supervisory staff, managers, and subject matter specialists have better formal education compare to the frontline extensionists. Even the chi-square (Chi^2 =6.911; df = 1; p =0.009) does confirm the finding. Of the fifteen (15) extensionists that have a JCE, eleven (11) are frontline extension staff. The 13.8 percent of extensionists that have JCE should have done that in the late 1970s or early eighties. Now the minimum level of education required for frontline extension staff is at least MSCE.

Düvel, (2002), argues that agricultural extension requires extension workers that are qualified and competent in both the disciplines of agriculture and extension. The highest formal qualifications of extension staff, consisting of frontline extension workers, supervisors or managers and subject matter specialists are summarised in Table 4.6 below.

Table 4.6: Distribution of extensionists according to their extension functions and their highest tertiary qualification (N=109)

Function	Highest tertiary qualification								Total	
	Certificate		Diploma		BSc,		MSc			
	N	%	n	%	n	%	n	%	N	%
Frontline extension workers	36	58.1	4	36.4	0	0	0	0	**40**	**36.7**
Extension Worker and Supervisor of Extension	6	9.7	1	9.1	1	3.6	0	0	**8**	**7.3**
Extension Supervisors and Managers	7	11.3	5	45.4	13	46.4	6	75	**31**	**28.5**
Subject Matter Specialists	13	20.9	1	9.1	14	50.0	2	25	**30**	**27.5**
Total	**62**	**100**	**11**	**100**	**28**	**100**	**8**	**100**	**109**	**100**

Chi^2 =46.861; df = 9; p =0.000

The majority of frontline extension workers (58.1 percent) have no higher tertiary qualification than a two-year general agricultural certificate. This does not place them in a good position for improved extension delivery. What is positive is the significant higher qualification of the supervisors and extension managers. 50 percent of them have a qualification of a BSc. or higher, while this percentage is 0 for frontline extension staff. The significantly lower qualification of some managers of private organizations is a call for concern. It was, however, found out that these managers with slightly lower qualifications do not do a lot of technical agricultural or extension work. In most cases they are managers of sales personnel for agricultural and related inputs.

Düvel, (2002) observes that the effectiveness and efficiency of extension is a direct function of the competence of the extension personnel. This is particularly the case in extension, which requires professional skills but is so often seen as a mere technique or methodology. The professional nature of extension lies in the fact that it does not deal with techniques or recipes, but rather has to adapt its message according to the unique environmental, economic, managerial and human specific situations (Düvel, 2002). In view of this, proper training and competence can be regarded as basic requirements or preconditions for effective extension delivery. A more specific detailed analysis of the extension qualifications as related to the major functions of extension staff appears in Table 4.7.

Table 4.7: Distribution of extensionists according to their operational functions and level of training in extension (N=109)

Extension Training	Frontline Extension workers		Extension workers /Supervisors		Supervisors and Managers		Subject Matter Specialists		Total	
	n	%	n	%	n	%	n	%	N	%
None	8	20.0	0	0	5	16.1	4	13.3	**17**	**15.6**
Courses in FA/ FHA Certificate[2]	29	72.5	7	87.5	2	6.4	10	33.3	**48**	**44.0**
Courses in Diploma	3	7.5	0	0	6	19.4	1	3.3	**10**	**9.2**
Courses in BSc and MSc[3]. Agric	0	0	1	12.5	18	58.1	15	46.8	**34**	**31.2**
Total	**40**	**100**	**8**	**100**	**31**	**100**	**30**	**100**	**109**	**100**

Chi^2 =52 .790; df = 9; p =0.000

Not even a single extensionist in the district has done a pure agricultural extension course. While the largest percentage (84.4 per cent) have had limited exposure to extension when they were enrolled for the agricultural programmes at certificate, diploma and Bachelor of Science (BSc) level, 15.6 percent of all extension staff have had no training in extension whatsoever. Though there is a significant difference between the frontline extension staff and their managers as far as extension training is concerned as confirmed by the chi square (Chi^2=52 .790; df = 9; p =0.000), perhaps a bigger cause of concern than the general low level of extension training is the fact that some supervisors and managers (7) are not much better qualified.

A further analysis was conducted to find out if there were differences in terms of level of extension training among extension staff from different organizations that participated in the study. Findings follow in Table 4.8 below.

[2] FA (Field Assistant) and FHA (Farm Home Assistant) were official titles given to male and female frontline agricultural extension staff respectively. These went through a two year certificate course. The names have changed to agricultural extension development officer (AEDO)

[3] Only one Extensionist did Masters in Extension

Table 4.8: Distribution of extensionists according to their level of extension training and the type of extension organisations they work for (N=109)

Extension Training	Government organisation		NGOs		Private organisations		Total	
	n	%	n	%	n	%	N	%
None	3	4.4	8	28.6	6	46.1	**17**	**15.6**
Courses in FA/FHA Certificate	44	64.7	4	14.3	0	0	**48**	**44.0**
Courses in Diploma	6	8.8	3	10.7	1	7.8	**10**	**9.2**
Courses in BSc and MSc. Agric	15	22.1	13	46.4	6	46.1	**34**	**31.2**
Total	**68**	**100**	**28**	**100**	**13**	**100**	**109**	**100**

Chi^2 =51.192; df = 12; p =0.000

Much as there is a reasonable number of extensionists from NGOs and the private organisations that have good agricultural training background, there are some that are inadequate. Of the 15.6 percent of all the extension personnel that have not undergone agricultural or extension training, 82.4 percent are from the NGOs and the private organisations (i.e. fourteen (14) out of 17 extension staff that have not done any agriculture or extension are from NGOs and private organisations). It would not be surprising therefore to find out that agricultural extension services delivery in the survey area is substandard.

It can also be observed in Table 4.8 above that overall, more extension staff from NGOs and the private organisations have higher level agricultural training than those from the government organisations. This places them in a professional category, something that would seem a precondition for a much improved extension delivery. Of the sixty-eight (68) extensionists that participated in this study from the public sector, only 15 did agricultural training at BSc or higher level. This is about 22 percent of all public sector extensionists. For NGOs and private organisations this higher level agricultural training is at 46.4 percent and 46.1 percent respectively. Even the chi-square (Chi^2 =51.192; df = 12; p =0.000) does confirm the above findings.

4.6 Work Experience

Bembridge (1988) is of the opinion that less than five years in extension employment is reckoned as inexperienced. He argues that the employee spends the first two years acquainting himself with the new work situation and making little meaningful contributions in that time. Table 4.9 below summarizes the situation regarding extensionists' work experience.

Table 4.9: Distribution of respondents according to their operational functions and years of service (N=109)

Work Experience	Frontline Extension Workers		Extension Managers		Managers		Subject Matter Specialists		Total	
	n	%	n	%	n	%	n	%	N	%
<10 years	20	43.6	10	58.7	13	81.1	18	60	60	55.0
11 – 20 years	17	36.9	3	17.7	2	12.6	6	20	28	25.7
21 – 30 years	9	19.5	4	23.6	1	6.3	6	20	20	18.3
Total	**46**	**100**	**17**	**100**	**16**	**100**	**30**	**100**	**109**	**100.0**
Means	**12.5**		**12.3**		**7.8**		**10.4**		**11.2**	

Chi^2 =22.750; df = 18; p =0.200

Nkhotakota district has a good crop of experienced agricultural extension staff. On average, the extension staff that participated in this study have worked for 11.2 years as extension agents. Of course, the length of the experience varies from one person to another, the longest being 30 years and the shortest less than a year. But more than 70 percent of the extensionists served for more than five years and thus should have a reasonable amount of experience. However, work experience alone does not guarantee that the extensionist can do his work well without commitment and putting efforts into learning new skills and concepts (Düvel, 2002). There is no significant difference between the types of extension organization as far as work experience is concerned (Chi^2 =22.750; df = 18; p =0.200).

The significantly lower work experience of managers of some organizations mostly private organisations is a call for concern. A further analysis was conducted to find out reasons for this trend among managers. Table 4.10 shows results.

Table 4.10 Distribution of managers of according to the type of organisation they work for and their years of experience in management positions

Manager's years of experience	Names of organisations			
	NGOs	No. of managers	Private Organisations	No. of managers
Less than 8 years	World Relief Malawi	1	Kulima Gold	1
			Farmers World	1
			NASFAM	1
			ADMARC	1
			ASMAG	3
More than 8 years	World Relief Malawi	2		
	World Vision International	1		
	Concern World wide	1		
	Malawi Red Cross Society	1		
	Total Land Care	1		
	IDEAA	1		
	SFPDP	1		
Total		**9**		**7**

Managers of private organisations that participated in the survey have relatively less years of work experience compared to the managers of agricultural related programmes from NGOs. According to Table 4.10 above private organisations managers have been working for eight years or less. This is because; most private organizations, which primarily deal with either, agro-input (e.g. Kulima Gold, Farmers World) or farmers associations (e.g. NASFAM, ASMAG) are quite new in agriculture and agricultural extension activities in the district. Most of these service providers have come in during the 1990s. In view of this, some of their extension staff have not been working for a long time.

4.7 Summary and conclusions

1. There is a clear under-representation of women in agricultural extension services in Nkhotakota district. This imbalance between men and women extends even to farmers within key leadership positions. This is a weakness in agricultural extension in the district since women contribute more to agricultural production than men. This imbalance can make it difficult to reach such an important target group.

2. Nkhotakota district has a good crop of experienced extension staff. On average, the extension staff have worked for 11.2 years. It should be noted, however, that extensionists from NGOs and private organisations have not been in agricultural extension for a long time because most of these service providers started doing agricultural extension during the 1990s. Such extension staff may need some good orientation to agricultural extension as well as on the job extension training.

3. While close to sixteen (16) percent of extension staff have had no training in extension, the largest number has had limited exposure to extension when they were enrolled for the agricultural programmes at certificate, diploma and Bachelor of Science (BSc) level. What is positive though is the fact that extension supervisors have significant higher qualification compared to frontline staff. The significantly lower qualification and work experience of some managers of NGOs and private organizations is a call for concern.

4. Farmers (leaders) have a significantly lower level of qualification. Only about 15 percent of farmer group leaders are high school graduates. If this is the picture of farmer leaders, it is bound to be much worse as far as the general clients are concerned.

CHAPTER 5

ORGANIZATIONAL CHARACTERISTICS

5.1 Introduction

This chapter provides an overview of agricultural extension and related organisations and staff that participated in this study. This forms part of an orientation to the various characteristics of the organisations involved in this survey. These characteristics will in the subsequent chapters be looked at closely in terms of their relationships with participatory and coordinated extension services.

5.2 Extension organisations

In most poor countries, the agricultural extension services are provided and managed by the public sector or state (Campbell, 1999). The department of agricultural extension services (DAES) has been a sole provider of agricultural extension services for a long time in Malawi. However, there have been new players coming into agricultural extension services (DAES, 2002). Extension organisations and number of extension staff that participated in this research are presented in Table 5.1 below.

Table 5.1 Distribution of respondents according to the organizations they belong to (N=109)

Name of Organization	No. Respondents from each organization
Government Organisations (GO)	
1. Department of Agricultural Extension Services	68
Sub-total	**68**
Non Governmental Organisations (NGO)	
1. Concern Worldwide	1
2. Concern Universal	3
3. Smallholder Floodplain Development Programme	2
4. World Vision International	5
5. World Relief Malawi	7
6. Save the Children Federation (USA)	2
7. Malawi Red Cross Society	1
8. Alinafe Rehabilitation Unit	3
9. SARRNET	2
10. IDEEA	1
11. Total Land Care	1
Sub-total	**28**
Private Organisations	
1. ARET	1
2. ADMARC	1
3. Malawi Rural Finance Company	1
4. Kulima Gold	1
5. Farmers World	1
6. NASFAM	2
7. ASMAG	4
8. Land O Lakes Cooperation	1
9. Chia Watershed Conservation Project	1
Sub-total	**13**
TOTAL	**109**

There are over two dozen organisations involved in the delivery of agricultural extension and related services in the survey district. This is in addition to various smaller community-based organisations, private stockists (agro-input dealers), and farmer groups, among others. Twenty organizations (21) from the public and private sectors, including non-governmental organizations (NGO), were considered in this survey. The government organisations have the largest number of extension staff (68). This is because until early 1990s, the Ministry of Agriculture through the Department of Agricultural Extension Services was the sole provider of agricultural extension services (DAES, 2002). As can be observed in Table 5.1 above, the situation has now changed and is continuing to change.

5.3 Type of agricultural extension agencies

For a very long time, extension in Malawi has been highly dependent on public service. However, with the reform of the public sector emphasizing the downsizing, of the service as well as the resources, the promotion of a broad variety of extension service providers seems to be a plausible proposition (DAES, 2002). One aspect of the new pluralism is that not all extension organisations offer their services for free. Table 5.2 reflects the degree to which the different organisations are focused on profit making or not.

Table 5.2: Frequency distribution of extensionists according to the type and intentions of the organisations they work for (N = 109)

Intention of Organisation	Government organisation		NGO		Private Organisation		Total	
	n	%	n	%	n	%	N	%
Profit making	0	0	1	3.6	7	53.4	8	7.3
Non-profit making	68	100	27	96.4	6	46.6	101	92.7
Total	**68**	**100**	**28**	**100**	**13**	**100**	**109**	**100**

$Chi^2 = 47.315$; df = 2; p =0.000

The findings indicate that only 7.3 percent of the respondents do extension with a profit-making motive and in this regard there are significant differences between the different types of extension organisation ($Chi^2 = 47.315$; df = 2; p =0.000). More than 50 percent of the private organizations are commercial by nature with a profit-making motive, while all the Government organizations and most of the NGOs have no profit-making motive. There are still more extension agents from the public sector in the district though there are many other service providers now coming in. More than half (62.4 percent) of the extension staff that participated in the study come from the public service. 25.7 percent and 11.9 percent are from non-governmental and private organizations respectively.

Most NGOs and private organisations in the district that are involved in agriculture and agricultural extension activities do not have their own frontline extension staff. Table 5.3 reflects the number of frontline extension staff organisations that did take part in the survey have.

Table 5.3 Distribution of extensionists according to their positions and the type of organization they work for (N=109)

Extension Organisations	Frontline Extension Workers		Extension Worker/ Supervisors		Subject Matter Specialists		Extension Supervisor /Managers		Total	
	n	%	n	%	n	%	n	%	N	%
Government organisation	33	82.5	7	87.5	18	60.0	10	32.3	**68**	**62.4**
NGOs	7	17.5	1	12.5	9	30.0	11	35.4	**28**	**25.7**
Private organisations	0	0	0	0	3	10.0	10	32.3	**13**	**11.9**
Total	**40**	**100**	**8**	**100**	**30**	**100**	**31**	**100**	**109**	**100**

Chi^2 =27.464; df = 6; p =0.000)

The public sector has the largest number of frontline extension staff available compared to other extension organisations. According to findings in Table 5.3, 82.5 percent of frontline extension staff in this survey are from the public service. The remainder (17.5 percent) are from NGOs. The private organisations do not have frontline extension staff. Both NGOs and private organisations rely on public extension staff in their programme or project areas for implementation of their activities and also remunerate them. Even NGOs that have some frontline staff, from time to time seek the services of government staff. The arrangement to use staff from the public sector is very informal, because, in most cases agreements do not involve the management of the organisations concerned. Arrangements are just made between NGOs and government staff involved. This "freelance" extension benefits government extension staff and is tolerated, because their salaries are very low. This being the case for a few years to come, the public sector, because of significant large numbers of frontline extension staff available compared to other extension organisations, will continue to provide the required leadership even in the pluralistic extension services.

5.4 Focus of service delivery

There have been new service providers coming into agricultural extension services in Malawi since 1990 (DAES, 2002). However, it must be pointed out that not all these organisations are primarily involved in agricultural development. Some of them, mostly NGOs do rural development programmes and projects. Agricultural development is only one of their interventions. Table 5.4 below highlights the

distribution of extension staff according to their organisations' focus of services delivery.

Table 5.4 Distribution of extensionists according to their type of organization and the focus of service delivery (N=109)

Type of extension Agency	Government organisations		NGOs		Private organisations		Total	
	n	%	n	%	n	%	N	%
Agricultural development only	52	76.5	2	7.1	7	53.8	**61**	**56.0**
Rural development[4]	16	23.5	26	92.9	6	46.2	**48**	**44.0**
Total	**68**	**100**	**28**	**100**	**13**	**100**	**109**	**100**

Chi^2 =38.707; df = 2; p =0.000

While the focus of services delivery for NGOs is mostly rural development where agriculture features as only one of numerous interventions (92.9 percent), the public sector does primarily agricultural development (76.5 percent). The Chi-square (Chi^2 =38.707; df = 2; p =0.000) confirms a significant difference between the extension organisations in this regard. For a long time the focus of the Department of Agricultural Services (DAES) has been agricultural development. This explains why fifty-six (56) percent of the extensionists, which primarily comprise extension agents from the public sector, indicate that agricultural development is the focus in their extension service delivery. The 44 percent focussing on rural development are mostly from non-governmental organisations (NGOs).

5.5 Extension message approach

In Malawi, about 78 percent of the farming households have holdings of less than 1 ha (IFAD, 1995). The average land holding size for Nkhotakota district, however, is 1.8ha (Decentralization Secretariat, 2002). In view of small land holding sizes most smallholder farmers practice mixed farming, which is presumed to have an influence on the message content of extension organisations. Extension approaches employed by different extension organisations regarding message content are presented in Table 5.5, which distinguishes between a commodity approach, (i.e. one that only

[4] Rural Development includes both agricultural and non-agricultural development

promotes a specific commodity) and mixed cropping (where more than one commodity is promoted).

Table 5.5 Distribution of extensionists according to their type of extension agency and extension approach used (n=109)

Extension Message Approach	Government organisation		NGOs		Private organisations		Total	
	n	%	n	%	n	%	N	%
Single commodity	2	2.9	0	0	1	7.6	**3**	**2.8**
Multi commodity	66	97.1	28	100	12	92.4	**106**	**97.2**
Total	**68**	**100**	**28**	**100**	**13**	**100**	**109**	**100**

Chi^2 =1.987; df = 2; p =0.370

Extension message approaches used by both public and private extension organisations are similar. This is shown in Table 5.4 and the non-significant chi-square value (Chi^2 =2.583; df = 4; p =0.630). Most organisations favour a multi commodity approach (97.2 per cent). The single commodity focus is not popular (2.8 percent) although the responses do not allow any conclusion as to whether and to what degree there are commodity focused approaches within the multi—commodity service provided.

5.6 Extension methods

The aim of the department of agricultural extension services is to improve access to extension services to all people especially smallholder farmers. In view of that, the individual, group and mass media methods of extension have been employed in Malawi since the early sixties (DAES, 2002). Table 5.6 highlights findings on the extension methods used by different extension organisations in the survey district.

Table 5.6 Distribution of extensionists according to the type of their organisation and the extension methods employed (N = 109)

Extension Methods	Government organisation		NGOs		Private organisations		Total	
	n	%	n	%	n	%	N	%
Both individual and group	55	80.9	20	71.4	11	84.6	**86**	**78.9**
Primarily group approach	13	19.1	8	28.6	2	15.4	**23**	**21.1**
Total	**68**	**100**	**28**	**100**	**13**	**100**	**109**	**100**

Chi^2 =1.354; df = 2; p =0.508

Agricultural extension organisations in the district mostly use both individual and group extension methods when interacting with their clients. The fact that 78.9 percent use both the group and individual method and 21.1 percent primarily the group approach, confirms the big emphasis on the group method, which is understandable and to be recommended in view of the wide extension worker/farmer ratio. The chi-square values (Chi^2 =1.354; df = 2; p =0.508) indicate that there is no significant difference between the different organisations in this regard, although it appears as if the NGOs are even a little more group focused. Currently the farmer/extension worker ratio is at 1: 1763, which is quite large. This exceeds the ratio of 1 frontline extension worker for every 750 farmers recommended by the department of agriculture (Decentralization Secretariat 2002).

5.7 Audience focus

The agriculture sector in Malawi is characterized by a dual structure composed of estate and smallholder farmers. The smallholder sub-sector comprises about 2.6 million farm families occupying around 4.5 million hectares of potentially arable land (World Bank, 2002). The estate sub-sector takes up 1.2 million hectares of the total land (Kherallah, *et al* 2001). Because of the large number of smallholder farmers, it would appear that extensionists spend much time with the subsistence and small farmer. This is reflected in extensionists' indication of their primary focus regarding clients (Table 5.7).

Table 5.7: Percentage distribution of extensionists according to their type of organisation and audience focus (N=109)

Target Audience	Government organisation		NGOs		Private organisations		Total	
	n	%	n	%	n	%	N	%
Smallholder food security farmers (SH – FS)	6	8.8	9	32.1	3	23.1	**18**	**16.5**
Smallholder commercial farmers (SH – CF)[5]	4	5.9	2	7.1	2	15.3	**8**	**7.3**
Both SH – FS and SH – CF	35	51.5	12	42.9	3	23.1	**50**	**45.9**
All (SH – FS, SH – CF and CF)	22	32.3	5	17.9	5	38.5	**32**	**29.4**
Commercial farmers (CF)	1	1.5	0	0	0	0	**1**	**0.9**
Total	**68**	**100**	**28**	**100**	**13**	**100**	**109**	**100**

$Chi^2 = 12.693$; df = 8; p =0.123

The overall focus on smallholder farming is clearly emphasised by the findings in Table 5.7. The first three categories listed namely, smallholder food security farmers (16.5 percent), smallholder commercial farmers (7.3 percent) and a combination of both smallholder food security farmers and smallholder commercial farmers (45.9 percent), all focus on smallholder farmers. Even the 29.4 percent extensionists classified as serving small, medium and large scale farmers must, according to clear evidence obtained, be seen as focusing primarily on small scale farmers. This would imply that 99 percent of extension workers in Nkhotakota district focus on the subsistence and smallholder farmers.

[5] Smallholder commercial farmers (SH – CF) are farmers that have attained food security, possess commercial and market orientation and are skilled in the specialist enterprises such as Tobacco, Horticultural crops, Rice, Paprika, Spices and Dairying. The main priority commodities for the smallholder commercial farmers in Nkhotakota are Rice, Chillies and Cotton.

5.8 Summary and conclusions

1. In Nkhotakota district alone, there are over two dozen organisations and projects involved in the delivery of agricultural extension and related services. While all the Government organizations and most of the NGOs have no profit-making motive, more than 50 percent of the private organizations are commercial by nature with a profit-making motive. The public sector has most extension agents in the district.

2. In terms of focus of services delivery, most NGOs do rural development. The public sector does primarily agricultural development. Extension message approaches used by both public and private extension organisations are similar, in that the multi commodity approach is favoured.

3. As regards extension methods, both individual and group extension methods are used when seeking interaction with the clients. Though there are a few extension organisations in the district that deal with smallholder farmers, smallholder commercial farmers as well as commercial farmers, the focus of most extension organisations is primarily smallholder farming.

CHAPTER 6

FARMERS' VIEWS ON PARTICIPATION IN EXTENSION

6.1 Introduction

The clients' assessment is assumed to be one of the most valid indicators of extension and its performance and accomplishments. To get an indication of the farmers' assessment of whether or to what degree participation was taking place in agricultural extension, randomly selected farming group leaders from two randomly selected extension planning areas (EPA[6]) in Nkhotakota were interviewed. A survey capturing the views of all the clients on how agricultural extension is perceived would have to be very extensive and costly, without necessarily reflecting the true performance of extension because of varying degrees of ignorance. The focus on farmer leaders was because of funding limitations, but also because of the likelihood that they would be able to provide more informed opinions and because they are assumed to be influential in their communities. This chapter deals with the views of leaders of farmer groups regarding participation, but prior to that the characteristics of these leaders are discussed.

6.2 Farmer leaders' profile

Of the twenty-six (26) farmer leaders interviewed, 61.5 percent are from Linga EPA and 38.5 percent from Nkhunga EPA. Of these, 73.1 percent are male and 26.9 percent female. Their minimum age is 22 and the maximum is 60, with a mean of 40 years. An overwhelming majority (80.8percent) of the respondents is married, while 19.2 percent are either single or divorced. The average family size is 7.4 members. Furthermore, all respondents have undergone some formal education. While 65.4 percent have done primary education ranging from standard one to eight, a good 34.6 percent have done up to junior certificate at secondary level and 15.8 percent are high school graduates (MSCE).

The land holding or size of the land farmed ranges from 0.4 to 4.86 hectares (ha), with the mean being 1.8 hectares. 76.9 percent own 2 ha and less, 19.2 percent have

[6] Extension Planning Area (EPA) comprises several sections i.e. it is made up of several extension service areas that front line extension workers are responsible for.

between 2.5 and 4 ha, and 3. 8 percent farm on more than 4 ha. The large majority (76.9 percent) of these leaders are smallholder farmers. Only 3.8 percent are commercial farmers, the other (19.2 percent) are smallholder commercial farmers.

6.3 Awareness of extension

One of the most basic indications of a successful extension service is that the clients are aware of it (Düvel, 2002). One would expect the community to know who their extension worker is and what his functions are. Table 6.1 summarises farmer leaders' responses to a question concerning their local extension officer and how well they know him.

Table 6.1: Distribution of farmer leaders according to awareness of the their local extension officer (N=26)

Awareness criteria	Number	Percentage
Does not know the extension agent	1	3.8
Knows the extension agent but no contact	3	11.5
Little contact (reactive)	10	38.5
More contact (own initiative)	4	15.4
Frequent contact	2	7.7
Contact in group situation	5	19.2
Member of development group	1	3.8

Most leaders of the farmers have very little knowledge of agricultural extension activities taking place in their communities. Up to about 70 percent of the leaders do not have any substantial contact with their local extension worker. Even the leaders who have a high degree of contact with the extension worker (15.4 percent), is because of their own initiative. As many as 15.3 percent don't even know or have little to do with him or her. If extension had a significant impact in a community, it would be normal to expect that all or at least most of the farmer leaders would at least have some knowledge about the extension worker's presence or existence. If this is the picture regarding farmer leaders, it is bound to be much worse in the case of the general clients.

6.4 Extension organisations involved in the extension planning areas

In view of the limited resources and the tremendous task facing the extension service of the Department of Agriculture, several service providers have been encouraged to become involved and contribute towards the big challenge of agricultural development in the country. Table 6.2 highlights farmer leaders' views on whether or not they are working with all service providers.

Table 6.2: The involvement of extension organisations in selected extension planning areas (EPAs) according to citings by farmer leaders (N=26).

Name of organization	EPA	Number of times cited	Percentage
1. Department of Agricultural extension services (DAES)	Linga and Nkhunga	26	100
2. World Relief Malawi (WRM)	Linga and Nkhunga	21	80.8
3. World Vision International (WVI)	Nkhunga	10	38.4
4. Save the children federation (USA)	Linga	5	19.2
5. Nkhotakota AIDS Support Organization (NASO)	Linga	5	19.2
6. Malawi Red Cross Society (MRCS)	Linga	1	3.8
7. Wildlife and environmental society of Malawi (WESM)	Linga	1	3.8
8. Concern Worldwide	Linga	1	3.8
9. National initiative for civic Education (NICE)	Nkhunga	1	3.8
10. Micro loan	Nkhunga	1	3.8

It is very clear from the findings that in spite of pluralism in extension service provision, the public sector agricultural extension still has a high presence. NGOs tend to restrict their operations to selected areas. All leaders (100 percent) from the two EPAs indicated that the department of agricultural extension services (DAES) has its presence in their areas. This contradicts earlier findings that farmer leaders are not aware of the local extension agents available in their areas. These findings suggest that most leaders know the existence of local extension agents but there is very little contact. As it can be noted from the Table 6.2 there are more extension organisations operating in Linga than in Nkhunga. Apart from the department of agricultural extension services (DAES) only one NGO works in both EPAs.

6.5 Current participation in extension

The term participation is now part of the normal language of many development agencies but more often that not, the level of farmers' involvement leaves a lot to be desired (Pretty, 1995). To get a clear picture of the current level of involvement of farmers in the agricultural extension services, farmer leaders were requested to rank their current involvement in the following areas: research activities, problem identification, problem prioritisation and the programme planning process. Figure 6.1 below summarises the outcomes.

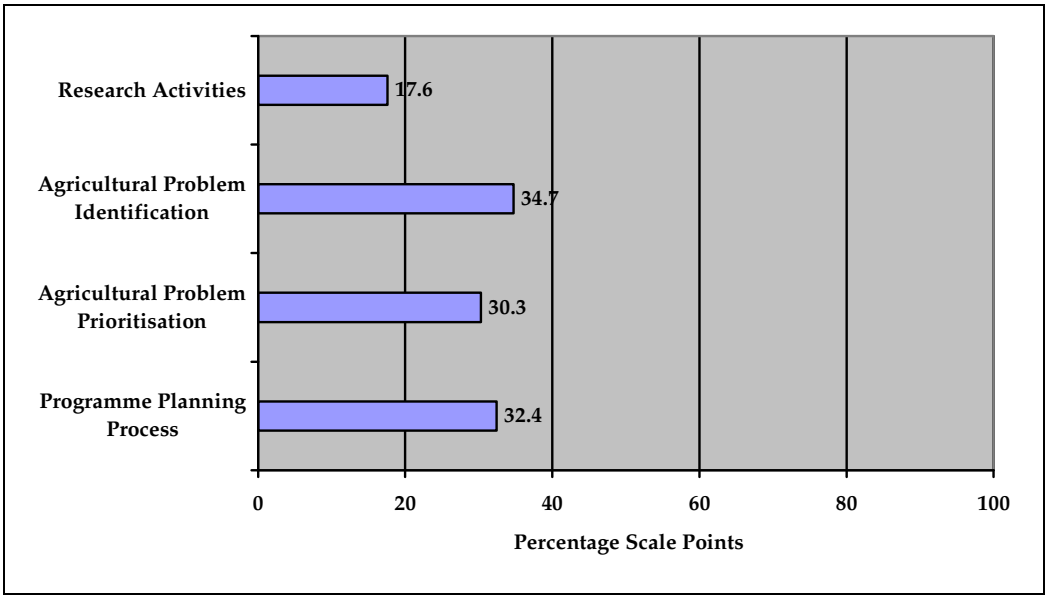


Figure 6.1: Distribution of respondents (farmer leaders) according to assessment of their current involvement in different aspects of agricultural extension activities (N=26)

The overall picture reflected in Figure 6.1 is positive, but needs to be seen in context, namely that the respondents were all farmer leaders and, in view of that, leave much room for improvement. Agricultural extension agents and researchers have not been adequately involving farmers in agriculture and agricultural extension activities. The assessed average percentage scale point of the farmers' level of involvement in agricultural extension activities in their areas is 28.8 percent. This is low for leaders and implies that there is limited contact between farmers and the extension staff and researchers. Conspicuously low is the farmer leaders' involvement in research activities (17.6%). An important implication of this low involvement is the likelihood

of inappropriate technologies and extension messages and a consequent low rate of adoption of disseminated agricultural technologies. Farmers, in general, do not appear to be party to the identification and prioritisation of the problems/needs for whom the technologies/innovations are generated. Given this state of affairs, one cannot expect a high degree of success from extension programmes formulated without the active participation of the target population.

6.6 Factors influencing participation

Weinberger & Jutting (2001), doing a study on women participation in local organizations in Chad and India found that household characteristics such as size of farm area showed more significant results than individual characteristics such as age and school attendance in their influence of participation. Analyses of some of the factors assumed to influence farmers' participation in agricultural extension were conducted, and the results are provided in this section.

6.6.1 Age

Results in Figure 6.2, which relates the participation with age, show that older farmers are more involved in extension activities than younger ones, but it is especially the middle group (36 – 45 years) that are most involved. This could be attributed to the fact that most of the middle-aged farmers can better afford it from a financial point of view. The same applies to the oldest age category, but in their case there could be a waning interest and consequently slightly less involvement.

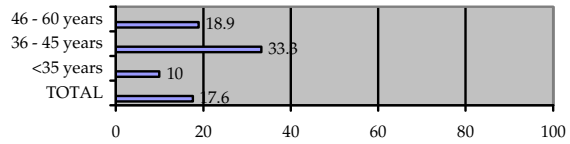
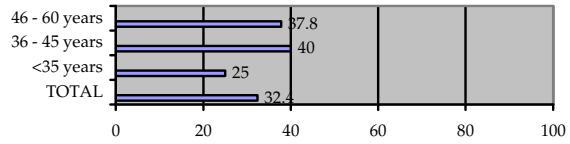
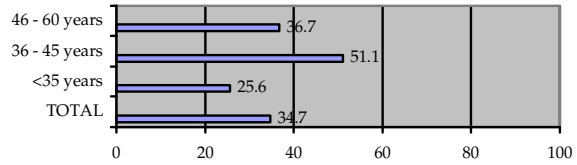
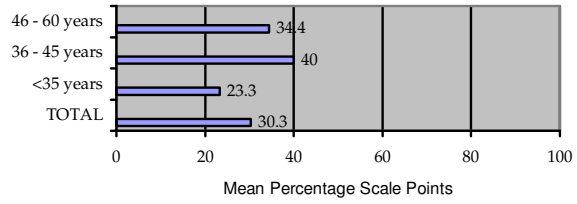
Research activities	
Programme development process	
Agricultural problem identification	
Agricultural problem prioritisation	

Figure 6.2: The mean assessment of current degree of participation in different aspects of agricultural extension activities (expressed as percentage scale points) by leaders of farming groups in different age categories (N=26)

6.6.2 Level of education

Outcomes regarding the influence of years of education on participation in agricultural extension are presented in Figure 6.3.

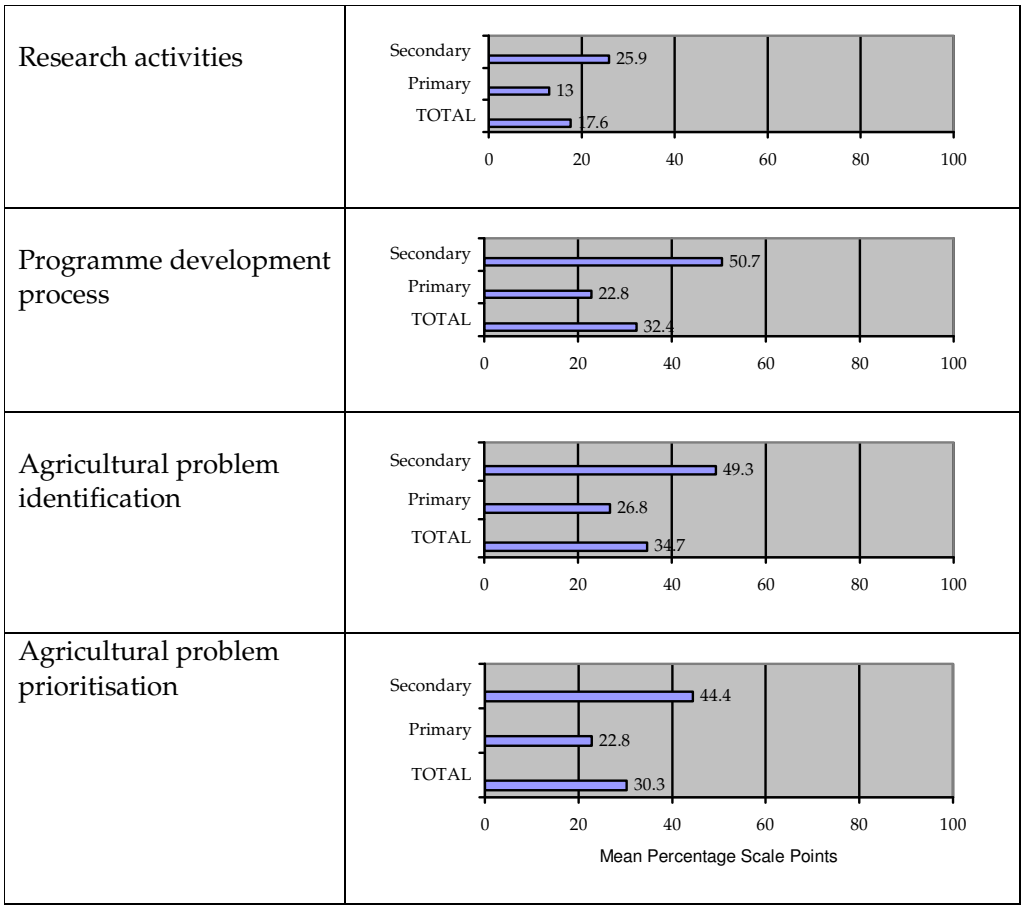


Figure 6.3: Mean assessments of the current level of participation in different aspects of agricultural extension activities (expressed as mean percentage scale point) by farmer leaders in different education categories (N=26)

Level of education seems to play a minor role in involvement in agricultural extension services. The expectation is that farmer leaders that have only a primary education are less involved than those that have gone beyond primary education, because leaders with more years of education should have a better understanding of participation and related issues and how these could assist in their progress in agricultural development. However these relationships ($r = 0.228$, $p = 0.26$; $r = 0.283$, $p = 0.16$; $r = 0.270$, $p = 0.18$; $r = 0.265$, $p = 0.19$) are not significant, and could be attributed to the relatively small number of farmer respondents interviewed.

