UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

The nature and influence of management on the performance of the Ethiopian public agricultural extension service, with special reference to Oromia Region

by

KEDIR BATI JIBBA

Submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Agricultural Extension

In the Department of Agricultural Economics, Extension and Rural Development

Faculty of Natural and Agricultural Sciences
University of Pretoria

Pretoria

Promoter: Professor G.H. Düvel

November 2009

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

DECLARATION OF ORIGINALITY

I, Kedir Bati Jibba, declare that the thesis/ dissertation, which I hereby submit for the degree PhD in Agricultural Extension at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

SIGNATURE: …….

DATE: ……

ACKNOWLEDGEMENTS

In the course of completing this extraordinary academic programme, I have received valuable assistance from various persons and organizations. It is therefore appropriate for me to express my deep-seated gratitude to them all. I am indebted to Haramaya University, my employer institution, for funding my PhD study and granting me leave. I am also grateful to the Sasakawa Africa Association and the Sasakawa Global 2000 Ethiopia for their assistance during data collection, in terms of fuel and vehicle support.

In particular, I would like to thank Professor G.H. Düvel, my Director of Studies, for his continued guidance, constructive criticism, critical thinking, support and assistance throughout my research. He probably does not realize how much he has transformed my thinking and writing skills. This experience might never have been possible without his invaluable mentorship and tutelage.

My sincere thanks go to Professor Johann Kirsten, Head, Department of Agricultural Economics, Extension and Rural Development for hosting and supporting me during my stay at University of Pretoria.

I also wish to specially convey my heartfelt appreciation to extension staff in the Oromia Bureau of Agriculture and Rural Development Headquarters office, zone and district.

I am highly indebted to my colleagues: Mr. Ali Mimi Jibba (USA), Mr. Aman Boru Hamado (Norway), Mr. Amano Bulo Dube (USA), Mr. Bulo Bento Qulu (USA), Mr. Guta Alo Gerbicha (South Africa), Dr. Hussien Hamda Komicha (Addis Ababa University) and Mr. Jemal Guto Feto (South Africa) for their support when I was financially stressed as I approached the end of the study.

Finally, I want to acknowledge the love and contributions of my wife and children. My wife, Rahma Johar Ali, was very supportive and has helped me grow emotionally during our time together in Pretoria. She took the thesis write up a step forward with her work on creation of the map of the study area, reshaping of the tables, partly typing of the text and proof reading, which are a significant contribution to the write up process. My sons, Mohammed and Miraj Kedir, and daughter, Hanan Kedir, who somehow managed to make working on this thesis possible while they took the back seat.

Above all, thanks to the Almighty Allah for giving me the health, strength and wisdom to complete this thesis.

DEDICATION

This effort is dedicated to my dad, Bati Jibba Bedhaso, and mom, Subbo Qalu Abdi, who brought me up to this level and who always believed in me in a very proud manner.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

The nature and influence of management on the performance of the Ethiopian public agricultural extension service, with special reference to Oromia Region

By

Kedir Bati Jibba

Degree: **PhD**
Department: **Agricultural Economics, Extension and Rural Development**
Promoter: **Professor G.H. Düvel**

ABSTRACT

Against the background of frequent organizational changes and restructuring, often based on impulsive decisions rather than structured feasibility studies or evaluations, this study examines the nature and influence of management on the performance of the Ethiopian public extension service. Based on a survey of 353 respondents from Oromia region, one of the nine regions in Ethiopia, representing various agro-ecological zones and managerial positions, the study examines the current level of organizational performance, the influence of the 2002 restructuring on organizational performance and the factors influencing the organizational effectiveness. The knowledge of these influences is important for improving the current and future design of organizational change and development practices.

The study was guided by the following research questions: (1) how efficiently is the Oromia Bureau of Agriculture and Rural Development currently functioning? (2) what is the current situation of Oromia Bureau of Agriculture and Rural Development regarding managerial efficiency level and the application of improved management practices? (3) are there any differences between before and after 2002 organizational restructuring in terms of improvements in organizational performance? (4) what are the factors that currently influence, (enhance or restrain) the organizational and managerial functioning of OBARD? (5) are there any variations regarding assessed organizational and managerial performance between various categories of respondents?

The findings show that the current organizational efficiency is low. The effect of the 2002 restructuring on organizational performance was negligible and mixed. The organizational performance was influenced by various factors. The most critical factors found to influence organizational performance were skilled manpower, availability of accommodation/offices, extension teaching aids; farmers' willingness, collaborations between institutions, government policy and regulations and political forces. These findings can be useful in assisting managers in their endeavours to correct the weaknesses and to focus on the most critical issues for the improvement of organizational performance.

Finally, this study raises issues that need policy and managerial interventions and have implications for further research.

ABBREVIATIONS AND SYMBOLS

ADLI	Agricultural and Development Led Industrialization
AFM 25-1	Air Force Manual 25-1, 1954
ANOVA	Analysis of variances
ARDU	Arsi Rural Development Unit
OBARD	Oromia Bureau of Agriculture and Rural Development
CADU	Chilalo Agricultural Development Unit
CPP	Comprehensive Package Program
CSA	Central Statistical Agency
DA	Development Agent
EEA	Ethiopian Economic Association
EEC	European Economic Commission
EMTP	Extension Management Training Plot
EPID	Extension and Project Implementation Development
FTC	Farmers' Training Centre
MMP	Minimum Package Program
MoA	Ministry of Agriculture
MoARD	Ministry of Agriculture and Rural Development
MoFED	Ministry of Finance and Economic Development
MoIPAD	Ministry of Information Press and Audiovisual Department
FAO	Food and Agricultural Organization
NEIPEM	National Extension Intervention Program
NGO	Non-Governmental Organization
HYV	High Yielding Varieties
IDA	International Development Assistance
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
PA	Peasant Association
PADEP	Peasant Agriculture Development and Extension Program
PADETES	Participatory Demonstration and Training Extension System
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
REAC	Research Extension Advisory Council
RELC	Research-Extension Liaison Committee
SG-2000	Sasakawa Global 2000
SNNP	Southern Nations, Nationalities and Peoples
SPSS	Statistical Package for Social Sciences
T&V	Training and Visit
USAID	United States Agency for International Development
WADU	Wolayita Agricultural development Unit
n	Number
N	Total number
$\chi 2$	Chi-square
r	Pearson's correlation
p	Probability
df	Degree of freedom
R^2	Regression coefficient

CHAPTER 1
INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Ethiopia, with a total population of 73 918 505, is one of the poorest countries in sub-Saharan Africa. Although various development initiatives and strategies have been started and pursued during the past five decades, the country has been living in a perpetual poverty trap. Some of the major challenges facing Ethiopia include: the dynamics of population growth, very low productivity, infrastructural bottlenecks, dependency on unreliable rainfall and being land-locked (MOFED, 2005).

Since 1991, however, the government became determined to address the development issues, namely under a Plan for Accelerated and Sustained Development to End Poverty (PASDEP) guided or directed by the strategy of Agricultural Development Led Industrialization (ADLI). Public extension service has been seen as a main means of achieving these development initiatives and strategies.

The PASDEP has two phases: PASDEP I, which covered the first five years of the 10 year plan, focussed on expanding education, strengthening health services, capacity-building and decentralization, and the food security program. In PASDEP II (2006 – 2010), the strategy consists of eight elements (MOFED, 2005): (a) a massive push to accelerate growth - through promotion of commercialization of agriculture and non-farm private sector growth; (b) a geographically differentiated growth zones strategy – the country consists of at least three different sorts of economic and agro-ecological zones (such as the traditionally settled semi-arid highlands, potentially productive semi-tropical valley areas, and the hot semi-arid lowlands) each of which require different responses to maximize their potential – (Special effort will be made for pastoral areas in order to reach semi-nomadic people with tailored programs); (c) addressing the population challenge – by making available services for spacing births; (d) unleashing the potential of Ethiopia's women; (e) strengthening the infrastructure ; (f) managing risk and

volatility; (g) scaling up to reach the MDGs; and (h) creating jobs. While most of the initiatives are sector specific, civil service reform, capacity building, governance and decentralization are cross-cutting issues (MOFED, 2005).

The following is a historical overview of the public extension organization in Ethiopia as it evolved during the three main political systems, given to provide a better perspective of the background to the study.

1.2 HISTORICAL OVERVIEW OF THE PUBLIC EXTENSION ORGANIZATION IN ETHIOPIA

The history of agricultural extension in Ethiopia can be traced back to 1908, when Emperor Menelik II issued a decree to establish the Ministry of Agriculture (MoA, 1987). However, up to the 1950s, there was no formal national extension organization in the country. Ethiopia has moved, administratively or politically, from an imperial government with a feudalistic economy, since 1974 to a Marxist military regime that promoted a socialist economy, before finally moving to an ethnic-based federal system, advocating decentralization and a market economy. The following sub-sections review the evolution of public extension organization in Ethiopia during these three different political and economic eras.

1.2.1 The Imperial Era (Pre 1974)

It was only after the early 1950s that formal extension systems in Ethiopia began conducting large-scale activities aimed at transforming the traditional agriculture (Gryseels & Anderson, 1983). The period prior to 1953 was marked by sporadic activities of introducing exotic livestock breeds, vegetables, and fruit and fuel wood trees. Put simply, there was not a well-defined extension system with specific extension objectives, targets, extension contents and communication methods (Elias & Agajie, 2001; Tesfaye, 2003).

In 1953 the Alemaya College of Agriculture was established and given the responsibility of nationally coordinating and leading agricultural education, research and extension based on the Ethio-American Cooperation Agreement (Belay, 2003). According to Elias & Agajie (2001), the 1953-63 period was called the era of Alemaya College. The college initiated a number of research centres that also included satellite extension demonstration plots, namely Alemaya, Jimma, Debre-Zeit, Assela and Fitche. Demonstration plots were established with collaborating farmers. The extension agents, besides visiting and advising farmers, organized adult educational meetings and promoted the formation of agricultural youth clubs.

Youth clubs were used as major fora for technology popularization. The clients of the extension system were therefore youths organized in youth clubs, and not adult men and women. The number of trained personnel was inadequate, and institutions of technology generation, input delivery and credit provision remained extremely underdeveloped (MoA, 1992-93).

In October 1963, with the increasing number of sites and extension personnel, the then government saw the need for transferring the mandate of agricultural extension from Alemaya College to the Ministry of Agriculture (MoA). Since then, MoA has literally become the sole extension service provider in the country, and was given the national mandate to coordinate extension, set up a department to lead activities of planning and implementation of agricultural extension in the country, deploy provincial supervisors in all provinces, followed by assigning staff to Awraja and the districts (Belay, 2003).

Field level extension workers were assigned to work along the main roads and in a radius of about 25 to 30 km from their offices (Belay, 2003). Agricultural officers assigned at provincial level were accountable to the Agricultural Development Promotion Division of MoA for agriculture related matters, and to the provincial administration regarding administrative issues. Establishing youth clubs and tree nurseries were the two major national activities. Extension agents also established agricultural clubs in schools that were instrumental in promoting general agricultural practices and vegetable and poultry

production. Over time, the number and quality of staff grew, and the MoA employed various extension approaches and projects (MoA, 1993, 1994a).

Soon it was felt that spreading out efforts thinly throughout the country might not help achieve desired results of rapid increases in production and productivity. It was conceived that major changes had to include focusing on high potential areas with simultaneous involvement of research and extension, improving the credit schemes and marketing systems, and building institutions as well as social and physical infrastructure. This led to the adoption of the Comprehensive Package Program (MoA, 1993).

In 1967, through the Food and Agricultural Organization (FAO)-sponsored Freedom from Hunger campaign and with assistance from donor agencies, mainly Swedish International Development Agency (SIDA), the Comprehensive Package Program (CPP) began. CPP emphasized the need for focusing activities and bringing together the necessary elements in a project form in view of achieving a significant increase in production and income. The basic aim of the package program approach was, therefore, to promote agricultural development by concentrating inputs and activities in geographically delineated areas so that the results could have demonstrative effects. The intention was to cover 90% of the country in 15-20 years (MoA, 1994).

The first comprehensive package project, the Chilalo Agricultural Development Unit (CADU), was initiated in September 1967 in the then Arsi Province. CADU's office was in Assella and was accorded administrative and financial autonomy. It was relatively free from political interference (MoA, 1984, 1993). The organization did not follow political boundaries; but was organized according to development zones. The clientele was the smallholders with land holdings of fewer than 25 ha. Extension messages were mainly related to crop and livestock production, forestry, and farm implements. CADU was later upgraded to become the Arsi Rural Development Unit (ARDU) to be implemented in several districts of Arsi.

CADU and ARDU have been criticized for neglecting resource poor and dry land areas, and for not involving farmers in the planning and implementation of extension activities (MoA, 1993).

A slightly different model from ARDU was the Wolayita Agricultural Development Unit (WADU). Its focus was on highly populated areas, and its target was the relatively poor farmers. Besides promoting agricultural productivity by focusing on crop protection and development, WADU also included rural artisans in its programs and had settlement schemes for the landless. Other areas of focus were coffee development, small-scale rural industry, and cooperatives. It also focused on the promotion of one multipurpose cooperative at each of its development centres (MoA, 1992).

Then another five comprehensive package projects were initiated and a total of seven projects of different degrees of intensity planned. The remaining five were the Ada Development Unit (near Addis Ababa), the Thatai Adaibo and the Hedakti Agricultural Development Units (in North-western Tigray), the Southern Region Agricultural Development Unit (around Awassa), and the Humera Agriculture Development Unit (Belay, 2003). CADU and WADU were, however, the two most prominent ones.

The CPPs seem to have had noticeable influence on improving productivity and encouraging agricultural intensification and specialization in their immediate vicinities in Ethiopia. It was later realized that implementing CPPs through the whole country could not be feasible because of the high manpower requirements and costs involved. CPP benefited mainly landowners and commercial farmers as evidenced in the distribution of loans provided and accelerated eviction of tenants by facilitating mechanization on large farms (Betru, 1975 cited in Belay, 2003). The feudalistic mode of production limited the contact and the type of advice that these extension agents could give to smallholders (MoA, 1994a; Stommes and Sisaye, 1979 as quoted in Belay, 2003).

As a result, the Minimum Package Programs (MPPs) were initiated in 1971 in two phases (MPP I and MPP II). The idea of MPP was that farmers require integrated support

services, viz. extension advice, fertilizer, improved seeds, farm credits, better tools and implements. In 1971 the Extension and Project Implementation Development (EPID) was established under MoA with the aim of increasing peasant production by implementing the MPPs and following up CPPs and other related projects (Belay, 2003).

MPP I (1971-74) was envisaged to extend services only to habitations within 3-5Km on either side of a main road, covering only one-fifth of the productive land (Nair, 1984). It was designed to provide smallholder farmers with minimum essential services for agricultural development, i.e. extension of tested technologies, facilitating access to credit, and provision of marketing advice (MoA, 1993). To implement the program, EPID set up organizational cells called MIPP areas.

Unlike the CPP, MPP I used an individual farmer extension approach where both model farmers and extension agents demonstrate innovations that increase productivity and income (Belay, 2003). Nevertheless, like the CPP, MPP also employed the general extension model (Tesfaye, 2003). Using the MPP approach, EPID managed to provide extension services in close to half of the districts in the country. But before MPPs were widely implemented, the imperial Government was toppled by the military following the 1974 popular revolution (Belay, 2003).

The extension system during the Imperial Era had limited coverage, and its clients were mainly the better off farmers. Though the transfer of the extension mandate from the then Alemaya College to the Ministry of Agriculture had improved coverage and the launching of a number of donor-promoted projects, signs of improvements in terms of focus and quality of extension, linkages with research and the much needed complimentary services (credit, input, market, etc) were extremely weak (Belay, 2003). Besides, the land tenure system had a crippling effect on the contribution that the extension system could have made to the millions of smallholder farmers, as the aristocrats and the church owned most of the farmland. Consequently, the restrictive credit system discriminated against the landless tenants (MoA, 1994a; Belay, 2003).

1.2.2 Era of the Marxist Regime (1974 – 1991)

After the fall of Emperor Haile Selassie in September 1974, the Military Regime began taking some drastic measures. On March 4, 1975, the Land Reform Proclamation was issued which abolished private ownership of land, prohibited the transfer of land by sale, exchange or mortgage, and limited the maximum farm size of a farmer to 10 hectares. The extension program of EPID was decentralized in 1976 to facilitate implementation of the land reform. In 1977, the agricultural development department of MoA took over some of EPID's responsibilities. As this department was a crop department that was turned into an agricultural development department, it could not fully take over EPID's responsibility. As a result, there existed confusion regarding the management, coordination, and supervision of extension programs at field level (MoA, 1993).

In 1981 (with the financial assistance of SIDA, IFAD and the World Bank), MPP II was reinitiated (MoA, 1994a). Unlike MPP I, instead of working along roadsides, MPP II was set to work on selected districts. To this end, farmers' training centres were established to provide farmers with intensive training of several months. But MPP II was reportedly constrained by institutional changes and lack of support facilities and availability of appropriate technologies (MoA, 1992, 1994a).

It is worth emphasizing that both MPPI and MPPII were not given sufficient time of implementation in wider areas, nor were adequate evaluation studies carried out allowing lessons to be drawn from the experiences.

In 1986, the Peasant Agricultural Development and Extension Project (PADEP) was introduced as a follow-up and replacement of MPPII to be implemented in surplus producing districts (Tesfaye, 2003). It also gave attention to lowlands through specifically designed livestock development projects. PADEP aimed at increasing national food production, promoting cash crops production, expanding rural cooperatives and employment opportunities, and preventing soil erosion. Funds for the implemented

programs were obtained from IDA, IFAD, EEC and USAID. PADEP employed a modified T&V system (Tesfaye, 2003).

The modified T & V system was said to have a clear line of command, and was able to build accountability into the system. It also significantly improved the capacity of the MoA in the form of offices, staff residences, transportation and finances. The links with creditors were established but accessing credits by farmers and collection of loans from farmers proved difficult. To strengthen the research link, national and zone level Research-Extension Liaison Committees (RELCs) were formed.

Nevertheless, RELCs were not firmly anchored in specific institutions and had no budget and no officer in charge. Many zones also did not have research centres nearby (Belay, 2003). Lack of institutional, home-based, dependable funding mechanism weakened RELCs. Further, donors required policy changes on the part of the then Military socialist government, especially in liberalizing the agricultural marketing systems, giving emphasis to individual farms rather than collective and state farms. In January 1988, the government announced policy changes, which lifted price controls, allowed free movement of goods, and provided farmers with better security of tenure. This led to approval of PADEP I, and implementation began in 1989 (World Bank, 1993).

To sum up, the contribution that agricultural extension could make to agricultural development during the 1974-91 period was seriously undermined by such factors as giving priority to state and collective farms at the expense of smallholder individual farmers; extension workers being involved in many other tasks in addition to extension; extension burdened with political objectives; and highly centralized, less flexible, and top-down extension planning.

1.2.3 The Post 1991 Era of decentralization

The period after 1991 is characterized as the era of institutional pluralism in the history of extension in Ethiopia (Elias & Agajie, 2001). That means the beginning of involvement

of farmers, NGOs (particularly Agri-Service Ethiopia, FARM Africa, and SOS Sahel in on-farm research) and other institutions in extension processes. The National Agricultural research system had become the main source of technology.

The modified T&V system continued to be the national extension system in the early 1990s as well. The newly established Regional National states were given full autonomy in the planning, execution, monitoring and evaluation of extension programs. In the meantime, Saskawa Global 2000 (also known as SG-2000), after having made inventory of available technologies with the support of the national agricultural research and extension systems, initiated an extension strategy in 1993, which was later known as Participatory Demonstration and Training Extension System (PADETES).

PADETES was proposed as a remedy to rectify drawbacks observed during the implementation of package programs. It emphasized better research-extension linkage, encouraged aggressive work in technology transfer to smallholders, and made efforts to strengthen the capacity of the extension system to disseminate research-proven pre-and post-harvest technologies mainly in food crops (Quinones *et al.,* 1997). The on-farm demonstration plot size was 0.5 ha (called extension management training plots) so as to show the farmer on a larger scale the advantages of using high yielding varieties (HYVs) along with recommended fertilizer levels and management practices. Model farmers were provided with a 25% down payment credit to cover the cost of improved seeds and fertilizers and with effective technical assistance from governmental extension agents.