6.6.3 Location

Location here should be seen in the context of variations relating to the communities as well as the communities serving them. Different organisations use different ways and means of reaching out to their target clientele. Figure 6.4 highlights the outcomes of the influence of location of the clients on their participation in extension.

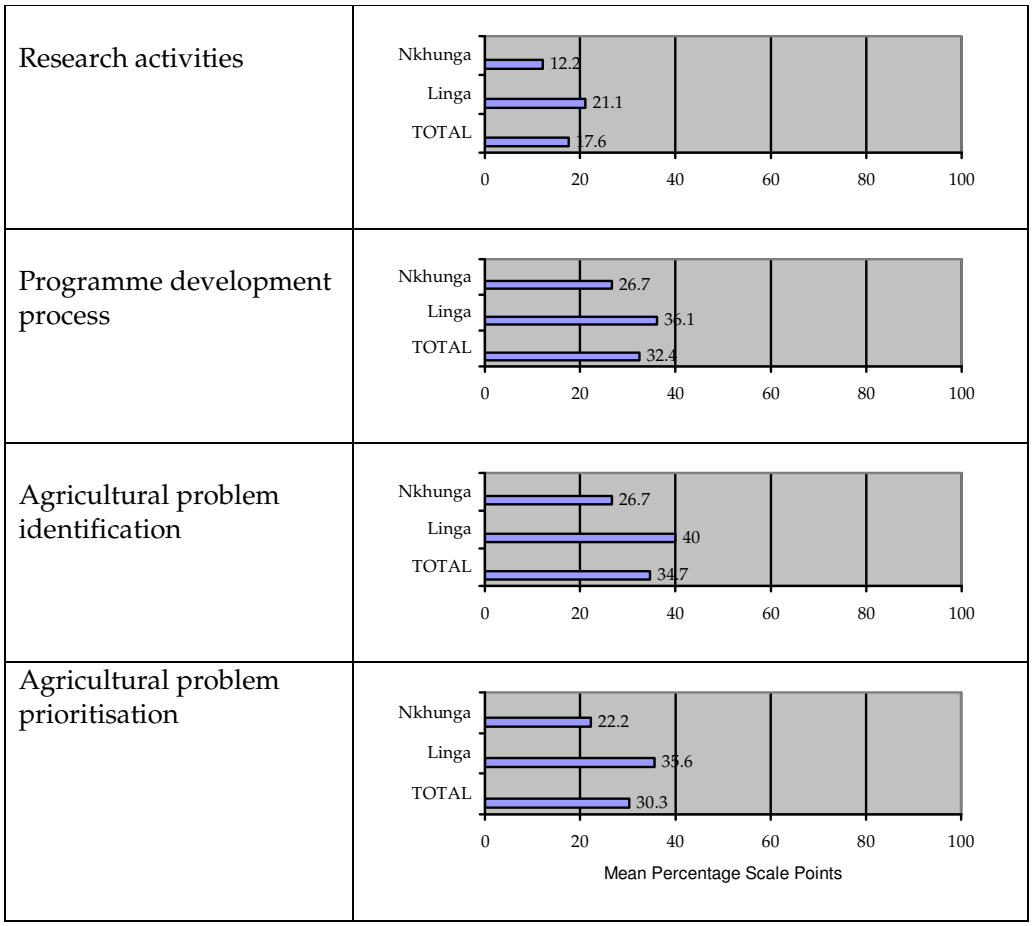


Figure 6.4: Mean assessments of the current degree of participation in different aspects of agricultural extension activities (expressed as mean percentage scale point) by farmer leaders in different extension planning areas (N=26)

Extension clients' location seems to have an influence on participation in agricultural extension services. Leaders from Nkhunga EPA are less involved than those from Linga EPA in this regard as can be seen in Figure 6.4 above. The relatively high rating of leaders from Linga EPA could be attributed to a higher concentration of NGOs working in the area. Most NGOs encourage participatory development. The non-

significant relationship between age and location as shown by chi-square (Chi^2 =0.157; df = 2; p =0.924) and the correlation (r = -0.052); (p = 0.802) rules out the contribution of age to these findings.

6.6.4 Gender

The role that gender could play in influencing clients' participation was also investigated and the findings are presented in Figure 6.5.

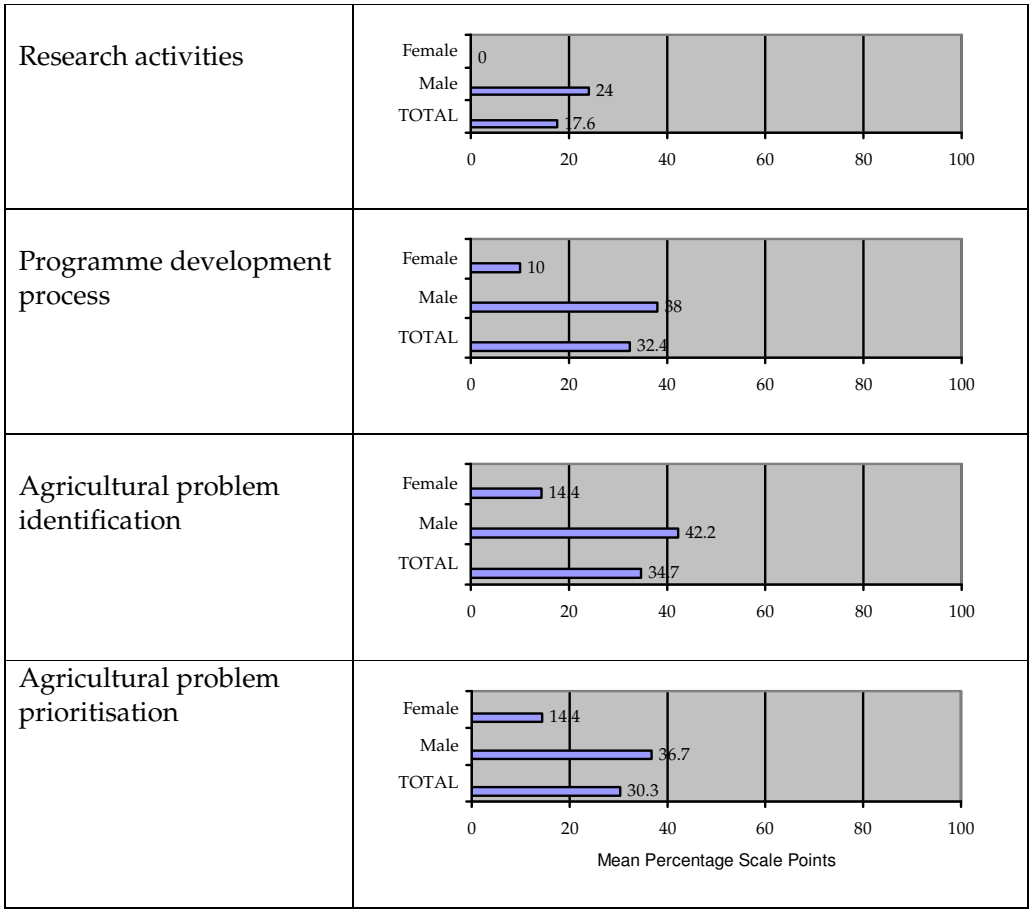


Figure 6.5: Mean assessment of the current degree of participation in different aspects of agricultural extension activities (expressed as mean percentage scale point) by farmer leaders in gender categories (N=26)

Women leaders' participation in agricultural extension is much less, ranging from 10 to 14.4 percent scale points, while they are not involved at all in research activities.

These findings are not surprising in view of the general subordinate role of women, and their more limited contact with extension.

6.6.5 Farm sizes

Results of the influence of landholding appear in Figure 6.6.

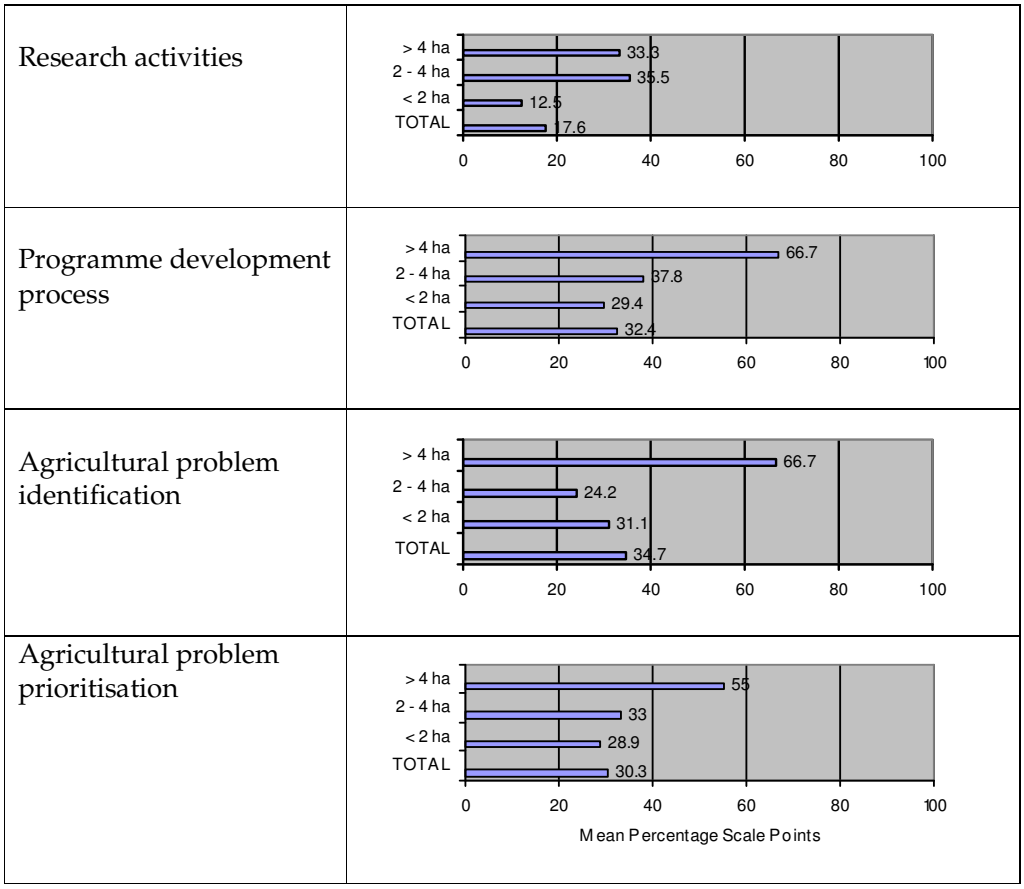


Figure 6.6: Mean assessments of participation in different aspects of agricultural extension activities (expressed as mean percentage scale point) by leaders of farming groups in different farm size categories (N=26).

Farmers with small farm sizes are less involved in agricultural extension services compared to those that have relatively larger hectares of land under cultivation. This is consistent with expectations, because farmers with more land tend to be more in production and profit oriented, and hence the need for more services in terms of extension. This puts these farmers in a position that requires frequent contact with

extension staff. The close contact in most cases leads to more involvement even in other aspects of extension. Though the findings indicate some degree of relationship between farm sizes and participation, this relationship is not significant as reflected in the non-significant correlations ($r = 0.150$, $p = 0.46$; $r = 0.052$, $p = 0.79$; $r = 0.109$, $p = 0.59$; $r = 0.265$, $p = 0.19$).

6.7 Farmers' willingness to be involved in agricultural extension services

To ensure that extension meets the demand of the farmers, the new agricultural extension policy in Malawi places much emphasis on clients' participation. In this survey leaders of the farming community were requested to indicate their willingness to participate or to be involved in the various agricultural extension activities. The findings are summarised in Figure 6.7.

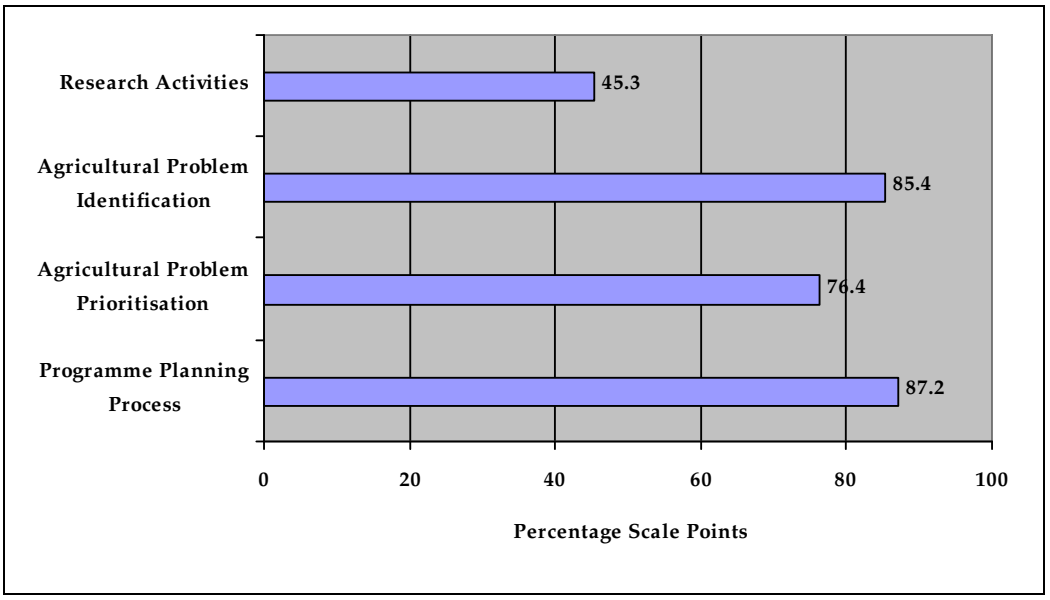


Figure 6.7: Assessments of the willingness to be involved in different aspects of agricultural extension by farmer leaders (N=26)

Farmer leaders show a high degree of willingness to be involved in agriculture and agricultural extension activities in their areas. Their willingness to be involved in research activities is surprisingly low, but they are especially keen to be part of the actual programme development process (87.2 %). However, this will take place only if the researchers and extension agents are willing to incorporate them into the process. It seems a great pity that this willing potential resource is not fully utilized.

6.7.1 Age

The influence of age on willingness to participate in extension is indicated in Figure 6.8.

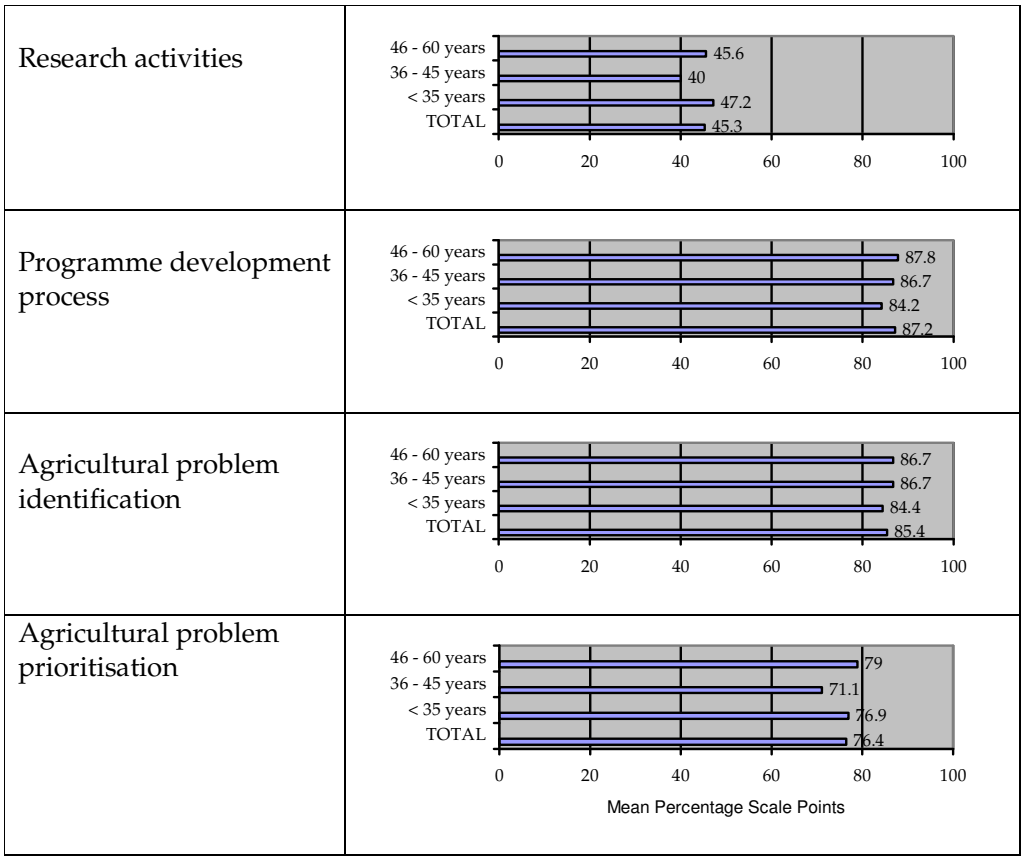


Figure 6.8: Assessments of willingness to be involved in different aspects of agricultural extension by farmer leaders in different age categories (N=26)

There are no significant differences between farmer leaders in different age groups as regards their willingness to be involved in agricultural extension.

6.7.2 Level of education

Years of education have been found to have some degree of influence on participation. Figure 6.9 below shows the role of level of education on willingness to participate.

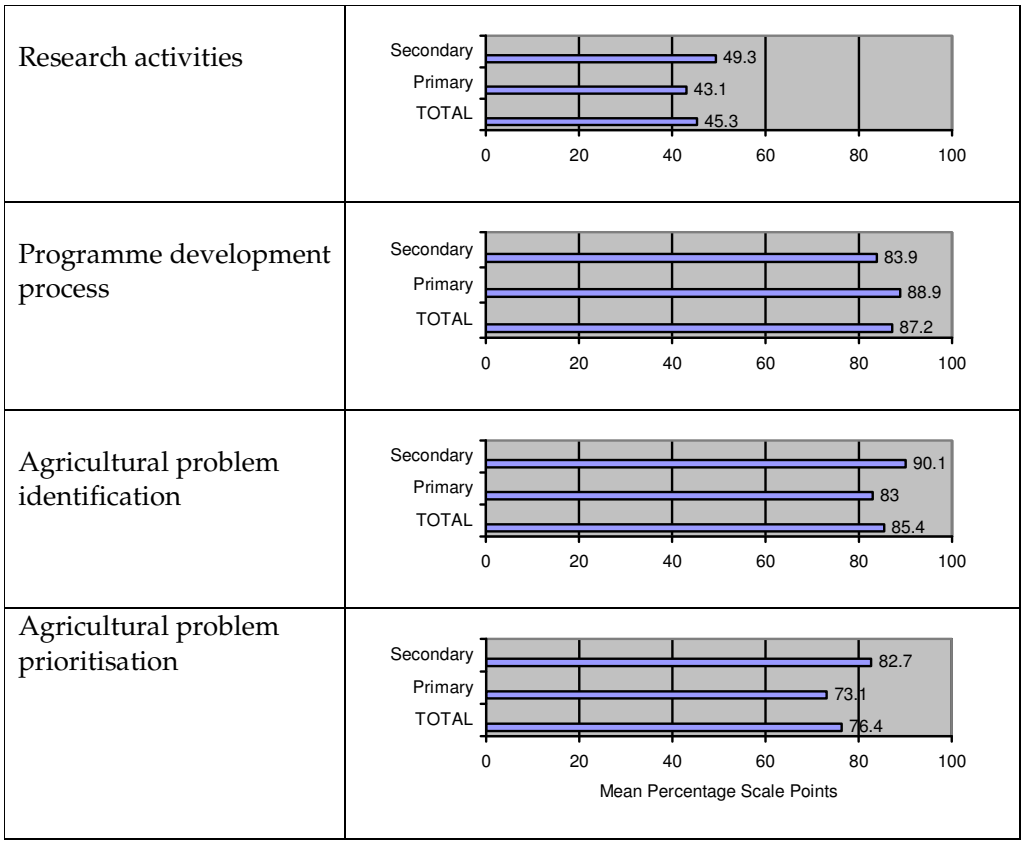


Figure 6.9: Assessments of willingness to be involved in different aspects of agricultural extension by farmer leaders in different education categories (N=26)

Level of education seems to have an influence on the willingness to be involved in agricultural extension. As it can be observed in Figure 6.8, apart from the programme planning process, the farmer leaders with a secondary level of education have expressed a bigger need to be involved in extension activities than those with only a primary education.

6.7.3 Location

The relationship between location and farmer leaders' willingness to be involved in agricultural extension is illustrated in Figure 6.10.

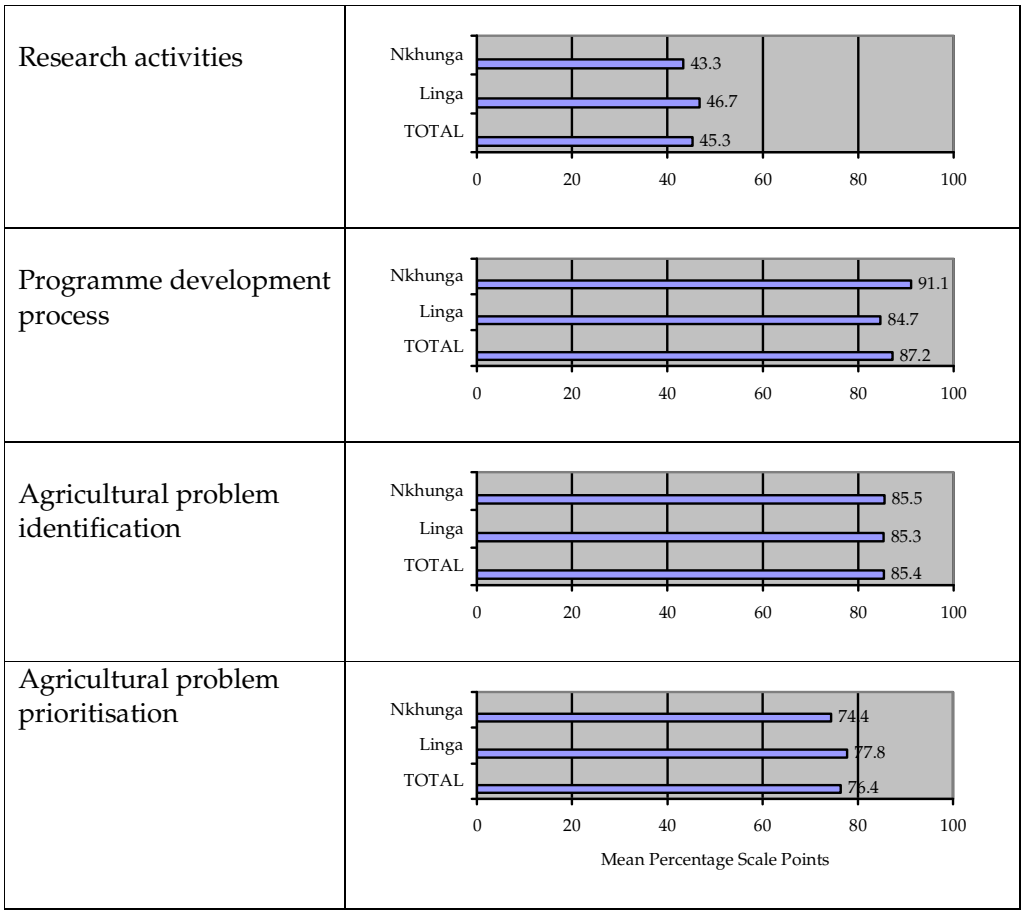


Figure 6.10: Assessments of willingness to be involved in different aspects of agricultural extension by farmer leaders in different extension planning areas (N=26)

Though farmer leaders from Nkhunga EPA are more willing to be involved in programme development (91 percent) than those from Linga, Linga EPA leaders are especially keen on getting involved in problem prioritisation (77.8 percent) and research (46.7 percent). However, these differences are not significant.

6.7.4 Gender

The relationship between gender and the willingness to participate in agricultural extension activities is shown in Figure 6.11.

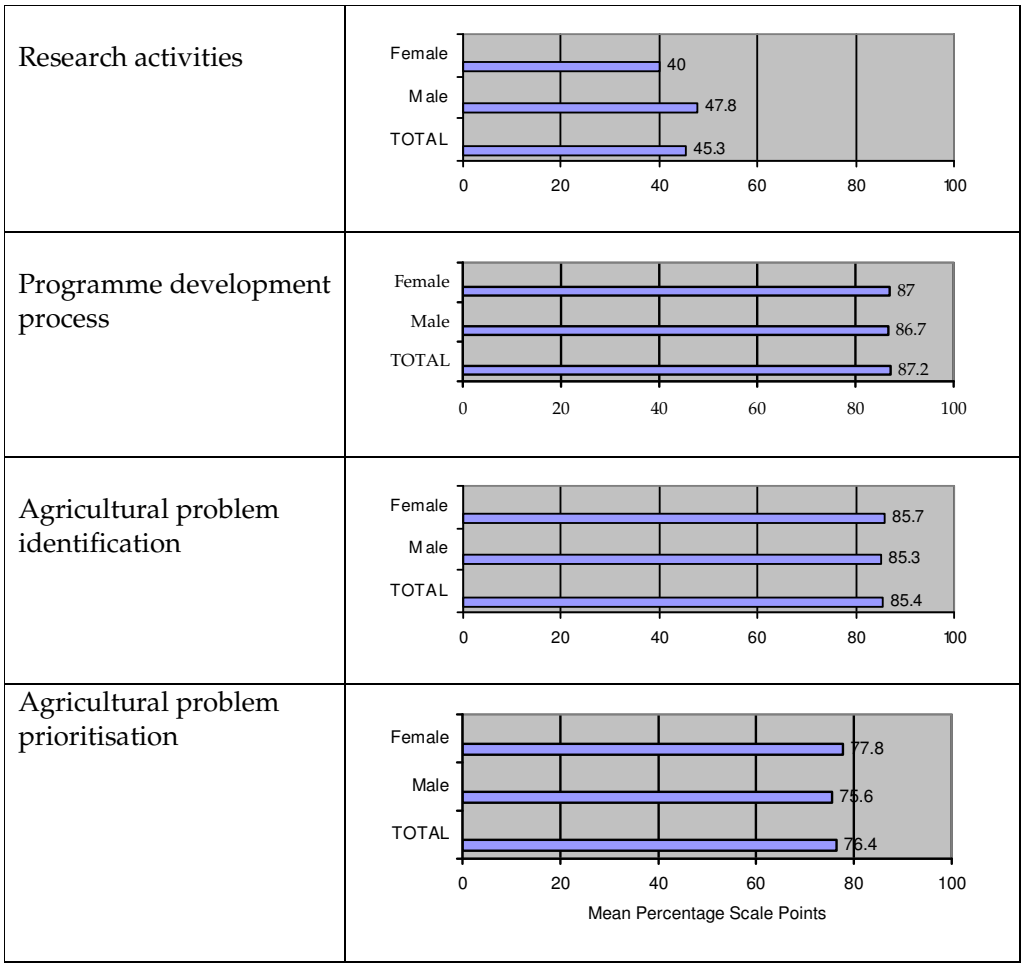


Figure 6.11: Assessments of willingness to be involved in different aspects of agricultural extension by farmer leaders in different gender categories (N=26)

Gender has no noteworthy influence on willingness to participate. This is surprising in view of the earlier findings on current clients' participation in agricultural extension. However, when comparing women farmer's current level with the aspired level of participation, their scope of aspiration is significantly more than that of the opposite gender.

6.7.5 Farm size

In the earlier findings, it was clear that farm size has some influence on clients' participation. Figure 6.12 summarizes results of a further analysis of the role of landholding on willingness to be involved in agricultural extension.

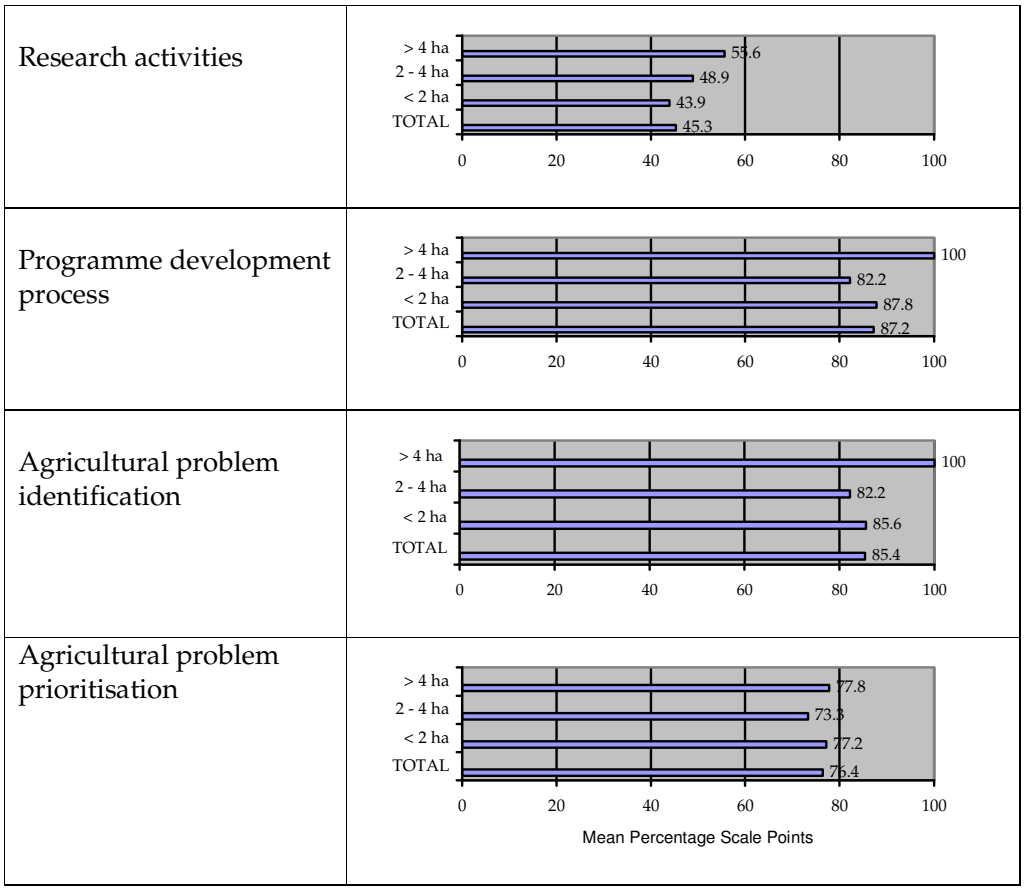


Figure 6.12: Assessments of willingness to be involved in different aspects of agricultural extension by farmer leaders in different farm size categories (N=26)

Land size seems to have an influence on willingness to be involved in agricultural extension only above the threshold of 4 ha. Farmer leaders with more than 4 ha of land are more eager to participate than those with less land. Agricultural extension organisations ought to take this finding seriously because most of the farmers in Nkhotakota are smallholders.

Another critical issue looked at was whether clients value community participation in agricultural extension services for their own benefit only or also for the benefit of the wider community. Findings to that effect are presented in Figure 6.13 below.

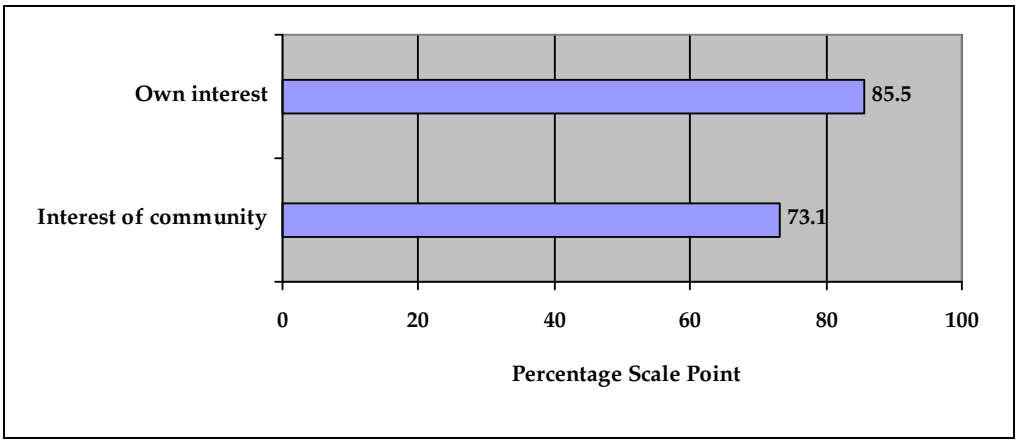


Figure 6.13: Mean assessment of the main interests served with involvement in extension, expressed as percentage scale point (N=26)

From the overview of mean scale points expressed as percentages in Figure 6.12, it is evident that the prime motive for wanting to become involved in extension is self interest (85. 5 percent). However, the possibility to serve the community through becoming involved in extension does also feature (73.1 percent). This is a positive attitude among farmer leaders that should be exploited.

6.8 Constraints preventing community participation in agricultural extension services

Apantaku, Oloruntoba & Fakoya (2003) observe that poor motivation and encouragement of farmers by researchers and extension officers is one of the major reasons for inadequate involvement of farmers in extension services. The farmers are not motivated or encouraged to participate in agricultural extension services. In this study respondents were requested to highlight the major reasons that prevented them from getting involved with extension. Table 6.3 summarizes the responses to a closed-end question regarding the most important factors preventing community participation in agricultural extension or development in Nkhotakota.

Table 6.3: Distribution of farmers according to their views regarding the reasons preventing farmer leaders' involvement in agricultural development work (N = 26)

Constraint	Number of times cited	Percentage
1. Poor motivation and encouragement by researchers and extension officers	**25**	**96.2**
2. Lack of formal education	**25**	**96.2**
3. Lack of interest in participatory agricultural extension	**20**	**76.9**
4. Lack of willingness of researchers and extension agents to involve farmers in agricultural extension services	**14**	**53.8**
5. Lack of adequate knowledge of research and extension processes	**12**	**46.2**
6. Inefficient and ineffective linkage between researchers, extension officers and farmers	**11**	**42.3**
7. Lack of confidence to work as partners with researchers and extension agents	**9**	**34.6**

The major constraints which hinder farmer involvement in agricultural extension services as indicated by the farmer leaders are: poor motivation and lack of encouragement of farmers by researchers and extension officers (96.2%), lack of formal education by farmers (96.2%) and lack of interest in participatory extension by farmers (76.9%). These seem to suggest that most developmental policies that are implemented by the Department of Agriculture follow a purely top-down rather than a bottom-up approach, which would have ensured that farmers' opinion are known and considered. Because of the top-bottom approach, extension staff find it very difficult to get to a point where they should begin involving farmers in the extension services in a greater way.

These problems are not insurmountable. They can be easily addressed; hence involving farmers in agricultural extension services may not be a problem. Extension organizations have a great role to play in this regard.

6.9 Summary and conclusions

Based on the findings above it is concluded that;

1. The level of farmers' involvement in agricultural extension activities is low. Given this state of affairs, the impact of extension programmes is likely to remain limited because of the lack of active participation of the target population.

2. Farmers are willing to be involved in agriculture and agricultural extension. This is an opportunity, which extension organisations must exploit.

3. Generally, the socio-economic characteristics of the farmers had no significant influence on farmers' level of involvement in agricultural extension services. An exception is the level of education and farm size, in the sense that a farm size above a certain threshold or a higher education tends to be associated with a higher level of involvement or willingness to be involved in agricultural extension services.

4. Some of the constraints that prevent farmers' involvement are poor motivation and encouragement of farmers by researchers and extension officers. Farmers are neither motivated nor encouraged to participate in agricultural extension activities. Other constraints include farmers' lack of adequate knowledge of research and extension processes, ineffective and inefficient linkages between researchers, extension agents and farmers and a lack of formal education by farmers. Since most of the causes for lack of participation can be laid at the door of extension staff and researchers, they should initiate participatory agricultural research and extension, which will involve farmers at every stage of the research and extension processes.

CHAPTER 7

COMMUNITY PARTICIPATION AND INVOLVEMENT

7.1 Introduction

For more than a decade now, there has been a significant paradigm shift towards more participatory approaches in extension and rural development (Düvel, 2000). Participation of the clients or farmers in agriculture and the development process in general is nowadays more generally accepted as a very important principle of Extension. In spite of this, there are different interpretations as to what participation is and how it should be implemented in practice. This chapter discusses the views of extension staff on the purpose or goal of participation, the current practice of participation and the level or degree of participation envisaged by extensionists in the study area, the place of needs assessment in participation as well as constraints to effective participation in extension services.

7.2 Purpose or goal of participation

Düvel, (2002) points out that the principle of maximum community participation is based on the notion of self-determination, self-reliance, self-responsibility and self-help as a normative goal. This implies that involvement should be extended to the ultimate of empowerment and ownership of the development process. A further reason for emphasising participation is that it is associated with greater effectiveness. Cohen & Uphoff, as cited by Düvel, (2002), have found that people adjust to change most rapidly when they initiate, identify and solve problems that directly affect their welfare. Emphasis on participation and involvement ultimately also contributes to an increased sustainability in development. According to Düvel (2002), another major consideration relates to the democratic values of the individual, which have been widely recognised and accepted as a basic need and right (e.g. by United Nations Organisations), and has consequently become a primary goal of development. To establish the views of respondents as regards the purposes of participation, a list of alternatives was provided. Findings are summarised in Figure 7. 1 and reflect the assessments of their importance using a 10-point semantic scale and expressed as an average percentage.

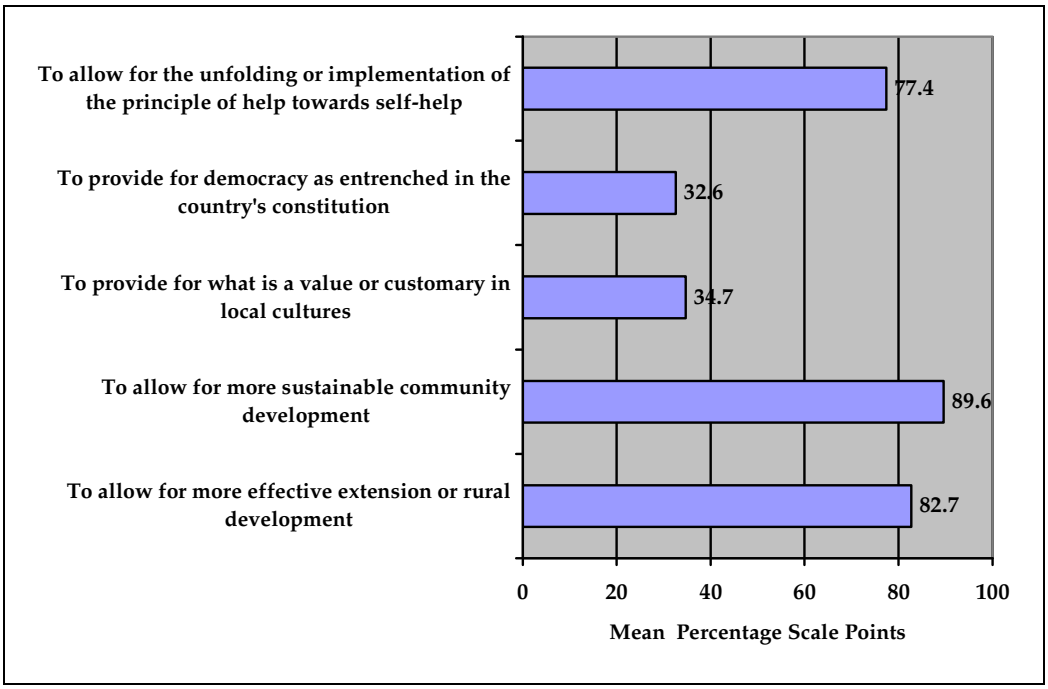


Figure 7.1: The assessment of different purposes of participation (expressed as a mean percentage scale point) by extensionists (N=109)

All the purposes of participation are regarded as important. The contribution of participation to improved sustainability and more effective extension or rural development received assessments of more than 80 percent, with the contribution towards self-help and self-sufficiency being regarded only slightly less important (77.4 percent). Less important, though still a vital consideration, is the compatibility with democratic and customary values (32.6 percent and 34.7 respectively. These viewpoints apply with minor variations to all respondents categorised according to operational functions (Figure 7.2).

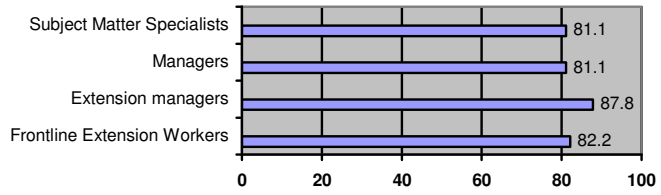
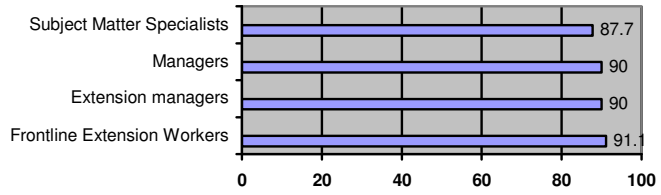
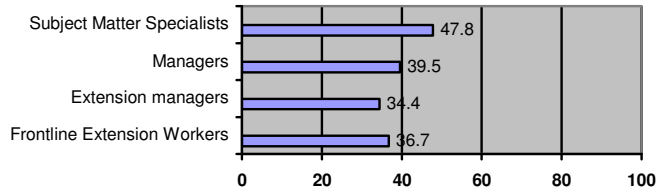
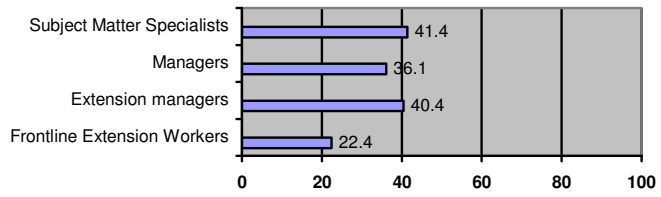
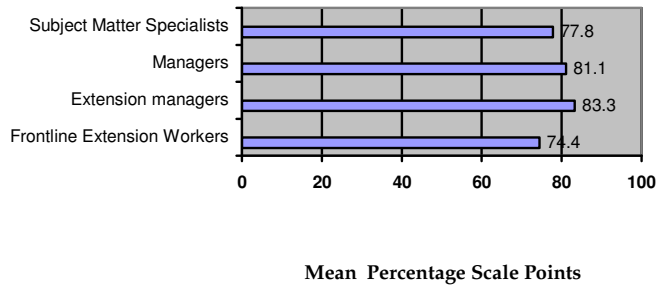
1. To allow for more effective extension or development	
2. To allow for more sustainable community development	
3. To provide for what is a value or customary in local culture	
4. To provide for democracy as entrenched in the country's constitution.	
5. To allow for the unfolding or implementation of the principle of help towards self-help	

Figure 7.2: The mean assessment of different purposes of participation expressed as mean percentage scale points by respondents in different functional categories (N=109)

There are no significant differences among the extensionists regarding the assessment of different purposes of participation. It is noteworthy, however, that extension managers assessment of the purposes to allow for more effective extension or development (1) and to allow for the unfolding or implementation of the principle of help towards self-help (5) are significantly higher compared to the other categories. This could be as a result of their better understanding or because of their interest in these issues due to their possible concern regarding accountability. Perceptions as they pertain to different types of extension organisations are presented in Figure 7.3.

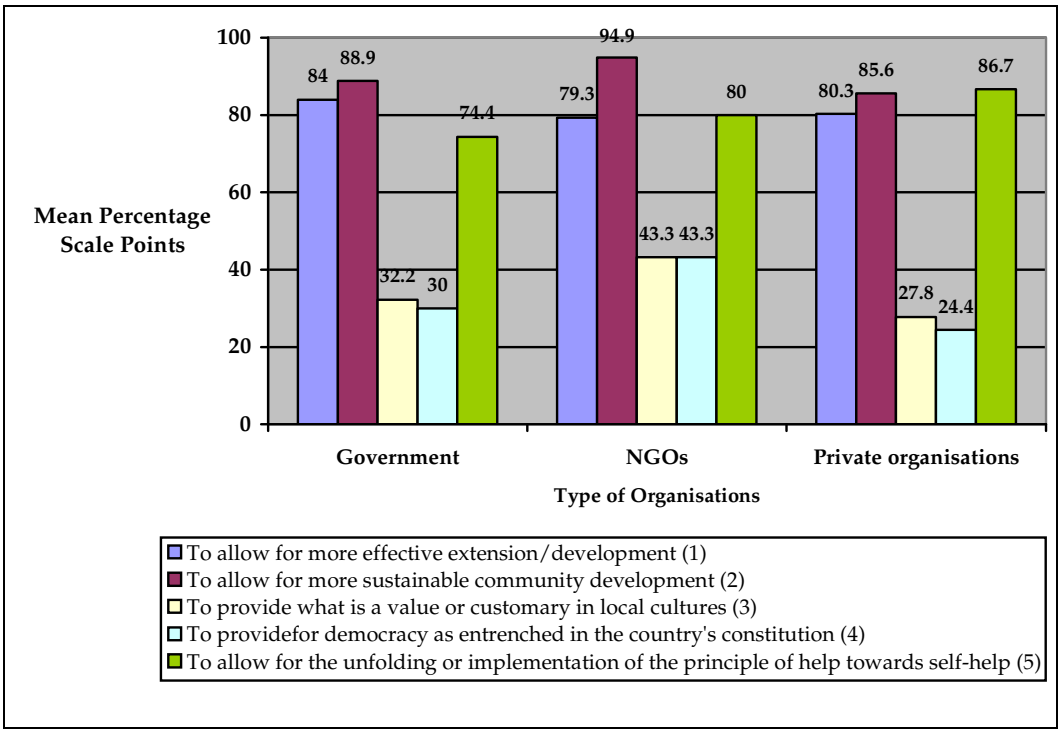


Figure 7.3: The mean assessment of the importance of different purposes of participation expressed as mean percentage scale points by extensionists within the different types of extension organisation (N=109)

Again there are no significant differences between the different type of organisations, except that NGOs regard the purposes relating to compatibility with local culture and democratic values as somewhat more important then government and private organisations. They are also somewhat more concerned about the sustainability of community development.

7.3 Participation as a means to an end or as a means only

The most outstanding alternatives regarding participation are whether participation is seen as a means to an end or as an end in itself (Düvel, 2002). Whether and to what extent extension personnel support these alternatives or a combination of them, was investigated by requesting respondents to place them, namely the following, in rank order of acceptability:

(1) Participation as an ultimate goal (i.e. to promote self-reliance, self-sufficiency and self-responsibility) should be the ultimate and primary goal of a public extension service (normative goal.)
(2) Participation as means only (i.e. it should contribute towards the development intervention being more effective in the form of better support, more identification, more sustainability, etc.)
(3) Participation as goal and as a means (combination of 1 and 2)

Figure 7.4 shows the extension staff's rank order of alternative uses of participation.

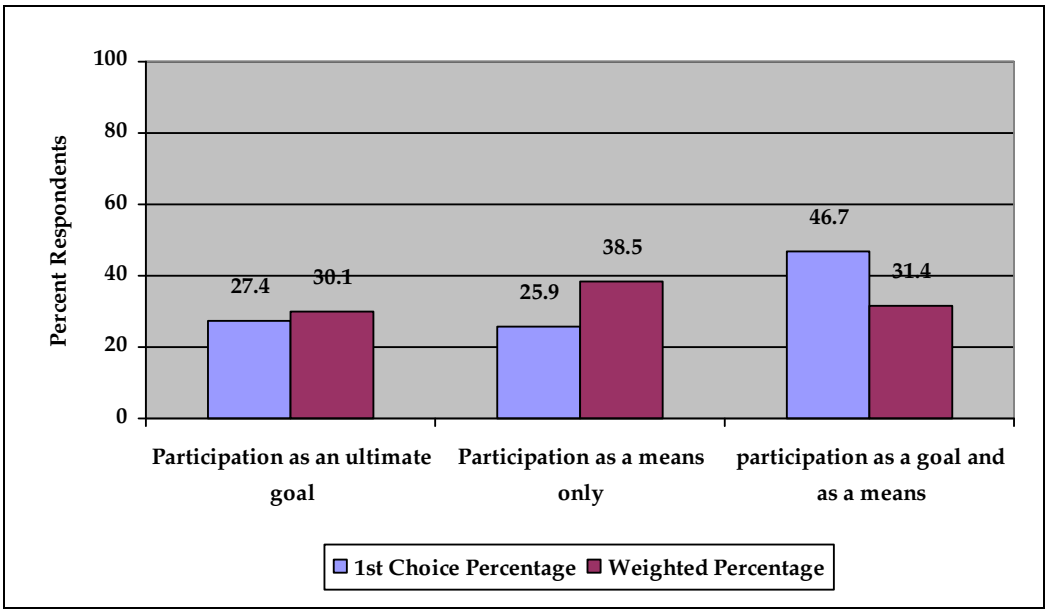


Figure 7.4: Respondents' importance rank order of alternative uses of participation expressed by first choice and by weighted percentages (N=135)

Participation as a goal and as a means received highest ranking. Most respondents (46.7%) chose the participation as a goal and as a means as their first priority. The

high ranking of participation as a means when expressed as a weighted percentage is because it received the highest number of second positions, but it does reflect relatively strong support for participation solely as a means for better extension or more sustainable development.

Figure 7.5 summarises the alternatives lists as perceived by respondents in different operational function categories.

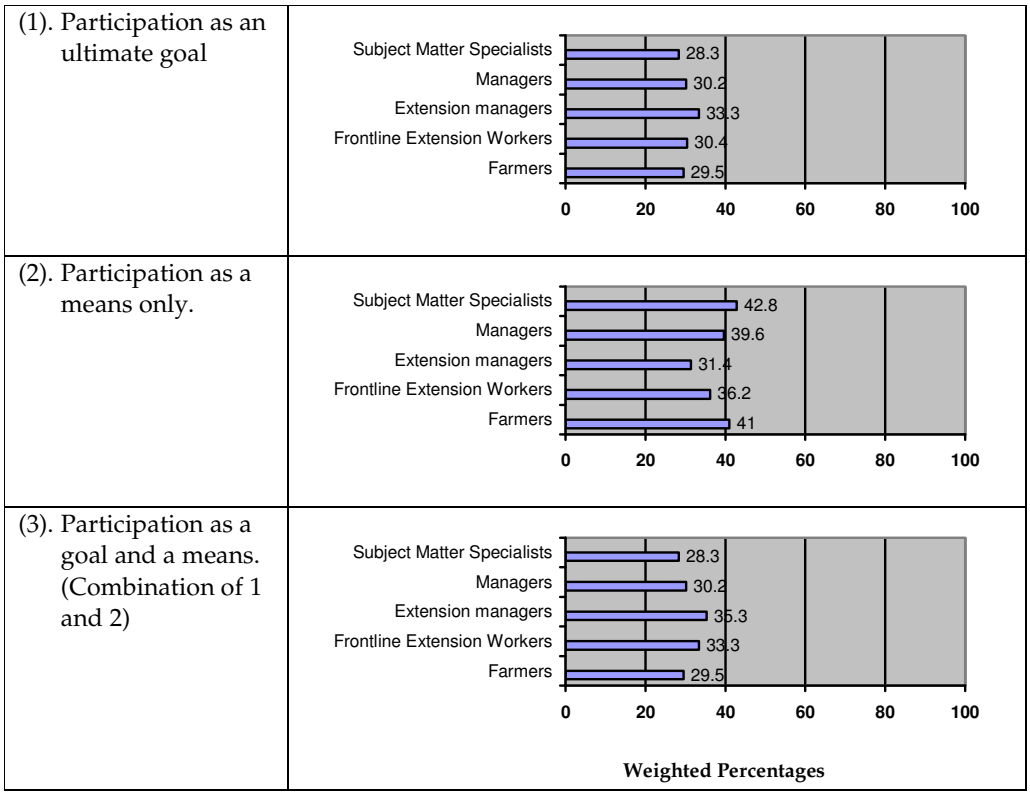


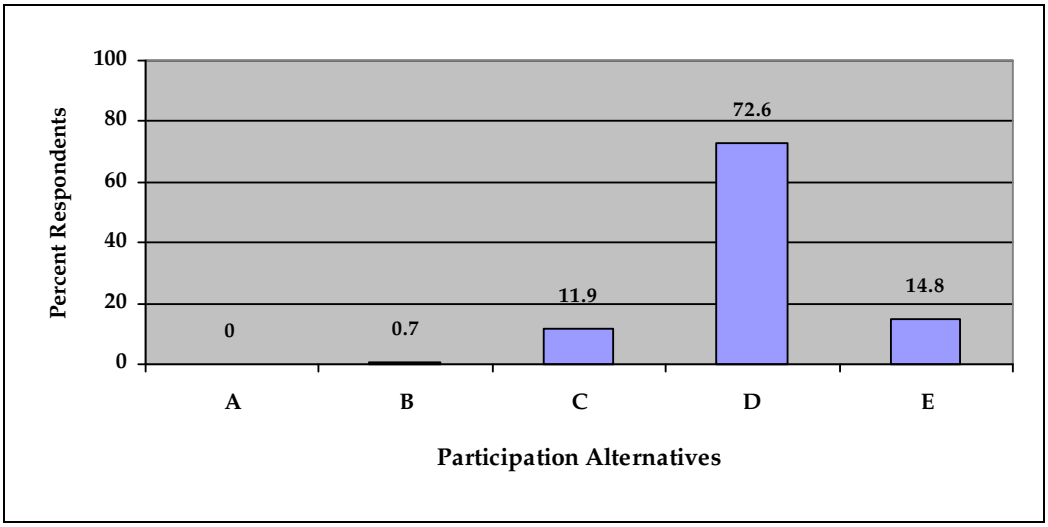
Figure 7.5: The rank order of different purposes of participation by respondents in different operational function categories and expressed as weighted percentages (N=135).

The higher acceptability of participation "as a means" is particularly evident among subject matter specialists, farmers, managers as well as frontline extension staff, while for extension managers' participation "as a goal and as a means" has the highest priority. Participation "as an ultimate goal" did not receive a lot of support; however, extension managers seem to be more in favour of it compared to the rest. Participation as a means implies that participation, as a way of harnessing community resources, is expected to help achieve some predetermined goals and

objectives. The results of participation are more important than the act of participation itself. This fits the frontline extension staff, subject matter specialists and managers since they are more interested in achievement of the goals and objectives set by their organisations rather than in having the community empowered to take responsibility for development leading to sustainability. The participatory process that promotes self-reliance, self-sufficiency and self-responsibility would be taking a risk for organisations that have set goals and objectives to accomplish, because it does take a while to start achieving the expected results. These findings seem to imply that a large percentage of the respondents were not familiar with the different understandings and purposes of the concept of participation. This may have resulted in them not yet having formed a clear opinion regarding participation.

7.4 Participation in agricultural extension services in practice

The term "participation" is now part of the normal language of many development agencies (World Bank, 1994). It is so fashionable that almost everyone says that participation is part of his or her work. But "more often than not, people are asked or dragged into partaking in operations of no interest to them, in the very name of participation" (Rahnema, 1992). The respondents viewpoints in the previous section regarding the meaning and purpose of participation are likely to become manifested in the way communities are involved in extension. To establish the current degree or level of participation in development in general and agriculture extension in particular, respondents were provided with a list of different alternatives and requested to choose the one that is most common in their area. The findings are summarised in Figure 7.6.



Legend

A. The community coordinates, owns and finances the development process
B. The community coordinates, owns, finances and implements the development process and in the process involves one or more development agents
C. The community in partnership with the development agent initiates, plans, finances, coordinates and implements the development programme or project
D. The community is involved in needs assessment, but decisions, planning and implementation of the development processes are the responsibility of development agents or organisations
E. Development remains the responsibility of the development organisations and should be done in the way they deem fit

Figure 7.6: Distribution of respondents according to their views regarding the participation alternative that is dominant in their communities (N=135)

The level or degree of community participation in agricultural extension activities is generally low. A clear majority, namely 72.6 percent of the respondents interpret the current participation or involvement of communities as the type of development where the community is involved in needs assessments, but decisions, planning and implementation of the development processes are the responsibility of the development agent or organisations. A further 14.8 percent indicate they are not involved in any way in the development processes, i.e. development remains the responsibility of the development organisations. The reliability of these responses cannot be questioned, simply because it does match the observed reality. Judging from these responses, it is very clear that in most communities in the study area there is still tremendous scope for improvement as far as involvement and true participatory development is concerned. These findings support Pretty's (1995) emphasis that the term "participation" should not be accepted without proper clarification.

Figure 7.7, highlights the differences in participatory development between operational function categories.

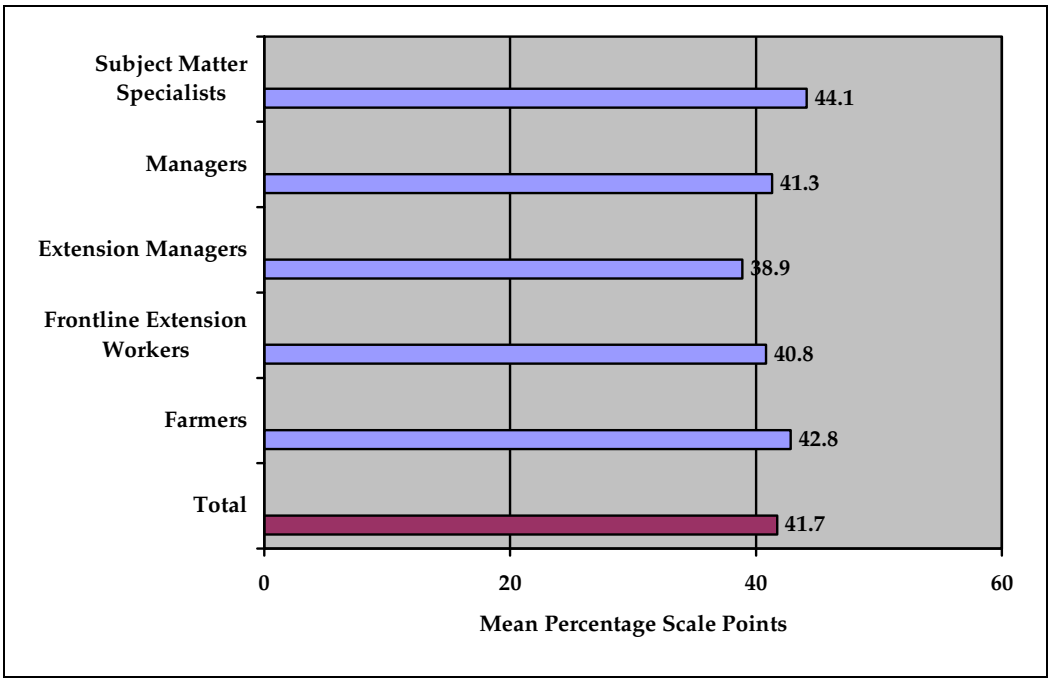


Figure 7.7: The assessment of current practice of participation expressed as mean weighted percentage scale points by respondents in operational function categories (N=135)

As can be seen in Figure 7.7, respondents in all operation functions are of the opinion that current practice of participation is rather low, namely less than 45 percent of what is regarded to be possible. Though the differences are not significant, the assessment by extension managers, front line extension workers as well as managers are lower, which could be an indication that they do realise somewhat more the tremendous scope for improvement as far as clients' participation in extension is concerned.

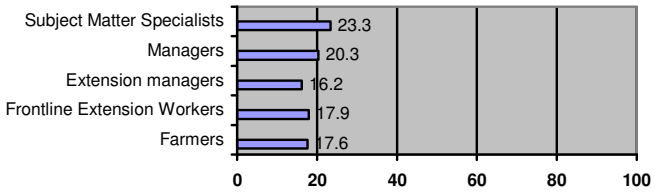
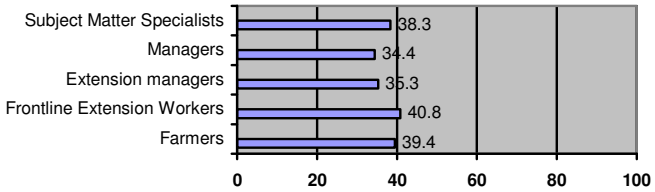
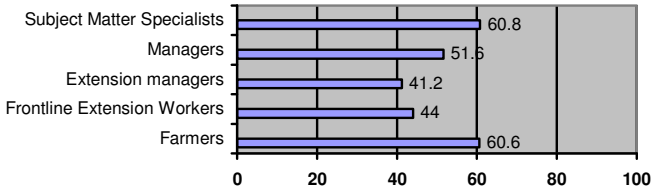
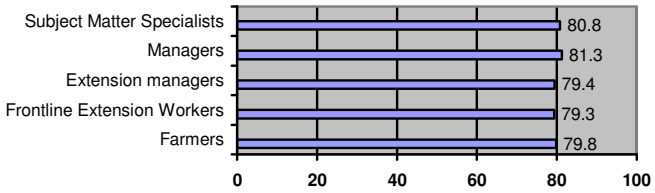
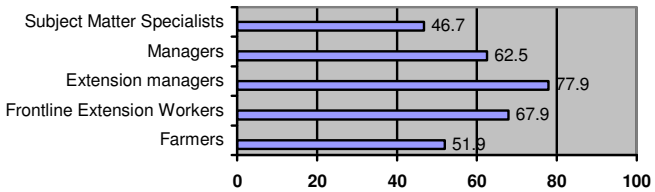
A. The community coordinates, owns and finances the development process	
B. The community coordinates, owns, finances, and implements the development process, and in the process involves one or more development agents	
C. The community in partnership with the development agent initiates, plans, finances, coordinates and implements the development program or project	
D. The community is involved in needs assessments, but decisions, planning and implementation of the development processes are the responsibility of the development agent or organisations.	
E. Development remains the responsibility of the development organisation and is done in a way it deems fit and is not accountable to the clients	

Figure 7.8: The assessment of the participation alternatives currently implemented expressed as mean percentage scale points by respondents in different functional categories (N=135)

There are no significant differences between respondents in the various functional categories in their assessment of alternative D as the most common practice of client participation at the moment. The high prevalence of alternative E as judged by extension managers, frontline extension workers and managers is an indication that the level of participation is still on the lower side. What is surprising, however, is the high assessment of farmers and subject matter specialists of alternative C.

Different organisations look at participation differently. To get an indication of the differences between extension organisations on level of current involvement of their communities in the development processes, a further analysis was conducted. Table 7.1 highlights the outcomes.

Table 7.1: Distribution of extensionists according to the participation alternative practiced and the type of organisations they belong to (N=109)

Participation alternatives	Type of extension organisations						Total	
	Government Organisations		NGOs		Private Organisation			
	n	%	n	%	n	%	N	%
A	0	0	0	0	0	0	**0**	**0**
B	0	0	0	0	0	0	**0**	**0**
C	2	2.9	10	35.7	1	7.7	**13**	**11.9**
D	51	75.0	17	60.7	11	84.6	**79**	**72.5**
E	15	22.1	1	3.6	1	7.7	**17**	**15.6**
Totals	**68**	**100**	**28**	**100**	**13**	**100**	**109**	**100.0**

Chi^2=23.879; df=4; p=0.000

Legend

A. The community coordinates, owns and finances the development process
B. The community coordinates, owns, finances and implements the development process and in the process involves one or more development agents
C. The community in partnership with the development agent initiates, plans, finances, coordinates and implements the development programme or project
D. The community is involved in needs assessment, but decisions, planning and implementation of the development processes are the responsibility of development agents or organisations
E. Development remains the responsibility of the development organisations and should be done in the way they deem fit

All organisations involved in extension in the survey area are miles away from the type of participation that implies or leads to self-reliance, self-sufficiency and self-responsibility. Alternatives A and B do not even feature as it can be observed in Table 7.1 above. However, there are significant differences between organisations

(Chi²=23.879; df=4; p=0.000). For example, the NGOs are more advanced in implementing a participation leading towards ownership and self-determination. Evidence of this is that out of the thirteen (13) extension staff that indicate that alternative **C** is used in the communities they work, ten (10) are from the NGOs.

Table 7.2 summarises the variations as perceived by respondents in different operational function categories.

Table 7.2: Distribution of respondents according to the participation alternative practiced and their operational function categories (N=135)

Participation alternatives	Respondents Category										Total	
	Farmers		Frontline extension workers		Extension managers		Managers		Subject matter specialists			
	n	%	n	%	n	%	n	%	n	%	N	%
B	1	3.8	-	-	-	-	-	-	-	-	**1**	**0.7**
C	3	11.5	4	8.7	1	5.9	2	12.5	6	20.0	**16**	**11.9**
D	19	73.2	33	71.7	13	76.5	14	87.5	19	63.3	**98**	**72.6**
E	3	11.5	9	19.6	3	17.6	0	0	5	16.7	**20**	**14.8**
Totals	**26**	**100**	**46**	**100**	**17**	**100**	**16**	**100**	**30**	**100**	**135**	**100**

Chi²=11.084; df=12; p= 0.522

Legend

B. The community coordinates, owns, finances and implements the development process and in the process involves one or more development agents
C. The community in partnership with the development agent initiates, plans, finances, coordinates and implements the development programme or project
D. The community is involved in needs assessment, but decisions, planning and implementation of the development processes are the responsibility of development agents or organisations
E. Development remains the responsibility of the development organisations and should be done in the way they deem fit

Responses from respondents in different operational functions are quite similar as regards the degree of participation currently taking place. This is shown in Table 7.2 and supported by the non-significant chi-square value (Chi²=11.084; df=12; p= .522). The distributions but confirm that alternatives **D** and **E** are most commonly used in the communities. As already stated above, these alternatives are not of a kind that is normally associated with real community participation in development

7.5 Extension organisations involvement in participatory extension

Pretty (1995) observes that development organisations interpret and use the term participation in different ways and he identifies up to seven types. These range from manipulative and passive, where people are told what is to happen and act out predetermined roles, to self-mobilisation, where people take initiatives largely independent of external institutions. Figure 7.9 reflects the extension staff assessment of their own organisations involvement in participatory extension (using a 10-point semantic scale).

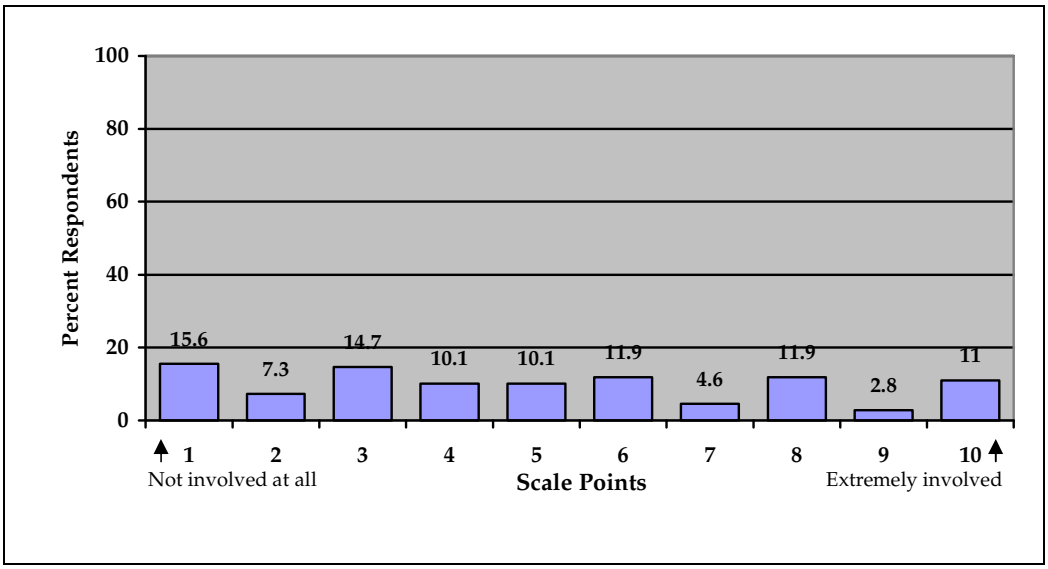


Figure 7.9: Distribution of extension staff according to their assessment of their organisations involvement in participatory extension (N=109)

There is little doubt about the lack of involvement of extension organisations in participatory extension. The inadequate participation of communities in development in general and agricultural extension in particular, is widely appreciated. Close to 70 percent of the respondents assess the degree of involvement to be 6 and less on a 10-point semantic scale.

Figure 7.10 shows the extent of involvement in agricultural extension by organisations.

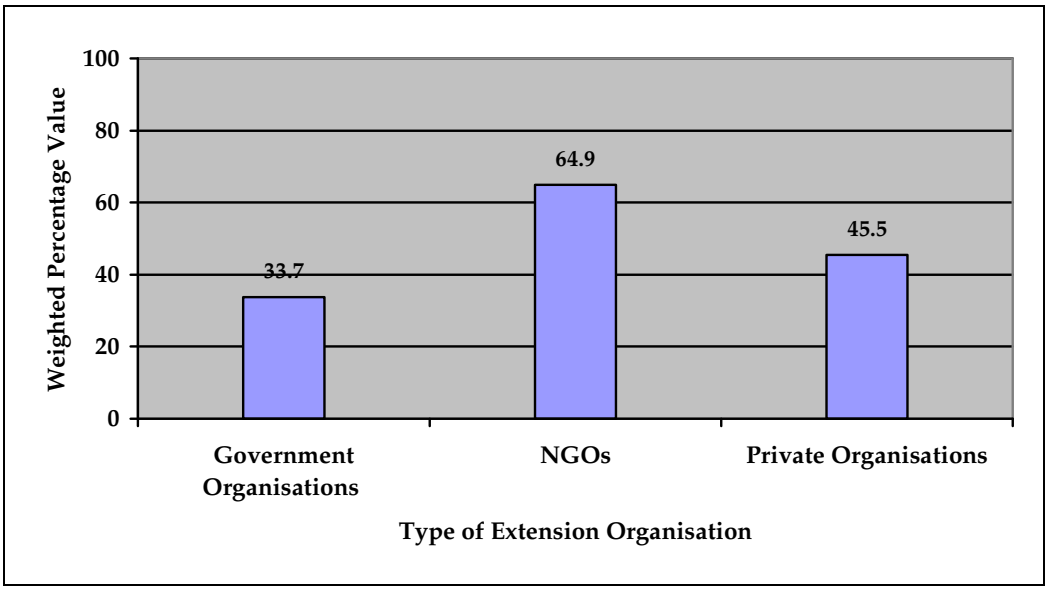
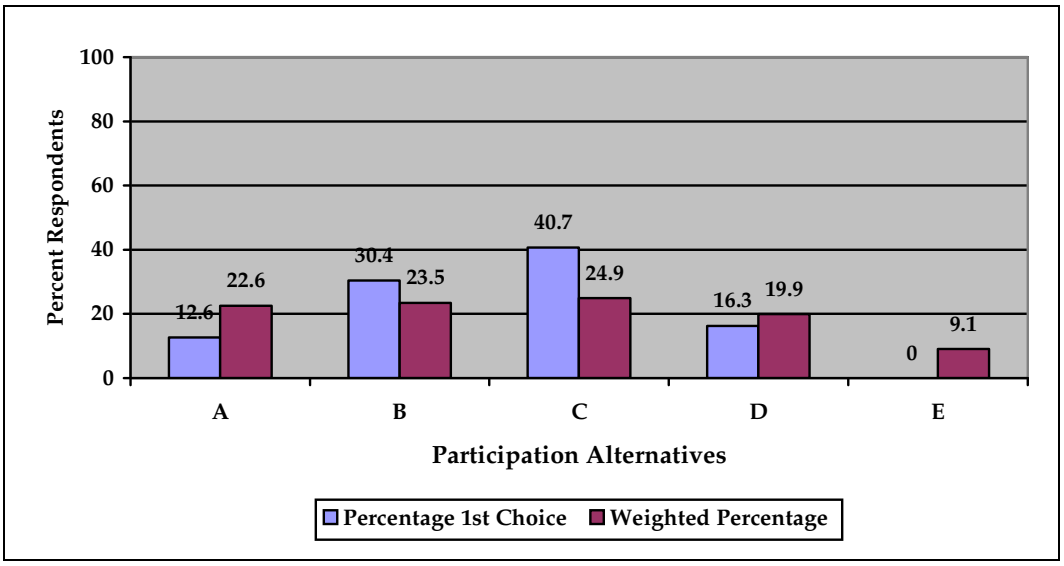


Figure 7.10: Distribution of extension staff according to the degree of their organisations' involvement in participatory extension (N=109)

The findings in Figure 7.10 suggest that NGOs are more involved in participatory extension (69.4 percent) than other extension organisations. This could be attributed to the fact that most NGOs, since they are more dependent on donor funding, are compelled to comply with their requirements, one of which being strong community involvement and participation in extension programmes or projects.