In 1995 the rural centred agricultural development program, using PADETES and modified SG-2000 approaches, came into being under the name of the new extension intervention program (Tasfaye, 2003). Core features of PADETES include clear objectives and implementation strategies, selection of technologies suitable to the specific agro-ecological zones, use of a wide range of communication methods and media, emphasis on participation through a large number of demonstration plots on farmers' fields, credit provision by local government, collateral arrangement, and systematic inclusion of women and the youth (MoA, 1994b). The role of DAs in the PADETES

revolves around training and organizing farmers to have access to and make use of inputs, mainly technological innovations and inputs such as chemical fertilizers and seeds of improved varieties (MoA, annual performance reports).

The post 1991 period is marked by the devolution of power from the central to regional governments. Regional bureaus of agriculture are responsible for the planning and implementation of agricultural extension. Since 2002, the decentralization process was taken one step further to the district level (Habtemarium, 2005). The current emphasis is on respecting the commands and building amicable relationships with the district administration that can hire and fire extension staff. The influence of this current restructuring on extension delivery is not known, which is the focus of this study.

1.3 STATEMENT OF THE PROBLEM

In order to regain the capability to feed the rapidly growing population, Ethiopian agriculture will have to address challenges such as natural resource degradation, increasing frequency of drought, worsening state of poverty, and the HIV/AIDS pandemic that is decimating the productive youth (Habtamarium, 2005). A thriving agricultural economy is critical for reducing poverty, ensuring food security and for proper management of natural resources. In this regard, public extension services have historically been the primary vehicle of Ethiopian development policies and strategies of various former and current governments, which clearly underpins the importance of extension and properly functioning extension organisations.

Public extension organizations in many developing countries have shortcomings with regard to effectiveness, efficiency and accountability (Habtamarium, 2005). Assessing the impact of extension is known to be inherently difficult, and critical reviews of extension programs and projects are lacking in Ethiopia. Adoption studies covering wider areas are few, and organizational or managerial efficiency related studies are scant. Thus, extension remains an under-researched area making it even more difficult to assess its successes or failures (Habtamarium, 2005). Useful efforts in this regard include studies

by Gebre-Selassie (2001), Habtemarium (2005), Belay (2003) and Fasil & Habtemarium (2006), but they did not look at organizational efficiency holistically, or make a comparative study of the situation before and after the changes had been implemented.

Although there has not been a well-defined agricultural extension policy and implementation strategy, the public extension organization kept on changing in Ethiopia. The historical review of public extension in Ethiopia indicates that extension projects have nearly always been top down in nature and heavily influenced by donor agencies and politicians. There have been frequent changes in approach, focus and organizational structure, but there is literally no systematic assessment of past performance to design future intervention strategies, and enough time is not being given to draw lessons from changing approaches and changing organizational structures (Habtamarium, 2005). In fact, it seems as if changes, and they are not infrequent, occur arbitrarily and spontaneously.

Since the mid 1970s, the ministry of agriculture has undergone at least ten major restructuring processes as far as the focus of extension delivery is concerned. In none of the cases is there evidence of such restructuring decisions being based on feasibility studies or systematic evaluation of the effect of such changes. And if these changes coincide with or are the result of the intuitions or personal incentives of a newly appointed leader, there is no assurance of a systematic improvement over time. This has negatively affected continuity of programs and staff stability in the past and will continue to do so in the future, unless corrective measure is taken in this regard (Habtamarium, 2005).

Currently, against the backdrop of declining public resources, economic changes, globalization and sustainable development issues, extension organizations have been undergoing considerable re-examination and change (Thompson & Strickland, 2001; Swanson, *et. al.,* 2003). Downsizing and restructuring are the most common changes implemented in extension organizations (Swanson, *et. al.,* 2003).

There is growing literature showing the varying effects of these intervention efforts on the effectiveness of organizations. There are only a few developing countries claiming general successes, such as Morocco, Thailand, Papua New Guinea and Botswana (Crook & Manor, 1994; Hope, 2000; Guislain, 1997; Shirley, 1999). Even in these countries there is much variation between and within the countries (Crook & Manor, 1994).

Similarly, there is adequate evidence in Africa, Latin America and Asia where decentralization, down-sizing and merger efforts have produced little results (Sarker, 2003; Flint, 2003; Turner & Hume, 1997). Decentralization efforts, for example, in Africa have fostered control of rural area by deconcentration, in Latin America created centralist attitude and interests from both politicians and bureaucrats, and in Asia politicians and bureaucrats were found to be reluctant to devolve power to local authorities rather than creating effective organization (Turner & Hume, 1997). Such unstable states affect organizational coping strategies and can negatively impact work performance and, sometimes, causing the best employees to emigrate (White, 1999; Cunningham; 1987; Jayaratne, 2003).

In Ethiopia, large-scale structural changes were undertaken in 1991 with the devolution of power from the central Government to Regional States Governments and in 2002 the decentralization process was taken further to district level. The intention was to improve the accountability of public service organizations, focusing on a more "private businesslike" management system. This new public management system has focused on more "accountable management" or "businesslike" control based on formal performance agreements.

In this context, continuous systematic evaluation and monitoring are essential for an extension system to function efficiently as intended, and to determine if modifications are needed to meet changing conditions or demands. According to Bembridge (1980) much of the evaluation research in extension has been focused on behavioural change on the part of the farmer. By focussing on the farmer, the most important factor in the process

and the one that can most easily be adjusted, namely the extension organization itself, has been neglected (Röling, 1970).

The purpose of this study is to contribute towards these challenges by investigating the current efficiency level of the Oromia Bureau of Agricultural and Rural Development (OBARD) in regard to extension management and organizational efficiency.

1.4 RESEARCH OBJECTIVES AND QUESTIONS

The specific objectives of the study were to examine the:

1. Current situation of overall organizational and managerial functioning,
2. Impact or influence of the 2002 organizational interventions, and
3. Determinants of organizational effectiveness.

In order to achieve these objectives, the study was guided by the following research questions:

1. How efficiently is the OBARD organization currently functioning?
2. What is the current situation of OBARD regarding managerial efficiency level and the application of improved management practices?
3. Are there any differences between before and after the 2002 organizational restructuring in terms of improvements in organizational performance?
4. What are the factors that currently influence, (enhance or restrain) the organizational and managerial functioning of OBARD?
5. Are there any variations regarding assessed organizational and managerial performance between various categories of respondents?

1.5 SIGNIFICANCE OF THE STUDY

The extension organization is one of the most important government institutions responsible for agricultural development in Ethiopia. The findings of this study will

contribute towards effectiveness and efficiency of extension management and the subsequent extension service provision. In addition, this study is useful for higher education curriculum development of extension department by providing information regarding the training needs of organizations. The study is also expected to contribute towards a better and common understanding among policy makers, researchers and extension workers of the concepts of extension in Ethiopia. This understanding is critical if the future policy decisions implemented by the government are to complement the knowledge, attitude and values of extension workers and managers for effective extension organization.

1.6 THESIS OVERVIEW

This thesis is divided into twelve chapters. Following the introduction in chapter one, in chapter two various theories of management and effectiveness measurement models that cover essential themes of the study are briefly reviewed, leading to the theoretical and conceptual framework of the study. Chapter three outlines and briefly discusses the research methodology used regarding the study population, instruments and study design, in order to answer research questions.

The next nine chapters (4-11) present the findings of the research. Chapter four presents the profile of the respondents. The current state organizational effectiveness of the Oromia Bureau of Agricultural and Rural Development (OBARD) is presented in chapter five; while chapter six evaluates the extent of alignments or fits between the organization's strategy, its capability and its environment. Chapter seven through eleven provide the current efficiency levels of the organization in terms of the five management functions, namely, planning, organizing, human resources management, leadership and controlling, respectively.

Finally, chapter twelve will present the summaries or main findings and their implication for policy, research and future extension service provision and managerial interventions.

CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

The purpose of this chapter is to review various management theories and organizational/ managerial performance measurement models, in order to identify a theoretical and conceptual framework for this study.

Organized endeavours directed by people responsible for planning, organizing, leading and controlling activities have existed for thousands of years (Mescon *et al.,* 1981). According to Wren (1979), the use of organization can be traced back even further through archaeological evidence, indicating that prehistoric peoples often lived in organized groups. The Hanging Gardens of Babylon, the Ice City of Machu Piccu, and the pyramids of Egypt could only have been built through coordinated organized endeavour (Robbins & Coulter, 1999). The pyramids are a particularly interesting example; the construction of a single pyramid occupied more than 100,000 people for 20 years (George, 1972).

There also were large political organizations long before the birth of Christ. Those of the Macedonians under Alexander the Great, the Persians, and later the Romans stretched from Asia to Europe (Mescon *et al.,* 1981). Kings and generals were managers, of course; so were the lieutenants, slave drivers, territorial governors, and keepers of the treasury who helped to keep these early organizations operating (Wren, 1979). The accomplishments of larger organizations clearly indicate that they were managed formally and had levels of management (Mescon *et al.,* 1981). These examples from the past demonstrate that organizations have been around for thousands of years, and that management has been practiced for an equivalent period (Mescon *et al.,* 1981).

Although organization and the practices of management may be as old as humanity, before the twentieth century hardly anyone thought systematically about them (Wren,

1979). In the view of Wren (1979), the main reason is that people were interested in using organizations to acquire money or political power, but not in managing them. For example, during the early nineteenth century, Robert Owen gave a great deal of thought to attaining organizational objectives through other people. He provided workers with adequate housing and safer conditions, developed a system for fairly and openly evaluating employees, and paid incentives for better performance Wren (1979). These reforms, phenomenally innovative for the time, showed insight into human nature and the manager's role. But other businessmen of that time saw little practical value in Owen's reforms, and no single one is known to have followed his lead (Mescon *et al.,* 1981).

The first genuine burst of interest in management came in 1911 (Mescon *et al.,* 1981). The major force that first spurred serious interest in management was the Industrial Revolution, which began in England. But the idea that management could in itself make a major contribution to organizations first arose in America (Mescon *et al.,* 1981).

These evolutions of management thought and concepts emerged over the years, and are categorized as: the pre- classic school of management theories (1776-1886), classic school of management theories (1898-present), processes approach of management thought, and contemporary (modern) management thought (Mescon *et al.,* 1981).

However, the evolution of the development of management theories did not consist of a series of distinct steps (Wren, 1979). Rather, the pattern has been one of varying approaches which have often overlapped chronologically in development. Consequently, advances in management theory have always been dependent on advances in many supporting disciplines, such as mathematics, engineering, psychology, sociology, and anthropology (Wren, 1979).

To date, there have been four major approaches that have contributed significantly to management thought and practice. Namely:

1. The schools approach views management from four distinct perspectives.

2. The process approach views management as a forgoing series of interrelated management functions.
3. The systems approach stresses that managers should view an organization as a number of interrelated parts, such as people, structure, tasks, and technology that try to attain diverse objectives in a changing environment , and
4. The contingency approach stresses that the appropriateness of various management techniques is determined by the situation.

The following four sections trace developments in management thought according to these four approaches, in order to select the theoretical framework of this study. The final section concludes the review of literature by reviewing various models of organizational and managerial performance measurement for the purpose of identifying the conceptual model of this study.

2.2 THE SCHOOLS APPROACH TO MANAGEMENT THOUGHT

The twentieth century witnessed a period of tremendous management theory ferment and activity. Calls were heard for the development of a comprehensive management theory. The classical school of management was primarily concerned with developing such a theory to improve management effectiveness in organizations. However, the theorists went a step further. Not only did they seek to develop a comprehensive theory of management, but they also wanted to provide the tools managers required for dealing with their organizational challenges. Within the schools approach there are the scientific management, administrative management, human relations management, behavioural science management, quantitative management and Japanese school of management branches.

2.2.1 Scientific Management School (1885 - 1920)

The scientific management approach emphasized empirical research for developing a comprehensive management solution (Mescon *et al.,* 1981). The major representatives of

this school of thought are Frederick Winslow Taylor (1856-1915), Frank Gilbreth (1868-1924) and Lillian Gilbreth (1878-1972). A fundamental implication of scientific management is that the manager is primarily responsible for increasing an organization's productivity. Taylor is known as the father of scientific management (Mescon *et al.,* 1981).

Taylor sought to create a mental revolution among both the workers and managers by defining clear guidelines for improving production efficiency. He defined four principles of management (Box 1), and argued that following these principles would result in the prosperity of both managers and workers (Robbins & Coulter, 1999). Workers would earn more pay and managers would earn more profits (Robbins & Coulter, 1999).

Box 1: Taylor's four principles of management

1. Develop a science for each element of an individual's work, which will replace the old rule-of-thumb method.
2. Scientifically select and then train, teach, and develop the worker. (Previously, workers chose their own work and trained themselves as best they could.)
3. Heartily cooperate with the workers so as to ensure that all work is done in accordance with the principles of the science that has been developed.
4. Divide work and responsibility almost equally between management and workers. Management takes over all work for which is better fitted than the workers. (Previously, almost all the work and the greater part of the responsibility were thrown on the workers.)

The scientific management school is contrasted sharply from the old system in which workers had to plan their work themselves. According to Robbins & Coulter (1999), scientific management, in sum, was a major conceptual breakthrough. Largely because of it, management became widely recognized as a distinct field of scholarly inquiry. For the first time, managers and scholars recognized that the methods and approaches of science

and engineering could be applied with equal effectiveness to facilitate the attaining of organizational objectives (Robbins & Coulter, 1999). Further, Mescon *et al.* (1981) summarized the contribution of this school of thought as follows.

The contributions of scientific management school:

1. application of scientific analysis to determine the best way of performing a task
2. selection of workers best suited to the task and provision for training them
3. providing workers with the resources required to perform their tasks efficiently
4. systematic, fair use of pay incentives to improve productivity
5. separation of planning and thinking from the actual work

The other important thing to recognize about the scientific management approach is that many of the techniques developed by Taylor, the Gilbreths and others are still used in organizations today (Robbins & Coulter, 1999).

But current management practice is not restricted to the scientific management approach. The other areas of its methodology have proven to be flawed (Robbins & Coulter, 1999). For example, the piece rate system all too often is either inapplicable in today's computerized assembly lines or is compromised by management continually raising the quota (Robbins & Coulter, 1999). Scientific management writers focused on what is called shop management (Mescon *et al.,* 1981). They concentrated on improving efficiency below the managerial level. It was not until the rise of the administrative school that writers systematically approached making the management of the overall organization more effective (Mescon *et al.,* 1981).

2.2.2 Administrative Management School (1920 - 1950)

Another group of writers who looked at the subject of management, but focused on the entire organization, were called the general administrative theorists (Robbins & Coulter, 1999). They developed more general theories of what managers do, and what constitutes good management practice (Robbins & Coulter, 1999). The most prominent of these general administrative theorists were Henri Fayol, Max Weber, and Ralph Davis.

Unlike Taylor and Gilbreths, who began their job as common labourers, which doubtless influenced their thinking about managing organizations, the major contributors to administrative management had more direct experience with top-level management in big business (Mescon *et al.,* 1981). Consequently, their primary concern was the broader problem of efficiently administrating the overall organization. They were focusing on administrative management, the study of how to create an organizational structure that leads to high efficiency and effectiveness (Mescon *et al.,* 1981). Organizational structure is the system of task and authority relationships that controls how employees use resources to achieve the organization's goals (Robbins & Coulter, 1999).

Two of the most influential views regarding the creation of efficient systems of organizational administration were developed by Max Weber (1864–1920) and Henri Fayol (1841–1925). Weber developed the principles of bureaucracy (Box 2) - a formal system of organization and administration designed to ensure efficiency and effectiveness. A bureaucratic system of administration is based on five principles (Robbins & Coulter, 1999).

Box 2 Weber's five principles of bureaucracy

Principle 1:	In a bureaucracy, a manager's formal authority derives from the position he or she holds in the organization.
Principle 2:	In a bureaucracy, people should occupy positions because of their performance, not because of their social standing or personal contacts.
Principle 3:	The extent of each position's formal authority and task responsibilities, and its relationship to other positions in an organization, should be clearly specified.
Principle 4:	So that authority can be exercised effectively in an organization, positions should be arranged hierarchically, so employees know whom to report to and who reports to them.
Principle 5:	Managers must create a well-defined system of rules, standard operating procedures and norms, so that they can effectively control behaviour within an organization.

Weber believed that organizations that implement all five principles, will establish a bureaucratic system that will improve organizational performance (Robbins and Coulter,

1999). The specification of positions and the use of rules to regulate how tasks are performed, make it easier for managers to organize and control the work of subordinates. Similarly, fair and equitable selection and promotion systems improve managers' feelings of security, reduce stress, and encourage organizational members to act ethically and further promote the interests of the organization (Robbins and Coulter, 1999).

On the other hand, working at the same time as Weber but independently of him, Henri Fayol identified 14 principles (Box 3) that he believed to be essential to increasing the efficiency of the management process (Robbins and Coulter, 1999). Some of the principles that Fayol outlined, have faded from contemporary management practices, but most have endured (Mescon et al., 1981).

Box 3 Fayol's 14 principles of management

1. *Division of Labour* Job specialization and the division of labour should increase efficiency, especially if managers take steps to lessen workers' boredom.
2. *Authority and Responsibility* Managers have the right to give orders and the power to exhort subordinates for obedience.
3. *Unity of Command* An employee should receive orders from only one superior.
4. *Line of Authority* The length of the chain of command that extends from the top to the bottom of an organization should be limited.
5. *Centralization* Authority should be concentrated at the top of the chain of command.
6. *Unity of Direction* The organization should have a single plan of action to guide managers and workers.
7. *Equity* All organizational members are entitled to be treated with justice and respect.
8. *Order* The arrangement of organizational positions should maximize organizational efficiency and provide employees with satisfying career opportunities.
9. *Initiative* Managers should allow employees to be innovative and creative.
10. *Discipline* Managers need to create a workforce that strives to achieve organizational goals.
11. *Remuneration of Personnel* The system that managers use to reward employees should be equitable for both employees and the organization.
12. *Stability of Tenure of Personnel* Long-term employees develop skills that can improve organizational efficiency.
13. *Subordination of Individual Interests to the Common Interest* Employees should understand how their performance affects the performance of the whole organization.
14. *Esprit de Corps* Managers should encourage the development of shared feelings of comradeship, enthusiasm, or devotion to a common cause.

The principles that Fayol and Weber set forth still provide a clear and appropriate set of guidelines that managers can use to create a work setting that makes efficient and effective use of organizational resources (Robbins & Coulter, 1999). These principles remain the bedrock of modern management theory. Recent researchers have refined or developed them to suit modern conditions (Mescon *et al.,* 1981). For example, Weber's and Fayol's concerns for equity and for establishing appropriate links between performance and reward are central themes in contemporary theories of motivation and leadership (Donnelly *et al.,* 1995).

In general, administrative management theorists' contributions relied heavily on personal observation rather than scientific methodology (Robbins & Coulter, 1999). They tried to look at organizations from a broad perspective to determine what all had in common. The administrative management school's objective was to identify universal principles of management applicable to all organizations. The underlying idea was that following these principles would invariably lead to organizational success (Robbins & Coulter, 1999).

The contributions of the administrative management school are: development of principles of management, description of the functions of management, and systematic approach to management of overall organization (Mescon *et al.,* 1981). Some of our current management ideas and practices can be directly traced to the contributions of the general administrative theorists (Robbins and Coulter, 1999).

2.2.3 Human Relations School (1930 – 1950)

Human relations writers brought to managers' attention the important role played by individuals in determining the success or failure of an organization (Donnelly, et al., 1995). Basically accepting the major premises of the administrative school, the human relations school showed how these premises should be modified in view of differences in individual behaviour and the influence of work groups on the individual and vice verse. Thus, the formulators of human relations theories are concerned with the social

environment surrounding the job, while administrative school writers were concerned mainly with the physical environment (Donnelly et al., 1995). The human relations school has produced a wealth of important ideas, research findings, and values about the role of the individual in an organization (Mescon et al., 1981). Human dignity, individual self-esteem, and relationship are important considerations when effective managers make decisions. Exploitation, manipulation, and insensitivity toward people are not accepted in organizations with people-oriented management (Donnelly et al., 1995).