7.6 The degree of participation expected in agricultural extension service.

Srivanasan (1990) and Oakley (1991) have identified three main concepts of community participation namely, participation as a contribution made by the community, participation as an organisational process of the community, and participation as an empowerment of the community. These concepts of community participation formed the basis for the revised participation scale or participation alternatives that were used in the survey. To establish the degree or level of participation most acceptable, respondents were requested to place the participation alternatives in rank order of acceptability. The findings are summarised in Figure 7.11.



Legend

A. The community coordinates, owns and finances the development process
B. The community coordinates, owns, finances and implements the development process and in the process involves one or more development agents
C. The community in partnership with the development agent initiates, plans, finances, coordinates and implements the development programme or project
D. The community is involved in needs assessment, but decisions, planning and implementation of the development processes are the responsibility of development agents or organisations
E. Development remains the responsibility of the development organisations and should be done in the way they deem fit

Figure 7.11: The respondents' ranking (percentage first choice and rank order percentage) of the acceptability of participation alternatives (N=135)

According to Figure 7.11, the most acceptable participation alternative is where the service provider and community mutually share, as equal partners, the responsibilities of initiating, planning, financing, coordinating and implementing of development programmes or projects (40.7 percent and 24.9 percent, first choice percentage and weighted percentage respectively). This is followed by the participation alternative where the community carries comparatively more responsibility. The least acceptable is the one where the major responsibility lies with the extension worker or service provider. Judging from these responses, it is clear that participation in agricultural extension services is a possibility since respondents from all categories are keen to be involved as equal partners. Differences between respondents in different operational function categories regarding alternatives degrees of participation are presented in Figure 7.12.

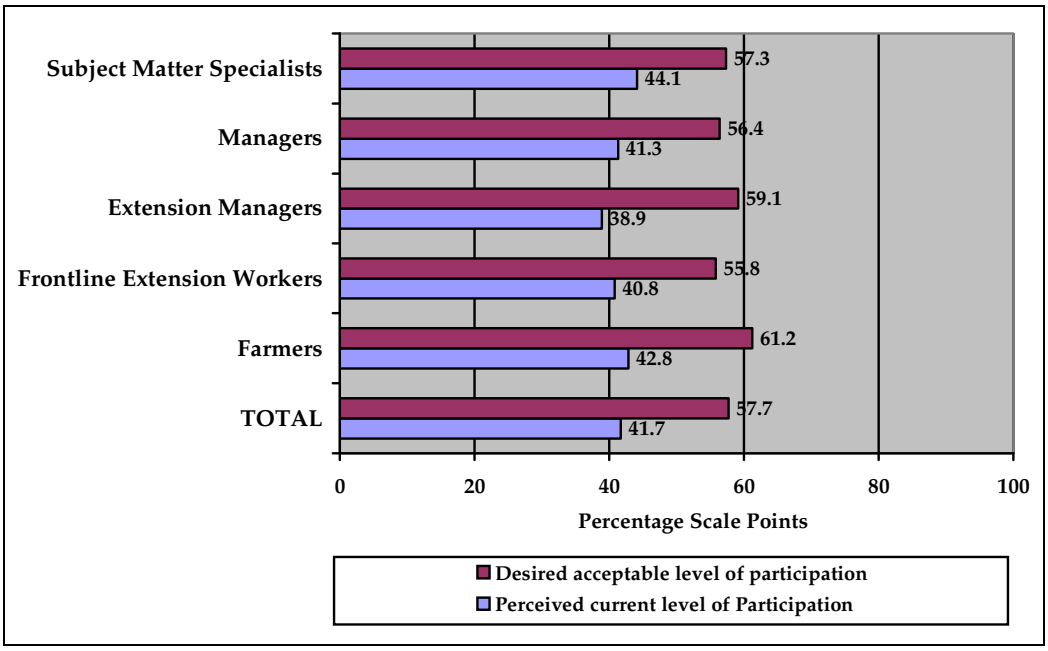


Figure 7:12 The assessment of the current and acceptable participation alternatives expressed as mean percentage scale point by respondents in operational function categories (N=135)

All respondents in the different operational function categories agree that there is a need for a higher level of participation of clients in extension services. As can be observed from Figure 7.12, the differences between the operational function categories are not all that big, but it is noteworthy that farmers and extension managers not only have the highest aspiration level namely 61.2 percent and 59.1 percent respectively, but also perceive the biggest scope for improvement, namely 18.4 percent and 20.2 percent respectively. This again emphasises the need among farmers to get more involved, but also the great appreciation of this need among extension managers.

Figure 7.13 presents the differences between respondents in different operational function categories regarding the rank order of acceptability of alternatives degrees of participation.

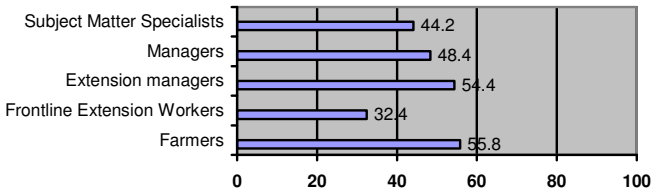
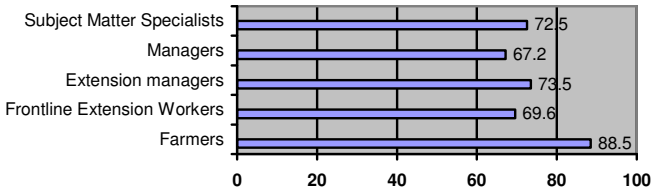
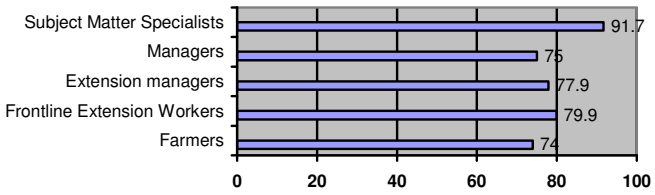
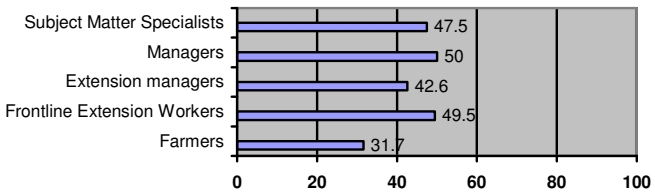
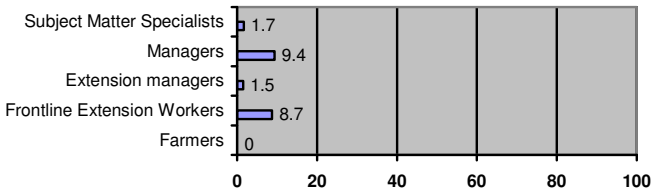
A. The community coordinates, owns and finances the development process	
B. The community coordinates, owns, finances, and implements the development process, and in the process involves one or more development agents	
C. The community in partnership with the development agent initiates, plans, finances, coordinates and implements the development program or project	
D. The community is involved in needs assessments, but decisions, planning and implementation of the development processes are the responsibility of the development agent or organisations.	
E. Development remains the responsibility of the development organisation and is done in a way it deems fit and is not accountable to the clients	

Figure 7.13: The assessment of the acceptability of participation alternatives expressed as percentage rank position (mean percentage scale point) by respondents in different functional categories (N=135)

Though there is a general agreement among respondents that a participation leading towards ownership and self-determination is more acceptable, there are some significant differences as far as their operational function categories are concerned. According to figure 7.13, it would appear that subject matter specialists (SMS) are more supportive of this than the other categories (91.7 percent). The most important finding, however, is that farmers have expressed a bigger need for a participation that brings about ownership and self-determination than the rest of the respondent groups. This is not only indicated by their highest aspiration for alternatives A (55.8 percent) and B (88.5 percent), which are normally associated with client participation of highest level, but they also have the lowest assessment of alternatives D (31.7 percent) and E (0 percent).

7.7 Major constraints to community participation in extension services

Obstacles to community participation are identified in the attitudes and practices of the personnel of development agencies and field staff and in the community itself (Cohen, 1996). There are reasons that prevent people and communities from getting involved in agricultural extension activities. Presented in Table 7.3 below are the findings from extension staff regarding the major constraints to community participation in agricultural extension services.

Table 7.3: Major constraints to participation in agricultural extension work as perceived by extension staff (N=109)

Type of constraint	Number of times cited	Percentage
Lack of formal education of farmers	**42**	**38.5**
Lack of willingness of researchers and extension agents to involve farmers.	**32**	**29.4**
Lack of resources by service providers	**26**	**23.9**
Most smallholder farmers are so used to free handouts	**23**	**21.1**
High cost of production inputs	**18**	**16.5**
HIV/AIDS epidemic	**16**	**14.7**
Poverty	**17**	**15.6**
Inadequate extension staff	**15**	**13.8**
Poor motivation and encouragement of farmers to participate by researchers and extension officers	**14**	**12.8**
Lack of coordination among extension service providers	**7**	**6.4**

The major constraints, which hinder communities' involvement in agricultural extension services, as indicated by the extension staff, are lack of formal education of farmers (38.5%), unwillingness of researchers and extension agents to involve farmers (29.4%) and inadequate resources of services providers (23.9%). A general observation that can be made regarding constraints to participation, as indicated by extension staff, is that most developmental policies that are implemented by the department of agriculture follow an inflexible top-down or centralized extension approach rather than a bottom-up approach. This makes it very difficult for communities to come in and be involved.

The other constraints that also need attention are: HIV/AIDS epidemic, poverty, high cost of production inputs and farmers being so used to handouts. Poverty, free handouts, and high cost of inputs have similar implications. Up to the 1980s agricultural extension in Malawi was closely linked to provision of inputs on loan. Since it was phased out, farmers no longer see the need of being part of agricultural extension activities because they do not have access to the required production inputs. HIV/AIDS has had a big impact on farming families. Much less time is being spent in their fields because farmers are either sick or spending much more time taking care of the sick.

Since the major reasons for lack of participation of farmers in agricultural extension are related to the extension approach, initiation of the process of participatory agricultural extension would have to be done at the higher management level. Once the approach is changed and farmers are involved at every stage of the research and extension processes most of the current problems are likely to disappear or become less serious.

As can be seen from the Table 7.3, a lack of institutional linkages and structures has not been cited as a reason for in adequate participation. The importance of these structures, however, should not be overlooked, because no meaningful participation can take place without them. Düvel, (2000) argues that without institutional linkages and structures, participation to the level of self-mobilisation is not possible.

7.8 Needs and participation

The problems and challenges facing development and agricultural development in the developing world are tremendous (Laker, 1990, and McCracken, 1988). In view of limited resources on the one hand, and the tremendous and never fully achievable development challenges on the other hand, Düvel (2002) suggests that a priority approach in terms of development focus is essential, hence the importance of needs assessment. Many authors (Baker, 1987; Nzamnjo, 1991; Utzinger & Williams, 1984 and Witkin, 1984) as cited by Mwangi & Rutatola, 2002, agree that needs assessment is important in the process of initiating and implementing extension programs.

The importance of needs assessments in extension is widely appreciated, and also supported by the findings in Figure 7.14, which reflect the assessment of extension personnel (using a 10-point scale).

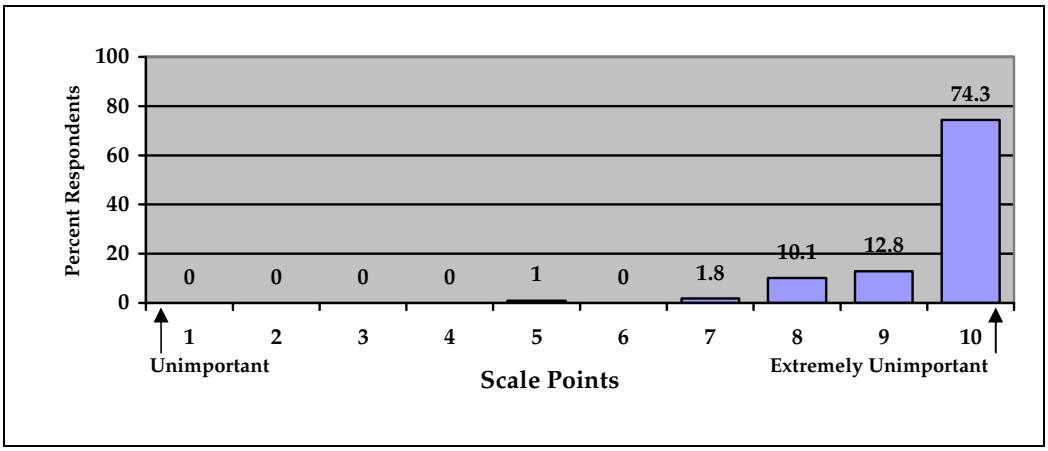


Figure 7.14: Percentage distribution of respondents according to their assessments of the importance of needs using a 10-point scale (N=109)

There is little doubt about the importance of needs among the extension staff. 74.3 percent gave it the highest assessment possible (10), while about 97 percent gave an assessment of eight or more.

7.9 The purpose of needs assessment

Different people and organisations have different purposes for needs assessment. Respondents were requested to rate the importance of different purposes of needs assessment. In Figure 7.15 respondents' importance assessment of some identified purposes of needs assessments are summarised.

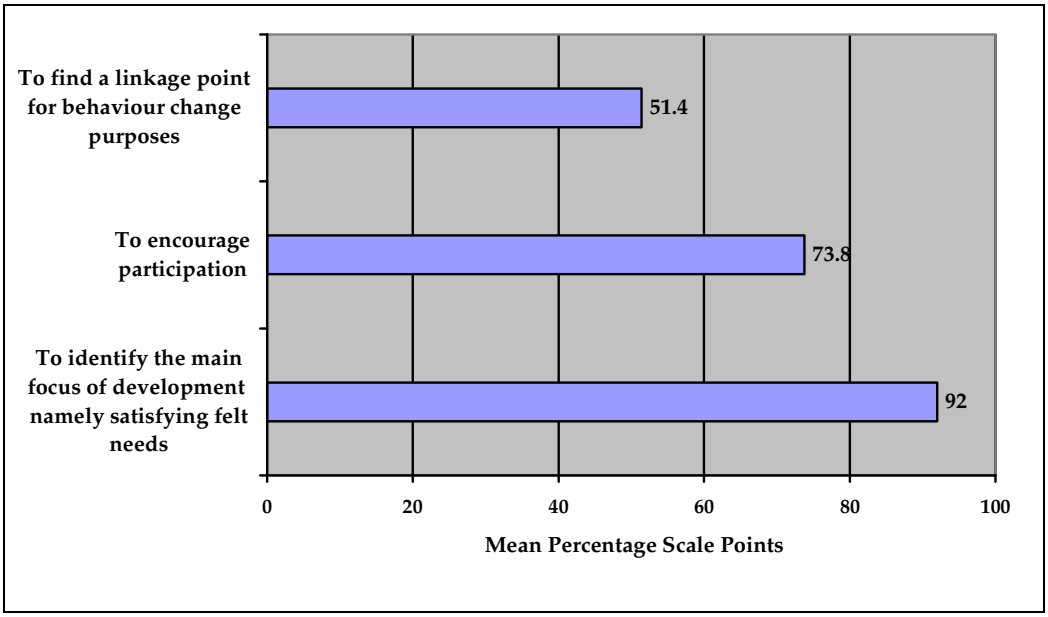


Figure 7.15: The assessment of different purposes of need assessments by extension staff expressed as a mean percentage scale points (N=109)

The most important purpose of needs assessments is, according to the perception of extension staff, to identify the main focus or content of development (92%) and to encourage participation (73.8%). The importance of needs in behaviour change (51%) is not widely appreciated yet.

The viewpoints above apply with minor variations to all extensionists categorised according to operational functions (Figure 7.16).

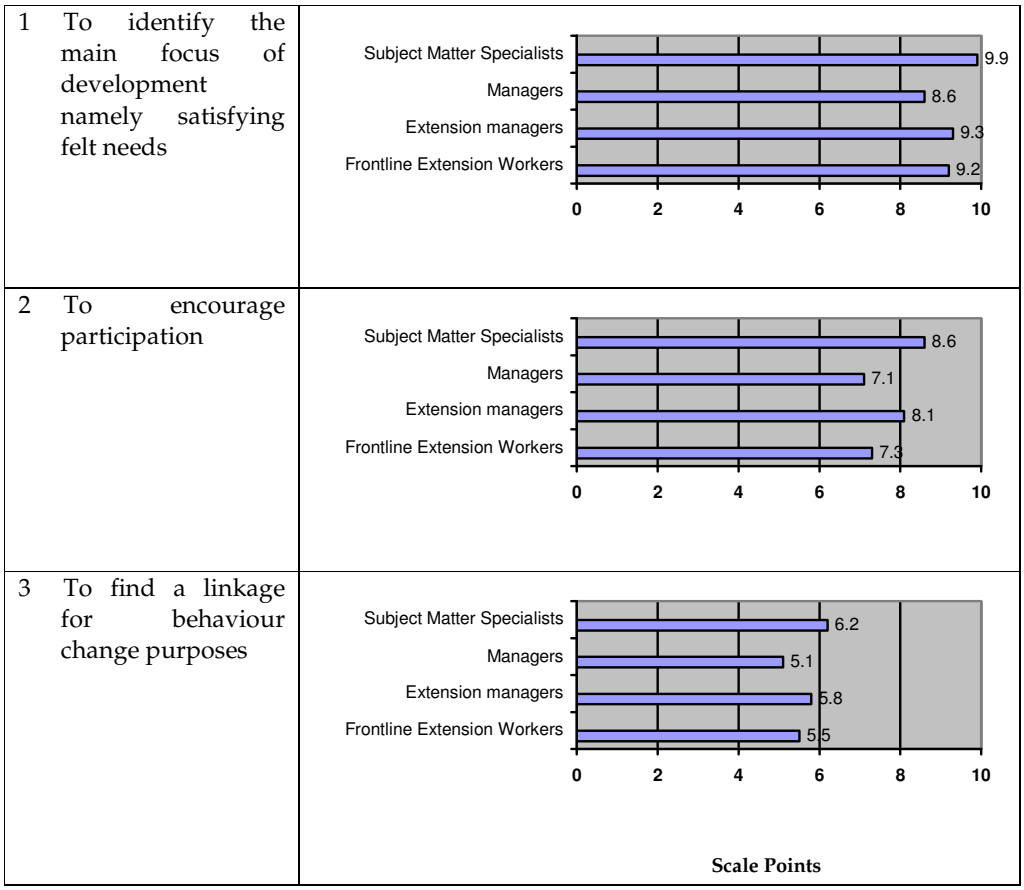


Figure 7.16: The mean assessment of different purposes of need assessment expressed as mean scale points by extensionists in different functional categories (N=109)

There are no significant differences between extensionists in the various functional categories in their assessment of the main purposes of needs assessments. However, according to Figure 7.16, the subject matter specialists' (SMS) and extension managers' assessment of all the three purposes of needs assessment are significantly higher compared to the other categories. This could be due to their better understanding of these purposes. Perceptions as they pertain to different types of extension organisations are presented in Figure 7.17.

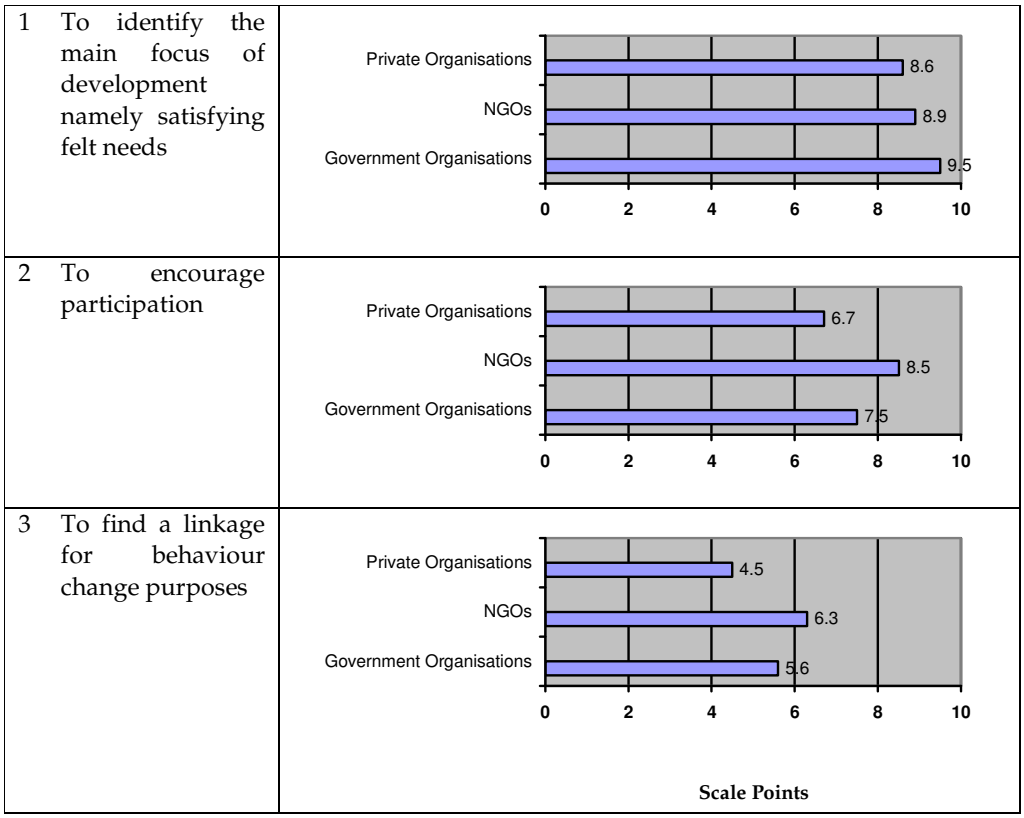


Figure 7.17: The mean assessment of different purposes of need assessment expressed as mean scale points by extensionists within different types of extension organisations (N=109)

Again there are no significant differences between the different types of organisations, except that NGOs regard the purposes relating to encouraging participatory processes and finding a linkage for behaviour change purposes as somewhat more important then government and private organisations. This could perhaps be as a result of the participatory nature of the operations of most NGOs.

As far as the use of need assessments for the purpose of identifying the priority development focus is concerned, respondents were further probed as to what was the most appropriate way of assessing these needs. According to Düvel (2002) a development focus based only on felt needs can be problematic. In the choice of priority identification and selection both felt and unfelt[7] needs should be considered. Respondents were requested to assess the relative importance of "felt" and "unfelt"

[7] **Unfelt needs** refer to needs that clients are not necessarily aware of but which, from a more "objective" point of view and usually based on their scope or improvement potential, justify being attended to.

needs as focus of development by placing the provided alternatives in rank order of acceptability or importance. Respondents' assessments are presented in Figure 7.16.

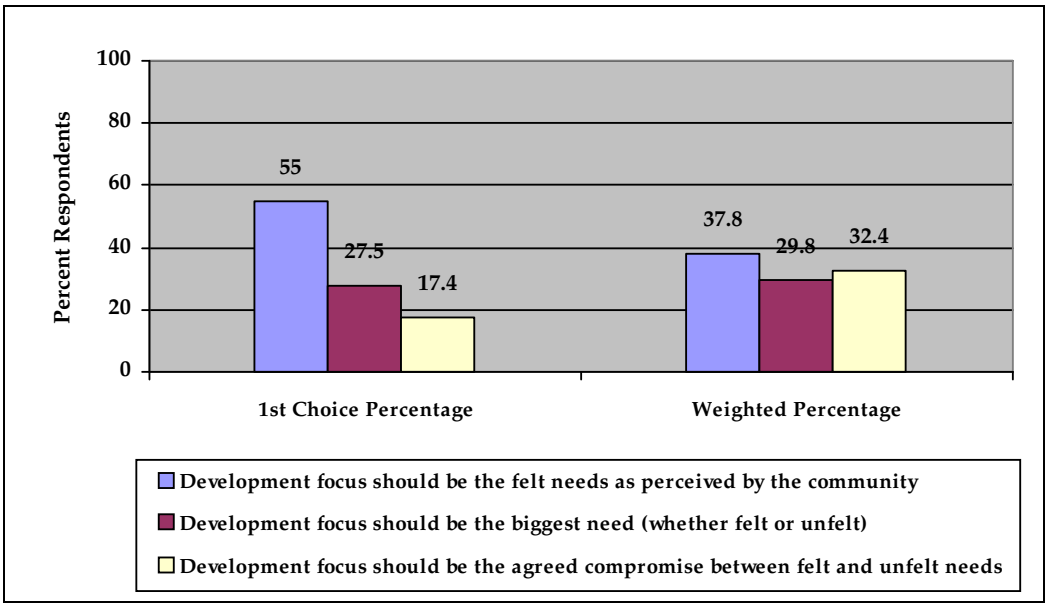


Figure 7.18: Distribution of extension staff ranking of the relative importance of felt and unfelt needs as focus of development expressed as a percentage and weighted percentage (N=109)

The majority of the extensionists (55 Percent) are of the opinion that development focus should be on the felt needs as perceived by the community. The lowest support is for an agreed compromise between felt and unfelt needs by the wider community. A possible explanation for this is that the differences between the alternatives or of their implication have not been well understood and that the responses are largely a matter of paying lip service to certain buzz words or concepts.

Figure 7.18, presents the difference between extensionists in different operational function categories regarding the rank order of relative importance of felt and unfelt needs as focus of development.

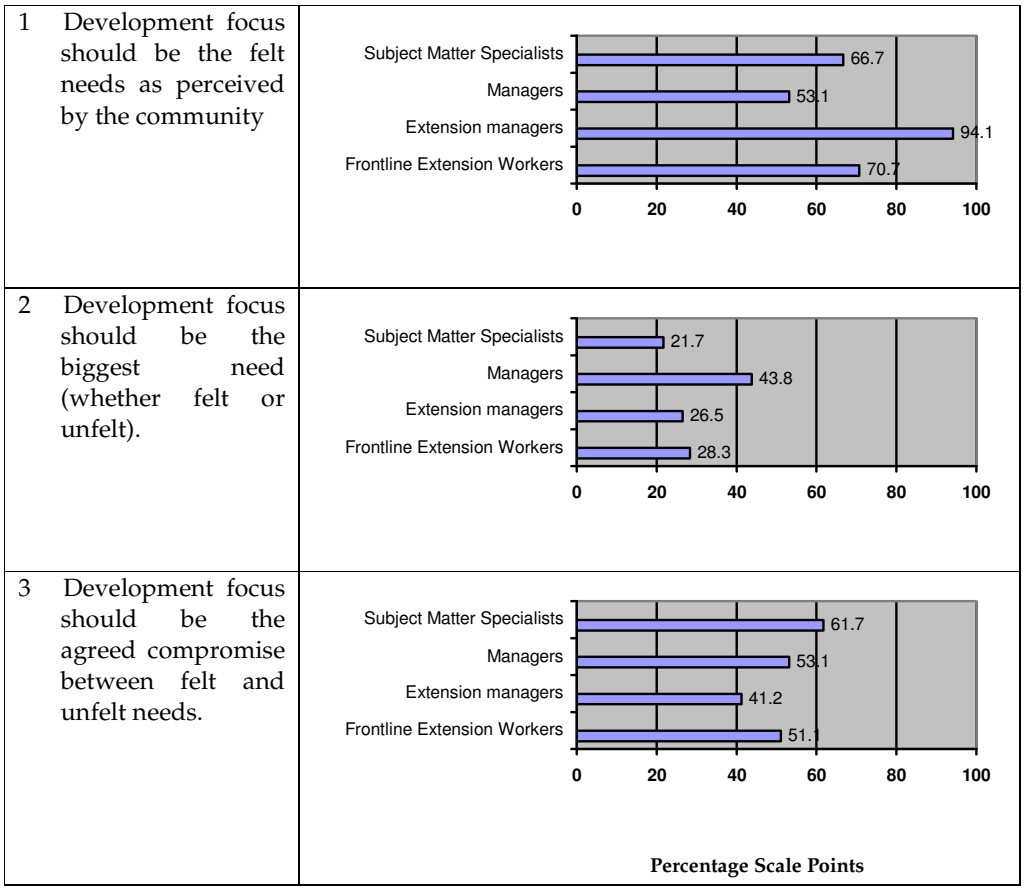


Figure 7.19: The assessment of the relative importance of felt and unfelt needs as focus of development expressed as mean percentage scale points by respondents by respondents in different functional categories (N=109)

As can be observed in Figure 7.19, there is a general agreement among respondents that a development focus should be the felt needs as perceived by the community is more important, however, there are some significant differences as far as their operational function categories are concerned. According to Figure 7.19 above, it would appear that extension managers and frontline extension workers are more supportive of this than the other categories (94.1 percent and 70.7 percent respectively). The most important finding, however, is that subject matter specialists (SMS) have expressed a bigger need that development focus should be the agreed compromise between felt and unfelt needs. This is indicated by their highest aspiration for alternatives 3 (61.7 percent).

Different extension organisations look at development focus differently. To get an indication of the differences between extension organisations on the relative importance of felt and unfelt needs as focus of development a further analysis was conducted. Figure 7.20 highlights the finding.

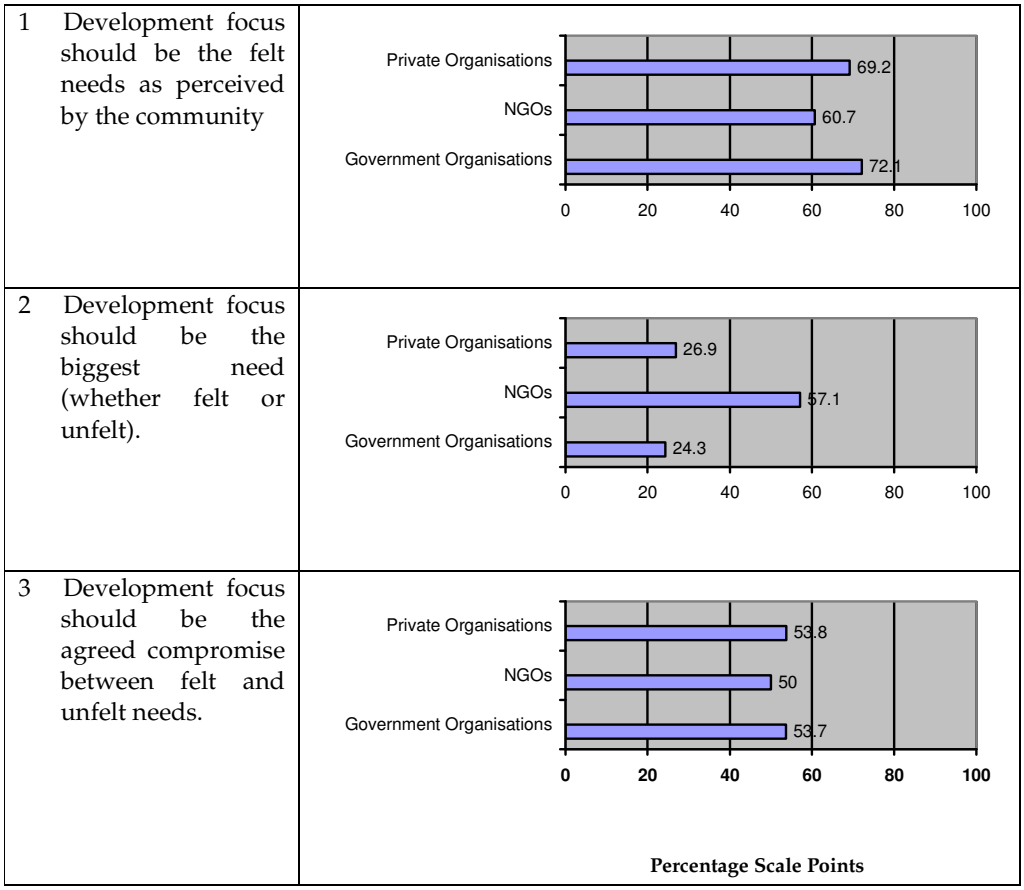


Figure 7.20: The mean assessment of the relative importance of felt and unfelt needs as focus of development expressed as percentage scale points by extensionists within different types of extension organisations (N=109

As can be seen in Figure 7.20, there are no significant differences between the different types of organisations on the relative importance of felt and unfelt needs as focus of development. It is noteworthy, however, that NGOs regard the alternative pertaining to the fact that development focus should be the biggest need (whether felt or unfelt) more important than government and private organisations (57.1 percent). This could be as a result of what NGOs always do in participatory development. They usually emphasise on what their clients have demanded.

7.10 Summary and conclusions

1. All the purposes of participation are regarded as important. The contribution of participation to improved sustainability and more effective extension or rural development as well as the contribution towards self-help and self-sufficiency received large scale support.

2. Participation is perceived equally as a goal and as a means. Evidence of this is the highest ranking of the combination of participation as a goal and means as opposed to either the one or the other. The high ranking of participation as primary goal when expressed as a weighted percentage is because it received the highest number of second positions.

3. The level or degree of community participation in agricultural extension activities is generally low. A clear majority interprets the current practice of participation, as the type where the community is involved in needs assessments, but decisions, planning and implementation of the development processes are the responsibility of the development agent or organisations. This alternative is not conducive to more optimal levels of community participation in development.

4. All extension organisations in the district are still far removed from a level of participation that is conducive to community empowerment. However, it is noteworthy that some NGOs in the district are more advanced in this regard and share, as equal partners with communities, the responsibilities of initiating, planning, financing, coordinating and implementing the development programmes or projects with their clients.

5. The major constraints, which hinder communities' involvement in agricultural extension services, as indicated by the extension staff, are lack of formal education by farmers, unwillingness of researchers and extension agents to involve farmers and inadequate resources by services providers. A general conclusion that can be made regarding constraints to participation is that most developmental policies that are implemented by the department of agriculture follow an inflexible top-down or centralized extension approach rather than a bottom-up approach. This

makes it very difficulty for communities to become involved. The path towards full participation can be lengthy and might have to be adapted depending on situation-specific circumstances. This implies that under certain circumstances a less participatory approach can be the most appropriate.

6. There is little doubt about the importance of needs among the extension staff. The most important purpose of needs assessments is, according to the perception of extension staff, to identify the main focus or content of development and to encourage participation. The importance of needs in behaviour change is not widely appreciated yet. As regards the focus of development the large majority of the extensionists are of the opinion that it should be on the felt needs as perceived by the community.

CHAPTER 8

INSTITUTIONAL LINKAGES AND ORGANISATION

8.1 Introduction

It is increasingly accepted that a partnership between the service providers and their clients (the community) is not possible without the appropriate institutional or organisational structure(s) (Düvel, 2000). Düvel (2002) argues that for such a partnership to be possible and effective, the partners have to interact in order to establish needs, to identify and agree on development priorities, procedures and processes to pursue them, etc. In view of shrinking public resources, the number of extension staff in Malawi, is by far too small compared to the number of farmers in the communities. This dilemma of an extension staff having to interact with the large number of community members necessitates a linkage or institutional structure in which the target community is represented and which acts as their mouthpiece (Düvel, 2000). In this chapter, views of respondents as regards the need and importance of these structures, their positioning as well numbers are discussed.

8.1.1 The Need for institutional linkages and structures

Hagmann, Murwira, & Chuma (1997) and Chamala (1990), as cited by Düvel (2000), maintain that the necessity for institutional linkages and structures is increasingly recognised internationally. Respondents in the study were requested to give an indication of their degree of agreement or disagreement with the need for a linkage structure by making a choice of the alternatives corresponding most with their opinion. Findings are presented in Table 8.1.

Table 8.1: Distribution of respondents according to their opinions regarding the necessity of institutional linkage structures for a partnership interaction between the service providers and the community (N=135)

Opinion about necessity of linkage structure	N	Percentage
1. Unnecessary	3	2.2
2. Undecided/Neutral	14	10.4
3. Useful	68	50.4
4. Essential	50	37.0

There is general agreement among respondents interviewed that there is a need for linkage structures if extension is supposed to be a partnership between the extensionists and the community. 87.4 percent of the respondents are supportive of a linkage system for a partnership interaction. As many as thirty-seven (37) percent believe that without institutional linkage structures, a real partnership where the community takes some responsibility is not possible. Only 2.2 percent of the respondents believe that a linkage structure is unnecessary.

Table 8.2 compares the views of the respondents in different operational function categories to establish whether the operational function of respondents influences the views in this regard.

Table 8.2: Distribution of respondents according to the assessment of the need for a linkage structure and their operational function categories (N=135)

Need for Linkage structure (Alternatives)	Respondents operational function										Total	
	Farmers		Frontline extension workers		Extension managers		Managers		Subject matter specialists			
	n	%	n	%	n	%	n	%	n	%	N	%
1	0	0	1	2.2	1	5.9	1	6.2	0	0	**3**	**2.2**
2	1	3.8	6	13.0	2	11.8	2	12.5	3	10.0	**14**	**10.4**
3	12	46.2	23	50.0	8	47.1	6	37.5	19	63.3	**68**	**50.4**
4	13	50.0	16	34.8	6	35.2	7	43.8	8	26.7	**50**	**37.0**
Totals	**26**	**100**	**46**	**100**	**17**	**100**	**16**	**100**	**30**	**100**	**135**	**100**

$Chi^2 = 8.907$; df = 12; p =0.711

Legend

1 Disagree altogether
2 Institutional structures can be useful but are not essential
3 Institutional structures make a partnership relationship (form of partnership) easier
4 Without institutional linkage structures a real partnership with full or co-responsibility on the part of the community is impossible.

The support for the need for institutional structures by respondents in all operational function categories is quite similar. Evidence of this is the non-significant chi-square value ($Chi^2 = 8.907$; df = 12; p =0.711). However, it is noteworthy that the farmers also support this view of linkage structures being necessary or essential, in fact they seem to be the strongest supporters of it.

8.1.2 Reasons for the support of linkages and structures

There are different reasons for the need for institutional linkage structures. Table 8.3 gives an insight into the respondents' reasoning behind the need of such structures.

Table 8.3: The distribution of respondents according to their reasons for the necessity of institutional linkage structures (N=135)

Reasons for the support of the responses	N	Percentage
1. Linkages and structures enhance community participation	39	28.9
2. Linkages and structures enhance community ownership of programmes and projects	34	25.5
3. Linkages and structures improve communication among stakeholders	29	21.5
4. Linkages and structures make coordination easy	28	20.7
5. Linkages and structures provide for representatives and mouth piece for the community	25	18.5

The major reasons for the support for institutional linkage structures, as indicated by the respondents, are that institutional linkage and structures enhance community participation in development (28.9 percent) as well as enhancing community ownership and responsibility in development programmes and projects (25.5 percent). The importance of enhancing community participation and ownership of extension services is very clear from the reasons given above. These positive findings must be taken note of by extension organisations if extension is to promote self-reliance, self-sufficiency and self-responsibility.

8.2 Opinions regarding institutional linkage structures

By definition a linkage structure consists of a number of community members, representing their community and thus acting as their mouthpiece in negotiations and dealings with the development organisation(s) or other agencies (Düvel, 2002). An appropriate institutional structure to serve the purpose of participatory development and ultimately aimed at empowering the community and allowing it to take ownership of the development process is bound to vary with the situation. The intention here was to capture respondents' views and opinions regarding the most important principles ensuring an effective linkage structure. According to Düvel (2005), the most important principles and assumptions regarding effective linkage structures are functional differentiation, positioning, number of the linkages and relationship between agriculture and other development.

8.2.1 Positioning of linkages and structures

While the necessity for institutional linkage structures is increasingly being recognised, the right positioning of these linkages and structures remains unresolved. Düvel, (2000) argues that, if organisational linkage structures are to facilitate maximum participation and ownership, it stands to reason that they should be as close to the grassroots community as possible. The benefit of these linkage structures being as close to the grassroots community as possible is that community members would regard such institutional linkage structures as their own. They would not have difficulty relating to them and effectively participating through them. At the same time these structures would serve the interest and purpose of the community and not those of the service providers. However, there should be a co-ordination function that arises out of the linkage structures at the community and move on to the district, region or even national level (Düvel, 2005). Figure 8.1 summaries the respondents responses regarding the alternative levels at which the linkage structures should be positioned.

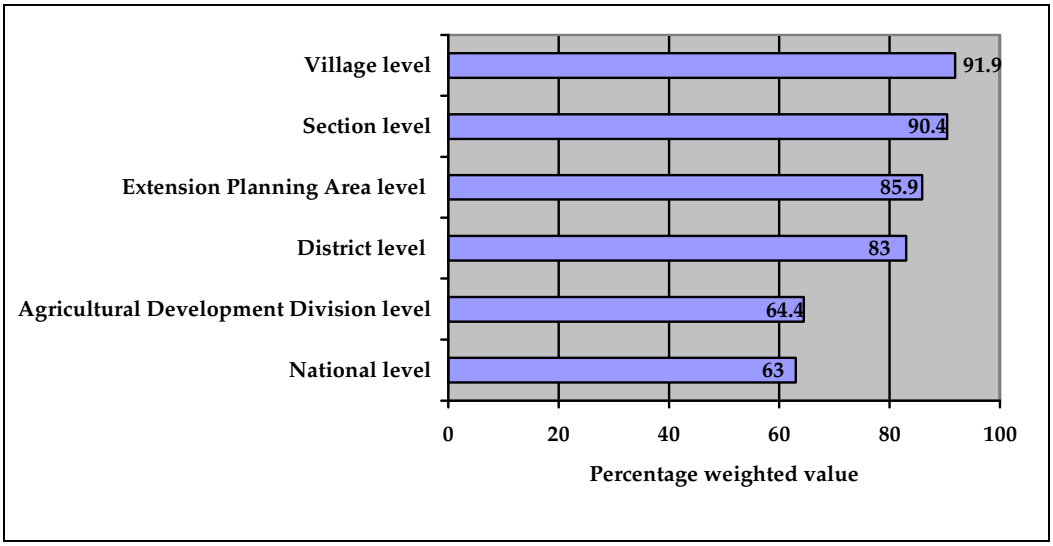


Figure 8.1: Respondents' assessment of the different alternatives regarding the positioning of the institutional structures (N=135)

Findings highlight a general agreement among respondents regarding the need for linkage structures at all the levels. The linkage structures at Village level (91.9

Percent) and Section level[8] (90.4 percent) are regarded to be most important, but there is also clear evidence of a need for a ladder of the structures extending from the village or sub-community level up to the national level. These viewpoints apply with some variations to all respondents categorised according to operational functions (Figure 8.2).

[8] A Section is an extension worker's service area. It is made up of several villages (on average about 12 villages). It is an equivalent of an extension ward.

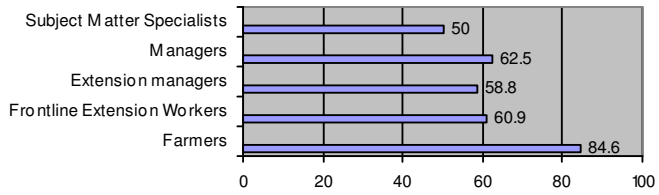
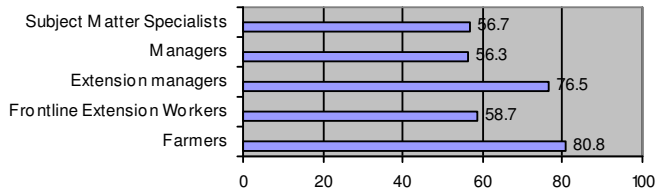
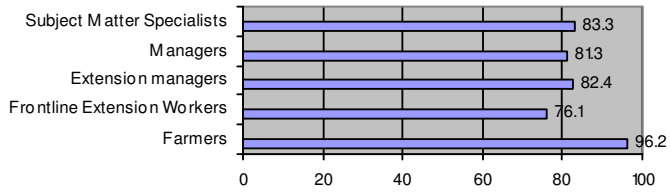
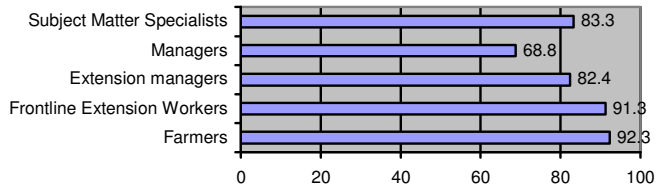
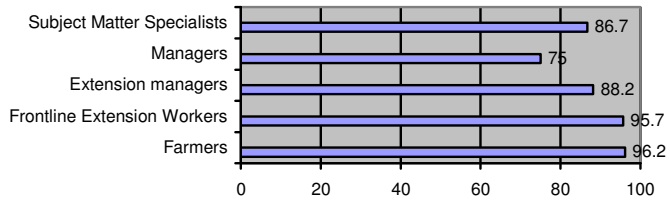
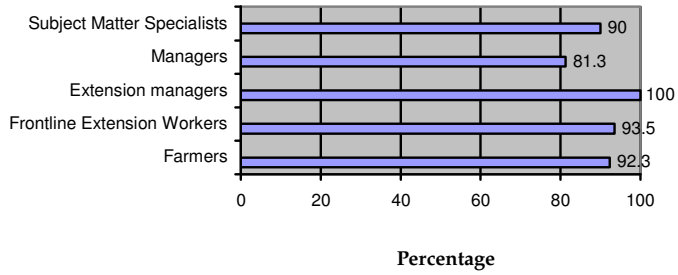
A. National Level	
B. Agricultural Development Division Level	
C. District Level	
D. Extension Planning Area Level	
E. Section Level	
F. Village Level	

Figure 8.2: **The assessment of the different alternatives regarding the positioning of the institutional linkage structures expressed as percentage by respondents in different functional categories (N=135)**

There are no significant differences between extensionists in the various functional categories in their assessment regarding the need of linkages structures. However according to Figure 8.2, it would appear that farmers have a significantly higher interest to have the linkage structures at all levels compared to other functional categories.

Respondents' viewpoints as they pertain to different types of extension organisations are presented in Figure 8.3. Again there are no significant differences between the different types of organisations, except that government organisations and NGOs regard the need for these institutional linkage structures to be slightly more important at all levels than private organisations.

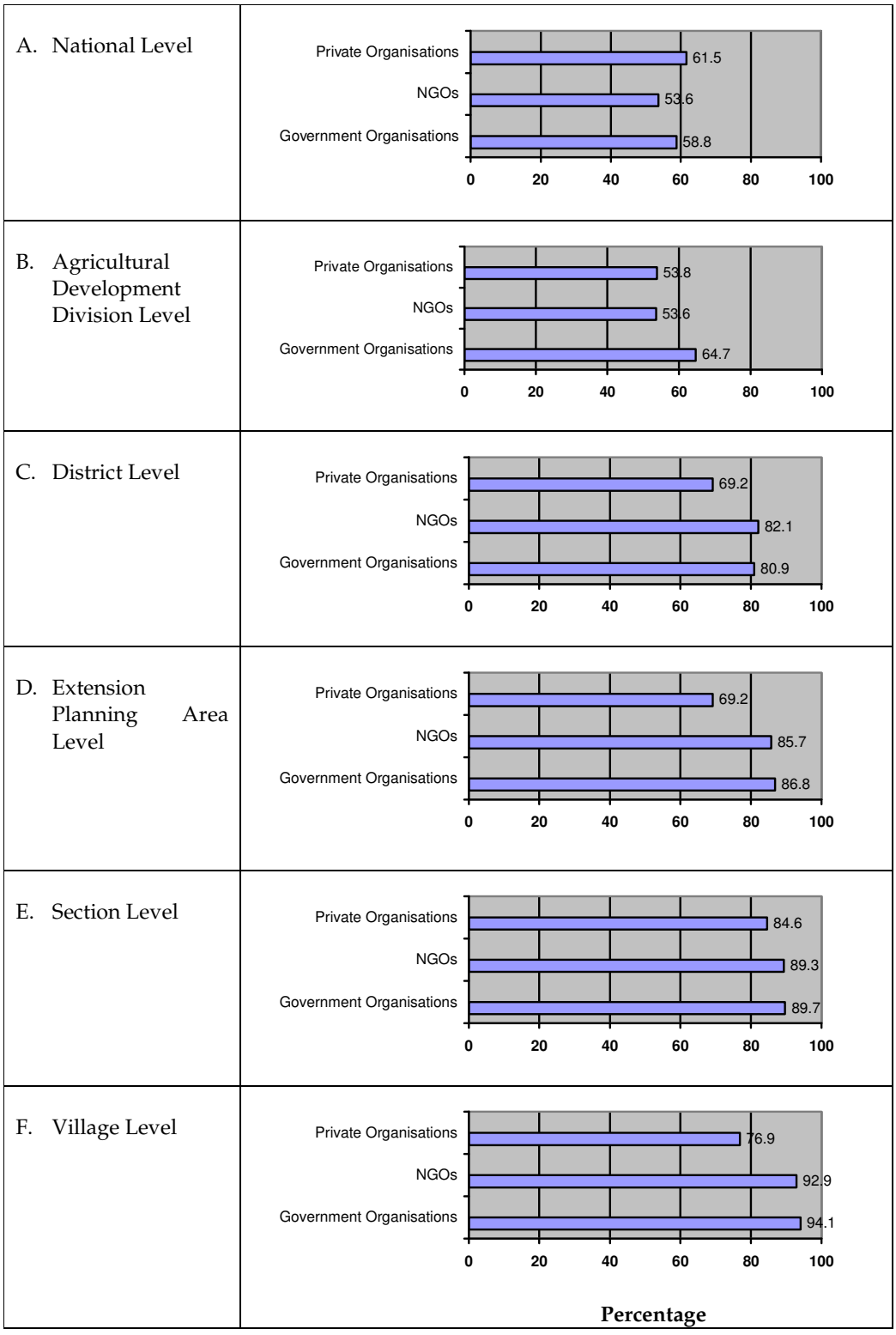


Figure 8.3: **The assessment of the different alternatives regarding the positioning of the institutional linkage structures expressed by extensionists within different types of extension organisations (N=109)**

Respondents were asked to indicate the levels at which these linkage structures already exist at the moment. Presented in Figure are their views in this regard.

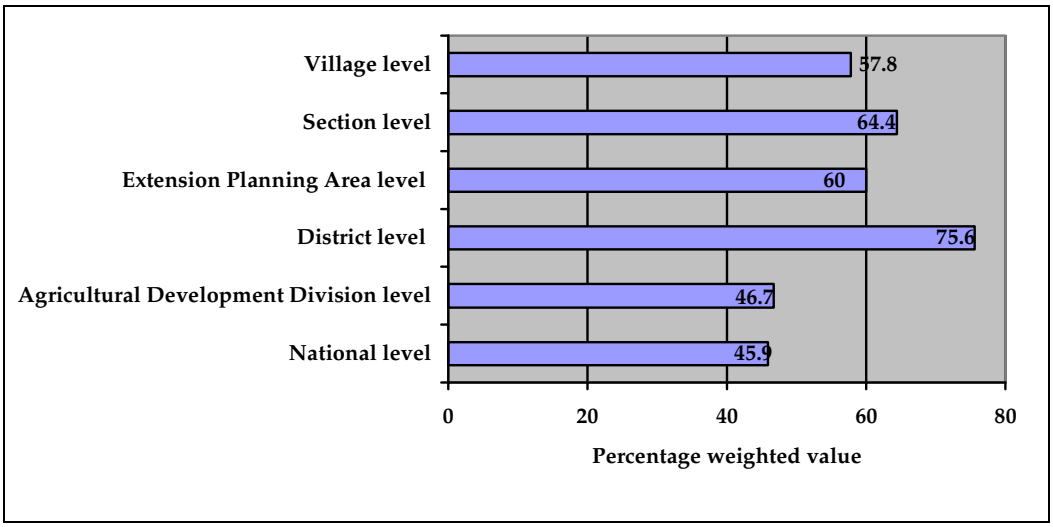


Figure 8.4: Respondents' assessment of the current status regarding the institutional linkage structures at different levels (N=135)

According to the respondents' views, linkage structures exist at all levels with the one at district level being most operational. This, however, does not reflect the observed reality, because even at district level extension organisations seldom meet. The involvement of farmers at these few formal meetings that take place is almost non-existence. Perhaps most of the respondents, especially those from the department of agriculture could have been indicating what the new agricultural extension policy stipulates regarding coordination structures but not necessarily what is currently taking place. Nevertheless, the existing so called linkage structures are not even close to what has been defined and proposed by Düvel (2000).

Since the need for the institutional linkage structures is to evoke more participatory and coordinated extension, respondents were asked to indicate their views regarding the level at which the linkages are more important (Figure 8.5).

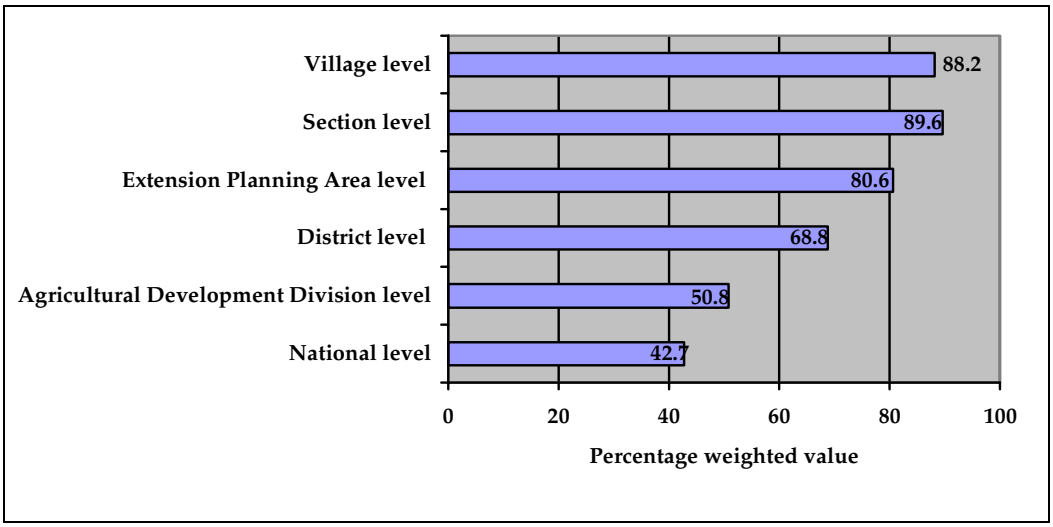


Figure 8.5: Respondents assessment regarding the best positioning of linkage structures to evoke more participatory and coordinated extension expressed as percentage weighted value (N=135)

The linkage structures that will evoke most participatory and coordinated extension should, according to the respondents, be located at Section (extension service area) level (89.6 percent) and the village level (88.2 percent). This is in agreement with what Düvel (2000) proposes that the structure should be as close to the community as possible. Although participation becomes better the lower the linkage structure is positioned, the opposite applies in a sense for coordination, and with more than one linkage structure for a service area, the possible duplication increases and coordination consequently becomes more difficult.

In view of these divergent tendencies, respondents were asked to place the above levels in rank order of importance or preference, in particular the level at which they regard the linkage structure to be ideal or the best compromise from an extension point of view. Outcomes are presented in Figure 8.6.

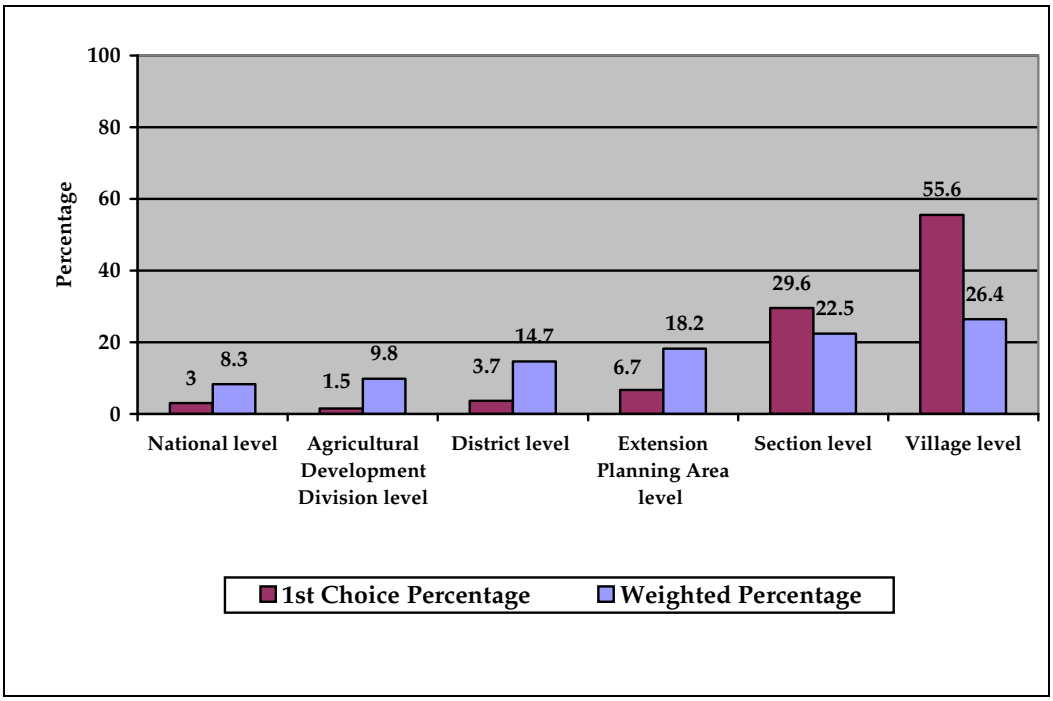


Figure 8.6: The percentage distribution of respondents (expressed as first choice and weighted percentage) according to their ranking of different alternatives regarding the preferred positioning of the structures (N=135)

In terms of both rank order position and weighted percentage, the linkage structure at village level is regarded to be most optimal. A close second is the Section level. Thereafter the importance decreases systematically up to national level. These findings support what Düvel (2005) proposes, namely that for ultimate national coordination and integration of development it is important that the linkage structures are not isolated. Düvel (2005) argues that there should be an organized hierarchy or ladder of similar linkage structures extending from the grassroots community up to at least the district level.

However, the arrangement that linkage structures be created for sub-communities within an extension service area e.g. at village level, is a recipe for complications. With it comes the problem of overlapping and uncoordinated service delivery. This is as a result of repetition of the activities at every level. For instance, if two sub-communities are created within an extension service area, the two linkage structures would require a duplication of development activities. It is also important to note that implementation of such linkage structures would be very costly and with the

shrinking agricultural extension resources it would be difficult and time consuming to establish and maintain such a multitude of linkage structures.

For the past two decades agricultural extension services in Malawi have been using the Section as the extension service area. However, because of decentralisation the new agricultural extension policy stipulates that the local government structures should be used for agricultural extension service delivery. In view of this, sub-communities (e.g. a village) may become extension service areas. Respondents' views regarding their choice between the two alternatives follow in Table 8.4.

Table 8.4: The distribution of respondents according to their comparative preference regarding linkage structures at section level or at sub-community (village) level (N=135)

Alternatives	N	Percentage
Sub-community (village) is much better than Section	37	27.4
Sub-community (village) is better than Section	15	11.1
No real difference/Undecided/Don't know	6	4.4
Section is better than Sub-community (village)	29	21.5
Section is much better than Sub-community (village)	48	35.6
TOTAL	**135**	**100.0**

A clear majority of respondents (57.1 percent) came up in support of the Section (the area a frontline extension officer is responsible for) as being the most appropriate linkage level, perhaps because extensionists are used to the Section as the service area. However, the policy change to have sub-communities become service areas would be ideal only if the tremendous staff and cost implications that these changes come with are taken care of. In that case the anticipated duplication and coordination problems could be reduced or even eliminated.

8.2.2 Functional differentiation

In order to maximize participation and partnership between the community and service providers, it is necessary that there should be provision for different bodies performing different tasks within the linkage structure. Düvel (1999) proposes two functions:

An over-arching, central coordinating body: This is an umbrella organisation operating as a representative mouthpiece of the community in negotiation with development organisations having, among others, the function of identifying development priorities and commissioning, supervising and coordinating development actions and projects (Düvel, 2000). Because such a coordinating body represents the whole community (various interest groups and local institutions) it is bound to be quite big. What is of great importance is that the community should regard it as representing it and its interests. This body should assume full responsibility for the development of the whole community.

Operational bodies: Since the coordinating body is bound to represent and coordinate the interests and needs of a large variety of interest and commodity groups it is likely to have many members. This, as well as the motive to maximize involvement of the community in the development process makes the coordinating body less dynamic and less suitable for operational functions. It is for this reason that Düvel (2000) argues that several different smaller bodies be commissioned by the coordinating body to take full responsibility of implementing different programmes and projects according to the various priorities and needs of the community. Düvel (1999) refers to these structures or communities as programme or project committees and thus clearly distinguishes between the coordinating and the operational functions (Düvel, 2000).

Given these different functions of development or linkage structures, respondents were requested to give their preference regarding the following alternatives:

(a) Whether the coordinating body should be responsible both for all coordination and all implementation of programmes or
(b) Whether there should be a clear distinction between the coordinating function and the implementation or operational functions commissioned to programme or project committees

The respondents' reactions to this question are given in Figure 8.7.

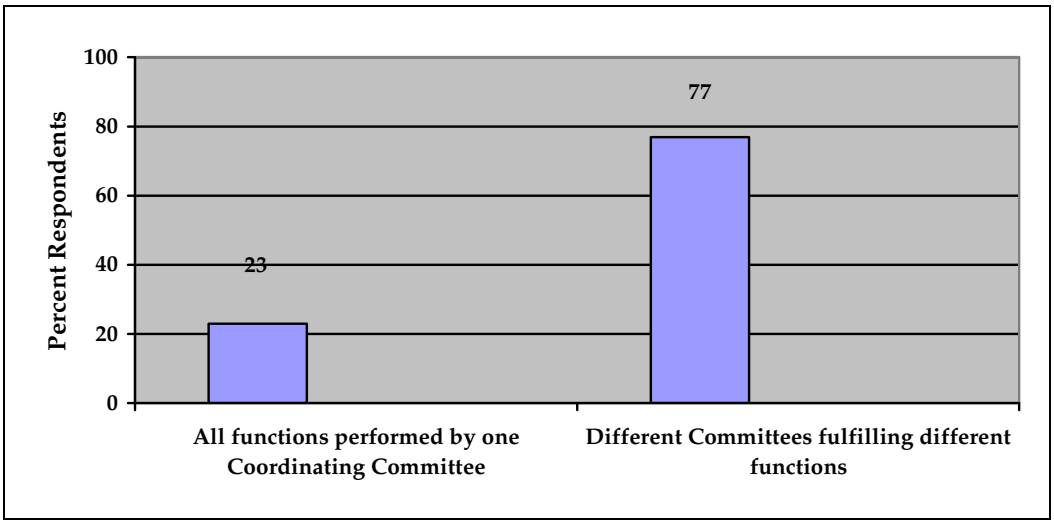


Figure 8.7: Percentage distribution of respondents according to their support of functional differentiation (N=135)

Most of the respondents, namely 77 percent, are of the opinion that per target community (extension service area) there should be one overarching coordinating body representing the total community and all its development interests complimented by a number of committees that are responsible for the implementation of programmes or projects according to priorities and needs in the community. Only 23 percent of the respondents believe that there should be only one institutional linkage structure per extension service area that is responsible for both coordination and implementation of all development projects and/or programmes. This preference for functional differentiation clearly supports Düvel's recommendation. In spite of the general preference for a functional differentiation there are significant differences between respondents in different operational function categories (Table 8.5).

Table 8.5: Distribution of respondents according to their operational function categories and their support of the alternatives regarding functional differentiation. (N=135)

Functional differentiation within linking structure	Respondents Category										Total	
	Farmers		Frontline extension workers		Extension managers		Managers		Subject matter specialists			
	n	%	n	%	n	%	n	%	n	%	N	%
All functions performed by one body	2	7.7	17	37	3	17.6	4	25	5	16.7	**31**	**23**
Different committees fulfilling different functions	24	92.3	29	63	14	82.4	12	75	25	83.3	**104**	**77**
Totals	**26**	**100**	**46**	**100**	**17**	**100**	**16**	**100**	**30**	**100**	**135**	**100**

$Chi^2 = 9.501$; df = 4; p =0.050

The findings indicate significant differences between the respondents' various operational functions categories as regards the importance of having one overarching coordinating body representing the total community and all its development interests per extension service area ($Chi^2 = 9.501$; df = 4; p=0.050). Farmers show a significantly higher support in this regard (92.3 percent) while frontline extension workers are significantly less convinced with as many a 37 percent being in favour of a single development body.

Table 8.6 summarises the variations as perceived by respondents within the type of the organisations they work for.

Table 8.6: Frequency distribution of extensionists according to the type of organisations they work for their support of the alternatives regarding functional differentiation (N = 109)

Functional differentiation within linking structure	Government organisation		NGO		Private Organisation		Total	
	n	%	n	%	n	%	N	%
All functions performed by one body	20	29.4	8	28.6	1	7.7	29	26.6
Different committees fulfilling different functions	48	70.6	20	71.4	12	92.3	80	73.4
Total	**68**	**100**	**28**	**100**	**13**	**100**	**109**	**100**

$Chi^2 = 2.711$; df = 2; p =0.258

The support for the need for functional differentiation within institutional structures among extension organisations in the district is not very different. Evidence of this is

the non-significant chi-square value (Chi^2 =2.711; df =2; p=0.258). However, private organisations seem to have the strongest support.

8.2.3 Number of linkage structures

The number of linkage structures per extension service area is equally important, but not unrelated to the positioning (par 8.2.1). Düvel, (2002), argues that if many linkage structures are created, overlapping and duplication of services is inevitable and there are implications on coordination of development activities, especially if linkage structures are created for every village or sub-community within an extension service area. Figure 8.8 investigates respondents' opinions regarding their preference regarding numbers or levels of such linkages or coordinating development structures. The following main alternatives are suggested:

(a) One linkage structure per sub-community

(b) One linkage structure per extension service area (Section)

(c) One linkage structure per district,

Support for these alternatives varies significantly, as can be seen from the findings summarised in Figure 8.8.

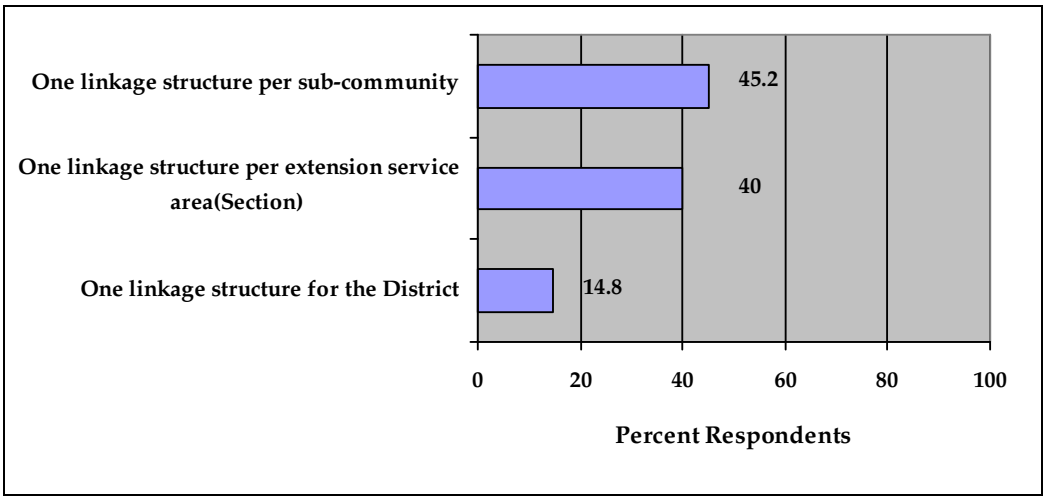


Figure 8.8: The percentage distribution of respondents according to their support for different alternatives regarding the number or level of linkage structures (N=135)

Respondents seem to appreciate the necessity for the coordinating or linkage body to be as close to the grassroots community as possible. This means that the most favoured level is the sub-community (45.2 percent), followed by the extension service area (section) (40 percent). The implications of the increased number of linkage structures without additional extension personnel and resources is apparently not appreciated.

Table 8.7 gives a comparison of the support within the operational function categories of respondents.

Table 8.7: Distribution of respondents in different functional categories according to their support of the alternatives regarding the number or level of linkage structures (N=135)

Number or Level of Linkage structures	Respondents Category										Total	
	Farmers		Frontline extension workers		Extension managers		Managers		Subject matter specialists			
	n	%	n	%	n	%	n	%	n	%	N	%
One linkage structure per sub-community	9	34.6	15	32.6	7	41.2	9	56.3	14	46.7	**54**	**40.0**
One linkage structure per Section	17	65.4	22	47.8	9	52.9	4	25.0	9	30.0	**61**	**45.2**
One linkage structure for the District	0	0	9	19.6	1	5.9	3	18.8	7	23.3	**20**	**14.8**
Totals	**26**	**100**	**46**	**100**	**17**	**100**	**16**	**100**	**30**	**100**	**135**	**100**

Chi^2=14.936; df=8; p=0.060

The outcomes indicate some significant differences between respondents in the various operational function categories as far as their assessment regarding the number or level of linkage structures is concerned. Evidence of this is the significant chi square (Chi^2=14.936; df=8; p=0.060). It is noteworthy according to Table 8.7, that farmers have a significantly higher interest for one linkage structure per Section (65.4 percent) compared to other categories. Another outstanding outcome that emerges is that most managers (56.3 percent) favour one linkage structure per sub-community.

As can be seen from Table 8.8, which presents opinions of extension organisations regarding number or level of linkage structures, extension organisations have similar views in this regard. This is shown by the non-significant chi-square value (Chi^2 =2.894; df=4; p=0.576). However, the public sector seem to be more positive in having structures closer to the community compared to other extension organisations as observed in their higher assessments for Section (44.1 percent).