Two particularly influential contributors to the human relations movement were Mary Parker Follett and Elton Mayo (Mescon et al., 1981). It was Miss Follett who originally defined management as "getting work done through others". Elton Mayo's famous experiments, particularly those conducted at Western Electric's Hawthorne plant, opened a new dimension of management thought. Mayo found that an efficiently designed job and adequate pay would not always lead to improved productivity, as the scientific management school believed (Mescon et al., 1981). Forces arising from interaction between people could and often did override managerial efforts. People sometimes responded more strongly to pressure from others in the work group than to management's desires and incentives. Later researches conducted by Abraham Maslow and other behavioural scientists helped explain why. Human beings, Maslow learned, are motivated not by economic forces, as the scientific management writers believed, but by various needs that money only partially and indirectly fulfils (Robbins & Coulter, 1999).

Based on these findings, writers of the human relations school believed that if management showed more concern for their employees, employee satisfaction should increase, which would lead to an increase in productivity (Donnelly, et al., 1995). They recommended the use of human relation techniques such as more effective supervision, employee counselling, and giving workers more opportunities to communicate on the job.

The work of Mary Parker Follett, the Hawthorne experiments and the criticism of the Classical School by Herbert Simon led to a deeper consideration of the needs of the employees and the role of management as a provider for these needs. The two major

organizational theorists in the human relations movement are Abraham H. Maslow (1908-1970) and Douglas McGregor (1906-1964).

Maslow was the first psychologist to develop a theory of motivation based upon a consideration of human needs (Mescon et al., 1981). Maslow's theory of human needs has three assumptions (Donnelly, et al., 1995): (1) human needs are never completely satisfied, (2) human behaviour is purposeful and is motivated by need satisfaction, and (3) needs can be classified according to a hierarchical structure of importance from the lowest to highest.

Maslow believes the needs hierarchy can be classified into five specific groups (Donnelly, et al., 1995). To reach successive levels of the hierarchy required the satisfaction of the lower level needs. They are: (1) Physiological needs; (2) Safety needs; (3) The belongingness and love needs; (4) The esteem needs; and (5) The need for self-actualization. Maslow's hierarchy of needs theory helps the manager to visualize employee motivation. It helps in understanding the motivations and needs employees have and the requirement to satisfy basic needs in order to achieve higher level motivation (Donnelly, et al., 1995).

McGregor is the other major theorist associated with the Human Relations School of management. McGregor believes there are two basic kinds of managers. One type of manager, Theory X, has a negative view of employees assuming they are lazy, untrustworthy and incapable of assuming responsibility, while the other type of Manager, Theory Y, assumes employees are trustworthy and capable of assuming responsibility and have high levels of motivation (Donnelly, et al., 1995).

The contributions of the human relations school are related to the application of human relations techniques to increase satisfaction and productivity (Mescon et al., 1981).

2.2.4 Behavioural Science School (1950 - present)

The behavioural science approach to the study of management can be defined as the study of observable and verifiable human behaviour in organizations, using scientific procedures. It is largely inductive and problem centered, focusing on the issue of human behaviour, and drawing from any relevant literature, especially psychology, sociology, and anthropology (Donnelly, et al., 1995). Its theorists include Mary Parker Follett (1868-1933) and Herbert Simon, as well as numerous psychologists who turned from studying individual behaviour to organizational behaviour (Mescon et al., 1981).

The behavioural science school departed significantly from the human relations movement's emphasis on human relations techniques (Robbins & Coulter, 1999). The behavioural science school was more concerned with helping employees to realize their full potential, by applying the behavioural science concept to the design and management of organizations (Mescon et al., 1981). In basic terms, the aim of the behavioural science school was to increase organizational effectiveness by increasing the effectiveness of its human resources. This could be accomplished by using scientific analysis to describe, explain and predict human behaviour in the workplace (Mescon et al., 1981).

Both scientific management advocates and the general administrative theorists viewed organizational employees as machines (Robbins & Coulter, 1999). Managers were the engineers. They ensured that the inputs were available and that the machine was properly maintained. Any failure by employees to generate the desired output was viewed as an engineering problem (Robbins & Coulter, 1999). Contributors to the organizational behaviour approach forced managers in many organizations to reassess this simplistic machine-model view (Mescon et al., 1981).

However, like earlier approaches, it advocated a "one best way" approach (Donnelly, et al., 1995). Its contention was that the correct application of behavioural science would always improve individual and organizational effectiveness (Robbins & Coulter, 1999).

However, techniques such as job redesign and participation are only appropriate for certain individuals and situations. Thus, despite its many important contributions, the behavioural approach was sometimes found wanting in situations different from those studied by its researchers (Mescon et al., 1981).

2.2.5 Quantitative or Management Science School (1950 - present)

After World War II, many quantitative techniques that had been used for military problems were applied to the business sector (Robbins & Coulter, 1999). The quantitative approach to management includes applications of statistics, optimization models, information models, and computer simulations (Robbins & Coulter, 1999). Linear programming, for instance, is a technique that managers can use to improve resource allocation decisions, while critical-path scheduling analysis can be used for more efficient work scheduling (Mescon et al., 1981).

In general, management science theory is a school of management thought that focuses on the use of rigorous quantitative techniques to help managers make maximum use of organizational resources to produce goods and services (Mescon et al., 1981). Perhaps the biggest boost of all to the application of quantitative techniques to management was the development of the computer (Robbins & Coulter, 1999). The computer enabled operations researchers to construct mathematical models of increasingly greater complexity that more closely approximated reality and were therefore more accurate.

The two main contributions of the management science school are:

1. Improved understanding of complex management problems through development and application of models, and
2. Development of quantitative techniques to help managers make decisions in complex situations (Mescon et al., 1981).

However, the quantitative approach has not influenced management practice for a number of reasons including that many managers are unfamiliar with the quantitative

tools; behavioural problems are more widespread and visible; and it is easier for most students and managers to relate to real day-to-day people problems than to the more abstract activity of constructing quantitative models (Robbins & Coulter, 1999). Yet the quantitative approach and the wide spread availability of sophisticated computer software programs to aid in developing models, equations, and formulas have added another dimension to the evolution of management practice and thinking (Robbins & Coulter, 1999).

2.2.6 The Japanese Management School (1970 – present)

A great deal has been written in recent years about the Japanese style of management. One of the principal writers is William Ouchi, through his books Theory Z and The M-Form Society. Japanese management has achieved respect because of its ability to increase productivity (Ouchi, 1981). America's productivity increase has seriously underperformed Japan's (Ouchi, 1981). This raises the question of why Japanese management has been so successful (Ouchi, 1981).

Fundamental elements of the Japanese management system, namely the focus on human resources, such as recruitment and selection, the Ringi system of decision making, the lifelong employment system, the harmonious relationship between unions and management, are all-too-well known (Khan, 1991). The Ringi system, i.e. the Japanese decision-making process, differs significantly from that practiced in the West. It is built on a bottom-up approach, and the basic steps in the process are: (1) origination of proposal; (2) research and horizontal coordination; (3) approval and vertical coordination; and (4) action (Khan, 1991).

According to Ouchi (1981) this level of trust permits Japanese employees to have a great deal of decision-making authority and also stresses the concept of intimacy in its managerial relationships where personal relationships are highly valued, respected and rewarded.

In organizational terms, the large Japanese company has a balance between teamwork and individual effort. Ouchi calls this the M Form organization (Ouchi, 1981). It is a combination of a large decentralized organization where each unit competes with every other unit, in order to obtain budgetary resources based upon earnings, while at the same time having to draw upon the same centralized corporate services (Ouchi, 1981). It is essentially a "loose-tight organization" where individual initiative is rewarded, while still being controlled through centralized corporate management systems (Kono & Clegg, 2001).

However, there are basic drawbacks of the Japanese management system. A closer examination reveals that while Japan has achieved unparalleled economic success, it pays a toll in human and social terms (Khan, 1991). According to Khan (1991) the level of frustration of Japanese workers expresses itself in many forms today (i.e. emotional breakdowns, alcoholism, and increased divorce rate). Moreover, the overwhelming emphasis on conformity, group orientation and the concept of lifelong employment demanding unquestioning obedience and loyalty, borders on servitude (Khan, 1991).

Concluding Remark

The schools based theories of management efforts to systematize management tended to approach it from a single perspective.

Scientific management concentrated on redesigning work to improve efficiency at the non-managerial task level. The administrative management school tried to identify broad, universal principles or laws for administering an organization. The human relations and behavioural science schools felt that the key to effectiveness is the understanding of human needs and social interaction. The quantitative (management) science school, whose influence is growing, uses quantitative tools such as models and operations research to make decisions more objective and to maximize efficiency of work flows. Finally, the Japanese management school (Theory z) focuses on human resources (such

as recruitment and selection, the Ringi system of decision making, and the lifelong employment system) for increased productivity.

Each of the schools made an important, lasting contribution to management; but, because they tended to advocate a "one best way" approach, and thus examined only part of the organization, or ignored the external environment, none proved itself wholly successful in all situations.

2.3 THE PROCESSES APPROACH

Management scholars have sought to reduce the theory and practice of management to an orderly body of knowledge for some time (Wren, 1979). The "principles and process" approach represents one view of how a general theory of management might be developed. The management "process," that is, what managers do in performing their job, provides a framework for theory; "principles" allegedly describe how managers should manage and represent building blocks for the body of knowledge (Wren, 1979).

The process approach to management thought consisted of the work of its intellectual progenitor, Henri Fayol. Ralph C. Davis and Luther Gulick were influenced by Fayol's elements and must be classified as "first generation", since their writings influenced more modern versions of the management process (Wren, 1979). It was in the writings of these men that the functions of the manager were established as a recurring, interdependent cycle of activity which led to the accomplishment of organizational goals (Wren, 1979).

The process approach was first suggested by writers of the administrative management school and it is a major conceptual breakthrough widely accepted today (Mescon et al., 1981). It was they who first attempted to describe the functions of the manager. However, administrative writers tended to consider these functions to be independent from one another. The process approach, in contrast, considers management functions to be interdependent (Mescon et al., 1981).

Management is considered a process, because the work of attaining objectives through others is not a one-time act, but an ongoing series of interrelated activities (Mescon et al., 1981). These activities, all of which are essential to organizational success, are referred to as the management functions. The managerial functions are also referred to as processes, because they consist of a series of activities. The management process is the sum total of these functions.

Henri Fayol, who is credited with originating the concept, believed that there are five primary functions. In his words: "to manage is to forecast and plan, to organize, to command, to coordinate, and to control." Eleven other writers have come up with different lists. A search of current literature would include the following: planning, organizing, supervising (command), motivating, leading, coordinating, controlling, communicating, investigating, evaluating, decision making, staffing, representing, and bargaining or negotiating. In fact, almost every management text employs a slightly different framework of functions.

This study takes the approach of combining essential managerial activities into a relatively small number of categories, all of which are currently widely accepted as applicable to all organizations (Mescon et al., 1981). We consider the management process per se to consist of the functions of planning, organizing, staffing and human resources management, leading and influencing, and controlling. All of these concepts are elaborated on in separate result chapters (6-11). The following brief explanation of each should give a general overview of the ground the study covers.

The search for the general management theory through the management process is presented in Table 2.4. In retrospect, the process approach was an attempt to identify management as a distinct intellectual activity which was universal in nature (Wren, 1979). The search was for a generally agreed upon body of knowledge which could be distilled into principles and hence would lead to a general philosophy or theory of management (Wren, 1979).

The process approach evolved from classic simplicity with Fayol and Davis, became more diverse in the function presented by Gulick, Newman, and Terry, and then began to settle down with more widespread agreement among AFM 25-1, Koontz and O'Donnell, and McFarland (Table 2.1).

Table 2.1 Relevance of managerial functions according to various authors

Managerial functions	Name of scholars								
	Fayol (1961)	Davis (1934)	Gulick (1937)	Newman (1951)	Terry (1953)	AFM* 25-1 (1954)	Koontz and O'Donnell (1955)	Terry (1956)	McFarland (1958)
Planning	√	√	√	√	√	√	√	√	√
Organizing	√	√	√	√	√	√	√	√	√
Coordination	√		√	√	√	√			
Controlling	√		√	√	√	√	√	√	√
Command	√								
Directing			√	√	√	√	√		√
Leading Human efforts					√				
Actuating								√	
Staffing	√		√				√		
Assembling Resources				√					
Reporting			√						
Budgeting			√						

* AFM (Air Force Manual)

Of the managerial functions presented (Table 2.1), planning, organizing, and controlling achieved the greatest agreement concerning their applicability.

For the purpose of management in extension, Buford et al., (1995) combined essential managerial functions into five categories, all of which are currently widely accepted as applicable to all organizations. Accordingly, in this study the management process per se consists of the functions of planning, organizing, staffing and human resource management, leading and influencing, and controlling. The following brief explanation of each should give a general overview of the ground the study covers.

2.3.1 Planning

According to Mescon et al. (1981), the planning function is the process of deciding what the organization's objectives should be, and what members should do to attain them.

Most basically, the planning function addresses three fundamental questions:

1. Where are we now? This involves assessing the organization's strengths and weaknesses in important areas such as finance, marketing, production, research and development, and human resources. The underlying idea is to determine what the organization can realistically accomplish.
2. Where do we want to go? This involves assessing the opportunities and threats in the organization's environment, such as competitors, customers, laws, political factors, economic conditions, technology, suppliers and social and cultural changes. By doing so, management decodes what the organization's objectives should be and what could hinder the organization in attaining objectives.
3. How are we going to get there? This involves deciding both generally and specifically what the organization's members must do to attain objectives (Mescon et al., 1981).

Through planning, management attempts to establish guidelines for channelling effort and decision making that will create unity of purpose within the organization's membership. In other words, planning is one of the ways in which management gets its entire people pulling in the same direction—toward the organization's objectives (Mescon et al., 1981).

2.3.2 Organizing

Organizing is the creation of structure. There are many elements that must be structured for the organization to carry out plans and thereby attain its objectives. Organizing work was also the primary concern of the scientific management movement. Since it is ultimately people who perform the work of the organization, another essential aspect of

the organizing function is deciding who is to accomplish each of the many tasks of the organization, including the work of managing. The manager matches people with work by delegating tasks and the authority, or right, to use the organization's resources to individuals (Mescon et al., 1981).

2.3.3 Human Resource management

The recruitment, selection, training, and administration of the human resources have a long history, and are commonly called staffing or personnel management (Wren, 1979). According to Robbins & Coulter (1999), the human resource management function seeks to staff the organization and sustain high employee performance through human resource planning, recruitment or decruitment, selection, orientation, training, career development, compensation and benefits, and performance appraisal.

Recruitment seeks to develop a pool of potential job candidates, while decruitment reduces the labour supply within an organization through options such as firing, layoffs, attrition, transfers, reduced workweeks, and early retirements (Robbins & Coulter, 1999). Selection devices must match the job in question. To Robbins & Coulter (1999) human resource management practices can facilitate workforce diversity by widening the recruitment net, eliminating any discriminatory selection practices, communicating to applicants the company's willingness to accommodate their needs, and providing employee training and education programmes that focus on diversity.

2.3.4 Leading and influencing

The leading function involves the manager in close day-to day contact with individuals and groups (Robbins & Coulter, 1999). According to Gibson, et al. (1997), the leading function is uniquely personal and interpersonal, and it requires unique needs, ambitions, personalities, and attitudes. In these interactions the full panorama of human behaviour is evident. Individuals work, play, communicate, compete, accept and reject others, join groups, leave groups, receive rewards, and cope with stress. Of all the management

functions, leading is the most human-oriented (Robbins & Coulter, 1999). Each person perceives the workplace and his job uniquely. Managers must take into account these unique perceptions and behaviours, and somehow direct them toward common purposes Gibson, et al., 1997).

The manager must always keep in mind that the best-formulated plans and finest organizational structures have no value whatsoever unless somebody actually performs the work of the organization (Mescon, et al., 1981). The role of the motivating function is to get members of the organization to perform their delegated duties according to plan.

Leadership is an essential function in any type of organization. Leaders are individuals who positively influence the behaviour of followers. Exercising influence in solving problems in international markets is a key to successfully operating globally (Donnelly, et al., 1995).

In most organizational settings, leadership occurs in two forms: formal and informal. Formal leaders are in appointed or elected positions of formal authority. By definition, a leader can help motivate others to complete tasks (Donnelly, et al., 1995).

2.3.4 Controlling

Controlling is the process of ensuring that the organization is actually attaining its objectives (Wren, 1979). There are three aspects to managerial control. One is determining precisely what should be accomplished within a set period of time. This is called setting standards and is based on plans created during the planning process. Another aspect is measuring what has actually been accomplished and comparing this to what was anticipated. If these two phases are done correctly, management should not only know that a problem exists, but also its source. Knowing the source is required for successfully performing the third phase: taking action, if necessary, to correct serious deviations from plans. One possible action may be to revise objectives to make them

more realistic or more appropriate for changes that have occurred in the environment (Wren, 1979).

The linking processes

The five management functions of planning, organizing, motivating, leading and controlling have two things in common: all require decisions to be made; all require communication both to obtain information for making a good decision and to get that decision understood by others in the organization (Wren, 1979). Because of this bond and because they connect and interrelate the five functions, communication and decision making are often referred to as the linking processes.

Decision making:- managerial work is largely mental. It is something like trying to put together the pieces of an enormously complicated jigsaw puzzle after somebody added the pieces of ten other puzzles to the box (Wren, 1979). To complete its picture, management continuously has to sift through numerous potential actions to find the one just right for its organization at that given time and place. In essence, for the organization to operate smoothly, the manager must make a continuous series of good choices from among several alternatives. A choice between alternative is a decision. Hence, decision making (choosing how and what to plan, organize, motivate, and control) is the manager's primary activity in a general sense.

An essential requirement for making an effective, objective decision or even understanding the true dimensions of a problem is adequate, accurate information. The only means of obtaining information is through communication.

Communication is defined as the process of exchanging information and meaning between two or more people. It is essential to all social relationships. The strength and quality of relations between people (whether with friends, family, or business associates) is largely a function of how clear and honest their interpersonal relationships are. Since

an organization is a deliberately structured pattern of relationships among people, it depends heavily on good communication to function effectively.

In summary, while scholars were settling down by 1958 to some degree of unanimity about the job of the manager, new developments in education, in other disciplines, and in the environment of management were beginning to impinge upon the process approach and would lead to some changing notions about the manager's job (Wren, 1979).

Consequently, the process approach gives way to the systems approach, which is the subject of the next section.

2.4 THE SYSTEMS APPROACH

The systems approach analyzes the basic components of operations, with a view toward their improvement. The application of the systems theory to management has made it easier for managers to conceptualize the organization as an entity of interrelated parts that is inexorably intertwined with the outside world (Mescon, et al., 1981). Is also has helped to integrate the contributions of the schools that dominated early management thought.

To visualize these interactions and multiple consequences, managers, especially those on upper levels, need an overall perspective on the organization and its relationship to the environment. The managers need to know not just their own jobs but also how their jobs and all others fit into what the organization is trying to achieve (Robbins & Coulter, 1999). Managers need to be aware of the immediate ramifications. They should take into account the environment's impact on the organization and the organization's effect on the environment. In today's complex organizational world, however large or small one's own organization, it is extremely difficult to see the "forest" since there are many "trees" to distract attention from or block off one's view of the broad picture. The inherent flaw of the various schools approaches to management is that they focused on only one important element, rather than seeing management effectiveness as contingent on many diverse factors.

The system theory was first applied in the sciences and in engineering. The application of the systems theory to management in the late 1950s was one of the important contributions of the management science school. The systems approach is not a set of guidelines of principles for managing, but a way of thinking about organizations and management.

A system is an entity composed of interdependent parts, each of which contributes to the unique characteristics of the whole (Robbins & Coulter, 1999). All organizations are systems. The parts of an organization, in a general sense, are people (the social component) and the technology it uses to get work done (Mescon, et al., 1981).

There a two major types of system: closed and open. A closed system has firm, fixed boundaries; its operation is relatively independent of the environment outside the system (Robbins & Coulter, 1999). An open system is characterized by interaction with the external environment. Energy, information and material are exchanged with the environment through the system's permeable boundaries. The system is not self-sufficient but dependent on energy, information and materials from outside. In addition, the open system has the capacity to adapt to changes in the external environment, and must do so to continue operating (Robbins & Coulter, 1999).

Managers are concerned primarily with open systems, because all organizations are open systems. All organizations are dependent on the world outside themselves for survival. Even a monastery needs to bring in people and supplies and to maintain contact with its parent church in order to operate over the long term.

Another reason why the early schools' approaches to management failed to hold up in all situations is that they assumed, at least by implication, that organizations are closed systems. They did not actively consider the environment as an important variable in management.

The realization that organizations are complex, open systems composed of several interdependent subsystems helps explain why each of the various schools have only a limited capacity for application. Each school approach tends to focus primarily on a single subsystem of the organization. The behavioural schools concentrated on the social subsystem, while scientific management and management science concentrated primarily on technical subsystems. It is now widely accepted that forces external to the organization are sometimes primary determinants of what management techniques are appropriate and most likely to be successful.

Equifinality

The concept of equifinality is an important characteristic of open systems and is of practical significance to managers (Robbins & Coulter, 1999). Equifinality means that the same end result can be reached from different starting conditions and in different ways (Mescon, et al., 1981). Because of this there may be several acceptable solutions to some organizational problems (Robbins & Coulter, 1999).

Equifinality implies that there is no single "best way" to attain organizational objectives, as some early management theorists believed (Robbins & Coulter, 1999). What works for one organization in a particular time and place may not work for another. What failed in one situation may work in another (Mescon, et al., 1981). The most effective solution is dependent on the specific attributes of the organization and its relationship with the environment (Robbins & Coulter, 1999).

According to Robbins and Coulter (1999), the systems theory has provided the management discipline with a framework for integrating the concepts of the earlier schools' approaches. Many of these earlier ideas, though not wholly correct, continue to have considerable value. The systems framework probably will help synthesize new knowledge and theories that will be developed in the future (Robbins & Coulter, 1999).

However, the systems theory per se does not tell managers exactly what the significant elements of the organization as a system are (Robbins & Coulter, 1999). It tells only that the organization consists of many interdependent subsystems and is an open system that interacts with its environment. Not established are the crucial matters of what specifically are the major variables affecting management functions (Mescon, et al., 1981). Nor does the systems theory specifically identify what in the environment affects management and how the environment influences the performance of organizations (Mescon, et al., 1981). Clearly, managers need to know what the variables of the organization as a system are, to apply the systems theory to the process of managing (Mescon, et al., 1981). This identification of variables and their impact on organizational effectiveness is the major contribution of the contingency approach, which can be thought of as a logical extension of the systems theory.

2.5 THE CONTINGENCY APPROACH

The contingency theory of management suggests that there is no one way of managing that works best in all situations and there are many effective ways to perform the various managerial functions (Buford, et al., 1995:25).

The contingency approach, developed in the late 1960s, does not imply that the concepts of the traditional management theory, the behavioural school, and the management science school are wrong. Like the systems approach to which the contingency approach is so closely allied, it attempts to integrate the various segmented approaches. It also stresses the interrelationships among the management functions, rather than considering them independently. The focal point of the contingency approach is the situation, the specific set of circumstances that influences the organization most at a particular time. Because of this focus, the contingency approach stresses the importance of "situational thinking."

Like the systems approach, the contingency view is not a set of prescriptive guidelines but a way of thinking about organizational problems and their solutions. It does not set

aside the concept of a management process applicable to all organizations. But the contingency approach recognizes that although the general process is the same, the specific techniques managers must use to attain organizational objectives effectively may vary widely.

The contingency approach tries to match specific techniques or concepts of managing to the specific situation at hand, in order to attain organizational objectives most effectively. It focuses on situational differences both between and within organizations. It tries to determine what the significant variables of the situation are and how they influence organizational effectiveness.

As far as the situational variables are concerned, for practical purposes one can only consider those factors of greatest significance, the ones most likely to strongly affect an organization's success. By eliminating the thousands of less significant differences among organizations and situations, the number of variables is reduced to comprehensible dimensions without appreciably diminishing accuracy.

Today most of the researches in management are based on the contingency approach. This study has been based on the contingency theory of management approach, because this approach can make provision for the methods of the study and the various aspects of the management processes. It states that there are no universally applicable processes of management, but that the choice of appropriate management techniques will depend upon the circumstances surrounding a specific organization (Otley, 1999:367).

2.6 MODELS FOR MEASURING ORGANIZATIONAL OR MANAGERIAL EFFECTIVENESS

According to Daft (1995), organization is defined as a social entity that is goal directed and deliberately structured. Social entity means being made up of two or more people. Goal directed means designed to achieve some out-come, such as making a profit (Boeing, Mack Trucks), meeting spiritual needs (Methodist church), or providing social

satisfaction (college, universities). Deliberately structured means that tasks are divided and responsibility for their performance assigned to organization members (Daft, 1995). Therefore, the organizational performance is defined as the organization's ability to attain its goals by using resources in an efficient and effective manner (Daft, 1995).

Efficiency is a vital part of management and refers to the relationship between inputs and outputs. Efficiency is referred to as the use of minimal resources – raw materials, money, and people – to produce a desired volume of output; while organizational effectiveness is the degree to which the organization achieves a stated objective (Daft, 1995). Efficiency and effectiveness are related. It is easier to be effective if one ignores efficiency. Organization can be reasonably effective but extremely inefficient; that is they get their jobs done but at a high cost (Robbins & Coulter, 1999). Management is concerned, then, not only with getting activities completed and meeting organizational goals (effectiveness), but also with doing so as efficiently as possible. Organization can also be efficient and yet not effective – by doing the wrong things well (Robbins & Coulter, 1999).

Organizations' overall performance depends on the type of organization; whether the organization is for profit or not for profit. Profitability reflects the overall performance of for-profit organizations (Daft, 2001). Profitability may be expressed in terms of net income, earnings per share, or return on investment.

Not-for-profit organizations do not have goals of profitability, but they do have goals that attempt to specify the delivery of services to members within specified budget expense levels (Daft, 2001). Growth and volume goals also may be indicators of overall performance in not-for-profit organizations (Daft, 2001). The next sections explore various models of organizational performance measurement.

2.6.1 Traditional effectiveness approaches

The measurement of effectiveness has focused on different parts of organization. Organizations bring resources in from the environment, and those resources are transformed into outputs delivered back into the environment, as shown in figure 2.1. Organizations must perform diverse activities well - from obtaining resource inputs to delivering outputs – to be successful. Traditional approaches used output goals, resource acquisition, or internal health and efficiency as the criteria of effectiveness (Daft, 1992).

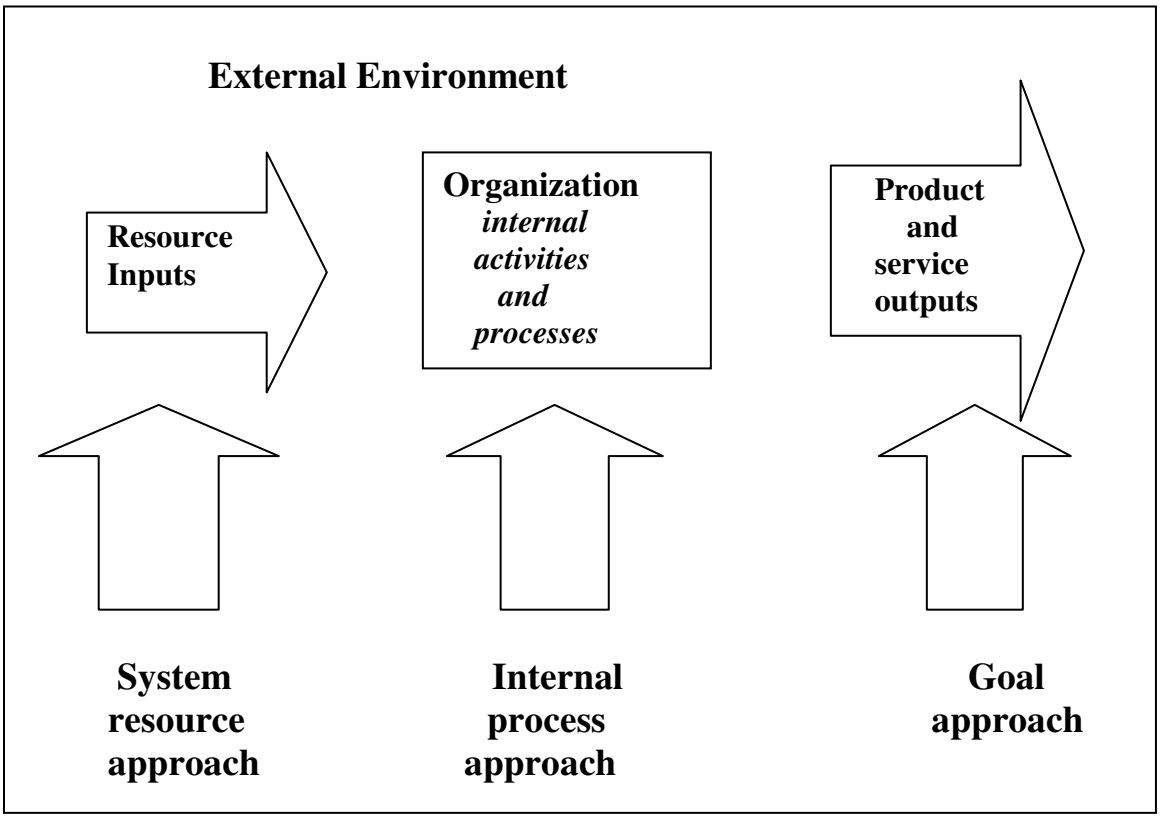


Figure 2.1 Traditional approaches to the measurement of organizational effectiveness (Daft, 1992)

2.6.1.1 Goal Approach

The goal approach to organizational effectiveness is concerned with the output side and whether the organization achieves its goals in terms of desired levels of output (Strasser, et al., 1981) as quoted by Daft, 1992. This approach consists of identifying an

organization's output goals and assessing how well the organization has attained those goals (Price, 1972). It measures progress toward attainment of those goals.

Indicators: The important goals to be considered here (Stoelwinder & Charns, 1981; Perrow, 1961) are operative goals and official goals. Official goals are the mission that describes the organization's values, aspirations, and reason for being; whereas, operative goals designate the ends sought through the actual operating procedures of the organization and explain what the organization is actually trying to do (Daft, 2001).

Application: The goal approach is used in business organizations, because output goals can be readily measured. However, identifying operative goals and measuring performance of an organization are not always easy. Two problems that must be resolved are the issues of multiple goals and subjective indicators of goal attainment. In most cases, organizations may have multiple goals, and a single indicator often cannot assess conflicting goals. Moreover, for not-for-profit and some business organizations, many goals cannot be measured objectively (Pennings & Goodman, 1979).

2.6.1.2 System Resource Approach

The systems approach looks at the input side of the transformation process shown in Figure 2.1. It assumes that organizations must be successful in obtaining resource inputs and in maintaining the organizational system in order to be effective (Daft, 2001). From a systems view, organizational effectiveness is defined as the ability of the organization, in either absolute or relative terms, to exploit its environment in the acquisition of scarce and valued resources (Daft, 1992).

Indicators: Obtaining resources to maintain the organization system is the criterion, which assesses the organizational effectiveness (Daft, 2001).

Usefulness: The system resource approach is valuable when other indicators of performance are difficult to obtain (Daft, 2001). In many not-for-profit and social welfare organizations, for example, it is hard to measure output goals or internal efficiency.

Although the system resource approach is valuable when other measures of effectiveness are not available, it does have shortcomings. Often the ability to acquire resources seems less important than the utilization of those resources (Daft, 2001).

2.6.1.3 Internal Process Approach

In the internal process approach, effectiveness is measured as internal organizational health and efficiency. According to Daft (2001), an effective organization has a smooth, well-oiled internal process, and employees are happy and satisfied. Departmental activities mesh with one another to ensure high productivity. This approach does not consider the external environment. The important element in effectiveness is what the organization does with the resources it has, as reflected in internal health and efficiency (Deft, 1992).

Indicators: The best-known proponents of a process model are from the human relations approach to organizations. Writers such as Chris Argyris, Warren G. Bennis, Rensis Likert, and Richard Beckhard have all worked extensively with human resources in organizations and emphasize the connection between human resources and effectiveness (Deft, 1992).

Indicators of an effective organization, as seen from this viewpoint, are as follows (Beckhard, 1969): strong corporate culture and positive work climate; team spirit, group loyalty, and teamwork; confidence, trust, and communication between workers and management; decision making near sources of information, regardless of where those sources are on the organizational chart; undistorted horizontal and vertical communication; sharing of relevant facts and feelings; rewards to managers for performance, growth, and development of subordinates, and for creating an effective

working group; and interaction between the organization and its parts, with conflict that occurs over projects resolved in the interest of the organization (Cunningham, 1977).

A second indicator of internal process effectiveness is the measurement of economic efficiency. Evan (1976) developed a method that uses quantitative measures of efficiency. The first step is to identify the financial cost of inputs (I), transformation (T), and outputs (O). Next, the three variables can be combined in ratios (O/I) to evaluate various aspects of organizational performance (Daft, 2001).

Usefulness: The internal process approach is important, because the efficient use of resources and harmonious internal functioning are ways to measure effectiveness. A significant recent trend in management is the concern for human resources as a source of competitive advantage. Most managers believe participative management approaches and positive corporate culture are important components of effectiveness (Watson, 2002).

The shortcomings of the internal process, however, are that total output and the organization's relationship with the external environment are not evaluated (Daft, 2001). Also, evaluations of internal health and functioning are often subjective, because many aspects of inputs and internal processes are not quantifiable. Like the other approaches to organizational effectiveness, the internal process approach has something to offer, but managers should be aware that efficiency alone represents a limited view of organizational effectiveness (Daft, 1992).

2.6.2 Contemporary Effectiveness Approaches

The three approaches – goal, system resource, and internal process – to organizational effectiveness described earlier all have something to offer, but each one tells only part of the story. Recently, integrative approaches to organizational effectiveness have been introduced. These new approaches acknowledge that organizations do many things and have many outcomes. These approaches combine several indicators of effectiveness into

a single framework (Daft, 1992). They include the stakeholder and competing values approaches.

2.6.2.1 Stakeholder Approach

The stakeholder approach integrates diverse organizational activities by focusing on organizational stakeholders (Daft, 2001). A stakeholder is any group within or outside an organization that has a stake in the organization's performance. Creditors, suppliers, employees and owners are all stakeholders. In the stakeholder approach (also called the constituency approach); the satisfaction of such groups can be assessed as an indicator of the organization's performance. Each stakeholder will have a different criterion of effectiveness, because he has a different interest in the organization. Each stakeholder group has to be surveyed to learn whether the organization performs well from its viewpoint (Daft, 2001).

Indicators: Each stakeholder and his criterion of effectiveness are as follows (Table 2.2):

Table 2.2 Type of stakeholders and their effectiveness criteria (Daft, 2001)

No	Stakeholder	Effectiveness Criteria
1	Owners	Financial return
2	Employees	Worker satisfaction, pay, supervision
3	Customers	Quality of goods and services
4	Creditors	Creditworthiness
5	Community	Contribution to community affairs
6	Suppliers	Satisfactory transactions
7	Government	Obedience to laws, regulations

Evaluating how organizations perform across each group offers an overall assessment of effectiveness (Daft, 2001).

Usefulness: The strength of the stakeholder approach is that it takes a broad view of effectiveness and examines factors in the environment as well as within the organization. The stakeholder approach also includes the community's notion of social responsibility, which was not formally measured in traditional approaches (Daft, 2001). The stakeholder approach also handles several criteria simultaneously – inputs, internal processing, outputs – and acknowledges that there is no single measure of effectiveness. The well being of employees is just as important as attaining the owner's goals (Daft, 1992).

2.6.2.2 Competing Values Approach

The competing values approach to organizational effectiveness was developed by Robert Quinn and John Rohr Baugh to combine the diverse indicators of performance used by managers and researchers (Daft, 2001).

Indicators: The first value dimension pertains to organizational focus, which is whether dominant values concern issues that are internal or external to the firm. Internal focus reflects a management concern for the well-being and efficiency of employees, and external focus represents an emphasis on the well-being of the organization itself with respect to the environment (Daft, 2001). The second value dimension pertains to organization structure, and whether stability versus flexibility is the dominant structural consideration. Stability reflects a management value for top-down control, similar to the mechanistic approach. Flexibility represents a value for adaptation and change and similar to the organic approach to structure (Daft, 2001).

The value dimensions of structure and focus are illustrated in figure 2.2.

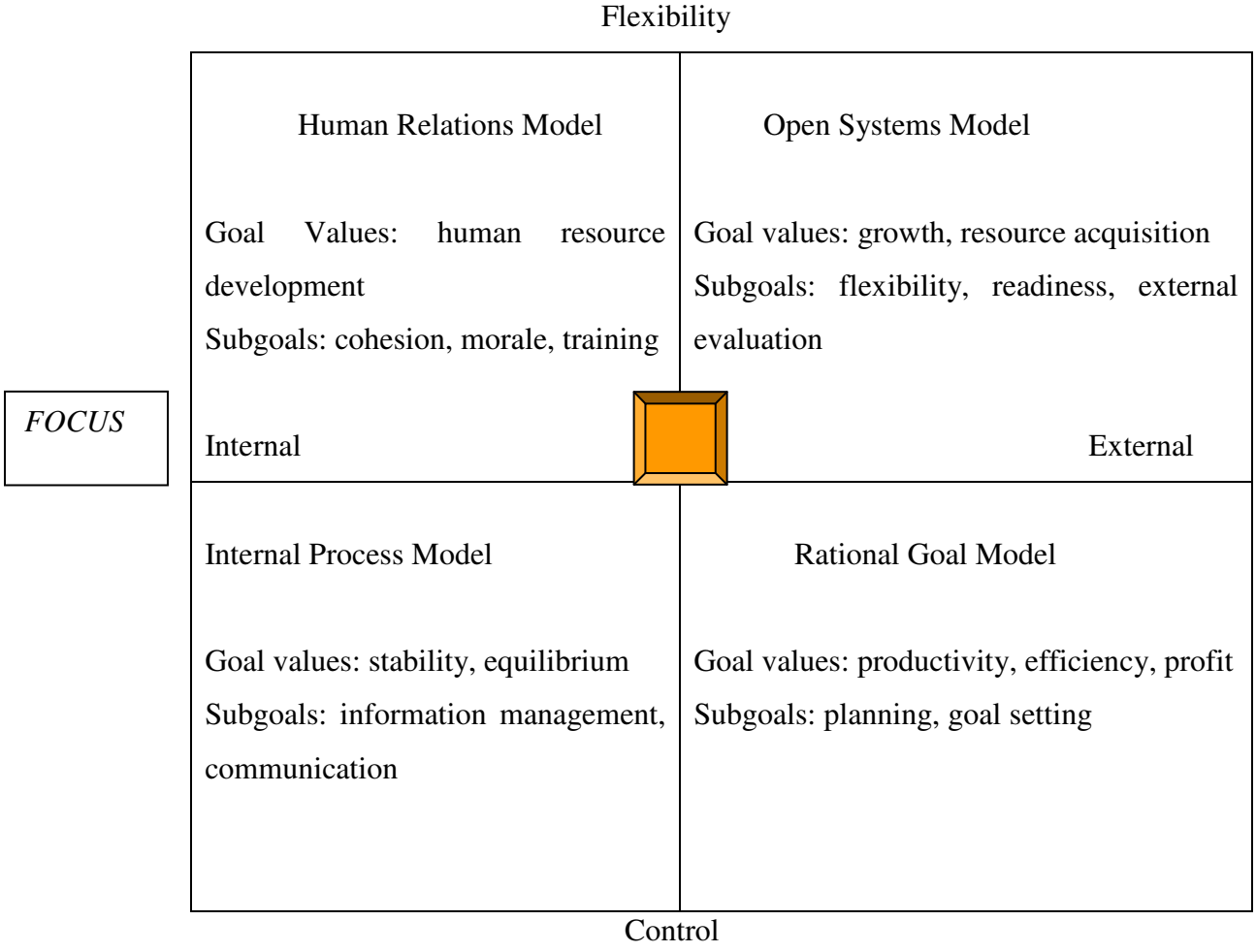


Figure 2.2 Four models of effectiveness values (Daft, 1992)

The four models in Figure 2.2 represent opposing organizational values. Managers must decide which goal values will take priority in their organizations.