Table 8.8: Distribution of respondents according to their support of the alternatives regarding the number or level of linkage structures and the extension organisations they work for (N=135)

Number or Level of Linkage structures	Government organisation		NGO		Private Organisation		Total	
	n	%	n	%	n	%	N	%
One linkage structure per Sub-community	27	39.7	14	28.6	4	30.8	45	41.3
One linkage structure per Section	30	44.1	9	32.1	5	38.5	44	40.4
One linkage structure for the District	11	16.2	5	17.9	4	30.8	20	18.3
Total	**68**	**100**	**28**	**100**	**13**	**100**	**109**	**100**

Chi^2 =2.894; df = 4; p =0.576

Table 8.9 provides a summary of findings of the influence of gender on the number or level of linkage structures.

Table 8.9: Distribution of respondents according to their support of the alternatives regarding the number or level of linkage structures and gender (N=135)

Number or Level of Linkage structures	Gender of Respondents				Total	
	Male		Female			
	n	%	n	%	N	%
One linkage structure per Sub-community	48	42.5	6	27.3	**54**	**40.0**
One linkage structure per Section	46	40.7	15	68.2	**61**	**45.2**
One linkage structure for the District	19	16.8	1	4.5	**20**	**14.8**
Total	**113**	**100**	**22**	**100**	**135**	**100**

Chi^2 =6.012; df = 2; p =0.050

While a fair percentage of male respondents (42.5 percent) are of the opinion that there should be one linkage structure per sub-community, the support for a linkage structure per extension service area (section) among the women is much bigger (68.2 percent). Evidence of this difference is the significant chi-square value (Chi^2=6.012;

df=2; p=0.050). These findings can be an indication that women have a better understanding of the implications of linkage structures at the various levels.

8.2.4 The place of service providers in the linkage structure

Another important issue is the place of service providers or development agents in the structure. Two alternatives exist: the first one being that service providers be part of the development committee and the second is that the service providers should not form part of the committee. Düvel (2000) argues against the former, because when service providers become part of the development committee, they tend to dominate and take over the process. This tends to undermine the communities emancipation towards full ownership and self-depending. Respondents were asked to choose between the above two alternatives.

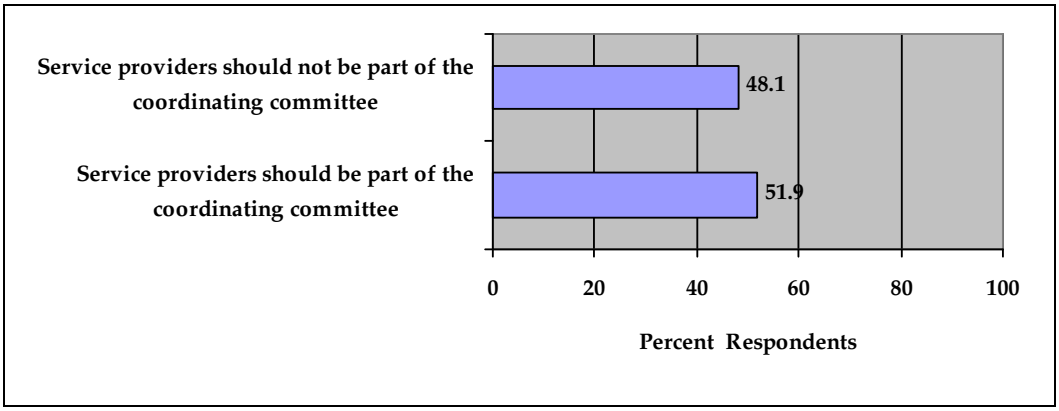


Figure 8.9: Respondents viewpoints regarding the place of service providers in the linkage structure expressed as a percentage (N=135)

There is no clear majority for any of the two viewpoints because, as Figure 8.7 indicates, 51.9 percent are of the opinion that the service providers' representatives in the community should be part of the development or coordinating committee while the rest (48.1 percent) think otherwise. Since many development agencies tend to dominate or dictate the development process, a strong case can be made for a ruling whereby service providers cannot obtain membership of the central development or coordinating body.

There are some deviations from the above general tendency. Table 8.10 summaries outcomes of the influence of respondents' operational function categories on their

preference regarding membership of service providers in the linkage or coordinating structure.

Table 8.10: Distribution of respondents according to their support of the place of service providers in the linkage structure and their operational function categories (N=135)

The place of service providers in the linkage structure	Respondents Category										Total	
	Farmers		Frontline extension workers		Extension managers		Managers		Subject matter specialists			
	n	%	n	%	n	%	n	%	n	%	N	%
Service providers should be part of the coordinating committee	6	23.1	27	58.7	8	47.1	8	50	21	70	**70**	**51.9**
Service providers should not be part of the coordinating committee	20	76.9	19	41.3	9	52.9	8	50	9	30	**65**	**48.1**
Totals	**26**	**100**	**46**	**100**	**17**	**100**	**16**	**100**	**30**	**100**	**135**	**100**

Chi^2 =13.622; df = 4; p =0.009

There are significant differences between respondents in the various functional categories as far as their assessment regarding the place of service providers in the linkage structure is concerned. This is shown by the significant chi-square value (Chi^2 =13.622; df = 4; p =0.009). The outstanding feature in Table 8.10 is the extent to which farmers prefer that service providers should not be part of the coordinating committee. 76.9 percent share this view, while only less than 53 percent of the service providers came out in support of this view. These findings are a clear indication of the farmers wish to take full responsibility of the development that affects them.

As far as the different extension organisations are concerned (Table 8.11) there are no significant differences between them (Chi^2=8.907; df =12; p=0.711). It seems, however, as if NGOs are more keen to become part of the coordinating linkage structure.

Table 8.11: Distribution of respondents according to their support of the alternative place of service providers in the linkage structure and the extension organisations they work for (N=135)

The place of service providers in the linkage structure	Government organisation		NGO		Private Organisation		Total	
	n	%	n	%	n	%	N	%
Service providers should be part of the coordinating committee	38	55.9	18	64.3	8	61.5	64	58.7
Service providers should not be part of the coordinating committee	30	44.1	10	35.7	5	38.5	45	41.3
Total	**68**	**100**	**28**	**100**	**13**	**100**	**109**	**100**

Chi^2 =0.6264; df = 2; p =0.731

Gender (Table 8.12) similarly has no significant influence on the perception regarding membership of a linkage structures (Chi^2=1.261; df=1; p=0.262). However, women seem to more supportive of linkage structure membership restricted to only community members.

Table 8.12: Distribution of respondents according to their support of the alternative place of service providers in the linkage structure and gender (N=135)

The place of service providers in the linkage structure	Gender of Respondents				Total	
	Male		Female			
	n	%	n	%	N	%
Service providers should be part of the coordinating committee	61	54.0	9	40.9	**70**	**51.9**
Service providers should not be part of the coordinating committee	52	46.0	13	59.1	**65**	**48.1**
Total	**113**	**100**	**22**	**100**	**135**	**100**

Chi^2 =1.261; df = 1; p =0.262

8.2.5 Linkage between agriculture and other development

Agricultural development is only one aspect of the total rural development, and where a high premium is placed on integrated development, the issue of linkages between agricultural and rural development become relevant. The question, therefore, is whether the coordinating linkage structure should be responsible for all rural development issues or whether the responsibility should be limited to agriculture or even to single commodities. Respondents' viewpoints are presented in Figure 8.10.

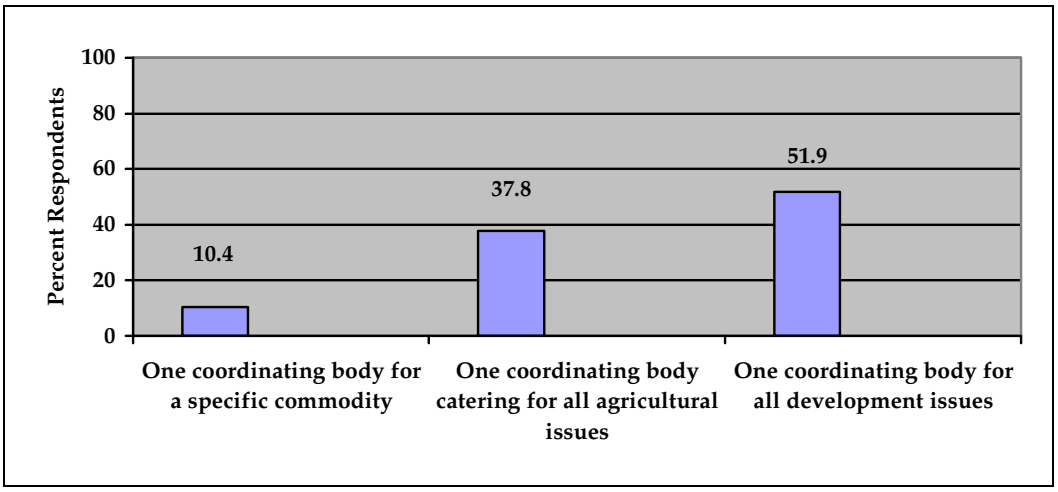


Figure 8.10: Percentage distribution of respondents according to their support for alternative responsibilities of the coordinating linkage structures (N=135)

The majority of the respondents, namely 51.9 percent, favour the coordination of all development issues relating to the target or service community. However, as many as 37.8 percent are of the opinion that a coordination body should be responsible for the coordination of agricultural development issues only. In view of the tremendous duplication and uncoordinated inputs between different departments and NGOs, a strong case can be made for the former especially as far as integrated development is concerned. Resistance to a combination of all development responsibilities within one coordinating linking structure could be attributed to the fear of marginalisation, especially if emphasis and funding are not even handed. Should this be at a cost of agricultural development, it can be ill afforded in a country where over 80 percent of the population is rural based and agriculture is the main source of livelihood.

In communities where a coordination of all development activities is favoured, the coordinating committee will have a big responsibility to ensure that all development issues in the community are well taken care of. Especially in communities where farming is the main source of livelihood, agriculture development should receive the necessary priority.

Support for the alternative responsibilities of a linkage structure vary significantly among respondents in operation function categories, as can be seen from the findings summarised in Table 8.13.

Table 8.13: Distribution of respondents according to their support of the alternatives responsibilities of a linkage structure and their operational function categories (N=135)

Alternative responsibilities of a Linkage structure	Respondents Category										Total	
	Farmers		Frontline extension workers		Extension managers		Managers		Subject matter specialists			
	n	%	n	%	N	%	n	%	n	%	N	%
One coordinating body per commodity	2	7.7	3	6.5	2	11.7	1	6.2	6	20.0	**14**	**10.4**
One coordinating body all agricultural issues	19	73.1	11	23.9	8	47.1	7	43.8	6	20.0	**51**	**37.8**
One coordinating body for all development issues	5	19.2	32	69.6	7	41.2	8	50.0	18	60.0	**70**	**51.9**
Totals	**26**	**100**	**46**	**100**	**17**	**100**	**16**	**100**	**30**	**100**	**135**	**100**

Chi^2 =26.666; df = 8; p =0.001

As far as the different operational function categories are concerned (Table 8.13) there are significant differences between them (Chi^2=26.666; df=8; p=0.001). Most farmers (73.1 percent) favour having one coordinating committee taking responsibility of all agricultural activities, while all categories of extension workers except the extension managers are of the opinion that one coordinating committee should take charge of all development activities. This is an indication of the farmers' dependence on agriculture and that they expect coordination of all development issues to have a negative influence on agriculture.

According to Table 8.14 extension organisations have no significant influence on the perceptions regarding the cope of coordination of linkage structure. Evidence of this is the non significant chi square (Chi^2 =5.954; df = 4; p =0.203). However, certain tendencies tend to merge. Private organisations are the least enthusiastic a bout a single coordinating body being responsible for all development issues. They are the organisations with the biggest support for a commodity focus. NGOs represent the other extreme characterised by the biggest support for a coordination of all development issues and least for only agricultural development coordination.

Table 8.14: Distribution of respondents according to their support of the alternative responsibilities of a Linkage structure and the extension organisations they work for (N=135).

Alternative responsibilities of a Linkage structure	Government organisation		NGO		Private Organisation		Total	
	n	%	n	%	n	%	N	%
One coordinating body per commodity	2	7.4	4	14.2	3	23.1	12	11.0
One coordinating body all agricultural issues	22	32.4	5	17.9	5	38.5	32	29.4
One coordinating body for all development issues	41	60.3	19	67.9	5	38.5	65	59.6
Total	**68**	**100**	**28**	**100**	**13**	**100**	**109**	**100**

Chi^2 =5.954; df = 4; p =0.203

Table 8.15 highlights the findings of the influence of gender on the alternative responsibilities of a linkage structure.

Table 8.15: Distribution of respondents according to their support of the alternative responsibilities of a linkage structure and gender (N=135)

Alternative responsibilities of a Linkage structure	Gender of Respondents				Total	
	Male		Female			
	n	%	n	%	N	%
One coordinating body per commodity	13	11.5	1	4.5	**14**	**10.4**
One coordinating body all agricultural issues	38	33.6	13	59.1	**51**	**37.8**
One coordinating body committee for all development issues	62	54.9	8	36.4	**70**	**51.9**
Total	**113**	**100**	**22**	**100**	**135**	**100**

Chi^2 =5.236; df = 2; p =0.073

While the majority of male respondents (54.9 percent) support that one development committee should be responsible for all development issues, a large majority of women (59.1 percent) are of the opinion that one development committee should take full responsibility for all agricultural issues. The significant chi-square value (Chi^2 =5.236; df = 2; p =0.073) confirms a significant difference between men and women in this regard. The women support for a linkage structure for agricultural development only is not strange because generally women do most of farming in most parts of the country.

8.4 Summary and conclusions

1. The implementation of a partnership (the partners being, on the one hand, the service provider or extensionist and, the community on the other hand) and the ultimate assuming of ownership by the community is unlikely without an appropriate institutional linkage structure. The main reason being that the linkage structure provides a forum for interaction between service providers and the benefiting community, which is the precondition for an effective partnership, namely the interaction between the partners. The community should be represented by a group of individuals that represent (and are accepted to represent) the total target community, and thus serves as mouthpiece for the community it represents.

2. The nature and the development of a community linkage structure can take different forms, depending on specific local circumstances. However, an extension service area or the community serviced by one extension worker should have only one coordinating linkage structure or body functioning as mouthpiece for the community and representing it regarding all aspects and interest of development. However, this coordinating linkage body should be supported and supplemented by programme committees, which will assume the delegated responsibility of implementation of activities but still being accountable to the coordinating body.

3. The coordinating linkage structures should, if possible, be responsible for the coordination of all and not only agricultural development issues. The coordination and linkage should be as close to the grassroots community as possible; but the coordinating body needs to be embedded in a hierarchy or ladder of linkage structures to allow for overall coordinated and integrated rural development.

CHAPTER 9

PLURALISTIC AND COORDINATED EXTENSION

9.1 Introduction

For a long time, agricultural extension in Malawi has been highly dependent on the pubic service. However, in view of the public sector reform with emphasis on downsizing or streamlining the capacity of the public extension services, coupled with the shrinking of public resources which exert pressure on extension spending, the promotion of a variety of actors in the extension service provision and delivery seemed to be a plausible proposition (DAES, 2000). In Nkhotakota district alone, there are now over two dozen organisations involved in the delivery of agricultural extension and related services. This is in addition to various smaller community-based organisations, private stockists (agro-input dealers), and farmer groups, among others. In view of pluralism, co-ordinating extension services becomes a challenging role, especially because, unlike in the more industrialised countries, pluralistic systems of social services delivery are still novel phenomena in many developing countries (Düvel, 2002). The assumption is that in the light of the diversity of organisations and projects involved in agricultural service delivery, improved co-ordination of extension activities would improve the performance of the agricultural sector. In this chapter, the need for coordination, current status as regards coordination, as well as ways of improving coordination in the district are discussed.

9.2 The need and reasons for coordination in pluralistic extension services

In pluralistic extension, lack of coordination between different extension organisations often results in unnecessary duplication or working at cross-purposes, with the result that the frequently scarce extension resources are not effectively utilized, thereby seriously reducing or undermining the potential extension input (Düvel 2002). Respondents were requested to give an indication of their agreement or disagreement of the necessity of coordination of extension services. Findings are presented in Figure 9.1.

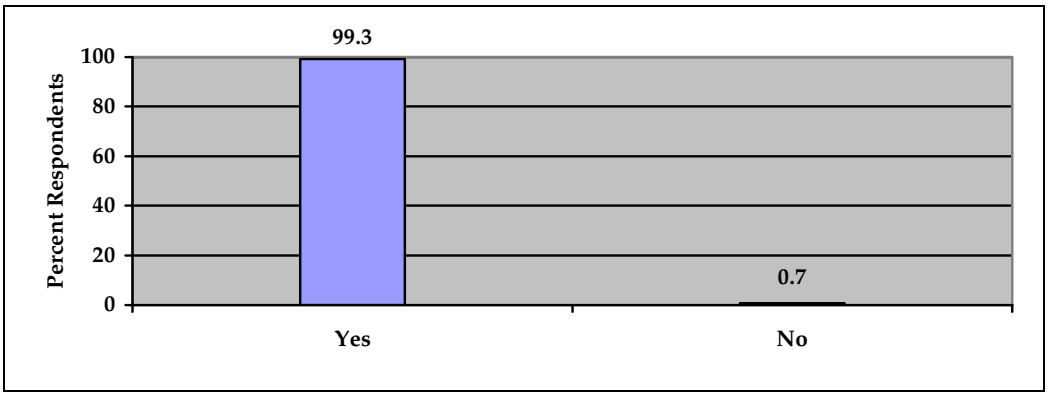


Figure 9.1: Percentage distribution of respondents according to their support for the necessity for coordination of extension activities (N=135)

An overwhelming majority, namely ninety nine percent (99.3 percent), of the respondents support the necessity for coordination of agricultural extension services in their district. The need for coordination comes out strongly. However, without understanding the rationale for coordination, this apparently positive perception would be meaningless. It is for that reason that respondents were also asked to indicate why they think coordination should be pursued. Table 9.1 presents various reasons for participating in coordination of agricultural extension services.

Table 9.1: Reasons why coordination is important in the delivery of extension services expressed as weighted percentage value (N=135)

Reasons	Average weighted Percentage value[9]
Sharing of experiences for effective and efficient extension delivery.	87.1
Avoid unnecessary duplication	86.4
Maximum use of scarce extension resources	82.1
Development of systematic procedures for delivery of extension services	73.8
Minimizing conflicts and facilitating conflict resolution	60.6
Specialization in certain areas of extension service delivery	57.3
Comparison with others and self-evaluation	56.7

According to respondents' perceptions, coordination is important because of, the need for sharing of experiences among stakeholders so as to improve efficiency and effectiveness of extension service delivery (87.1 percent) and avoidance of

[9] Average scale assessment expressed as a percentage and based on a scale where; 1= very unimportant, 10=extremely important.

duplication of services (86.4 percent). The appreciation of these could be attributed to the implementation of pluralism in extension, which resulted in an increase in the number of service providers, and the consequent increasing tendency of duplication of services. Duplication could be avoided, for example, by developing systematic procedures for extension service delivery.

Closely related to, and in a sense the outcome of the above mentioned two major reasons is maximum use of scarce extension resources (82.1 percent), of which respondents have become aware of in view of the limited resources that are now available for agricultural extension, especially in the public sector.

9.3 Organisations involved in agricultural activities

In the wake of pluralism, new players have been coming into agricultural extension services (DAES, 2002). The extension organisations operating in the different EPAs in Nkhotakota District are presented in Table 9.2.

Table 9.2: Number of extension staff reporting the presence of various organisations in their extension planning areas (EPAs) (N=109)

Name of Organisation	Linga	Mwansambo	Nkhunga	Zidyana	District HQ.	Total
1 Concern Worldwide	4	3	0	15	18	**40**
2 Department of Agriculture	6	5	7	6	12	**36**
3 World Relief Malawi	9	7	9	2	9	**36**
4 Save the Children Federation	11	0	2	4	8	**25**
5 World Vision International	1	2	3	0	16	**22**
6 Concern Universal	2	0	3	1	11	**17**
7 Malawi Red Cross Society	4	4	0	1	8	**17**
8 ARET	2	1	6	0	5	**14**
9 Nkhotakota Aids support organization (NASO)	11	0	0	0	3	**14**
10 World Medical Fund	7	0	7	0	3	**14**
11 Cotton Development Association (CDA)	1	8	2	2	1	**14**
12 Wildlife Environmental Society of Malawi	1	0	6	0	3	**10**
13 Alinafe	2	0	0	6	1	**9**
14 SARRNET	2	0	1	0	5	**8**
15 Total Land Care	3	3	0	1	1	**8**
16 Malawi Rural Finance Company	1	4	2	0	1	**8**
17 IDEEA	4	0	0	0	0	**4**
18 NASFAM	0	0	0	0	3	**3**
19 Kulima Gold	1	0	0	0	0	**1**
20 Farmers World	1	0	0	0	0	**1**
21 National Initiative for Civic Education (NICE)	0	1	0	0	0	**1**
22 Nkhoma Synod Relief and Development Department	1	0	0	0	0	**1**
23 Micro Loan	1	0	0	0	0	**1**
24 Finca	1	0	0	0	0	**1**
25 Chia Lagoon watershed management project	0	0	0	0	1	**1**
26 MASAF	0	0	0	0	1	**1**
27 Smallholder Sugar Authority	0	0	0	0	1	**1**
28 CAMPASS	0	0	0	0	1	**1**
29 ASMAG	0	0	0	0	0	**0**
30 Land O' Lakes Cooperation	0	0	1	0	0	**0**
31 ADMARC	0	0	0	0	0	**0**
Number of Extension organizations in each EPA	**22**	**10**	**12**	**9**	**21**	

Over 30 organisations have been cited to be involved in agricultural extension and related activities in the district. As can be observed in Table 9.2, the distribution of these organisations is not even, some EPAs have more extension organisations than others. Linga EPA has the highest number of extension organisations (22). Apart from the government organisations, only two other organisations (World Relief Malawi and Cotton Development Association) have their presence in all EPAs. Another observation from the Table above is that some extension organisations are not mentioned at the district headquarters (DAES), which may mean that these organisations work directly with frontline extension staff. This scenario has the potential of creating coordination problems.

9.4 Current coordination among organisations

The overwhelming agreement regarding the need for coordination (Figure 9.1) can only be seen in perspective against the current situation. Presented in Table 9.3 are respondents' perceptions or estimations regarding the extent to which various extension organisations currently coordinate with other organisations.

Table 9.3: Extension staff's assessments regarding the effectiveness and scope of coordination with other organizations (N=109)

Name of Organization	Number of respondents from each organization	Number of respondents who evaluated a particular organization	Average Weighted Percentage Value	
			Effectiveness of Coordination	Scope of coordination
1 Department of Agricultural Extension Services	68	36	5.1	4.9
2 Concern Worldwide	1	40	6.1	5.2
3 Concern Universal	5	17	6.0	4.8
4 World Vision International	5	22	4.7	4.3
5 World Relief Malawi	7	36	3.9	3.9
6 Save the Children Federation	2	25	6.1	5.2
7 Malawi Red Cross Society	1	17	4.2	3.7
8 ARET	1	14	6.6	5.4
9 Malawi Rural Finance Company	1	8	6.6	6.0
10 Kulima Gold	1	1	4.0	4.0
11 Alinafe Rehabilitation Centre	3	9	5.5	3.4
12 SARRNET	2	8	5.7	3.6
13 IDEEA	1	4	6.0	6.0
14 Total Land Care	1	8	6.8	6.5
15 NASFAM	2	3	5.3	5.0
16 Nkhotakota Aids support organization	0	14	3.5	3.9
17 World Medical Fund	0	14	3.4	2.6
18 Cotton Development Association	0	14	5.5	5.1
19 Wildlife Environmental Society of Malawi	0	10	3.4	4.0
20 National Initiative for Civic Education	0	1	5.0	5.0
21 Relief and Development Department (Nkhoma)	0	1	3.0	3.0
22 Micro Loan	0	1	1.0	1.0
23 Finca	0	1	1.0	1.0
24 Chia Lagoon watershed management project	0	1	3.0	3.0
25 MASAF	0	1	2.0	2.0
26 Smallholder Sugar Authority	0	1	2.0	2.0
27 CAMPASS	0	1	6.0	3.0
AVERAGE MEAN			**4.5**	**4.0**

The results show a tremendous variation in the assessment of coordination in the district. The average scale points range from 1 to 6.8 and 1 to 6.5 for effectiveness and scope of coordination respectively. However, most of the 27 organizations received assessments of less than 6 scale points, which emphasizes the tremendous scope for improvement as far as coordination, is concerned.

The mean assessments as they apply to the different extension planning areas (EPAs) are indicated in Figure 9.2.

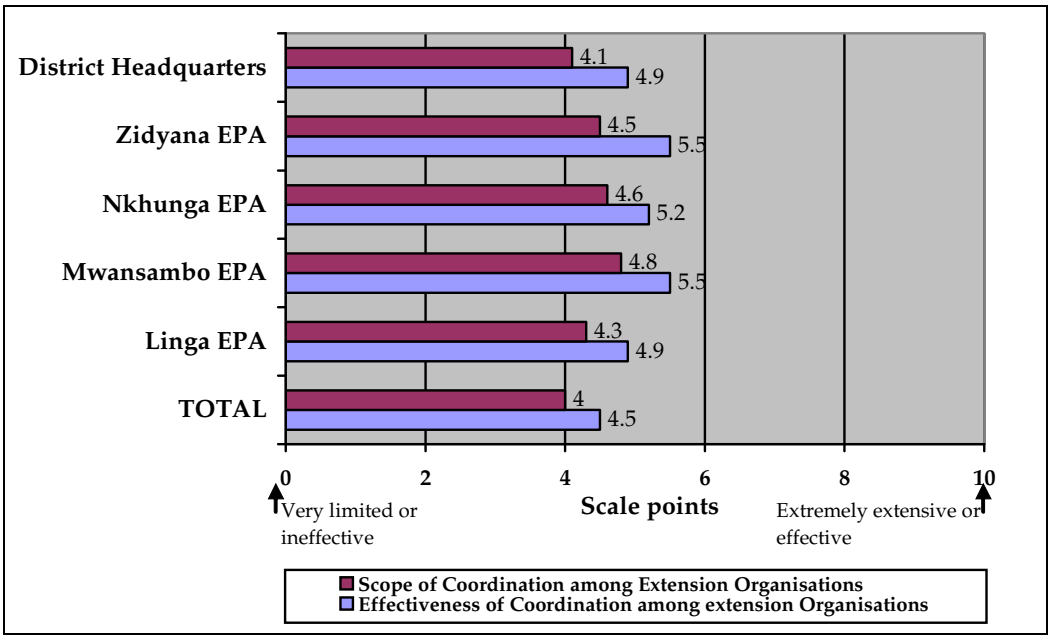


Figure 9.2: The extensionists' assessment of the effectiveness and scope or degree of coordination in EPAs expressed as mean scale points (N=109)

There are no significant differences between the different extension planning areas as far as the effectiveness and scope or degree of coordination is concerned. It is worth noting, however, that according to Figure 9.2 above, coordination is more effective in the Zidyana, Nkhunga and Mwansambo EPAs, probably because there are fewer extension organisations working in these areas, which makes it easier for them to get in touch with each other on a regular basis.

Perhaps one of the indicators of successful coordination among extension organisations is how well coordination has contributed towards accomplishing the

reasons that were given earlier as the motivation for coordination. To get an idea of the current level or degree of coordination, respondents gave their views using the same list as in section 9.2. Table 9.4 presents respondents' indications of the current level or degree of coordination between organisations.

Table 9.4: Respondents viewpoints regarding the current contribution of coordination to the accomplishment of various purposes expressed as mean weighted percentage value (N=135)

Reasons/ Purposes	Average weighted Percentage value[10]*
Avoid unnecessary duplication	39.7
Sharing of experiences for effective and efficient extension delivery	46.3
Development of systematic procedures for delivery of extension services.	37.4
Maximum use of scarce extension resources	39.0

As can be seen in Table 9.4, respondents are of the opinion that contribution of coordination to the various purposes is rather low, namely less than 47 percent of what is regarded to be possible. This is quite serious considering that, since the promotion of pluralism began, there are many organisations involved in extension in the district. However, seen in another context, the findings are quite positive, because the picture is clear that there is a tremendous scope for improvement as far as coordination of extension services is concerned.

9.5 Means of coordination

Prior to the survey several means that could be used for coordination of agricultural extension were identified. Respondents were given a task to indicate to what extent the identified means are used by organizations to coordinate their activities with other organizations. These can give an indication of the extent of coordination currently taking place. These frequencies, as judged by respondents, are presented in Table 9.5 and are based on a 4-point assessment scale.

[10] Average scale assessment expressed as a percentage and based on a scale where; 1= not accomplished at all, 10= very effectively accomplished.

Table 9.5: Respondents views on the extent to which various methods are used to coordinate agricultural extension services in the district (N=135)

Reasons	Average scale points*
Working with farmer development committees	3.4
Co-ordination mechanisms at Extension Planning Area levels.	3.1
Strengthening relevant associations	2.8
Co-ordination mechanisms at the village level.	2.8
Improving information flow among extension organizations.	2.8
Co-ordination mechanisms at the District level.	2.7
Encouraging extension staff to visit other organizations	2.5
Inviting other organizations to participate in planning sessions.	2.2
Harmonization of plans or programmes to avoid contradictions, duplications, or unnecessary conflicts	2.0
Sharing available resources for extension services with other stakeholders (without putting all resources on the same account).	1.9
Exchange of reports with other organizations.	1.9
Involving the politicians in planning agricultural extension	1.6
Sharing available resources (with finances on the same account)	1.3

** The average scale points values are based on a scale where; (4) always, (3) sometimes, (2) rarely, (1) never been used before.*

The use of the various means of coordination varies greatly. Ranging from an average scale point of 1.3 in the case of the sharing of available resources (with finances in a joint account), to as high as 3.4 for working with farmer development committees. Although the latter appears to be high level of coordination, most of the other means are less than the scale point 3. This implies that even the means of coordination, which were thought to be frequently used, are, in effect, seldom used. Effectively, this means that most of the other methods are rarely used or not used at all. It is noteworthy from these findings that coordination that is integrated in a hierarchy of similar linkage structures extending from the agricultural extension clients at community level up to at least district or even national level does not exists at the moment.

Probably one of the most valid indicators of the scope or degree of coordination has to do with the number of formal meetings that are organised involving the extension

organisations in the district. The extension arrangement in the district at the moment stipulates that service providers are supposed to meet once a month and fortnightly at district and EPAs levels respectively. Table 9.6 highlights the number of formal contacts currently taking place in the district.

Table 9.6: Distribution of extension staff according to their assessment of the number of formal coordination contacts taking place (N=109)

Number of formal contacts	Percentage
1. Fortnightly	14.8
2. Once a month	32.0
3. Bimonthly	14.1
4. Quarterly	9.4
5. Once in six months	9.9
6. Once in a year	9.9
7. No meetings at all	9.9
Total	**100.0**

The findings presented in Table 9.6 above suggest that formal coordination meetings are a very rare event, because up to 53.2 percent of the extensionists indicate that their attendance at these meetings ranges from once in two months to once in a year. And the fact that about ten percent (9.9 percent) have not been to such meetings is a call for concern.

9.6 Seriousness of the problem of poor coordination

With the influx of several service providers, the need for proper coordination increases. Respondents' opinions as regards the seriousness of the problem of coordination in their areas were sought. The seriousness of the problem of poor coordination, as expressed by extension staff, is illustrated in Figure 9.3

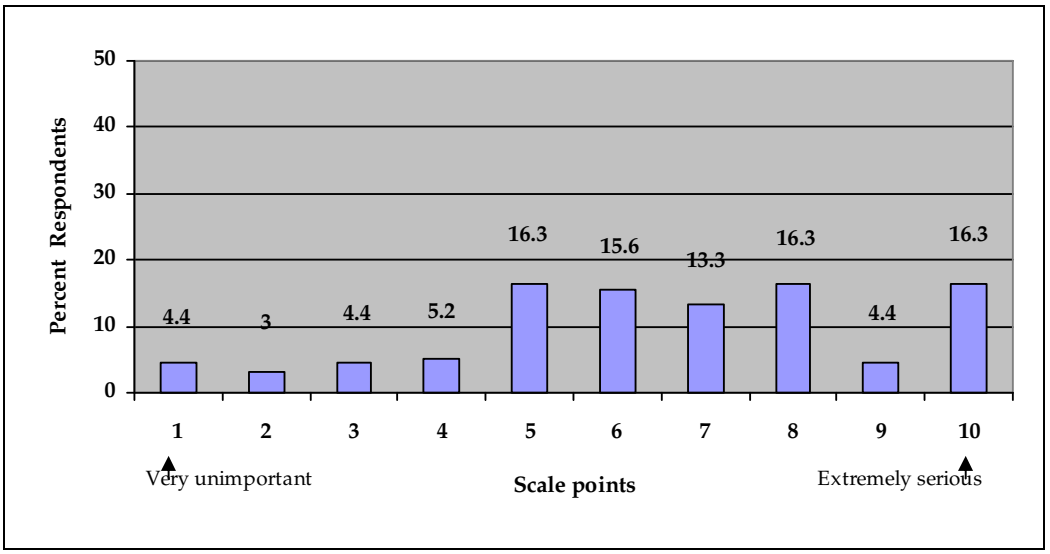


Figure 9.3: Distribution of respondents according to their assessment of the seriousness of the problem of poor coordination (N=135)

The importance of proper coordination is evident from these findings. The mean assessment of the seriousness of the problem of poor coordination in the district is 6.5 on a ten-point scale. 16.3 percent of the respondents give it the highest possible rating (10), while the percentage respondents rating it as an important problem (5) or more is 82.2.

There are likely to be differences between the respondents' operational function categories as well as between extension planning areas (EPAs) regarding the perceived seriousness of the problem of poor coordination. The extension planning areas (EPAs) differences are summarised in Figure 9.4 and show that the problem of poor coordination is particularly important among subject matter specialists (SMS), perhaps because they are less involved in extension compared to the frontline extensionists, and for that reason they may have a broader perspective as to what is required to improve coordination. Farmers' assessment of this problem is much lower, probably because they may not value so much the importance of coordination at the moment.

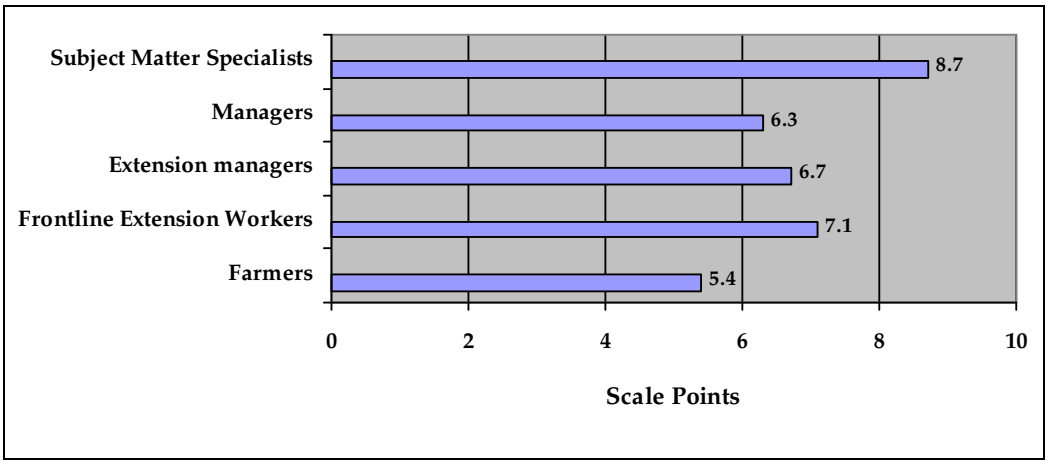


Figure 9.4: The mean assessment of the seriousness of the problem of poor coordination by respondents in their operational function categories (N=135)

Findings as summarised in Figure 9.5 do not show significant differences among respondents from different extension planning areas (EPAs) as regards the seriousness of the coordination problem. However, the problem is perceived to be slightly more serious in Mwansambo and Nkhunga EPAs, than it is in Zidyana EPA.