Usefulness: The computing values approach makes two contributions. Firstly, it integrates diverse concepts of effectiveness into a single perspective (Daft, 2001). It incorporates the ideas of output goals, resource acquisition and human resource development as goals which the organization tries to accomplish. Secondly, the model calls attention to effectiveness criteria as management values and shows how opposing values exist at the same time. Managers must decide which values they wish to pursue and which values will receive less emphasis. The four competing values exist

simultaneously, but not all will receive equal priority. The dominant values often change over time as organizations experience new environmental demand or new top leadership (Daft, 1992).

Deficiencies in any measures of effectiveness signal dysfunctions in an organization and suggest that the application of the diagnostic approach should help diagnose the dysfunctions and contribute to increasing organizational effectiveness (Daft, 2001). Increasing the quality of these behaviours and attitudes has positive consequences for many aspects of organizational effectiveness, including performance, adaptability, growth and satisfaction, among others (Gordon, 1980).

2.6.3 Düvel's Model for Monitoring and Evaluation of Extension Activities

According to Düvel (1998), the problems encountered in agricultural development are usually efficiency related; the ultimate usually being, as indicated in Figure 2.3, economic efficiency (or inefficiency), which is usually the function of some form of physical inefficiency. Both are the results of behaviour, which, in a holistic context, can be described as management and entails the various practices that have to be adopted correctly and timely (Düvel, 1998). The model shows how these determinants can be measured, and gives an example of an evaluation and monitoring document (Düvel, 1998).

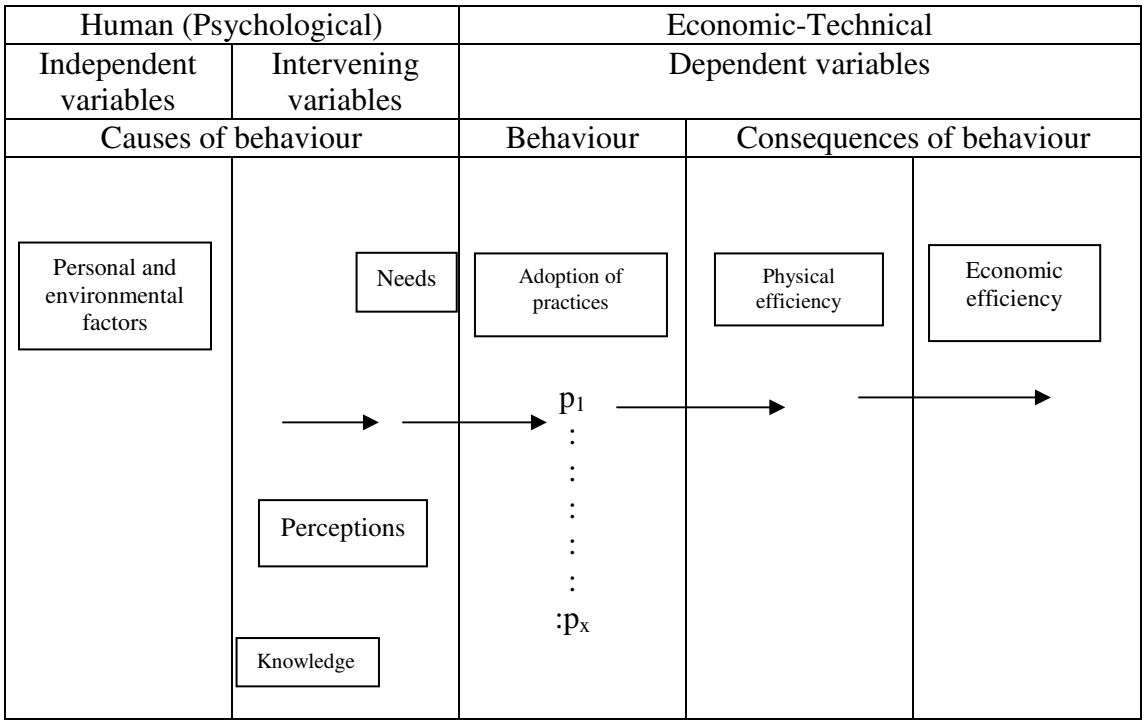


Figure 2.3 Relationship between behaviour determining and behaviour dependent variables in agricultural development (Düvel, 1998)

From the above influence relationship it can be concluded that a form of monitoring is possible by focusing on the preceding or causal variables as evaluation criteria (Düvel, 1998). According to Düvel (1998), the results of behaviour (e.g. profitability, or production efficiency) can be monitored through the adoption behaviour, which in turn can be monitored through evaluating the changes in the cognitive field (needs, perceptions and knowledge). These latter variables, as far as the extensionist's interest in evaluation is concerned, are the most important and critical criteria (Düvel, 1998). The more specific advantages of using them as criteria of change are the following:

1. They are, as direct determinants of behaviour, the logical focus of intervention, and consequently also the logical criteria of evaluation.
2. They will, if monitored, reveal why (or why not) change has occurred. Similarly, it is through these variables that progress (or the lack of it) can be monitored and

that the extensionist can get an indication concerning the adaptations that need to be made in terms of message, method or approach.

3. They will allow for a fair and just merit assessment or recognition of performance. It is not uncommon for an extensionist to either get undue credit for change that can only be partially accredited to him, or – perhaps even more frequently – not to get credit for what he has accomplished, simply because the change is of a covert nature (Düvel, 1998).

As already mentioned, the appropriate variables for monitoring change are the intervening variables, and more specifically the cognitive variables associated with needs, perceptions and knowledge. These have been selected and tested in extensive research projects over a number of years (Düvel, 1975; Louw & Düvel, 1993; Düvel & Scholtz, 1986; and Düvel & Botha, 1999) and are incorporated in the following behaviour analysis model in a cause-effect relationship (Düvel, 1998).

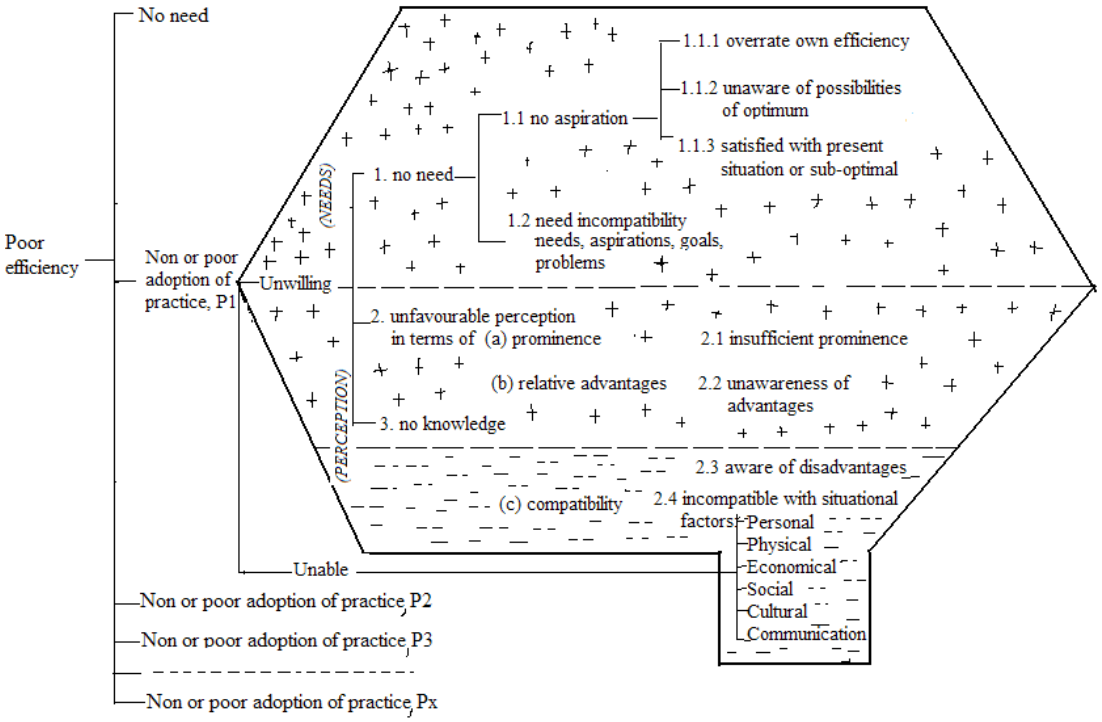


Figure 2.4 Model for behaviour analysis and intervention (Düvel, 1998)

According to Düvel's model (Fig. 2.4), poor efficiency is a function of non-or poor adoption of the recommended practices. The unwillingness is influenced by several factors like need related aspects, knowledge and perception as explained below.

2.6.3.1 Need (1 Fig. 2.4)

The concept of needs is used in a broad context and includes concepts like drives, motives, incentives, goals and even problems, mainly because the vocabulary of the psychology of motivation has as yet not been firmly established, resulting in these different concepts being used synonymously or being interchanged (Düvel, 1991). There appears to exist a "field polarity" consisting of a need (usually some form of deprivation resulting, in disequilibrium or system in tension) located within the individual, and a goal object situated in the environment. The goal-object will assume a positive character (positive incentive) if it is perceived by the individual as having a potential need-satisfying capacity, and a negative valence in the case of a threatening further deprivation (negative incentive).

The need-related causes that have been found to determine the non-adoption of recommended practices are lacking aspirations (see 1.1 in Figure 2.4) and need incompatibility (see 1.2 in Figure 2.4). The lacking aspiration relates more specifically to a tendency on the part of the farmer to overrate his own efficiency, e.g. his grazing condition or production efficiency (1.1.1 in Figure 2.4), to an unawareness of the possibilities or the optimum (1.1.2), and to a satisfaction with the present situation or having a sub-optimal aspiration (1.1.3).

In a sense, these aspects all have to do with the problem perception, where a problem is regarded as being the difference between " what is" (present situation) and "what can be" or is strived at, viz. the desired situation (Düvel, 1998). If the existing situation, e.g. the efficiency of production or rangeland condition, is overrated due to "misperception" (see 1.1.1 in Figure 2.4), the perceived scope of the problem or potential need tension is

reduced. If, at the same time, there is limited knowledge concerning the optimum that is achievable (1.1.2), the potential problem and need can be further reduced to an insignificant level.

Perhaps even more critical is the need compatibility (see 1.2 in Figure 2.4). This essentially means that an innovation or recommended practice does not fit the life space or need situation of the individual in the sense that it is not perceived as either a need related goal, or as a means of achieving such a goal (Düvel, 1998).

2.6.3.2 Perceptions (2 Fig. 2.4)

Although perceptions and needs (especially aspirations and goals) are related and interwoven, the necessity to identify all direct behaviour determinants as specifically as possible, justifies a separate focus on perception. Where needs usually relate to all positive or driving forces which in total constitute the attractiveness, perceptions are of a more specific nature and are analysed on the basis of attributes of innovations. Rogers' (1983) classification of innovation attributes does not suit this purpose, mainly because of the broad and unspecific categories. In order to make provision for a wider spectrum of specific forces (for the purpose of cause identification as well as for addressing these causes in the attempt to promote change), these attributes have been redefined (Düvel, 1987). The categories that can be directly associated with field forces are relative advantages, compatibility aspects and prominence and consequently give direct access to the possible identification of relevant positive and negative forces.

An unfavourable perception as cause of unwillingness to adopt can thus have the following causes (Düvel, 1998):

Insufficient prominence (2.1 Fig.2.4), i.e. the recommended practice is seen as less prominent or less advantageous than the current one or than another alternative.

1. Unawareness of the advantages of the recommended solution (2.2 Fig.2.4)
2. Awareness of disadvantages of the recommended solution (2.2 Fig. 2.4)

3. Situational incompatibility, viz. an awareness of constraints preventing the implementation of the solution or recommended practice (2.4 Fig. 2.4).

2.6.3.3 Knowledge (3, Fig. 2.4)

Knowledge that is relevant in the case of innovation or practice adoption can be categorized as follows (Düvel, 1998):

1. Basic knowledge or knowledge of principles
2. Knowledge associated with the awareness of relative advantages and knowledge of the recommended solutions.
3. Knowledge in respect of the application of an innovation or practices

According to Düvel (1998), the first two types of knowledge, in particular, are related to each other, but from a motivation point of view it is really only the knowledge concerning the recommended solution and its relative advantages (2), that is of importance. This type of knowledge or cognition can be regarded as an intrinsic part of perception and thus largely overlaps with it. It is for this reason that an analysis of perception also caters for most relevant aspects of knowledge (Düvel, 1998).

The knowledge of principles is important because it provides insight and therefore invariably has a bearing on the intensity with which the relative advantages are perceived as field forces. Basic knowledge is also fundamental if the practitioner is to become independent or self-sufficient in terms of decision making and self help. Practical knowledge is one of the last pre-requisites for implementation (Düvel, 1998).

This aspect is thus largely provided for under compatibility (2.4) and thereby supports the conclusion that, through an analysis of perception, most relevant aspects of knowledge can be identified (Düvel, 1998).

2.7 CONCEPTUAL MODEL

After reviewing various models of organizational or managerial performance measurements focusing on their contributions, strengths and weaknesses, the conceptual model for this study will be based on Düvel's (1991) model (Fig. 2.4). This is due to the fact that the model appears to offer practical guidelines for a systematic and scientific approach in evaluation of extension programs and consequential systematic change.

CHAPTER 3
METHODOLOGY

3.1 INTRODUCTION

This chapter outlines the research procedure and, more specifically, the methodological approach employed in data gathering and analysis. It begins with the choice and description of the study area, followed by the sampling procedure, the design of the questionnaire and its administration, including the definition of variables. Finally, the statistical techniques used in the analysis of the data are described.

3.2 THE STUDY AREA

The study was conducted in Oromia Regional State, Ethiopia. The Oromia region was selected mainly for reasons of cost saving (proximity to Haramaya University) and because it is representative of most of the country's agro-ecological climate zones (such as high, middle and low altitudes) and all main types of agricultural enterprises.

Ethiopia is administratively sub-divided into nine regional states and two autonomous city administrations, Addis Ababa and Dire-Dawa (Figure 3.1). Oromia is the largest state in terms of both land area (353,006.81 km² which accounts for almost 32% of the country) and population size (with a total population of 27,158,471, which is 36.7 percent of the country) (CSA, 2007). Over 90 percent of the people of Oromia live in the rural area, and agriculture has remained the source of livelihood for the overwhelming majority of the people.

Oromia contributes significantly to the agricultural production of the country. Specifically, Oromia accounts for 51.2% of the crop production, 45.1% of the area under temporary crops and 45% of the total livestock population of Ethiopia. In general,

Oromia reflects many general features of Ethiopia, in terms of the agro-ecological conditions, cropping systems, vegetation types and climatic conditions.

The climatic types prevailing in the region are grouped into 3 major categories: the dry climate, tropical rainy climate and temperate rainy climate. The dry climate is characterized by poor, sparse vegetation, with a mean annual temperature of 27°C to 39°C, and a mean annual rainfall of less than 450 mm. The hot semi-arid climate mean annual temperature varies between 18°C and 27°C. It has a mean annual rainfall of 410-820 mm with noticeable variability from year to year. The highlands of Oromia experience a temperate climate of moderate temperature, (mean temperature of the coolest month is less than 18^{o}c) and ample precipitation (1200-2000mm).

At the time of survey, the region consists of 14 administrative zones. Addis Ababa is the capital city of Oromia, as well as of Ethiopia. Five of the 14 zones (Namely: Jimma, Arsi, Borena, South West Shewa and East Shewa zones, Fig. 3.1) were selected for this study, representing various categories of agro-climatic zones and types of agricultural enterprises of the region.

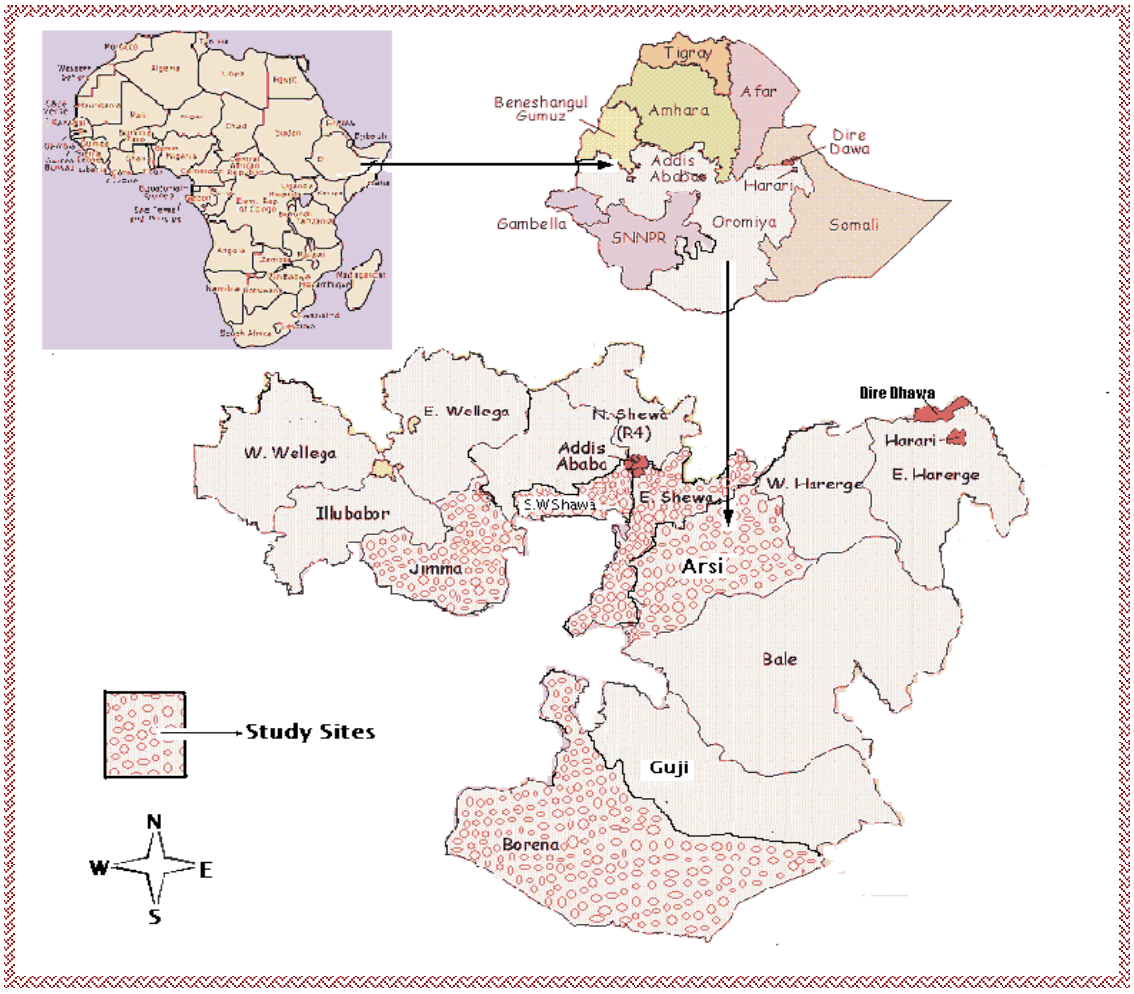


Figure 3.1 Location of the study areas

3.2.1 Jimma zone

Jimma zone is one of the four (East and West Wallega, Ilu Ababor and Hararghe zones) major coffee producing zones in the region and selected randomly to represent the coffee enterprise and reliable moisture agro-ecological zone. The zone's capital town, also known as Jimma, is located about 347 Km to the southwest of Addis Ababa. The zone has a total population of 2 495 795, of which 94.3 percent is living in the rural area. Jimma is a highland and a moisture reliable zone, known as the coffee producing area of the region. The area receives an annual rainfall in the range of 1,200-2,800 mm per

annum, and in normal years the rainy season extends from February to November. The area is suitable for growing coffee, cereals, pulses, root and fruit crops. Despite considerable deforestation in recent years, 27% of the total area of Jimma Zone remains forested (natural, artificial, shrubs and bushes).

It is reported (CSA, 2005) that 26,743 tons of coffee were produced in this zone in the year ending in 2005. This represents 23.2% of the region's output and 11.8% of Ethiopia's total output, and makes Jimma the top producer of coffee in the region.

3.2.2 Arsi Zone

Arsi zone was randomly selected from mainly cereal producing zones. It has a total population of 2 635 515, and an estimated area of 23,724.44 square kilometres. The zone has an estimated population density of 132.17 people per square kilometer (CSA, 2007). About 88 percent of the zone's population are rural dwellers. Its capital town is called Asela, 175 kilometres from Addis Ababa.

The zone has good agricultural land and a long rainy season. Arsi is mainly known for the production of wheat and barley. The beautiful landscape of lakes and mountains has attracted the introduction of agricultural technologies in the area since the 1960s. The zone is one of the first two areas in Ethiopia where, for the first time, agricultural extension projects began, as a pilot project with financial and skilled manpower support from the Swedish Government through the Swedish International Development Agency (SIDA) in 1967. The project was known as Chilalo Agricultural Development Unit (CADU). At that time Arsi province was administratively divided into three sub-provinces (Chilalo, Arbagugu and Ticho) called Awraja. Awraja was an administrative structure found between the district and the province.

Later, the CADU project was expanded to the whole province of Arsi by changing its name to Arsi Rural Development Unit (ARDU). The Arsi Bale project is still active in the area, supporting agricultural and rural development activities.

As a result of the prevalence of various agricultural and rural development projects over long periods of time in Arsi zone, various agricultural development-supporting institutions came into being. The names of some of these institutions and their focus of activities are as follows: Kulumsa Agricultural Research Centre, National Coordinating Centre for Wheat Commodity Research; Asella Rural Technology Centre (focused on the development, modification and multiplication of small scale farm implements); Gonde Seed Improvement and Multiplication Centre; and Gobe Improved Dairy Farm Centre.

3.2.3 Borena Zone

Borena is located in the far south of Ethiopia, bordering Kenya, about 800 km from Addis Ababa. The zone is selected to represent the pastoral and agro-pastoral extension area of the region. It has an estimated rural population of 966 467 with 91.2% living in rural areas. Borena is one of the less densely populated zones in Oromia with an estimated population density of 21.09 people per square kilometre (CSA, 2005). This zone was selected by the Ministry of Agriculture and Rural Development in 2004 as one of several areas for voluntary resettlement of farmers from overpopulated areas, and, since then became the new home for a total of 9145 heads of households and 45,725 total family members.

Borena zone is predominantly a pastoral and agro-pastoral area characterized by extensive traditional mobile livestock management systems on semi-arid rangelands with unreliable cropping activity to supplement livestock husbandry. The mobility is the strategy through which the pastoralists mitigate the adverse effects of climate, feed and water shortage and disease prevalence.

Recently, however, herd diversification, to include more goats and camels, is being pursued as an insurance measure to mitigate vulnerability to drought. Livestock exports from the zone normally contribute substantially to national foreign exchange earnings.

The area provides high quality animals to the highland areas for traction power and as a genetic base for inter-breeding.

Borena is also well known for having some of the finest grazing land in Africa and for their cattle breeds that are hardy and possess good productivity characteristics. Until a few decades ago, the southern Borena rangelands, in fact, had the reputation for being a model of traditional African pastoralism.

The Southern Rangelands Development Unit (SORDU) is the most widely known and one of the more effective development projects in the area. Under the auspices of SORDU, infrastructural works such as roads and ponds were constructed, and improvement in veterinary health achieved.

3.2.4 East and South West Shewa Zones

These zones take their name from the kingdom and former province of Shewa and they are located in the middle of Oromia, connecting the western regions to the eastern ones. They represent the central part of the region, around the capital city of the country, Addis Ababa.

East Shewa zone is a moisture unreliable agro-climatic area and is found to the east of Addis Ababa. It has a total population of 1 357 522, of which only 75 percent are rural dwellers, representing the lowest percentage of rural dwellers in the Oromia Regional state. The South West Shewa zone is reasonably moisture reliable and is located about 114 km south west of Addis Ababa (Figure 3.1).

Both of the zones are mainly known for the production of teff. Teff is one of the smallest grains in the world (associated with common grass in other parts of the world), measuring only about 1/32 of an inch in diameter, from which an Injera is made. Injera is unique to Ethiopia, and is used as staple food.

These zones were also supported by different projects such as T&V extension projects, supported by the World Bank, later by the European Economic Commission (EEC).

East Shewa is the centre for many institutions, due to its location advantage, namely its proximity to the capital city of the country. These institutions include, amongst others, Debra-zait Research Centre (national coordinator of teff commodity research), Malkasa Research Centre (national coordinator of sorghum research) and Kality Artificial Insemination Centre.

3.3 SAMPLING PROCEDURES

The samples were drawn from all levels of managerial positions and administrative structures, throughout the hierarchies of the public extension organization in Ethiopia. As it is not realistic to deal with the whole population, multistage sampling procedures were employed.

At the first stage, using purposive sampling, the Oromia region was selected mainly for reasons of cost saving (proximity to Haramaya University) and because it is representative of most of the country's agro-ecological climate zones (such as high, middle and low altitudes) and all main types of agricultural enterprises (MOIPAD, 2001; MOFED, 2005).

At the second stage, in order to select the five zones out of 14 zones of the Oromia region, a stratified sample design was implemented.

According to Cooper & Schindler (2003), if the population can be segregated into subpopulations, or strata, stratification is usually more efficient statistically than simple random sampling, and, at worse, it is equal to it. Two things are necessary to draw a stratified random sample: firstly, the various strata should be identified according to one or more variables; secondly, a random sample should be drawn from each separate stratum (Welman & Kruger, 1999; Finn et al., 2000). In this way a representative sample

can be obtained from a population with clearly distinguishable strata with a greater degree of certainly than is possible with simple random sampling.

In Oromia, the extension delivery systems are strategically divided into five broad categories in order to align the contents of extension packages with the features of dominant agro-ecological zones and agricultural enterprises in the country (MoA, 1996; MoA, 2006). The major agricultural enterprises include: perennial cash crops (such as coffee) and annual crops (such as wheat, barley, maize, sorghum, and teff). The enterprises or commodities strongly influence the extension focus as well as the focus of the research centres and the establishment and locality of commodity coordination head quarters. Accordingly, the 14 administrative zones in the region were stratified under five categories. Using random sampling, one zone was picked from each stratum.

All extension personnel from each zone as well as extension specialists working at region and national headquarters were invited to participate and received questionnaires. Of the total of 566 who were invited 353 (162 managers and 191 non-managers) correctly completed and returned their questionnaires, which represents a response rate of 62.4 percent (Table 3.1).

Table 3.1 The distribution of respondents according to their work location area

Respondents categories	Dominant Agro –climatic zone	Dominant Enterprise represented	Total numbers of respondents
Jimma	Moisture reliable	Coffee	106
Arsi	Moisture reliable	Wheat & barely	113
South West Shewa	Moisture reliable	Teff	39
Borena	Pastoralist	Livestock	43
East Shewa	Moisture unreliable	Teff, Maize & sorghum	33
Region level	Not applicable	Not applicable	7
National level	Not applicable	Not applicable	12
Total	-	-	353

The smallest response rates were from East and South West Shewa zones. These zones had previously participated in several surveys and had received payments in return for the

completed questionnaires. As there was no budget for respondents in this study, some of them were disappointed, and refused to return the questionnaires unless they were paid. In addition, at the time of the survey, these zones' extension workers were terribly busy and everybody was forced to leave the office for field work to visit farmers.

However, in the case of the Arsi and Jimma zones, a large number of extension staff participated, and their response rates are also high. The reason for this high response rate was that Arsi is the birth place of the researcher, and he also worked for the agricultural office of the zone for more than five years. In the case of the Jimma zone, the time of data collection coincided with the slack season so that many of the extension workers were available in office and able to attend the group interview meetings.

3.4 INSTRUMENTATION AND ITS ADMINISTRATION

3.4.1 Instrumentation

The process of data collection passed through various stages. The research began with a reconnaissance survey aimed at identifying the biggest or most urgent problem, the sources of relevant secondary data, and consultation of knowledgeable senior extension experts and managers.

Following the reconnaissance survey and subsequent problem conceptualization, a semi-structured interview schedule was drafted, using mainly 10-point semantic scales for assessment purposes. Some open-ended questions were also included to tap unexplored individual views of the respondents on some topic areas.

Questionnaire validation was accomplished by thorough discussion with researchers and subject matter specialists working in extension. This was followed by the pre-testing of the interview schedules.

The pre-test was conducted in the Sidama zone of an adjacent region the State of the Southern Nations, Nationalities and Peoples (SNNP) with features similar to Oromia regional state. It was found that some concepts were not clear to respondents and the questionnaire was somewhat long and took more than two hours to complete. All the necessary adjustments and corrections were made, and the corrected final version of the interview schedule appears in Appendix A.

3.4.2 Administration

Using the pre-tested and validated semi-structured interview schedule, the interviews were conducted in group sessions at various venues (such as at each district, zone, region and national offices level).

Use was made of one coordinator within each zone, who was assigned by the head of the zone agricultural and rural development office, and was selected on the basis of his/her knowledge of the zone, the localities of the districts and the personnel in the districts. The zone coordinators served a useful purpose in introducing the researcher to district officials and in organising the group interview sessions.

All group interviews were conducted by the researcher in such a way that every participant was given a questionnaire for completion. Using an overhead projector, the researcher facilitated the interview by providing the necessary background reasoning and explanation and pointing out the pros and cons and also the implications of many of the alternatives within the principles. During interviews, group interaction was only allowed when it contributed to the general understanding of the questions and interpretation of the scales, but care was taken that everyone ultimately gave his/her own view.

Although the necessary care was taken during the group interview sessions to ensure that respondents understood the issues and knew how to fill in the information, some missing values and misunderstandings were observed in the completed questionnaires. As a

result, a lot of time was spent in controlling and cleansing the data during and after capturing on computer (spread sheets).

3.5 VARIABLES AND THEIR MEASUREMENT

An overview of the variables included in the study is presented in Table 3.2 and 3.3.
Since this study is very comprehensive in terms of the coverage of various aspects of management of extension organizations, a large number of variables were identified, based on an extensive literature review. As a result, only a brief description is given here, but more detailed information is provided when the results pertaining to the respective variables are discussed (Chapters 4-11).

Table 3.2 An overview of the selected independent variables, description of their measures and their mean distributions

Variable name	Description	Measurement
1. Personal characteristics		
Job position	The respondent's work position at the time of data collection	Values 1-4 (1=non-manager; 2=first level manager; 3=middle level manager; 4=top level manager)
Age	The respondent's age at the time of data collection	Measured on a continuous scale
Gender	Refers to the sex of respondent	Dummy: Female=1,Male=2
Marital status	The respondent's marital status at the time of data collection	Values 1-3 (1=Never ;2=married; 3=separated)
Formal education	The level of formal schooling the respondent has completed at the time of data collection	Values 1-8 (1=high school; 2=certificate; 3=diploma; 4=BSC degree; 5=MSC; 6=PhD)
In-service training in extension	Whether or not the respondent has attended in-service training in extension	Dummy: yes=1, No=2
In-service training in management	Whether or not the respondent has attended in-service training in management	Dummy: yes=1, No=2
Total service	Number of years served in the extension organization at the time of data collection	Number of years served
Service in management position	Number of years the respondent served in managerial positions at the time of data collection	Number of years served
Service in current job position	Number of years the respondent served in current work position	Number of years served
Salary	Amount of money earned per month in local currency at the time of data collection	Amount in local currency (Birr)
2. Organizational (internal) factors		
(a) Organization's resources		
Extension teaching aids	Availability of extension teaching materials and equipment	Scale 1-15 (1=altogether insufficient; 10=sufficient; 15=much more than sufficient)
Offices and accommodations facilities	Availability of housing facilities and equipment for offices and accommodation	Scale 1-15 (1=altogether insufficient; 10=sufficient; 15=much more than sufficient)
Transportation	Availability of vehicles, cycles, draft animals etc	Scale 1-15 (1=altogether insufficient; 10=sufficient; 15=much more than sufficient)
Finance	Availability of money for fuel, per diem and other allowances	Scale 1-15 (1=altogether insufficient; 10=sufficient; 15=much more than sufficient)
Manpower	Availability of well trained and experienced manpower in their respective fields	Scale 1-15 (1=altogether insufficient; 10=sufficient; 15=much more than sufficient)
3.Environmental factors		
3.1Task environment		
Coordination between institutions	Coordination between stakeholder organizations in confronting common problems & finding synergistic solutions	Scale 0-10 points (0=very poor; 10=very good)
New agricultural technologies	Availability of improved agricultural production,/cultural practices and new ideas to be communicated to farmers	Scale 1-15 (1=altogether insufficient; 10=sufficient; 15=much more than sufficient)
Agricultural credit and inputs for smallholder farmers	Availability and affordability of agricultural credit and inputs for smallholder farmers	Scale 0-10 points (0=very poor; 10=very good)
Farmers' willingness	Farmers' willingness to participate in training, meetings and try improved agricultural innovations	Scale 1-15 (1=altogether unfavourable; 10=favourable; 15=much more than favourable)
3.2 General environment		
Government policies and regulations	Favourableness of Government policies and regulations	Scale 1-15 (1=altogether unfavourable; 10=favourable; 15=much more than favourable)
Land tenure policy	Favourableness of land tenure policy	Scale 0-10 points (0=very poor; 10=very good)
Agro-ecological factors	Favourableness of agro-ecological factors	Scale 1-15 (1=altogether unfavourable; 10=favourable; 15=much more than favourable)
Political factors	Favorableness of political forces or factors	Scale 1-15 (1=altogether unfavourable; 10=favourable; 15=much more than favourable)

Table 3.3 An overview of dependent variables: definition and description of their measures

Variable name	Measurement and description	Measurement	Cron-bach's Alpha
1. Organizational efficiency measures			
(a) Operating measures	Refers to tasks & activities related to organizational operative goals		.579
Extension effectiveness	Effectiveness of extension delivery in terms of both quantity (target farmers reached by services) and quality (impact of extension messages on target farmers) of services	Scale 0-10 points (0=very poor; 10=very good)	
Functional efficiency	Functional efficiency in current work position or post	Scale 0-10 points	
Return on investment in extension*	Input-output ratio of investment in extension expressed as a return per 100 Birr invested in extension in Oromia Bureau of Agriculture and Rural Development	Percent return per 100 Birr invested	
Underefficiency	The percentage of their current work time the respondent would require to achieve what they are currently doing, assuming that they were highly competent, productive and efficient	Percent (0-100)	
Total operating efficiency measures	Total weighted average (adding variables and then dividing by the number of items) of all operating efficiency measures	Scale 0-10 points	
(b) Process measures	Refers to level of consensus on goals/ procedures, cooperation and smooth flow of work, ideas and information	Scale 0-10 points	
Resource use	effective utilization of resources - manpower, time, finance and materials - to achieve organizational goals	Scale 0-10 points	
Coordination	Coordination among departments and between stakeholder organizations in confronting common problems and finding synergistic solutions	Scale 0-10 points	
Communication	Communication and openness between workers/ managers and between organization's managerial hierarchies	Scale 0-10 points	
Participation	involvement of subordinates or workers in decisions that affect them	Scale 0-10 points	
Total process efficiency measures	Total weighted average (adding variables and then dividing by the number of items) all process efficiency measures	Scale 0-10 points	
(b) Organizational health	Refers to human outcomes and interpersonal relations		0.88
Job satisfaction	Satisfaction with: the job itself (the extent to which it provides interesting tasks, opportunities for learning and the chances to accept responsibilities), the pay (the amount & equitability vis-à-vis other organizations), and the supervision (the ability of the supervisor to provide technical assistance and behavioural support)	Scale 0-10 points (0=very poor; 10=very good)	
Work climate	trust and support among workers and between subordinates and managers	Scale 0-10 points	
Motivation	Achievement recognition, workers' involvement in decision making that affects them and justice in workers' placement, transfer and promotion	Scale 0-10 points (0=very poor; 10=very good)	
Total, health	Total weighted average (adding the three variables of organizational health and then dividing by 3) organizational health efficiency	Scale 0-10 points	
Grand total	Total weighted average (adding all variables of organizational output variables and then dividing by the numbers of items) of all aspects of organizational efficiency	Scale 0-10 points (0=very poor; 10=very good)	
(c) Input-output ratio in different situations	Average efficiency expressed as a return per 100 Birr invested:		.775
Own section efficiency	in respondent's specific work area (department or section) within district/zone	Percent return per 100 Birr invested	
Respondent's own work location	in respondent's specific location in the organizational hierarchy (PA, District or zone or Region)	Percent return per 100 Birr invested	
Smallholder farming	in the smallholders farming situation in Ethiopia	Percent return per 100 Birr invested	
Commercial farming	in the commercial farming situation in Ethiopia	Percent return per 100 Birr invested	

3.6 METHODS OF DATA ANALYSIS

After capturing of the data, using the SPSS spreadsheet, frequency distributions were used to identify errors made during the completion of the questionnaire or in the subsequent capturing onto spreadsheets. Some of the modifications regarding the collapse or creation of new variables were also done at this stage.

The statistical package for the social science (SPSS) programme was used for the analysis of the data in the study. The principal procedures employed and the statistical techniques used for data analysis were the following:

(a) Factor analysis: this was the first analysis conducted to test or check the role of each item in a group of variables, to measure certain concept(s) in terms of their level of reliability, consistency and loadings. This is useful for data reduction. The principal component analysis, factor extraction and factor rotation of factor analysis techniques were used.

(b) Frequency distribution together with the use of graphic displays, tables and charts to illustrate data and facilitate analysis

(c) Comparing groups: Chi square (χ^2) test, t-test and one way analysis of variance (ANOVA) were used to test significance of the differences between two or more independent groups or categories.

(d) Exploring relationships: This was achieved by using correlation analyses, while multiple regressions were used to assess the contributions of independent variables on the dependent variables.

CHAPTER 4
SOCIO-ECONOMIC PROFILE

4.1 INTRODUCTION

The socio-economic characteristics of employees are important in order to understand who they are, and the effect of their individual differences on organizational performance as a whole (Cummings & Worley, 2001). According to Gibson, *et al.,* (2000), the level of individual and/or organizational performance of an institution can be determined by the nature of its people (e.g. their perception, motivation, desire for involvement and value of the person). To be successful in matching a person's abilities and skills to the job, a manager must examine required and possessed behaviours. This chapter tries to describe the socio-economic characteristics of employees of some selected zones of the Oromia Bureau of Agriculture and Rural Development (OBARD). The respondents' socio-economic characteristics considered are: job position, gender, age, marital status, location of work area, formal education, qualification in extension, qualification in management, work experience and salary.

4.2 MANAGERIAL POSITIONS

There are three distinct but overlapping levels of management positions in extension, each having a different emphasis (Buford, et al., 1995:7). They are first, middle and top levels. *First-level managers* – are described as those people who are responsible for managing agents, specialists, program assistances clerical personnel, and other non-managing staff**;** *middle level managers* – those people are primarily charged with integrating the activities of different work groups, enabling them to operate harmoniously and cope with the demands made upon them; *top level managers* – the people responsible for determining the form of an extension service and define its over-all approach, such as mission and goals of extension services (Buford, et al., 1995:7).