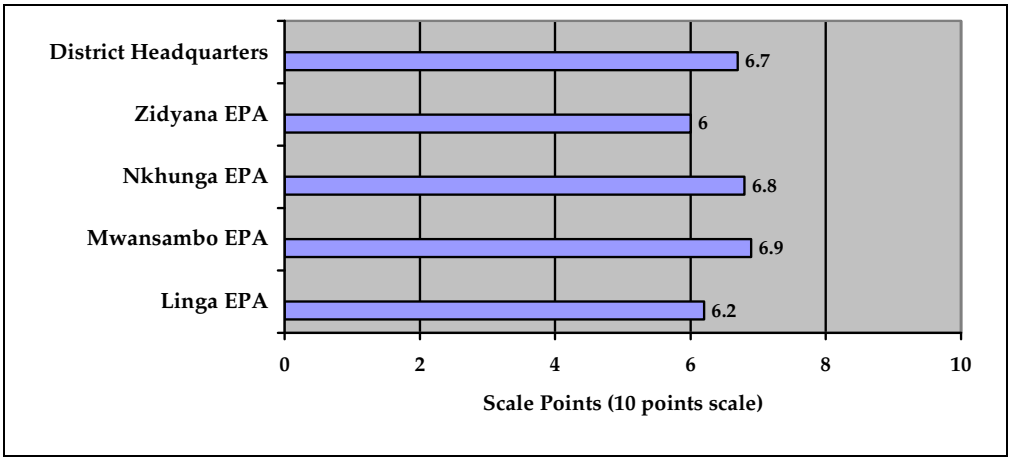


Figure 9.5: The mean assessment of the seriousness of the problem of poor coordination by respondents in their extension planning areas (N=135)

Another very valid indicator of the seriousness of poor coordination as a problem is to consider it along with other problems that affect agricultural extension. Respondents' were requested to give their viewpoints in this regard by placing in

rank/order of importance the problems affecting agricultural extension. Figure 9.6 highlights the findings.

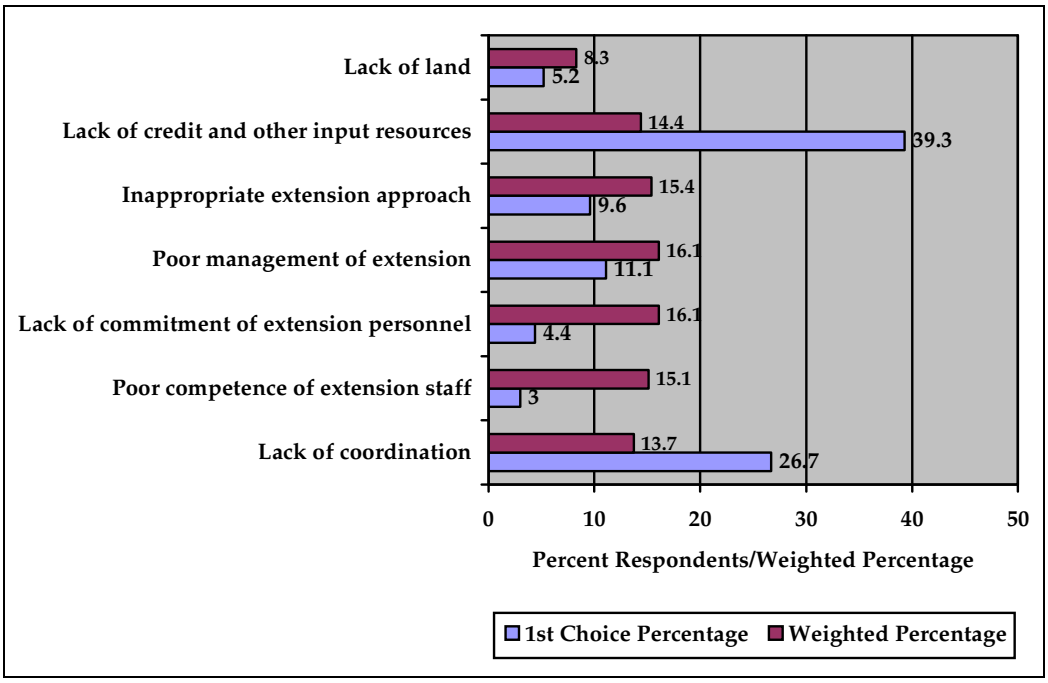


Figure 9.6: The respondents ranking (percentage first choice and weighted percentage) of the seriousness of lack of coordination considered along with other problems (N=135)

The seriousness of poor coordination comes out clearly in Figure 9.6. The problem of coordination (26.7 percent and 13.7 percent respectively for percentage first choice and weighted percentage) comes second only to inadequate access to credit and production inputs for the farmers (39.3 percent and 14.4 percent for percentage first choice and weighted percentage respectively). The high ranking of poor management of extension and lack of commitment of extension personnel and others when expressed as a weighted percentage is because they received the highest number of second and third positions. These findings confirm that poor coordination is a major problem that has to be dealt with in the district.

9.7 Solutions to poor coordination

For more than five decades, coordination was not an issue because the public sector was the only organisation responsible for agricultural extension. The need for coordination of agricultural extension activities is more visible now, because of

pluralism in extension services delivery. The need for coordination is likely to increase as the implementation of privatization and decentralization policies unfolds. In view of these developments, respondents were given the responsibility of evaluating a series of proposals for improving coordination of agricultural extension services in the district. The respondents indicated the extent to which they supported each of the proposed ideas for improving coordination.

Prior to looking at solutions for improving coordination of organisations in agricultural extension in the district, an attempt was made to find out whether the main problem is one of poor collaboration or poor coordination. The respondents' viewpoints in this regard are summarised in Table 9.7.

Table 9.7: Distribution of respondents according to their operational functions and their perception regarding the relative importance of the problem of poor collaboration and poor coordination of agricultural extension services (N=135)

Coordination or collaboration	Farmers		Frontline Extension Workers		Extension Managers		Managers		Subject Matter Specialists		Total	
	n	%	n	%	n	%	n	%	n	%	N	%
Collaboration	13	50	25	54.3	11	64.7	5	31.2	18	60	**72**	**53.3**
Coordination	13	50	21	45.7	6	35.3	11	68.8	12	40	**63**	**46.7**
Total	**26**	**100**	**46**	**100**	**17**	**100**	**16**	**100**	**30**	**100**	**135**	**100**

$Chi^2 = 4.689$; df = 4; p =0.321

Of all the respondents 53.3 percent have the viewpoint that lacking collaboration is the main problem, while 46.7 percent believe that the biggest problem is poor coordination. There are no significant differences between the operational function categories as far as the perception regarding the problem of coordination or collaboration is concerned ($Chi^2 = 4.689$; df = 4; p =0.321). It is noteworthy, however, that most managers (68.8 percent) seem to understand the problem in the context of poor coordination probably because most of the managers work for NGOs and private organisations which have their own goals and objectives to accomplish in the targeted communities. In view of that coordination is more of the problem that is collaboration.

These viewpoints apply with minor variations to all extension planning areas (Figure 9.7).

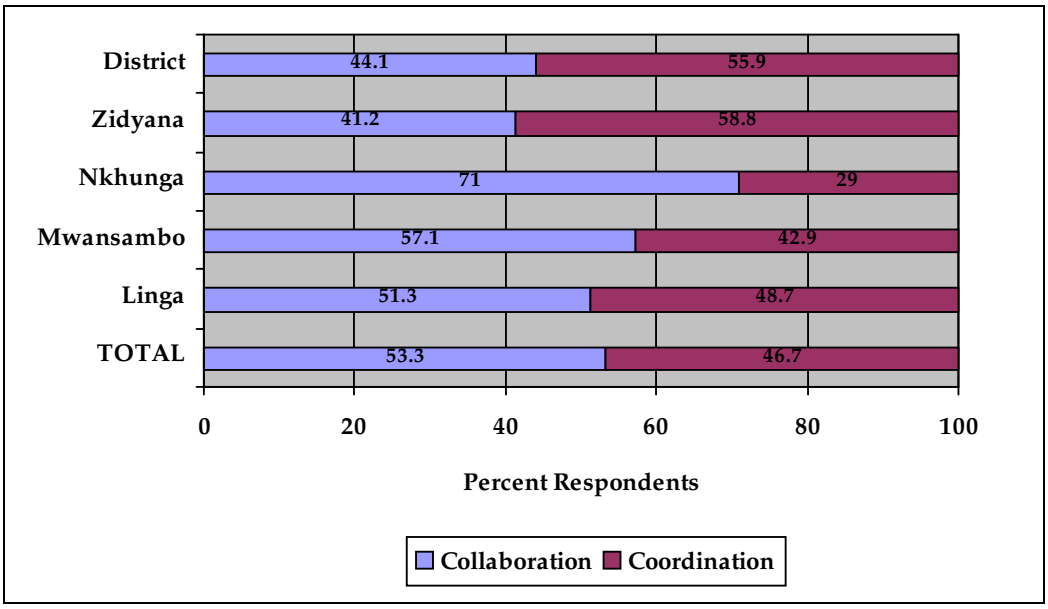


Figure 9.7: Percent distribution of respondents according to their nominations as to whether collaboration or coordination is the solution (N=135)

The latter view (coordination) is strongly supported by the Zidyana and at the district (58.8 percent and 55.9 percent respectively). Respondents from these areas seem to have understood that successfully implemented collaboration may not necessarily ensure effective delivery of services, because organisations involved in extension (e.g. NGOs, private organisations) have different goals and objectives making collaboration more difficult to be implemented. According to Düvel (2002) successful collaboration does not ensure that services are not duplicated or that they complement each other. Perhaps one of the reasons why the problem of poor coordination of extension has not been resolved in the district is that extensionists think that the solution lies in improved collaboration rather than improved coordination.

9.7.1 Interest in coordination of agricultural extension service

It is generally accepted that different agricultural extension or development organisations (whether public, private or company-oriented) have different objectives and agendas and are not equally interested in coordination (Düvel, 2002).

The willingness of the various service providers to become involved in a coordinated extension process will therefore depend on the degree to which their objectives and interests coincide with those of the coordination program. In seeking solutions to the problem of poor coordination, respondents were requested to assess the acceptability of the following three alternative solutions on a scale of 1 to 10.

1. Coordination is necessary for all organisations
2. Each organisation commits itself to coordination and contribute equally to the process and,
3. The difference between organisations be accepted and respected and coordination be planned accordingly.

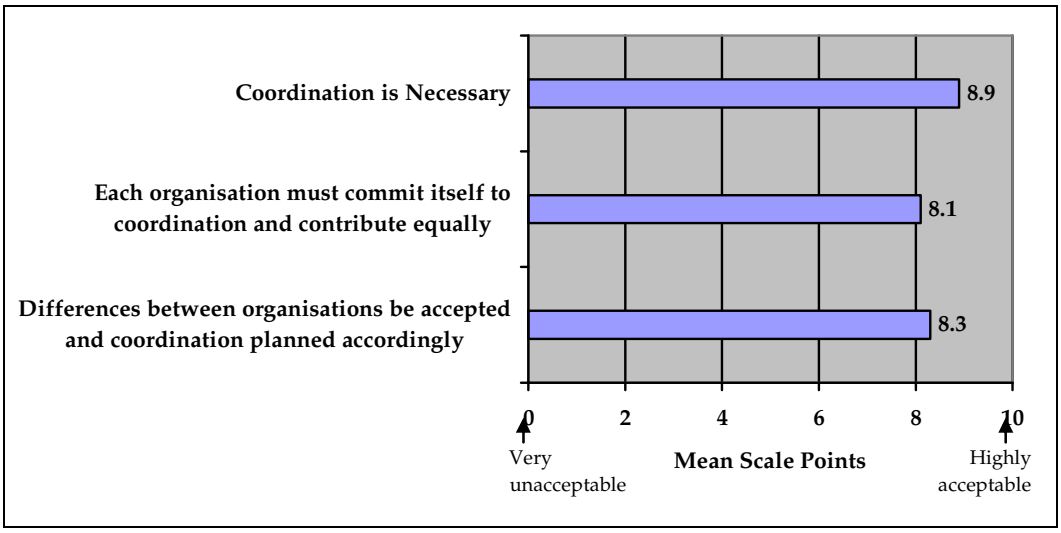


Figure 9.8: Respondents assessment of different alternatives to improve coordination (expressed as mean percentage scale points by respondents (N=135)

There is overall support for all the three alternatives. The support for the necessity of coordination is obvious in view of conspicuously inadequate coordination among the extension organisations. What is more interesting, however, is that the support for solutions (two (2) and three (3) is, according to Figure 9.8, very similar. Much of this similarity can be attributed to respondents' inadequate understanding of the difference. For example, about 88.9 percent and 91.9 percent of respondents gave an assessment of six (6) and more scale points for two (2) and three (3) respectively, which is an indication of complete ignorance of the alternatives because, strictly speaking, the two alternatives are quite different and contradictory. In view of these

contradictory outcomes between the two alternatives, it stands to conclude and assume that respondents did not understand the difference. An important finding, however, is that the necessity of commitment to coordination is generally realised and appreciated.

9.7.2 Coordination among extension organisations

As a solution to poor coordination between different extension organisations two widely proposed solutions are the following:

1. **The establishment of a coordinating forum for service providers.** This is a forum where all organisations involved in extension services meet on a regular basis to discuss, share and promote effective and efficient delivery of services**.**

2. **Coordination through the community structures, i.e. through a community body representing the community promoting and coordinating its interests.** This type of coordination is where the community through representatives from different sub-communities or villages meets on a regular basis, to discuss development issues, including extension delivery and setting guidelines for it and thus imposing a coordinated extension.

Düvel (2002) proposes the latter namely, the establishment of a coordinating extension forum for extension organisations as potential solution to the problem of poor coordination. Respondents were asked to give their views as to what they see as the solution to poor coordination between different extension organisations by making a choice between the above two widely proposed solutions. Respondents' view are summarised in Table 9.8.

Table 9.8: Distribution of respondents according to their operational function and their preference regarding alternative solutions to the problem of poor coordination (N=135)

Coordination Solution	Farmers		Frontline Extension Workers		Extension Managers		Managers		Subject Matter Specialists		Total	
	n	%	n	%	n	%	n	%	n	%	N	%
Coordination forum	11	42.3	33	71.7	15	88.2	10	62.5	25	83.3	**94**	**69.6**
Community linkage structure	13	57.7	13	28.3	2	11.8	6	37.5	5	16.7	**41**	**30.4**
Total	**26**	**100**	**46**	**100**	**17**	**100**	**16**	**100**	**30**	**100**	**135**	**100**

Chi^2 =15.106; df=4; p=0.004

There is reasonable support for the establishment of a coordinating extension forum for extension organisations as a solution (69.6 percent). These findings also indicate significant differences between respondents in the various operational function categories (Chi^2=15.106; df=4; p=0.004). Only farmers expressed more support for coordination through community linkage structure than for a coordination forum, perhaps because their interest to be involved in extension services is very high. The rest of the categories are of the opinion that a coordination forum for extension organisations is the best solution. This is not surprising because most of the respondents were extension staff and they apparently prefer coordination to remain in the hands of the extension organisations than have it delegated to community structures.

Figure 9.9 presents respondents perceptions as they pertain to the different extension planning areas (EPAs).

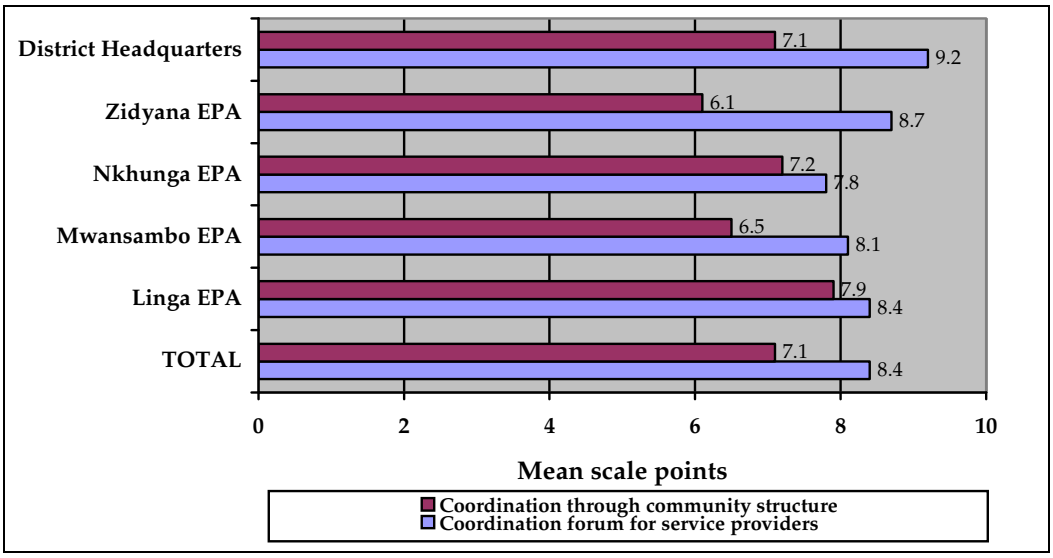


Figure 9.9: The respondent's assessment of coordination subordinate to community institutions and a coordination forum as solutions to overcome the problem of poor coordination (N=135)

The establishment of a coordination forum has strong support in Zidyana EPA and among extension staff at the district, while coordination through a community linkage structure is more favoured in Linga and Nkhunga EPAs. Noteworthy also from Figure 9.9 is that the differences between the mean scale points between the two solutions in Nkhunga and Linga EPAs are smaller compared to other EPAs. This may be an indication that both solutions are perceived to be acceptable in these two EPAs.

Findings of the influence of extensionists' organisations on the assessment of alternatives of improving the problem of poor coordination follow in Figure 9:10.

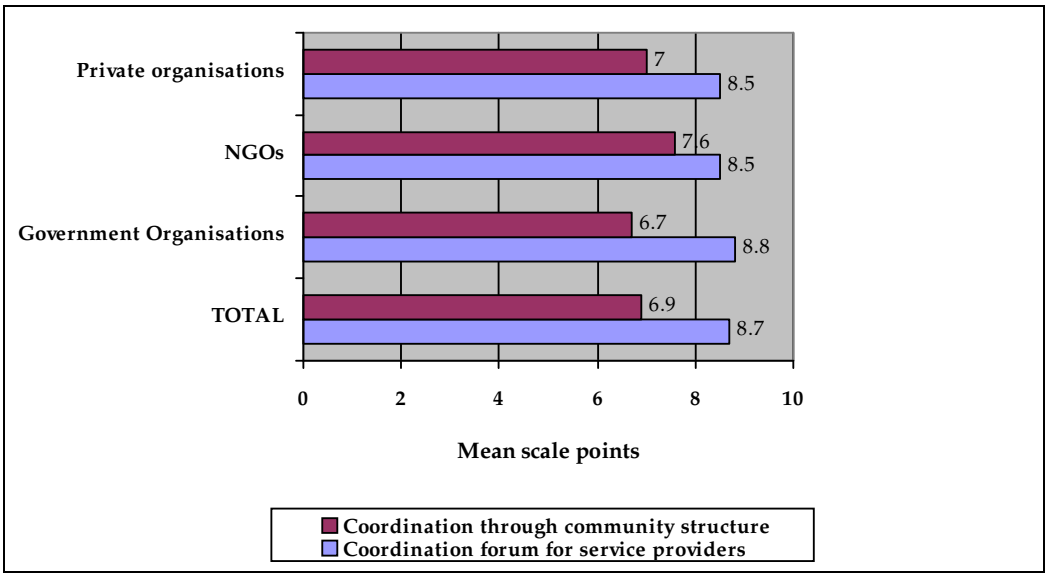


Figure 9.10: The mean assessment of a coordination forum and coordination through community structures as solutions to improve coordination as expressed by extensionists in different extension organisations (N=109)

As far as extension organisations are concerned, there are no significant differences between them. In all cases the coordination through the community linkage structure is not perceived as the best solution, but has the biggest support among the NGOs.

In a study conducted in South Africa in 2002, Düvel found that though there was agreement among service providers regarding the need for a coordination forum, certain service providers stayed out of the process when implementation began, which clearly indicates that some extension organisations, especially the commercial or private oriented organisations, are not necessarily committed to coordinated development. Although there is general agreement among service providers regarding the need for a coordination forum, there should be acceptance of the fact that such service providers have a right to pursue their own objectives as organisations. These should be respected and accepted and the planning and implementation of coordination should take account of it.

Since all service providers may not be equally interested in coordinated agricultural extension because of different interests and objectives, it can be expected therefore that some service providers may be perceived to be more suited to taking the initiative and leadership in the coordination process than others. The respondents'

opinions regarding the suitability of different service providers in taking leadership in coordination are shown in Figure 9.11

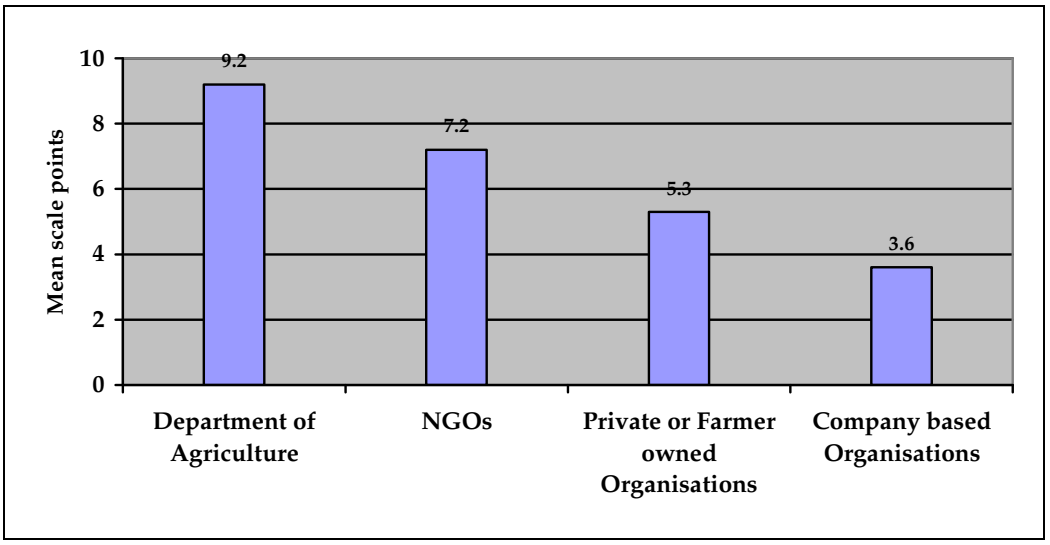


Figure 9.11: Respondents' assessment regarding the suitability of different service providers to lead the coordination process (N=135)

The findings show a clear preference for the Department of Agriculture to lead the coordination process with a mean scale point assessment of 9.2 out of a possible 10 (ideally suited). This may be biased because 62 percent of extensionists interviewed are employed by the Department of Agriculture. However, as Figure 9.12 indicates these sentiments are shared among respondents in all organisations.

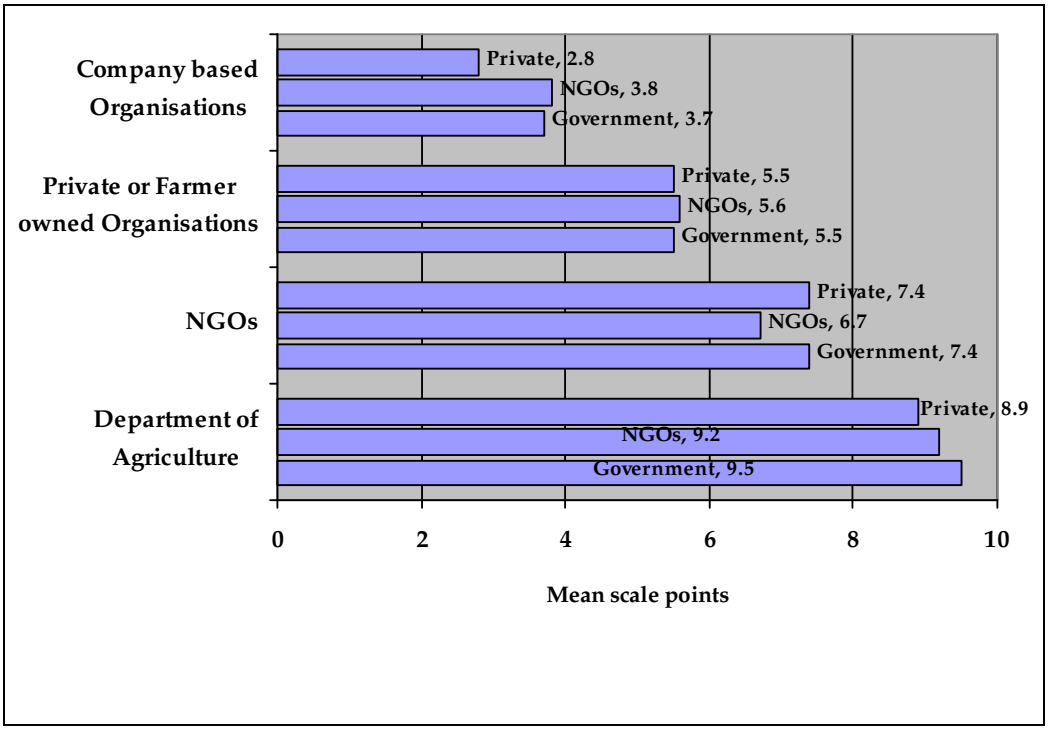


Figure 9.12: **The mean assessment of the suitability of different service providers to lead the coordination process as expressed by extensionists in different extension organisations (N=109)**

There is general agreement even among non-governmental service providers that the department of agriculture is best placed to take a leading role in the coordination process. A close second is the NGOs. Thereafter the importance decreases systematically up to company based organisations.

9.8 Summary and conclusions

1. The presence of many service providers in agricultural extension due to pluralism and the necessity to effectively use all the limited available resources without duplication of inputs, justifies that special attention be paid to coordination of agricultural extension services. The more pluralistic the extension and the more service providers involved in a community, the bigger the need for proper coordination.

2. The results of this study show a tremendous variation in the assessment of coordination in the district. Overall, however, respondents are of the opinion that the current level or degree of coordination is rather low. Seen in another context, the findings are quite positive because they are an indicator that there is a tremendous scope for improvement as far as coordination of extension services is concerned.

3. Coordination forums for service providers seem to offer promising possibilities as solution to the problem of poor coordination among extension organisations. However, differences between the various types of service providers should be appreciated, respected, accepted and considered in the planning of coordination and this may imply that the level or degree of involvement in the coordination forum may differ between one extension organisation and another. It should also be noted that coordination efforts that are undertaken independent of the client communities are bound to fail. This implies that the coordination forums should have a strong representation of the farmers from the grassroots community.

4. Since not all service providers are equally interested in coordinated extension because of different interests and objectives, it can be expected therefore that some service providers may be perceived to be more suited to taking the initiative and leadership in the coordination process than others. Findings in this study are clear that the Department of Agriculture is still the most appropriate organisation to take the leadership role in the promotion and initiation of coordination.

CHAPTER 10

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

10.1 Introduction

The agricultural sector is the backbone of the economy of Malawi. Agricultural development will therefore remain an important part of the Malawi's economy and the contribution of agricultural extension in this regard cannot be overemphasized. The department of agricultural extension services (DAES) has been the central implementing agency responsible for agricultural extension services in Malawi. However, since 1990s many changes have taken place leading to the development of a new national extension policy, which was launched in 2000, under the heading *Agricultural Extension in the New Millennium: Towards Pluralistic and Demand-driven Services in Malawi*. One of the biggest challenges in operationalising the new system is the facilitation of farmers' participation and involvement at all stages. This may not be achieved without appropriate functional structures from the grassroots community and in light of the pluralism in extension services delivery, co-ordination of agricultural extension has become another challenge that extension has to deal with. This chapter provides summary and conclusions of the study whose main aim was to investigate the degree of farmers' involvement in extension services, search for appropriate institutional linkage structures for effective participatory extension services as well as identify major factors affecting coordination of pluralistic agricultural extension services in Nkhotakota district.

10.2 Summary and conclusions

The summary and conclusions have been organized according to the chapters on study findings. They also include support for the identified principles regarding the functioning of an effective linkage and coordinating structure.

10.2.1 Extension staff

Nkhotakota district in general has experienced extension staff. However, extensionists from NGOs and private organisations are less experienced compared to those from the public sector. Not even a single extensionist in the district has done a pure or advanced agricultural extension course. 16 percent of extension staff have had no training in extension, 82.4 percent of these are from NGOs and private organisations. The largest number has had limited exposure to extension when they were enrolled for the agricultural programmes at certificate, diploma and degree levels. The low level of extension training among extension staff is a bigger cause of concern.

The findings also reveal that there is a clear under-representation of women in agricultural extension services in the district. Most of extension staff (83.7 percent) are male and only 16.3 per cent are female. This is a weakness, considering that women contribute to over a half of agricultural production in Malawi (USAID, 2004). This imbalance can make it difficult to reach such an important target group.

10.2.2 Extension organisations

There are over twenty organisations involved in the delivery of agricultural extension services in the district. The public sector has most frontline extension agents in the district. Most NGOs and private organisations rely on public extension staff for the implementation of their project activities. The phenomenon of using staff from the public sector is very informal and an agreement between NGOs and government staff involved, usually without the knowledge of management of the organisations concerned. 56 percent of the extension organisations in the district are involved in agricultural development only, the rest do rural development, and 92.9 percent of these are NGOs. The multi commodity extension message approach is favoured by most (97.2 percent) extension organisations. As regards extension methods, most organisations prefer using both individual and group extension methods when interaction with the clients. However, the group approach is mostly used in view of the wide frontline extension worker/farmer ratio. The primary focus of most extension organisations in the district is smallholder farmers. 99 percent of extension workers in the district focus on the subsistence and smallholder farmers.

10.2.3 Farmers' perceptions regarding participation in extension

The participation of farmers in extension is, according to the findings of this study, very low. The current level of involvement of farmers in extension is 2.8 on a 10 point scale. Up to 70 percent of the farmers do not have any substantial contact with their local extension workers. What is positive, however, is the high degree of willingness of farmers to be involved in agriculture and agricultural extension activities. The major constraints that prevent farmers' involvement in agricultural extension are poor motivation and encouragement by researchers and extension officers, lack of formal education, a lack of adequate knowledge of research and extension processes and ineffective and inefficient linkages between researchers, extension agents and farmers. As can be observed extension staff and researchers are responsible for most of these constraints. Unless the researchers and extension agents are willing to incorporate farmers into the process, very little change may take place.

10.2.4 Extension staffs perceptions regarding participation in extension

The principle of maximum community participation in development is, according to Düvel (2000), based on the notion of self-determination, self-reliance, self-responsibility and self-help as a normative goal. This implies that involvement should be extended to the ultimate of empowerment and ownership of the development process. In this study, participation is perceived by extension staff equally as a goal and as a means (46.7 percent) as opposed to either the one or the other. All purposes of participation are regarded as important. The contribution of participation to improved sustainability (89.2 percent) and more effective extension or rural development (82.7 percent) as well as the contribution towards self-help and self-sufficiency (77.4 percent) received large scale support.

Farmers' involvement in agricultural extension is perceived by extensionists to be generally low. 72.6 percent of the extensionists interpret the current practice of participation, as the type where the community is involved in needs assessments, but decisions, planning and implementation of the development processes are the responsibility of the development agent or organisations. A further 14.8 percent indicate that currently development remains the responsibility of the development

organisations. There are significant differences, however, between extension organisations as far as practice of participatory extension is concerned (Chi^2=23.879; df=4; p=.000). NGOs are more advanced in implementing a participation leading towards ownership and self-determination compared to other organisations. The major constraints, which hinder communities' involvement in agricultural extension services, as indicated by the extension staff, are lack of formal education of farmers (38.5%), unwillingness of researchers and extension agents to involve farmers (29.4%) and inadequate resources of services providers (23.9%). As can be seen from the above constraints, the development policies followed by the department of agriculture, especially the inflexible top down approach, makes it difficult for farmers to participate in development.

There is little doubt about the importance of needs in extension among the extension staff. The most important purpose of needs assessments is, to identify the main focus or content of development (92%) and to encourage participation (73.8%). The importance of needs in behaviour change (51%) is not widely appreciated yet. As regards the focus of development the large majority of the extensionists (55 percent) are of the opinion that it should be on the felt needs as perceived by the community. The lowest support (17.4 percent) is for an agreed compromise between felt and unfelt needs by the wider community. It would appear that the differences between the alternatives as well as their implications have not been well understood.

10.2.5 Institutional linkage structures and organisation

A large majority (87.2 percent) of respondents in the study agree with Düvel (1999), that the implementation of a partnership between the service providers and the community and the ultimate assuming of ownership by the community is unlikely without an appropriate institutional linkage structure. The major reasons for the support, according to the views of the respondents are, that the linkage structures enhance community participation and ownership of programmes and projects, improve communication among stakeholders as well as enhancing effective coordination among extension organisations. The nature and the development of an effective linkage structure can take different forms, depending on specific local circumstances. However, according to Düvel (2005), the most important principles

and assumptions regarding effective linkage structures are functional differentiation, positioning, number of the linkages and relationship between agriculture and other development. There is support for these identified principles regarding the proposed linkage structure. These include a clear differentiation between the coordinating and operational functions (77 percent). In spite of this general preference for a functional differentiation, farmers show a significantly higher support in this regard than the other categories (Chi^2=9.501; df=4; p=0.050).

As regards the number or level of linkage structures, respondents seem to appreciate the necessity for the coordinating or linkage body to be as close to the grassroots community as possible. The most favoured level is the sub-community (45.2 percent), followed by the extension service area (section) (40 percent). The implications of the increased number of linkage structures without additional extension personnel and resources is apparently not appreciated. Farmers have a significantly higher interest for one linkage structure per extension service area compared to the other operational functions categories (Chi^2 =14.936; df=8; p=0.060). Farmers' intentions are clear in this regard, they want linkage structures that are as close to them as possible, but appreciate also the need for effective coordination.

Düvel, (2000) argues that, if organisational linkage structures are to facilitate maximum participation and ownership, they should be as close to the grassroots community as possible. Findings from the study support these views, the linkage structures at Village (91.9 percent) and Section level (90.4 percent) are regarded to be most important because they have the potential to evoke most participatory and coordinated extension. As regards the relationship between agriculture and other development, coordination of all development issues through a linkage structure is favoured. Most respondents (51.9 percent) favour the coordination of all development issues relating to the target community, but as many as 37.8 percent are of the opinion that a linkage structure should be responsible for the coordination of agricultural development issues only. In view of the tremendous duplication and uncoordinated inputs between different departments and NGOs a strong case can be made for the former especially as far as integrated development is concerned.

Another important issue is the place of service providers or development agents in the structure. There is no clear majority for any of the two viewpoints. 51.9 percent of the respondents support service providers' membership in the community linkage structure while the rest (48.1 percent) think otherwise. However, significant differences between respondents in the various functional categories exist (Chi^2 =13.622; df=4; p=0.009, farmers are significantly less supportive of the idea that service providers should be part of the coordinating committee. The findings clearly highlight farmers' willingness to take full responsibility of the development that affects them.

10.2.6 Pluralistic and coordinated extension

The presence of many service providers in agricultural extension due to pluralism and the necessity to effectively use all the limited available resources, justifies that special attention be paid to coordination of agricultural extension services. 99.3 percent of respondents overwhelmingly support the need for proper coordination as it improves efficiency and effectiveness of extension service delivery through enhancing sharing of experiences among stakeholders, reducing the duplication of services and maximising the use of scarce extension resources.