In this study, the respondents are categorized into four job positions (the three managerial levels and non-manager extension workers). *(1) Top level managers, which* include federal, regional or deputy heads of service departments, namely planning, administration, finance); *(2) Middle level managers.* These include federal or regional level department heads, district office heads or coordinators etc); *(3) First level managers* represent a team of section or project leaders at all levels); and *(4) Non-managers or operational level* workers (all non-managers at all levels). Distribution of the respondents according to their job position is presented in Table 4.1

Table 4.1 Distribution of respondents according to their job position (N=353)

JOB POSITION CATEGORY	N	%
Non- managers	191	54.1
First level managers	94	26.6
Middle level managers	60	17.0
Top level managers	8	2.3
Total	353	100.0

Respondents are from all levels of management in the organizational hierarchy. According to Table 4.1, the majority (54.1 percent) are operational level extension workers. Top level managers are only 2.3 percent of total respondents. The reason for such distribution could be partially due to decentralization in 2002 when the majority of extension workers were deployed from regional and zone level to district level.

4.3 GENDER

Although there have been debates about male and female differences in terms of job performance, there are no compelling data suggesting that men or women are better job performers (Gibson, *et al*., 2000). However, currently issues regarding gender are shifting towards the extent of involvement and empowerment of women in terms of education, employment opportunities and holding key management positions. The focus in this study is on gender ratio, which is summarized in Table 4.2.

Table 4.2 Distributions of respondents by gender (353)

Gender	N	%
Female	54	15.3
Male	299	84.7
Total	353	100.0

The results in Table 4.2 reveal that the majority (84.7 percent) of respondents are male. The ratio of male to female is wider than that of total public employees of the Oromia region (73.22%: 26.78%). These results could imply that the extension profession is more attractive to males than females in the Ethiopian situation. There are various reasons for smaller numbers of females in extension (15.3%), such as gender imbalance in higher level education. For example, according to the CSA 2007 report, the total number of students enrolled for the year 2005/06 in high school grades 11-12 were male 69 397 female 25 771 and in universities/ colleges male 70 388 and female 21 267. Another contributing factor may be the challenging physical nature of fieldwork (frequent travelling to rural areas to meet farmers). The relationship between respondents' job position and gender is presented in Table 4.3.

Table 4.3 Percentage distribution of respondents according to gender and job position

	Gender categories			Level of association
Job position categories	Female (n=54)	Male (n=299)	Total (N=353)	
Non-managers (n=191)	23.0	77.0	100.0	χ^2=20.24;df=3; p=.000
First level managers (n=94)	8.5	91.5	100.0	
Middle level managers (n=60)	3.3	96.7	100	r=-.230; p=.000
Top level managers (n=8)	.0	100	100	
Total (N=353)	15.3	84.7	100.0	

Results in Table 4.3 show that gender is significantly associated with the job position of the respondents (χ^2 =20.244; df = 3; p=0.000). The proportion of females in various positions shows a linear decrease with higher management position. For example 23 percent of non-managers are females, while this percentage falls to 3.3 % in the case of middle level managers and nil in the case of senior managers.

4.4 AGE

According to the Federal Civil Servants Proclamation No.262/2002 of the Federal Democratic Republic of Ethiopia, the eligibility age to become a civil servant is between 18 – 55 years. The retirement age is 55 years. However, the service of a permanent civil servant may be extended beyond his/her retirement age for a period up to five years at a time and for a period not exceeding ten years in total. The age distribution of the respondents is shown in Table 4.4.

Table 4.4 Distribution of respondents by age (N=353)

Age categories	N	%
≤ 30	74	21.0
31 – 40	131	37.1
41 – 50	116	32.9
51 – 55	30	8.4
>55	2	0.6
Total	353	100.0

Mean = 39. Standard Deviation = 8.31. Min = 20. Max = 57.

The respondents range in age from 20 years to 57 years (Table 4.4). More than half (58.1%) of the respondents are below the age of 40 years. Only 2 respondents are above 55 years old, which could be due to the extension of service years after retirement. These findings indicate that the majority of respondents are in age categories frequently described as active and energetic.

A further analysis examines whether there is a relationship between job positions, gender and age of respondents. The results are summarized in Table 4.5.

Table 4.5 Percentage distribution of respondents according to age and according to managerial position and gender (N=353)

Categories	Percentage distribution per age category				Level of association
	≤30	31-40	≥41	Total	
Managerial Positions					
Non-managers	24.1	30.4	45.5	100	r=.09; p=.09
First level managers	9.6	36.2	54.3	100	
Middle level managers	8.3	43.3	48.3	100	
Top level managers	12.5	25.0	62.5	100	
Gender					
Female	22.2	33.3	44.4	100	r=.055;p=.302
Male	16.4	34.1	49.5	100	
Total	17.3	34.0	48.7	100	

Results in Table 4.5 show the relationship between age and managerial position. This relationship is only significant at a probability of 9 percent (r=0.09; p=.09) and can be attributed to the fact that the different levels of managers have similar age distributions, but differ very clearly from the non-managers. Conspicuous is the relative old age of first level managers. This could be an indication that experience is not the primary criterion in the selection or promotion of managers and should be welcomed if the criterion is competence and not political affiliation or nepotism. As far as gender is concerned, no significant association with age is found (r=.06; p=. 30).

4.5 MARITAL STATUS

The results of an analysis of the marital status of respondents are presented in Table 4.6.

Table 4.6 Distribution of respondents by marital status (n=353)

Marital status	N	%
Never married	62	17.6
Married	279	79.0
Separated/divorced	7	2.0
Widowed	5	1.4
Total	353	100.0

Table 4.6 reveals that the largest proportion of the respondents (79%) is married. In Ethiopia, religious as well as cultural influences on the promotion, establishment and support or maintenance of marriage are very strong, so that divorce or separation rarely happens (2%). These social institutions support and maintain marriage in terms of request for legalization of marriage in terms of weddings and related processes; teaching both partners about the importance of patience, commitment, and compromise in marriage during and after legalization processes; and availability of systems regarding conflict resolutions. Divorce is the last option and very stressful for both parties, especially when they have children.

Table 4.7 Percentage distribution of respondents according to their marital status and categories of managerial position, gender and age (N=353)

Categories	Marital status categories				Level of association
	Never married	Married	Separated/ divorced/ widowed	Total (N=353)	
Managerial position					
Non-managers	19.9	77.0	3.1	100.0	χ^2=4.609; df=8; p=.867
First level managers	14.9	79.8	5.3	100.0	
Middle level managers	13.3	85.0	1.7	100.0	
Top level managers	25.0	75.0	.0	100.0	
Total	17.6	79.0	3.4	100.0	
Gender					
Female (n=54)	22.2	70.4	7.4	100	χ^2=4.406; df=2; p=.110
Male (n=299)	16.7	80.6	2.7	100	r=-.01; p=.79
Total (n=353)	17.6	79.0	3.4	100	
Age					
≤30 (n=61)	63.9	36.1	.0	100	χ^2=12.237; df=4; p=.00
31-40 (n=120)	15.0	82.5	2.5	100	r=.47; p=.00
≥ 40 (n=172)	2.9	91.9	5.2	100	
Total (353)	17.6	79.0	3.4	100	

Of all the variables tested, only age shows a significant relationship with marital status. The number of unmarried respondents decreases significantly after 40 years, while the number of married respondents clearly increases with increasing age (χ^2=12.237; df=4; p=.00), which is in accordance with expectations.

4.6 LOCATION

The physical or geographical location of respondents can vary in many aspects, for example in terms of suitability of climate, and level of basic infrastructure development, etc. These variations may influence the type of employees attracted. In this study, location of respondents is defined as the place of work, expressed in terms of the country's current government administrative or political structure. According to the constitution of the Federal Democratic Republic of Ethiopia Proclamation No. 1/1995 article 47, Ethiopia consists of nine member states, which were delimitated on the basis of the settlement patterns, language, identity and consent of the people concerned. Ethiopia is administratively structured into five levels. These levels include (in descending order): national or federal, region, zone, district, and peasant association levels. Peasant associations (PAs) are the lowest grass root level government structure.

Respondents' distribution according to overall vertical structure is presented in Table 4.8.

Table 4.8 Distribution of respondents according to organizational level of employment (N=353)

Level of employment	N	%
Peasant association level workers	26	7.4
District level workers	292	82.7
Zone level workers	16	4.5
Region level workers	7	2.0
National level workers	12	3.4
Total	353	100.0

Respondents are from all levels of organizational structure; from grass root level to top nation level headquarter (Table 4.8). Most (82.7%) of the respondents are from district level. The two extremes, the lowest and top structures, comprise only 7.4 and 5.4 percent respectively of the total respondents.

A further analysis regarding horizontal structural differences between respondents from different zones in terms of their gender, age, and marital status is presented in Table 4.9.

Table 4.9 Percentage distribution of respondents in different zones according to gender, age, and marital status (N=334)

Categories	Percentage distribution per zone categories						χ^2 Value	P
	Jimma (N=106)	Arsi (N=113)	South West Shewa (N=39)	Borena (N=43)	East Shewa (N=33)	Total (N=334)		
Gender								
Female	11.3	15.9	15.4	16.3	27.3	15.6	4.923	.295
Male	88.7	84.1	84.6	83.7	72.7	84.4		
Total	100.0	100.0	100.0	100.0	100.0	100.0		
Age								
≤30	12.3	17.7	17.9	37.2	12.1	18.0	35.688	.000
31-39	43.4	23.9	41.0	48.8	27.3	35.6		
≥ 40	44.3	58.4	41.0	14.0	60.6	46.4		
Total	100.0	100.0	100.0	100.0	100.0	100.0		
Marital Status								
Not married	13.2	14.2	17.9	39.5	15.2	17.7	29.244	.004
Married	83.0	83.2	82.1	55.8	75.8	78.7		
Single/Divorced/ widowed	3.8	2.6	0.0	4.7	9.1	3.6		
Total	100.0	100.0	100.0	100.0	100.0	100.0		

The findings in Table 4.9 show that zones are different in terms of the identified respondents' socio-economic variables (gender, age, and marital status).

For example, the Borena zone is composed of younger workers with 37.2 percent of total respondents below the age of 31 years; while, for East Shewa, 60.6 percent of its respondents are in the age category of 40 and above. Such age distribution differences could be due to the manpower placement or transfer policy of the Bureau of Agriculture before decentralization with regard to distances from the centre of the country or the town. For example, East Shewa zone is found around Addis Ababa city, while Borena is about 800 km to the south of the Addis Ababa bordering with Kenya. According to previous organizational policies, the transfer of employees to the centre of the country is based on the number of years served or as a reward for outstanding performance, provided that there is an application for transfer.

On the other hand, Jima and South West Shewa were dominated by middle- aged groups (31-40). In the Arsi zone, workers are relatively equally distributed over all age categories. There is no statistically significant difference between the zones regarding gender (χ^2 =5.347; d.f=5; p=0.375).

4.7 FORMAL EDUCATION

Human resource development through tertiary level education is important for a successful social and economic development process to take place. There are few institutions training manpower in the field of agriculture. For the last five decades, Alemaya University was the only higher educational institution training at BSc degree and above in the field of agriculture or related fields in Ethiopia. Other junior agricultural colleges training general agriculturalists at diploma level are Jima agricultural college, Ambo agricultural college, Awasa agricultural college, Wondogenet institute of forestry and Debre-zeit veterinary college. Currently, Alemaya University and other former colleges are being upgraded to fully-fledged universities. The respondents' highest level of formal education is summarized in Table 4.10.

Table 4.10 Distribution of respondents by highest level of formal education

Education level	N	%
High school level	19	5.4
Certificate	60	17.0
Diploma	223	63.2
Bachelor's degree	29	8.2
MSc degree	20	5.7
PhD degree	2	.6
Total	353	100.0

The general level of education of respondents is very low, with the majority (63.2) of them being diploma holders, and only 8.2 percent BSc degree holders. These findings are similar to those reported by Tesfaye (1995). He found that 77% were diploma and 6% BSc degree holders. This implies that training of agricultural professionals has not changed much over the years.

For an organization whose core business is the provision of extension services to its clients, the knowledge of extension principles by its personnel is paramount for its success. The distribution of the respondents in terms of highest level of formal qualification in extension is given in Table 4.11.

Table 4.11 Distribution of respondents by highest formal qualification in extension

Extension qualification	N	%
None	96	27.2
Extension courses in in-service training	99	28.0
Extension courses in diploma program	121	34.3
Extension courses in BSc degree program	8	2.3
Diploma in extension	19	5.4
BSc degree in extension	9	2.5
MSc degree in extension	1	.3
Total	353	100.0

The findings in Table 4.11 indicate that the overall qualification in extension is low. About one-third (27.2%) of the respondents have no training of extension at all, while only 2.8 percent of respondents are in possession of a BSc and higher degree in extension. The majority (62.3%) are managing or practicing extension with only some introductory extension courses which they attended during their in-service training or as part of their diploma program.

A similar trend is observed with respect to respondents' qualification in management as indicated in Table 4.12.

Table 4.12 Distribution of respondents according to their level of qualification in management

Training in management	N	%
None	180	51.0
Management courses in in-service training	98	27.8
Management courses in diploma program	61	17.3
Diploma in management	11	3.1
BSc degree in management	1	.3
Management courses in BSc program	1	.3
Management courses in MSc program	1	.3
Total	353	100.

According to the findings in Table 4.12, more than 50 percent of the respondents had no training in the general principles of management. The only significant training was in-service training or as part for the diploma program to which respectively about 28 and 17 percent of the respondents were exposed.

The relationships between formal education and other background variables such as gender, age, marital status and job position are shown in Table 4.13.

Table 4.13 The percentage distribution of respondents according to their formal education and gender, age, marital status and job position category

Categories	Percentage distribution per formal education category				Spearman Correlation	
	HS/ certificate (N=78)	Diploma (N=224)	BSc and above (N=51)	Total (N=353)	r	p
Managerial positions						
Top level managers	.0	12.5	87.5	100	.369	.000
Middle level managers	1.7	76.7	21.7	100		
First level managers	11.7	72.3	16.0	100		
Non-managers	34.6	57.1	8.4	100		
Gender						
Female	48.1	40.7	11.1	100	.214	.000
Male	17.4	67.6	15.1	100		
Age						
≤30	14.8	77.0	8.2	100	-.083	.119
31-40	14.2	71.7	14.2	100		
≥ 40	30.2	52.9	16.9	100		
Marital Status						
never married	16.1	71.0	12.9	100		
Married	22.9	62.0	15.1	100		
separated/ divorced/ widowed	33.3	58.3	8.3	100		
Zone Location						
Jimma	13.2	77.4	9.4	100	.009	.870
Arsi	38.1	56.6	5.3	100		
South West Shewa	20.5	66.7	12.8	100		
Borena	16.3	67.4	16.3	100		
East Shewa	18.2	66.7	15.2	100		
General location						
PAs	23.1	76.9		100	.368	.000
District	24.7	66.8	8.6	100		
Zone		50.0	50.0	100		
Region			100.0	100		
National		8.3	91.7	100		

The general expectation in terms of the relationship between the educational level of respondents and job position is that the higher the level of management the higher the education level of respondents. Table 4.13 reveals that the results found are in accordance with this expectation (r = .369; P=000). For example, 87.5% of the top-level managers are holders of B.Sc. or higher degrees, while the proportion of those with B.Sc. degrees in the other lower levels of management positions decrease in linear fashion from 21.7 to 15.9 to 8.4 percent for middle, first level and operational positions, respectively (Table 4.13).

4.8 WORK EXPERIENCE

Extension workers help farmers increase the productivity of their farms and improve their living standard (Adams, 1990). These roles of extension workers require the understanding of the principles of extension and also the hands-on experience of how to deal with farmers and how to run the organization effectively and efficiently. Respondents' years of service in extension as well as in the position of management in the Oromia Bureau of Agriculture and Rural Development are presented in Table 4.14 through Table 4.17

Table 4.14 Distribution of respondents according to their total years of service in extension in the Oromia Bureau of Agriculture and Rural Development

Years of service in extension	N	%
≤ 9 years	72	20.4
10 – 15	72	20.4
16 – 20	84	23.8
21 – 25	74	21.0
≥26	51	14.4
Total	353	100.0

Minimum=1; Maximum=36; Mean=17; Standards of Deviation=8.31

The results in Table 4.14 indicate that the extension workers have no lack of working experience. About 80 percent of the respondents have been working for OBARD for about 10 years, while the average for all respondents is 17 years. These findings suggest a low level of recruitment in recent years. However, there are significant variations (F=7.5; p=0.000) between different zones as indicated in Table 4.15

Table 4.15 Mean years of experience in extension of respondents in different zones

Zones	N	Mean	Minimum	Maximum	Analysis of variance
Jimma	106	16.44	1	30	df = 4
Arsi	113	18.50	1	36	F = 7.449
South West Shewa	39	15.97	1	31	Sig = .000
Borena	43	11.21	1	26	
East Shewa	33	18.85	4	32	
Total	334	16.65	1	36	

The pattern of experience resembles that of age. East Shewa and Arsi zones have the most experienced extension workers with means of 18.85 and 18.50 years respectively. In Borena, which is the most remote from the centre of the country, the extension experience of personnel, expressed as mean number of years service, is significantly less, namely 11.21 years.

A similar trend is also observed with regard to experience of managers in terms of years of service in management positions (Table 4.16-17).

Table 4.16 Distribution of respondents according to service years in management position

Service years in management position categories	**N**	**%**
≤ 5 years	76	46.9
6 – 10	61	37.7
11 – 15	13	8.0
16 – 20	8	4.9
≥21 years	4	2.5
Total	162	100.0

Min=1; max=22; Mean=6.45; Std. Deviation=5.25

The mean average of service years of the respondents in the management position is 6.45 years, while about 85 percent of the managers have less than 10 years experience in management.

Table 4.17 Distribution of respondents according to experience in management (years of service in management position) and zones

Name of zones	N	Mean	Minimum	Maximum	Analysis of variance
Jimma	106	4.50	0	22	df = 4
Arsi	113	3.42	0	22	F = 2.589
South West Shewa	39	4.36	0	16	Sig = .037
Borena	43	1.88	0	13	
East Shewa	33	3.58	0	22	
Total	334	3.69	0	22	

According to the findings in Table 4.17, the Borena zone, as expected in terms of its distance from the centre, appeared to have the managers with the least experience (a mean of 1.88 years) while the Jimma zone is the top of the list with 4.5 years. This means that there is a significantly higher turnover of workers and managers (in terms of transfer from the zone to other places) and is something that management should pay attention to.

4.9 SALARY

Whatever there is in a rewards package, the salary is still the central and basic pillar of it (Stone, 1991). A good salary system will be: fair compared with outside bodies; consistent internally; flexible enough to handle unusual or unique jobs; and consistent with the economic environment so that it allows for inflation or changing economic circumstances (Stone, 1991).

The extent of fairness in promotion and job appointment is dealt with in Chapter 9. This section presents the description of respondents' salary in terms of the amount paid per month and comparison of their salaries between various zones (Table 18 and 19).

Table 4.18 Distribution of respondents according to the categories of monthly salary

Monthly salary Categories	N	%
≤ 500 Birr*	21	5.9
501 – 1000	189	53.5
1001 – 1500	103	29.2
1501 – 2000	38	10.8
> 2000 birr	2	.6
Total	353	100.0

Min=195; Maxi=2325; Mean=1023.66; Standard Deviation=400.074; *Birr (1US dollar = 9 Birr)

According to the results in Table 4.18, the majority (53.5 percent) of the respondents are in the monthly salary bracket of 501 to 1000 Ethiopian Birr; the average salary being 1024 Birr. But there are significant variations, based on average monthly salary, between the zones (Table 4.19)

Table 4.19 Respondents' mean monthly salary expressed in Birr by various zones

Name of zones	N	Mean	Minimum	Maximum	Analysis of variance
Jimma	106	1024.85	420	1865	df = 4
Arsi	113	899.93	300	1780	F = 3.373
South West Shewa	39	1042.12	381	1780	Sig = .010
Borena	43	915.09	502	1450	
East Shewa	33	1067.97	502	1565	
Total	334	975.20	300	1865	

Consistent with the previous findings relating to work experience, East Shewa appears at the top of the list in terms of mean monthly salary (1067.97), while Borena is the second from the bottom (915.09). Somewhat unexpected is the finding that the average salary of personnel in Arsi zone is the lowest average salary per month, namely 899.93 Birr. This could be attributed to the fact that it represents the biggest sample size and consequently included a larger percentage of lower income personnel (Table 3.1).