The degree of coordination in the district is rather low. As far as coordination between organisations is concerned, most organizations received assessments of less than 6 scale points out of possible 10. The mean assessment of the seriousness of lack of coordination in the district is 6.5 on a ten-point scale. The seriousness of poor coordination comes out clearly when poor coordination as a problem is considered along with other problems that affect agricultural extension. Poor coordination comes second only to inadequate access to credit and production inputs for the farmers. This confirms that poor coordination is one of the major problems that have to be dealt with in the district.

Further evidence of the low level of coordination is the degree to which certain methods of coordination are used. The means or methods of coordination mostly are used by extension organizations in the district include: (a) working with farmer development committees; (b) co-ordination mechanisms at EPA level; involving

politicians in planning; (c) strengthening relevant associations; (d) co-ordination mechanisms at the village level; (e) improving information flow among extension organizations and (f) coordination mechanisms at the district level. However, even the most frequently used methods are, in effect, only used sometimes or rarely which again emphasizes the big improvement potential that exist.

As a solution to poor coordination between different extension organisations, 69.6 percent of the respondents support the establishment of a coordinating extension forum for extension organisations, while 30.4 percent are of the opinion that a proper solution is coordination through the community structures. Significant differences between respondents in the various operational function categories exist (Chi^2=15.106; df=4; p=0.004), only farmers support the coordination through the community structures, perhaps because their interest to be involved in extension services is very high. The rest of the categories favour a coordination forum for extension organisations as a solution. Since not all service providers are equally interested in coordinated extension because of different interests and objectives, it can be expected therefore that some service providers may be perceived to be more suited to taking the initiative and leadership in the coordination process than others. In this study the Department of Agriculture is perceived to be the most appropriate organisation to take the leadership role in the promotion and initiation of coordination.

10.3 Recommendations

Since research is not an end in itself, but rather a means of improving the current situation, it is appropriate to propose some recommendations based on the findings of this study.

10.3.1 Reducing the imbalance between male and female extension workers

There is a clear under-representation of women in agricultural extension services in Nkhotakota district. This is a weakness since women contribute more to agricultural production than men. Extension organisations, especially the public sector need to invest more in the recruitment and development of women extension staff. This would help to reach such an important target group in agricultural development.

10.3.2 Qualifications and training of extension staff

Nkhotakota district has a good number of well trained and experienced extension staff. However, some extensionists from NGOs and private organisations are insufficiently trained and lack the experience required of good extensionists. The significantly lower qualification and work experience of some extension managers of NGOs and private organizations is a call for concern. It is recommended that such extension staff be provided with some good orientation to agricultural extension as well as on the job extension training.

10.3.3 Formal arrangements between extension organisations regarding the use of extension staff

According to the results of this study there are few service providers with reasonable numbers of agricultural extension staff working directly with farmers. Though there are over twenty organizations involved in agricultural extension services in the district, some of these, especially NGOs and private organisations, depend on government extension staff for delivery of their services. The arrangement to use staff from the public sector is very informal at the moment. There is need therefore for proper agreements to be made between management of organisations concerned. This can promote proper coordination of delivery of services.

10.3.4 Motivating and encouraging farmers to participate in agricultural extension services

The study reveals that farmers' involvement in agricultural extension is very low. There is, however, a high degree of willingness among farmers to be involved in agricultural extension. It is noteworthy from the findings that extension staff, researchers as well as the lack of enabling government policies are mostly responsible for lack of participatory extension. Based on these, the following are recommended:

- Agricultural researchers and extension officers servicing Nkhotakota District should initiate participatory agricultural research and extension, which will involve farmers at every stage of the research and extension processes.

- The management of Nkhotakota District Agricultural Development should initiate policies and processes that will mandate their personnel to involve farmers in participatory agricultural development and extension processes. Developmental policies should be implemented in a bottom-up approach rather than a purely top–down approach so that farmers' opinions can be accommodated.

10.3.5 Promoting establishment of appropriate community linkage structures

Implementation of agricultural development that is participatory in nature requires a partnership understanding and approach between service providers and the targeted communities. This partnership should ultimately lead towards the empowerment and capacity building of the communities to take ownership of the development process. The effective implementation of such a partnership is not possible without an appropriate linkage structure. The nature and the development of such linkage structures can take different forms, depending on specific local circumstances, however, the following are of great importance and are recommended.

- An extension service area (an area serviced by one frontline extension worker) should have only ONE coordinating linkage structure functioning as mouthpiece for the community and representing it regarding all aspects and interest of development. This coordinating linkage structure should, if possible, be responsible for the coordination of all and not only agricultural development issues and should be supported and supplemented by subordinate committees (program or project committees) through which specific development activities are commissioned. These committees, however, should be accountable to the coordinating body.

- The community linkage body should link into the extension planning areas (EPAs) as well as the district and should be embedded in a hierarchy or ladder of linkage structures to allow for overall coordinated and integrated rural development.

10.3.6 Improving coordination of agricultural extension services

The findings regarding the level or degree of coordination of extension among service providers clearly indicate that there is tremendous scope for improvement. The need for coordination is likely to increase as the implementation of privatisation and decentralization policies advance. There is a consensus regarding the necessity of coordination, but this may not be enough for the process to be sustainable. It will need to be formalised in the form of memoranda of agreement, stipulating clearly the process that will have to be followed by all service providers. Some of the proposals that could be the most effective in promoting coordination are the following:

- Establishing a coordination forum for all extension service providers for exchange of information periodically (such as bimonthly or quarterly).

- Establishing co -ordination mechanisms at Section, EPA and District levels.

The potential role of community structures in the coordination of extension or inputs of service providers must be emphasized. This may ultimately prove to be the most effective and sustainable way for effectively coordinated extension. It is possible that institutions representing the community and its interests could ensure that service providers adopt a more coordinated approach.

REFERENCES

ADNAN, S., BARRETT, A., ALAM, S. M., & A. BRUSTINOW, A. 1992. People's participation, NGOs and the flood action plan. Dhaka, Bangladesh: Research and Advisory Services.

APANTAKU, S.O., OLORUNTOBA, A., & FAKOYA, E.O. 2003. Farmers' involvement in agricultural problems identification and prioritization in Ogun State, Nigeria. *South African Journal of Agricultural Extension,* 32:45–59.

BAKER, H. 1987. The program planning process. In (Ed) Blackburn, D. *Extension Handbook,* University of Guelph, Guelph, Canada.

BEMBRIDGE, T.J. 1988. An evaluation of Venda agricultural extension service. University of Fort Hare, Alice, Ciskei.

BERGDALL, T.D. 1993. Methods for active participation: Experiences in rural development from East and Central Africa. Nairobi: Oxford University Press.

CAMPBELL, D.A.C. 1999. Managing public sector extension organisation: some critical issues. *Journal of International Agricultural and Extension Education,* 6(2): 55–69.

CERNEA, M. M. 1995. Putting people first, 2nd edition, Oxford: Oxford University Press.

CHAMALA, S. 1990. Establishing a group: A participative action model, In S. Chamala and P. D. Mortiss, Working together for land care: Group management skills and strategies. Brisbane: Australian Academic Press: 13–38.

CHAMBERS, R., PACEY, A. & THRUPP, L.A. 1989. Farmer first: Farmer innovation and agricultural research. London: Intermediate Technology

CHILOWA, W. 1998. The impact of agricultural liberalization on food security in Malawi, food policy, 23(6):553–569.

COHEN, J. H. & UPHOFF, N. T. 1980. Participation's place in rural development: Seeking clarity through specificity, *World Development 8:*

DECENTRALIZATION SECRETARIAT, 2002. The Nkhotakota district socio-economic profile. Malawi Government

DEPARTMENT OF AGRICULTURAL EXTENSION SERVICES (DAES), 1998. National agricultural extension, training and technical services project. Ministry of agriculture and irrigation.

DEPARTMENT OF AGRICULTURAL EXTENSION SERVICES (DAES), 2000. Agricultural extension in the millennium: Towards pluralistic and demand-driven services in Malawi. Agricultural communication branch.

DEPARTMENT OF AGRICULTURAL EXTENSION SERVICES (DAES) (2003), The new District Agricultural Extension Service System for Malawi: Concept and Operational Guidelines for Practitioners. MAIFS, Lilongwe, October 2003.

DEPARTMENT OF AGRICULTURAL RESEARCH AND TECHNICAL SERVICES (DARTS) (2002) Technology Transfer Strategic Plan. Department of Agricultural Research and Technical Services. Lilongwe, November 2002.

DUSSELDORP, D. & ZIJDERVELD, K. 1991. Preparation and implementation of development projects in the third world. Wageningen: Wageningen Agricultural University.

DÜVEL, G.H. 2002. Needs assessments in extension: Results and implications of different assessment methods. *South African Journal of Agricultural Extension*, 31:39–49.

DUVEL, G.H. 1999. Institutional structures for participation, empowerment and ownership in agricultural and rural development. *South African Journal of Agricultural Extension*, 29:1–10.

DUVEL, G.H. 2000. Towards an appropriate extension approach for agricultural and rural development in South Africa. *South African Journal of Agricultural Extension,* 29:10–23.

DUVEL, G.H. 2005. Realities and challenges regarding institutional linkages for extension and rural development in South Africa. Proceedings of the 39th Conference, Bloemfontein, Free State Province, *South African society for agricultural extension.*

DÜVEL, G.H. & LATEGAN, F.S. 1992. The group interview as data collection. *South African Journal of Agricultural Extension,* 23:28–35.

DÜVEL, G.H. 2002. Towards an appropriate extension approach for South Africa. Final Report. Pretoria: South African Institute for Agricultural Extension.

EWANG, P. & MTSHALI, S. 2000. Alternative extension system of enquiry for sustainable agriculture and rural development in extension for the new millennium. Proceeding of the conference for the South African Society for Agricultural Extension held in Mykonos, Langebaai. Western Cape.

FARRINGTON, J. & MARTIN, A. 1993. *Farmer participation in agricultural research: A review of concepts and practice*s. London: ODI.

GUIJT, I. 1991. Perspectives on participation. An inventory of institutions in Africa London: International Institute for Environment and Development.

HAGMANN, J., CHUMA, E. & MURWIRA, K, 1996. Improving the output of extension and research through participatory innovation development and extension; Experiences from Zimbabwe. *European Journal of Agricultural Education and Extension, 2(4):15-24.*

HAGMANN, J., MURWIRA, K. & CHUMA, E. 1997. Learning Together: Development and Extension of soil and Water Conservation in Zimbabwe. *Quarterly Journal of International Agriculture,* 35(2):142–162.

HART, R. A. 1992. Children's Participation: From Tokenism to Citizenship. UNICEF. Florence: Innocent Essays No. 4

INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT, (IFAD), (1995). Malawi Smallholder Irrigation Programme: Inception Paper, Vol. I.

KAARHUS, R. 2004. Competence and Capacity for Agricultural Development in Malawi: An overview of institutions involved in knowledge generation, training and extension in agriculture and natural resource management. Agricultural University of Norway, Noragric Report No. 22

KAMPUTA, D., EHRET, W. & WALKER, H. 2004. Initiating and Managing Change is the Public Sector in Malawi: a Learning History. Lilongwe.

KHERALLAH, M., MINOT N., KACHULE, R., SOULE, B.G. & BERRY P. 2001. Impact of agricultural market reforms on smallholder farmers in Benin and Malawi. Volume 1; Project Number 97.7860.6-001.00 IFPRI Collaborative Research Project

KORTEN, D.C. 1991. Rural development programming: The learning process approach. *Rural Development Participation Review*, 2(2): 1-8.

LAKER, M.C. 1993. Deteriorating quantity and quality of space – Africa's agriculture in a crunch. Paper presented at the Student Conference "*Making place in Africa"* held at the University of Pretoria in April, 1993.

MAC CRACKEN, J.A. 1988. An introduction to rapid rural appraisal for agricultural development. London: International Institute for Environmental Development.

MONTGOMERY, J. D. 1983. "When local participation helps," *Journal Policy Analysis and Management*, 3 (1): 90–105.

MULFORD, & KLONGLAN, 1982. Creating co-ordination among organizations. An orientation and Planning Guide. North Central Region Extension Sociology Committee.

MWANGI, J.G. & RUTATORA, D.F. 2002. Is needs assessment in extension programs rationally objective or mostly political? *South African Journal of Agricultural Extension*, 31: 28–35.

MWANJE, E. E. & DÜVEL, G. H. 2001. Challenges of co-ordination pluralistic agricultural extension services in Rakai District, Uganda. Proceeding of the conference for the South African society for agricultural extension held in Upington, Northern Cape.

MWANJE, E. E., DÜVEL, G. H. & MANGHENI, M.N. 2002. Extension staffs' perceptions of factors affecting co-ordination and partnerships in agricultural extension services in Rakai District, Uganda. *South African Journal of Agricultural Extension*, 31:1–11.

NARAYAN, D. 1993. "Focus on participation: Evidence from 121 rural water supply projects" (Washington. DC: UNDP World Bank Water Supply and Sanitation Program, Social Policy and Resettlement Division, World Bank.

NATIONAL ECONOMIC COUNCIL, 2003. *A Growth Strategy for Malawi*. Lilongwe: The Department of Economic Planning and Development.

NATIONAL STATISTICAL OFFICE (NSO), 2001. Malawi Demography and health survey 2000. Zomba, Malawi: NSO

NATIONAL STATISTICAL OFFICE (NSO), 2002. Malawi Atlas of Social Statistics, Malawi and International Food Policy Institute Washington DC. USA.

NZAMNJO, F. 1991. The Songhai movement. Technology culture and development in the third world, symposium by the centre for African studies and the Batelle endowment for technology and human affairs of the Ohio State University.

OAKLEY, P. & GARFORTH, C. 1985. Guide to extension training: Understanding extension, food and agriculture organization of the United Nations, Rome.

OAKLEY, P. (1991). Projects with people: the practice of participation in rural development. Geneva: International labour office.

PAUL, S. 1987. Community Participation. Washington. DC: World Bank.

PRETTY, J.N. 1995, Participatory Learning for Sustainable Agriculture. *World development*, 23 (8):1247–1263.

PRETTY, J.N. 1995 Regenerating Agriculture: policies and practice for sustainability and self-reliance (London: Earthscan Publications Ltd. and Washington, DC: National Academy Press.

PRETTY, J.N. 1994. Alternative systems of inquiry for sustainable agriculture. *IDS Bulletin*, 25(2), 37-48. University of Sussex: IDS Publications.

RAHNEMA, M. 1992. "Participation," in W. Sachs (Ed.), The Development Dictionary (London: Zed Books Ltd. pp. 116-131.

REIJNTJES, C., HAVERKORT, B., & WATERS-BAYER, A. 1992. *Farming for the future: An introduction to low input and sustainable agriculture.* London: Macmillan.

RÖLING, N. 1994. Extension and the sustainable management of natural resources. In: *11th European Seminar on Extension Educatio*n. August 30 – September 4, 1993. The Danish Agricultural Advisory Centre. Skejby, pp. 45-56.

SAITO K. A. AND SPURLING D. 1992 Developing agricultural extension for women farmers Washington, D.C.: World Bank, 1992

SALIMA AGRICULTURAL DEVELOPMENT DIVISION, 2005. Nkhotakota Rural Development Project Semi-Annual Technical Report. Nkhotakota District.

SATTERTHWAITE, D. 1995. Children, Environment and Sustainable Development (New York: UNICEF, Environment Division.

SRIVANASAN, L. (1990). Community participation: A challenge for trainers. A trainer's Manual. New York: PROWESS, UNDP.

SWANSON, B.E., BENTZ, R.P. & SOFRANKO, A.J. 1993. Improving Agricultural extension. A reference manual. Food and Agriculture Organization of the United Nations. Rome.

UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP), 2001. Human Development Report.

USAID, 2004. Malawi's country report on human rights practices, 2004. United States of America State Department. Washington

UTZINGER, J.D. & WILLIAMS, B.J. 1984. Needs assessment: A national survey of Extension professionals relative to their needs for in-service education in home horticulture. Ohio Home Horticulture Centre, Department of Horticulture, The Ohio State University:8-11.

WEINBERGER, K. & JUTTING, J. P. 2001, Women participation in local organizations: conditions and constraints. *World Development*, 29 (8):1391– 1404.

WITKIN, B.R. 1984. Assessing needs in educational and social programs. San Francisco: Jossey-Bass.

WORLD BANK, 1994. "The World Bank and participation," Report of the Learning Group on Participatory Development (Washington, DC: World Bank.

WORLD BANK, 1999. Malawi Country Assistance Strategy. Report No. 18349 MAI. Washington DC. World Bank.

WORLD BANK, 2002. World development reports 2002: building institutions for markets. New York: Oxford University Press.

APPENDIX A:

Questionnaire

1.0 Background information

1.1 Respondent Name: _____ V1

1.2 Respondent category V2

(1). Farmer
(2). Frontline extension worker
(3). Extension Manager
(4). Manager
(5). Subject matter specialist
(6). Other (specify) _____

1.3 In which Extension Planning Area is your service area? (front line staff) V3

(1). Linga
(2). Mwansambo
(3). Khunga
(4). Zidyana
(5). Other (Specify): _____

1.4 Extension Section: _____ V4

1.5 What is your position Position/Function? V5

(1). AEDO
(2). AEDC
(3). Scientist
(4). Subject matter specialist
(5). Extension worker and Supervisor of Extension
(6). Supervisor and or Manager of Extension
(7). Other: (Specify): _____

1.6 What is your rank? V6

(1). TA
(2). STA
(3). TO
(4). STO
(5). PO
(6). P8
(7). P7
(8). P6
(9). Other (Specify): _____

1.7. How many farming families are in your area of work (for front line extension staff)? V7

2.0 Organisational Information

2.1 Type of Extension Agency [ ] V8
- (1). Government Organisation (public sector) (GO)
- (2). Non governmental organisation (NGO)
- (3). Private Organisation
- (4). Community Based Organisation (CBO)

2.2 Type of Organisation [ ] V9
- (1). Profit making organisation
- (2). Non-profit making organisation

2.3 What is the focus of services of your organisation? [ ] V10
- (1). Agricultural development only
- (2). Rural development (Agriculture and non-Agriculture development)
- (3). Non-Agricultural development

2.4 What approach does the organisation you work for use in extension? [ ] V11
- (1). Single commodity approach
- (2). Mixed farming – commodity emphasis
- (3). Multi commodity approach

2.5 Indicate the extension methods that you use in your organization use. [ ] V12
- (1). Primarily individual approach
- (2). Both individual and group approach
- (3). Primarily group approach

2.6 What is the target audience of your organization? [ ] V13
- (1). Primarily smallholder farmers
- (2). Small-scale commercial farmers
- (3). Commercial farmers
- (4). Both 1 & 2
- (5). All 1, 2 & 3

2.7 Number of extension agents in the area for your organization [ ] V14

3.0 Demographic, Educational and Professional information

3.1 Gender: Male (1) Female (2) [ ] V15

3.2 What is your age? (Years) [ ] V16

3.3 What level of school education did you complete? [ ] V17

- (1). Std 8
- (2). JCE
- (3). MSCE

3.4 What is your highest tertiary qualification? Please specify: V18

(1). Certificate (1yr)
(2). Certificate (2yr)
(3). Diploma (2 or 3yr)
(4). Adv. Diploma
(5). BSc
(6). Honours
(7). MSc
(8). Other: Specify_____

3.5 What formal training have you had in Extension or Rural Development? V19

(1). None
(2). Extension courses during FA/FHA Course
(3). Extension courses in Diploma in Agriculture
(4). Extension courses in BSc. Agric, or Hons. Programme
(5). Diploma in Extension
(6). Advanced University Diploma in Extension and Rural Development
(7). Honours degree in Extension
(8). Masters degree in Extension
(9). PhD degree in Extension
(10). Other (Specify) _____

3.6 Please indicate your field of specialisation in the highest qualification mentioned above: V20

(1). Extension only
(2). Extension and Irrigation
(3). Extension and Forestry
(4). Extension and Livestock production
(5). Extension and Crop production
(6). Extension and Horticulture
(7). Extension and Home economics
(8). Extension and Rural development
(9). Other: Specify: _____

3.7 How many years of experience in extension do you have? V21

4.0 PARTICIPATION

Participation (viz. the involvement and participation of the clients or farmers in the development process) is nowadays more generally accepted as a very important principle of Extension. However, there are big variations in terms of the goals pursued with participation, the functions of participation and even the meaning attached to the word.

4.1 Assess the following purposes of participation by rating them using the following scale:

1	2	3	4	5	6	7	8	9	10

Very unimportant extremely important

(a).	To allow for more effective extension/development	V22
(b).	To allow for more sustainable community development	V23
(c).	To provide for what is a value or customary in local cultures	V24
(d).	To provide for democracy as entrenched in the country's constitution.	V25
(e).	To allow for the unfolding or implementation of the principle of *help towards self-help*	V26

Purpose or goal of participation

4.2 Which of the following do you perceive as the most acceptable alternative regarding the purpose or goal of participation? Please place them in rank order of preference.

(1). Participation as an ultimate goal (e.g. to promote self-reliance, self-sufficiency and self-responsibility) should be the ultimate and primary goal of public Extension Service (normative goal.)
(2). Participation as means only. (i.e. it should contribute towards the development intervention being more effective in the form of better support, more identification, more sustainability, etc.)
(3). Participation as goal and as a means. (Combination of 1 and 2)
(4). Other (Please specify): _____

1st	2nd	3rd	4th	
				V 27 - 30

Degrees of participation

4.3 The following are degrees or levels of participation. Please rank them in order of current state of farmers' (community) participation in extension services.

(a). The community coordinates, owns and finances the development process.
(b). The community coordinates, owns, finances and implements the development process and in the process involves one or more development agents.
(c). The community in partnership with the development agent initiates, plans, finances, coordinates and implements the development programme or project.
(d). The community is involved in needs assessments, but decisions, planning and implementation of the development processes are the responsibility of development agents or organisations.
(e). Development remains the responsibility of the development organisation and should be done in a way they deem fit.

1st	2nd	3rd	4th	5th	
					V 31 - 35

4.4 The following are degrees or levels of participation. Please rank them in order of what you think should be acceptable.

(a). The community coordinates, owns and finances the development process.
(b). The community coordinates, owns, finances and implements the development process and in the process involves one or more development agents.
(c). The community in partnership with the development agent initiates, plans, finances, coordinates and implements the development programme or project.
(d). The community is involved in needs assessments, but decisions, planning and implementation of the development processes are the responsibility of development agents or organisations.
(e). Development remains the responsibility of the development organisation and should be done in a way they deem fit.

1st	2nd	3rd	4th	5th	
					V 36 - 40

4.5 Which of the above is the most common in your extension area? V41

4.6 Using the scale below, to what degree is your organisation involved in participatory extension? V42

1	2	3	4	5	6	7	8	9	10

Not involved at all Extremely involved

4.7 What are the major constraints, which may hinder farmers' involvement in agricultural extension services?

Needs and Participation

4.8. How important do you regard needs assessments in extension? Assess the importance by making use of the following 10-point scale V43

1	2	3	4	5	6	7	8	9	10

Very unimportant Extremely important

4.9. What are the main purposes of needs assessments? Rate each of the following purposes by means of the scale above:

(1) To identify the main focus of development namely satisfying felt needs [ ] V44

(2) To encourage participation [ ] V45

(3) To find a linkage for behaviour change purposes [ ] V46

4.10 How do you view the relative importance of "felt" and unfelt needs as focus of development? Please rank them in order of importance.

(1). Development focus should be the felt needs as perceived by the community
(2). Development focus should be the biggest need (whether felt or unfelt).
(3). Development focus should be the agreed compromise between felt and needs.
(4). Other (please specify)_____.

1st	2nd	3rd	4th	
				V 47 -50

5.0 INSTITUTIONAL LINKAGES AND ORGANISATON

It is increasingly maintained that a partnership between the service provider (development or extension agent) and the community is not possible without the necessary institutional or organisational structure(s).

5.1 Give an indication of your degree of agreement/disagreement by choosing the alternative corresponding most with your opinion: [ ] V51

(1) Disagree altogether
(2) Institutional structures can be useful but are not essential
(3) Institutional structures make a partnership relationship (form of partnership) easier
(4) Without institutional linkage structures a real partnership with full or co-responsibility on the part of the community is impossible.

5.2 Could you please give reasons for your choice in (Q 5.1 above)?

5.3 By definition a linkage structure consists of a number of community members, representing their community (acting as their mouthpiece) in negotiations and dealings with the development organisation(s) or other agencies. At what level should these linkage structures be established? Indicate every of the following levels with

1 = No 2 = Hesitant, don't know or; 3 = Yes

(a).	National Level	V52
(b).	ADD level	V53
(c).	District level	V54
(d).	EPA Level	V55
(e).	Section (Extension service area) level	V56
(f).	VDC level	V57

5.4. At what level do these linkages already exist now? Yes = 1 No = 2

(a).	National Level	V58
(b).	ADD level	V59
(c).	District level	V60
(d).	EPA Level	V61
(e).	Section (Extension service area) level	V62
(f).	VDC level	V63

5.5 In terms of importance of linkage structures to evoke more participatory and coordinated extension, using the scale below indicate at which level are linkages structures more important?

1	2	3	4	5	6	7	8	9	10

Very unimportant extremely important

(a).	National Level	V64
(b).	ADD level	V65
(c).	District level	V66
(d).	EPA Level	V67
(e).	Section (Extension service area) level	V68
(f).	VDC level	V69

5.6 It is widely accepted that

- The lower the level of the linkage structure (the closer to the grassroots) the more effective the participation from an ownership and self-determination point of view, BUT
- The poorer and more difficult the development coordination.

In view of these divergent tendencies, at which level would you regard the linkage structure to be ideal or the best compromise from an extension point of view? Place the above levels (Question 5.5) in rank order of importance or preference:

1st	2nd	3rd	4th	5th	6th	
						V 70 – 75

5.7 As the most preferred level for a linkage structure, opinions are divided between

a. The village level

It is the most specific and potentially the most cohesive unit and with the highest level of solidarity. It is the level where participation to the level of ownership, self-responsibility and self-determination makes most sense. This would seem the ideal situation if resources were abundant and unlimited (approximately 500% more than are currently available and an extension worker could be appointed for every village or sub-community. Where this is not the case, such an approach is likely to lead to inequity or to a duplication of inputs and coordination problems

AND

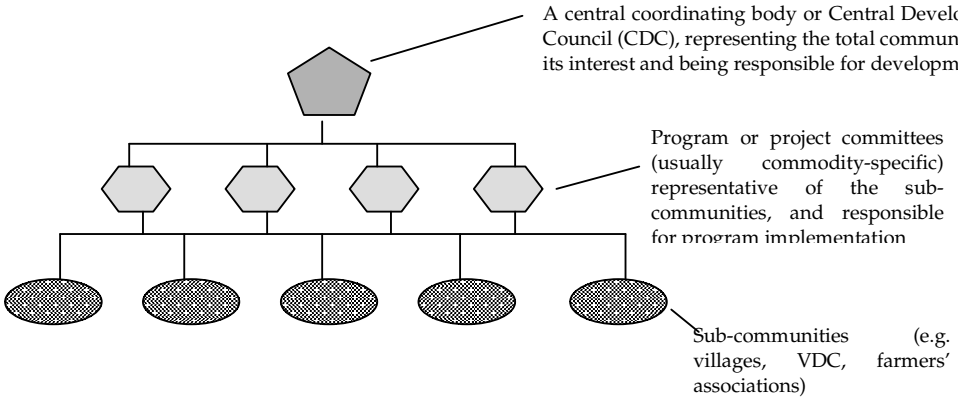
b. The Extension Area level

This is the community or area served by an extension agent and usually encompassing a few sub-communities (villages in case of traditional communities). Arguments in favour of linkages at this level is that it is more realistic and practical against the background of available resources (number of extension workers and financial resources available and less likely to promote inequity or discrimination in terms of extension focus, and also allows for a more coordinated and priority focused development

Please indicate your viewpoint by choosing one of the following: V76

(a). A is much better than B
(b). A is better than B
(c). No real difference/Undecided/Don't know
(d). B is better than A
(e). B is much better than A

5.8 An organisational linkage structure widely recommended or supported is the following:



Among each of the following alternatives, identify (indicate) the one that you regard as the most acceptable:

Alternative A:

1. Per target community (community for which extension worker is responsible) there should be only one community organisation or structure that is responsible for the coordination and implementation of all development projects and/or programs.

2. Per target community there should be one overarching coordinating body representing the total community and all its development interests as well as a potential multitude of committees or structures that are responsible for the implementation of individual programs or projects. (Clear differentiation between body with coordination function and those with implementation or operational function)

☐ V77

Alternative B

1. To have one CDC (Central development Council) or overarching and coordinating body per extension service area (section).
2. To have one CDC per sub-community (e.g. sub-Section)
3. To have one CDC only at the District level.

☐ V78

Alternative C

1. To have operative (commodity specific) programme development committees responsible for the total service area (e.g. extension ward)
2. To have operative programme committees for every sub-community (e.g. village within service area)

☐ V79

Alternative D

1. To have a CDC (Central Development Council) catering for only a specific commodity
2. To have a CDC catering only for agriculture
3. To have a CDC catering for all development issues

☐ V80

Alternative E

1. Service providers be part of the mouthpiece (Central Development Council)
2. Service providers should not be part of CDC

V81

5.9 How big should be a front line extension worker's service area?

(1) Parts of a section
(2) Existing Sections
(3) Re-demarcated sections fitting within VDC demarcations
(4) More than a section but less than a VDC level
(5) Equivalent to a VDC
(6) More than a VDC but less than an EPA
(7) Greater than an EPA

V82

6.0 CO-ORDINATION

In pluralistic extension, lack of coordination between different extension organisations often results in unnecessary duplication or working at cross-purposes, with the result that the frequently scarce extension resources are not effectively utilized, thereby seriously reducing or undermining the potential extension input. ***(Use table on the next page to record the responses to question (6.2 – 6.5)***

6.1 Do you think coordination of extension activities is necessary? 1= Yes 2=No V83

6.2 Name the organisations that are involved in extension services in your service area.

6.3 Which of the organisations mentioned above render agricultural development services similar to your organisation?
(1) Similar (2) Not similar

6.4 How many times do you have formal contacts with these organisations?
(1). Fortnightly
(2). Once a month
(3). Bimonthly
(4). Quarterly
(5). Once in 6 months
(6). Once in a year

6.5 On a scale 1 to 10 below, how would you assess the following?

1	2	3	4	5	6	7	8	9	10

Very limited or ineffective — Extremely extensive or effective

(1). The effectiveness of your organisation's coordination with the organisations mentioned above?
(2). The scope or degree of coordination.

Organisation name (Q. 6.2)	Similarity with your organisation (Q .6.3)	Frequency of contacts with other organisations (Q. 6.4)	Effectiveness of coordination Q. 6.5 (1)	Scope or degree of coordination Q.6.5 (2)

6.6 Could you please give an indication of the current level of coordination between organisations operating in your area is doing in terms of the items below? Please give an indication using following scale:

1	2	3	4	5	6	7	8	9	10

Not accomplished Very effectively accomplished

(a). Avoiding unnecessary duplication [ ] V84

(b). Sharing of experiences for effective and efficient extension delivery. [ ] V85

(c). Development of systematic procedures for delivery of extension services [ ] V86

(d). Maximum use of scarce extension resources [ ] V87

6.7 How serious is the problem of coordination in your extension area in your opinion? Please give an assessment on the following scale:

1	2	3	4	5	6	7	8	9	10

Very unimportant extremely important

[ ] V88

6.8 To get another perspective of your viewpoint regarding the seriousness of the lack of coordination as a problem, please consider it along with some other problems and list them in order of importance.

(a). Lack of coordination
(b). Poor competence of extension workers
(c). Lack of commitment of extension personnel
(d). Poor management of extension
(e). Inappropriate extension approach
(f). Lack of credit and other input resources
(g). Lack of land

1st	2nd	3rd	4th	5th	6th	7th

V 89 -95

6.9 Assuming there is an organisation in your area of work whose goals and objectives are similar to those of your organisation, which of the following options best describes the mode of operation that you would recommend between your organisation and other organisations?.

(1). Work independently and competitively
(2). Work independently but not competitively
(3). Work independently but informally agree about working area to minimise duplication
(4). Work jointly to achieve organisational objectives (but not necessarily community objectives)
(5). Work informally together to supplement each other's efforts in view of overall goal of community development
(6). Agree formally to effectively work together on separate projects and joint projects
(7). Work together on all projects (equivalent to becoming one agency)

[ ] V96

6.10 Do you think coordination is important in the delivery of extension services? Indicate the importance using the following scale.

1	2	3	4	5	6	7	8	9	10

Very unimportant Extremely important

Reasons

(a). Avoid unnecessary duplication [ ] V97
(b). Sharing of experiences for effective and efficient extension delivery. [ ] V98
(c). Development of systematic procedures for delivery of extension services [ ] V99
(d). Maximum use of scarce extension resources [ ] V100
(e). Comparison with others and self-evaluation [ ] V101
(f). Minimizing conflicts and facilitating conflict resolution [ ] V102
(g). Specialization in certain areas of extension service delivery [ ] V103

6.11 To what extent are the following various methods used to co-ordinate agricultural extension services?

4 = always, 3 = sometimes, 2 = rarely/seldom, 1 = never been used.

(a). Working with farmer development committees [ ] V104
(b). Involving the politicians in planning agricultural extension [ ] V105
(c). Strengthening relevant associations [ ] V106
(d). Co-ordination mechanisms at the District level. [ ] V107
(e). Encouraging extension staff to visit other organizations [ ] V108
(f). Co-ordination mechanisms at Extension Planning Area levels. [ ] V109

(g).	Improving information flow among extension organizations.	V110
(h).	Co-ordination mechanisms at the village level.	V111
(i).	Inviting other organizations to participate in planning sessions.	V112
(j).	Sharing available resources for extension services with other stakeholders (without putting all resources on the same account).	V113
(k).	Exchange of reports with other organizations.	V114
(l).	Harmonization of plans or programmes to avoid contradictions, duplications, or unnecessary conflicts	V115
(m).	Sharing available resources (with finances on the same account)	V116

6.12 Which of the following is closest to your idea of good coordination: V117

1. Extension organisations and/or agents assist each other and work together to be more effective and efficient.

2. Extension organisations and/or agents work in such a way that they don't do the same work, but complement each other by either focusing on different areas, different communities, different commodities or different functions.

6.13 It is generally accepted that different extension or development organisations (whether public, private or company-oriented) have different objectives and agendas and are not equally interested in coordination. Indicate (using the following scale) the acceptability of the following in terms of solutions to poor coordination:

1	2	3	4	5	6	7	8	9	10

Very unacceptable Highly acceptable

(1).	Each organisation must commit itself to coordination and contribute equally to the process.	V118
(2).	The difference between organisations must be accepted and respected and coordination must be planned accordingly.	V119
(3).	Coordination is necessary for your organisation.	V120

6.14 What do you see as the solution to poor coordination between different extension organisations? Two widely proposed solutions are the following: V121

(a). **The establishment of a coordinating extension forum for extension organisations**. This is a forum where all organisations involved in extension services meet on a regular basis to discuss, share and promote effective and efficient delivery of services. V122

(b). **Coordination through community structures, viz. through a community body representing the community and promoting and coordinating its interests**. This type of coordination is where the community through representatives from different villages with little assistance from the extension organisations meet on a regular basis, to discuss extension delivery involving all extension organisations in their area. V123

Please assess each of the above alternatives in terms of their potential solution of uncoordinated extension in your area, using the following scale:

1	2	3	4	5	6	7	8	9	10

No solution whatsoever — Extremely promising solution

6.15 Which of the following organisations (agents) would be most suited in leading or chairing a coordination forum?

1	2	3	4	5	6	7	8	9	10

Absolutely unsuitable — Ideally suited

(a) Department of Agriculture V124

(b) NGO's V125

(c) Private or farmer-owned extension service V126

(d) Company based organization (e.g. Fertiliser reps, etc.) V127

6.16 What would be the possible areas for coordination at the district or lower levels?