CHAPTER 5
ORGANIZATIONAL EFFECTIVENESS

5.1 INTRODUCTION

The presentation of empirical results of this study began in Chapter 4, which provided the descriptions, discussions and interpretations of the data analysis regarding the study respondents' socio-economic and demographic characteristics. This chapter is the continuation of the presentation of empirical results. It focuses on the perceived level of the current situation of overall organizational functioning, prominence of the 2002 organizational interventions, and the determinants of effectiveness with regard to the Oromia Bureau of Agricultural and Rural Development (OBARD).

5.2 CURRENT ORGANIZATIONAL EFFICIENCY

Three main dimensions of organizational efficiency were identified, namely operating, organizational health and process efficiency aspects. An organization is said to be efficient and its progress sustainable, if it performs well in all aspects of these three dimensions of organizational efficiency. The research findings focus on these three performance dimensions of organizational efficiency, influenced by the 2002 decentralisation, as well as by other determinants of organisational performance.

5.2.1 Operating efficiency

According to Fry & Killings (1995:5), the measures of organizational operating efficiency focus on the activities related to an organization's objectives, such as profitability, financial position, and market share. In the context of non-profit organizations, organizational operating efficiency refers to tasks and activities related to the organization's operational goals.

Seven variables were identified and operationally defined to measure the operating efficiency level of OBARD. They are: (1) Extension delivery effectiveness in terms of both quantity (target farmers' reached by services) and quality (impact of extension messages on target farmers) of services; (2) Resource utilization efficiency - manpower, time, finance and materials - to achieve organizational goals at district level; (3) Resource utilization efficiency - manpower, time, finance and materials - to achieve organizational goals at regional level; (4) Financial resources availability at district level; (5) Financial resources availability at regional level; (6) Return on investment in extension (input-output ratio of investment in extension, expressed as a return per 100 Birr invested in extension by OBARD); and (7) under efficiency (the percentage of their current work time that respondents would require to achieve what they are currently doing, assuming that they were highly competent, productive and effective).

Using a 10-point scale, these variables are applied to measure the operating efficiency level of OBARD before and after the 2002 decentralization except the last two variables (return on investment in extension and the perceived level of under efficiency), which are used to assess only the current efficiency status. These results are presented in Table 5.1.

Table 5.1 Respondents' mean assessment of organizational operating efficiency before and after the decentralization in 2002

	Before 2002		After 2002		Mean Differences (MD) (After 2002 – Before 2002)			
Variables	Mean	SD	Mean	SD	MD	SD	t	Sig.
Extension delivery	53.25	19.86	56.88	20.84	3.7	26.69	-2.55	.01
Resource use efficiency (D)	54.61	22.44	60.24	25.25	5.63	26.17	3.92	.00
Resource use efficiency (R)	60.24	19.49	62.10	25.59	1.85	26.72	1.26	.21
Financial availability (D)	51.82	22.02	47.61	25.37	-4.21	32.43	-2.36	.02
Financial availability (R)	60.00	21.55	48.40	26.48	-11.62	29.30	-7.17	.00
Return on investment	-	-	93.1	30.7	-	-	-	-
Under efficiency	-	-	63.2	16.7	-	-	-	-

(D) = District level; (R) = Regional level

The influence of decentralization on the organizational operating efficiency of OBARD is, in general, limited, but more significant at the district level than at regional level (Table 5.1). The biggest positive change is in resource use (manpower, time, finance and materials) at district level (Mean difference =5.6 percent; t=3.92; p=0.00). But noteworthy is also the increased extension delivery of 3.5 percent (t=2.55; p=0.01) which was achieved in spite of a reduction in the financing of 4.2 and 11.6 percent at district and regional level, respectively.

In this view of extension delivery, the respondents were further probed, although not in terms of before and after, regarding the degree to which the investment in extension is worthwhile in the context of the current situation.

The responses recorded in Table 5.1 reveal that the return on investment in extension of OBARD is perceived as 93.10 percent, which means that for every 100 Birr invested in extension, the return is currently estimated at 93.10 Birr. This implies that the organization is working at a loss. Further evidence in support of the low efficiency is the high level of perceived under-performance (36.8 percent). On an average, the respondents perceived that they could have accomplished the same work in 63.2 percent of their normal time under more favourable conditions. This represents a big potential improvement, which can be exploited if the reasons for under-performance are known.

5.2.2 Process efficiency

Organizational process efficiency refers to the level of consensus regarding goals/procedures, cooperation and smooth flow of work, ideas and information (Fry & Killings, 1995). Three variables were selected to capture this concept, namely: coordination (among departments and between stakeholder organizations in confronting common problems and finding synergistic solutions), communication (communication and openness between workers/ managers and between the managerial hierarchies of organizations), and participation (involvement of subordinates or workers in decisions

that affect them). Using a 10-point scale, the process efficiency level of OBARD before and after 2002 was measured (Table 5.2).

Table 5.2 Respondents' mean assessment of organizational process efficiency before and after the organizational restructuring in 2002

	Before 2002		After 2002		Mean Differences (MD) (After 2002 – Before 2002)			
Variables	Mean	SD	Mean	SD	MD	SD	t	Sig.
Coordination	51.20	19.55	54.46	23.27	3.3	28.47	-2.08	.04
Communication	51.98	20.80	55.06	22.75	3.1	28.29	-1.99	.05
Participation(D)	47.00	19.28	55.14	23.22	8.14	28.02	5.30	.00
Participation (R)	57.15	19.83	56.50	21.84	-0.67	27.95	-.43	.67

(D) = District level; (R) = Regional level

According to Table 5.2, all variables of organizational process efficiency show an improvement after decentralization, except participation of staff/workers at regional level. The biggest improvement is recorded in the area of extension workers' participation (involvement in decision making) at the district level (mean difference of 8.14 percent; t-value = 5.30; p=0.00). It appears as if the improved participation at district level might have happened at the expense of participation at regional level, which showed a decline, although not statistically significant (mean difference =-0.67 percent; t-value=0.43; p=0.67).

5.2.3 Organizational health efficiency

Organizational health refers to non-financial aspects of organizational performance, such as human outcomes and interpersonal relations. Three variables were selected, namely **job satisfaction** (the extent to which the job provides interesting tasks, opportunities for learning and to accept responsibilities), **motivation** (achievement recognition and justice in workers' placement, transfer and promotion) and **work climate** (trust and support among workers and between subordinates and managers). Table 5.3 summarizes the results.

Table 5.3 Respondents' mean assessment of organizational health efficiency before and after the organizational restructuring in 2002

Efficiency aspects	Before 2002		After 2002		Mean Differences (MD) (After 2002 – Before 2002)			
	Mean	SD	Mean	SD	MD	SD	t	Sig.
Work climate	53.93	21.10	51.38	22.56	-2.6	28.89	-1.61	.11
Job satisfaction	56.68	20.98	49.73	22.73	-7.0	27.52	-4.61	.00
Motivation	54.56	20.82	46.28	24.57	-8.3	31.30	-4.83	.00

According to the results in Table 5.3, the overall organizational health efficiency showed the least improvement with restructuring. In fact in all cases there has been a decrease in efficiency, highly significant in the case of motivation (mean difference = -8.3 percent, t-value = -4.83, p = 0.00) and job satisfaction (mean difference = -7.0 percent, t-value = -4.61, p = 0.00). This decline could be attributed to what Fry & Killings (1995) observed, namely that management might have applied pressure for short-term results and avoided investment in organizational health aspects like training, working conditions, and other internal concerns. With the government's current political and administrative agendas of decentralization; amalgamation and downsizing of public institutions, many members of staff were deployed or moved from the region and zone offices to the districts. This could explain the negative influence on work satisfaction and motivation.

This does not bode well for extension. According to Adams (1990), in organizations, such as extension, which depend on staff commitment, success primarily depends on the extension workers' motivation (willingness and commitment to serve and strive towards organizational goals) and capacity to communicate with and to get cooperation from target farmers. In such organizations, management that cannot motivate its staff is bound to be ineffective. It appears that field extension workers were doing their job in the field independently with no or little supervision regarding the quantity and quality of work performed.

5.3 DETERMINANTS OF ORGANIZATIONAL EFFICIENCY

Agricultural extension effectiveness in many developing countries is faced with many significant problems, both internal and external to the organization. Assessing an organization's internal (resource *strengths* and *weaknesses)* and external (*opportunities* and *threats)* environments, provides a good overview of whether an organization's business position is fundamentally healthy or unhealthy (Thompson & Strickland, 2001). These perceptions are important for the understanding of the issues in the environment and the issues within the organization to which the organization must respond in order to be successful (Cummings & Worley, 2001). Otherwise, the task of conceiving a strategy for the organization's well being becomes a chancy proposition indeed (Thompson & Strickland, 2001).

Various factors, which, according to the literature, can be expected to have an influence on organizational behaviour, were identified and categorised into personal, organizational and environmental variables or behaviour determinants. In an effort to identify and find evidence of factors influencing the organizational efficiency of OBARD, correlation and regression analyses were conducted.

5.3.1 Personal characteristics

The socio-economic characteristics of employees are important, in order to understand who they are and the effect of their individual differences on organizational performance as a whole (operational and managerial effectiveness/efficiency). The level of individual and/or organizational performance (Gibson, *et al*., 2000) of an institution can be determined by the nature of its people (e.g. individual differences, regarding perception, motivation, desire for involvement and value of the person). According to Gibson, *et al.,* (2000), to be successful in matching a person's abilities and skills to the job, a manager must examine required and possessed behaviours. Thirteen variables concerning respondents' socio-economic and demographic characteristics are identified. The

emphasis here is on the influence of these variables on the different aspects of organizational efficiency (Table 5.4).

Table 5.4 Correlations between respondents' personal characteristics and aspects of organizational efficiency (N=333)

		Aspects of organizational efficiency									
		Operating			Process			Organizational health			
Personal characteristics	Statistical parameter	Extension delivery	Functional efficiency	Resource use	Coordination	Communication	Participation	Job satisfaction	Work climate	Motivation	Total weighted average
Salary	r	-.11	.02	-.16	-.16	-.06	-.13	-.11	-.07	-.13	-.02
	p	.05	.76	.01	.004	.27	.019	.04	.23	.02	.67
Education	r	-.00	-.11	-.09	-.08	-.03	-.11	-.02	-.04	-.07	.05
	p	.95	.05	.09	.133	.56	.045	.67	.46	.20	.37
In-service training in management	r	.02	.05	.106	.068	.05	.101	.14*	.01	.12*	.09
	p	.68	.41	.054	.216	.34	.066	.01	.81	.02	.13
Service years in current position	r	-.04	-.02	.05	-.04	-.13	.045	-.03	-.05	-.03	-.06
	p	.42	.73	.390	.516	.021	.411	.59	.36	.65	.30
Job position	r	.04	.01	-.009	.035	.104	.053	.07	.08	.00	.09
	p	.49	.94	.868	.529	.058	.336	.21	.15	.99	.13
Age	r	-.03	.01	-.048	-.065	-.041	-.017	-.09	-.01	-.04	-.01
	p	.54	.80	.389	.240	.455	.764	.11	.79	.45	.93
Gender	r	-.06	-.05	-.102	-.012	-.063	-.070	-.05	-.00	-.09	.00
	p	.31	.39	.063	.831	.251	.202	.34	.95	.09	.98
Marital status	r	-.07	.05	-.007	-.050	.001	-.055	-.07	-.08	-.04	-.08
	p	.12	.36	.892	.362	.989	.323	.20	.16	.51	.19
Qualification in extension	r	.07	.04	.044	.009	.058	-.004	.04	.00	-.01	.13*
	p	.23	.51	.430	.873	.293	.943	.47	.97	.88	.02
Qualification in management	r	-.03	.01	.024	.026	-.053	-.065	.00	.05	-.05	.02
	p	.62	.98	.660	.634	.330	.239	.99	.40	.33	.72
In-service training in extension	r	-.05	.01	-.034	-.045	.030	.002	-.01	.00	-.03	-.08
	p	.38	.92	.544	.418	.590	.970	.88	.99	.57	.17
Total service years	r	-.03	.02	-.028	-.065	-.044	-.030	-.08	-.06	-.06	-.04
	p	.62	.77	.616	.239	.428	.582	.13	.32	.28	.49
Service years in management	r	-.01	-.01	-.026	-.104	.000	-.010	-.06	-.03	-.10	.02
	p	.80	.79	.639	.059	.999	.851	.29	.65	.06	.69

The overall impression is that personal variables (Table 5.4) have little influence on the way the organizational efficiency is perceived. An exception is the level of salary, showing significant relationship with most of the efficiency aspects. However, in all of these cases the correlations are negative, which implies that higher earning respondents tend to be more critical as far as the organizational efficiency is concerned. This corresponds somewhat to the findings of top managers who earn the highest salaries. This is also corroborated by the correlations between these two variables (r= 0.534; p=0.000).

Table 5.5 Correlation between salary, education and the management positions of the respondents (N=333)

	Management position	
Personal characteristics	r	p
Salary	.535**	.000
Education	.367**	.000
Age	.091	.089
Tenure	.098	.067

The only other determinants having a limited but noteworthy influence are education and in-service training, but a more valid indication of the comparative influence of these variables can be achieved through regression analyses. These are presented in Table 5.6.

Table 5.6 Total influences of respondents' personal characteristics variables

Variable	Beta	t	p
Constant		5.770	.000
Salary	-.206	-2.084	.038
Education	-.046	-.593	.554
In-service training in management	.085	1.343	.180
Years in current position	-.040	-.659	.510
Job position	.194	2.603	.010
Age	.128	1.051	.294
Gender	-.091	-1.570	.117
Marital status	-.036	-.550	.583
Highest qualification in extension	.080	1.377	.169
Formal training in management	-.015	-.258	.796
In-service training in extension	-.019	-.321	.748
Total service years in MOA	-.028	-.225	.822
Years in management	.002	.034	.973

$R^2 = 0.060$

According to Table 5.6, salary and managerial positions are confirmed to be the variables contributing most significantly to the variations regarding perceptions of the current organizational efficiency situations. However, the total contribution of personal characteristics towards explaining the variance is only six percent. This is reflected in the significant R^2 of 0.060.

5.3.2 Organizational (internal) factors

The strength of an organization's resources and its ability to mobilize them in a manner calculated to result in competitive advantage, are the biggest determinants of how well the organization will be able to perform, in light of the prevailing industry and competitive conditions. According to Thompson and Strickland (2001), an *organization's strength* is something it is good at doing, or a characteristic that gives it enhanced competitiveness (such as a skill/ important expertise, valuable physical assets, valuable human assets, valuable organizational assets, valuable intangible assets (brand name or reputation), competitive capabilities, alliances or cooperative ventures, and its market achievements determine the complement of resources at its command with which it competes). On the other hand, a weakness is something an organization lacks or does poorly (in comparison to others) or a condition that puts it at a disadvantage. An organization's internal weaknesses can relate to (1) deficiencies in competitively important skills or expertise or intellectual capital of one kind or another; (2) a lack of competitively important physical, organizational, or intangible assets; or (3) missing or weak competitive capabilities in key areas.

Some resource strengths and competencies are competitively more important than others, because they add greater power to the organization's strategy, or are bigger factors in contributing to a strong market position and higher profitability. Likewise, some weaknesses can prove fatal if not remedied, while others are inconsequential, easily corrected, or offset by company strengths (Thompson & Strickland, 2001). In view of this, the level of importance, two dimensions of organizational factors are identified:

resources position and general knowledge and skills of employees. Their importance level is examined by correlation analysis.

Organizational resources position

Concerning organizational resource position, five variables were selected. The results of these analyses are summarized in Table 5.7.

Table 5.7 Correlation between variables of organizational resources factors and various aspects of organizational efficiency (N=340)

		Organizational efficiency aspects									
		Operating			Process			Organizational health			
Variables of organizational resources position	St	Extension delivery	Functional efficiency	Resource use	Coordination	Communication	Participation	Work climate	Job satisfaction	Motivation	Total
Skilled manpower	r	.18	.05	.36	.21	.24	.31	.13	.17	.27	.23
	p	.00	.37	.00	.00	.00	.00	.02	.00	.00	.00
Offices & accommodation	r	.18	.15	.29	.24	.20	.24	.13	.18	.25	.22
	p	.00	.01	.00	.00	.00	.00	.02	.00	.00	.00
Extension aids	r	.16	.04	.16	.24	.15	.21	.25	.11	.16	.18
	p	.00	.53	.01	.00	.01	.00	.00	.04	.00	.00
Finance	r	.08	.08	.10	.14	.12	.18	.19	.03	.13	.12
	p	.18	.17	.09	.01	.03	.00	.00	.63	.02	.04
Transportation	r	.06	.01	.09	.13	.17	.18	.19	.02	.12	.08
	p	.30	.93	.11	.02	.01	.00	.00	.79	.03	.14
Total resources	r	.16	.08	.24	.23	.21	.27	.12	.22	.21	.20
	p	.01	.17	.00	.00	.00	.00	.03	.00	.00	.01

The results in Table 5.7 show that all of the selected resource variables were significantly correlated with most variables of organizational efficiency measures. Comparatively, based on correlation coefficients and level of significance, availability of the skilled manpower and offices/accommodations can be considered as more important, because they were found to have stronger and more significant association with all variables of organizational efficiency aspects. The results of regression analysis also support these findings (Table 5.8).

Table 5.8 Influences of organizational variables

Variable	Beta	t	p
Constant		26.484	.000
Extension aids	.116	1.450	.148
Offices & accommodation	.167	2.339	.020
Transportation	-.090	-.948	.344
Finance	-.097	-.906	.366
Skilled manpower	.218	2.917	.004

$R^2 = 0.101$

Table 5.8 reveals that out of the five organizational resource position variables, the skilled manpower and offices and accommodation variables are found to be the variables contributing most significantly to the variations in the current organizational efficiency situations. The overall contribution of this set of variables is higher than that of the personal characteristics towards explaining the dependent variable variation, namely total organizational efficiency (10.1 percent). This is expressed by the value of R^2, which is 0.101.

5.3.3 Environmental (external) factors

The extension organization operates in an environment which provides it with inputs (such as information, energy, and materials) and which in turn influences its goals and those of the farmers it serves (Cummings & Worley, 2001; van den Ban & Hawkins, 1996:236). External elements are related to the larger social, economic, administrative, political and diplomatic arena, of which agricultural extension is a small part. This external environment represents the external forces that can affect the attainment of organizational objectives (Cummings & Worley, 2001), in terms of what it can and cannot do (such as what is legal; what complies with government policies and regulatory requirements; special interest or pressure of politicians) and competitive conditions/

overall industry attractiveness which an organization has to be tailored to (such as customer needs and expectations).

There are two aspects of external environmental factors, the task and the general environment. While task related environment factors refer to the organization's competitive conditions, factors of the general environment are related to what an organization complies with (Cummings & Worley, 2001). A total of eight variables (four for each aspect) were identified regarding the analysis of association between organizational efficiency aspects and external environment variables (Table 5.9).

Table 5.9 Correlation between variables of environmental factors and various aspects of organizational efficiency (N=340)

		Variables of organizational efficiency aspects									
		Operating			Process			Organizational health			
Variables of Environmental factors	Statistical parameter	Extension delivery	Functional efficiency	Resource use	Coordination	Communication	Participation	Job satisfaction	Motivation	Work climate	Total
Task environment											
Cooperation between supplementary institutions	r	.21	.29	.20	.29	.24	.31	.22	.25	.31	.33
	p	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Farmers' willingness	r	.23	.11	.32	.17	.16	.21	.15	.21	.08	.19
	p	.00	.06	.00	.00	.00	.00	.01	.00	.16	.00
Smallholder farmers' access to credit and inputs	r	.11	.06	.10	.10	.06	.18	.13	.13	.24	.18
	p	.04	.30	.07	.07	.32	.00	.02	.02	.00	.00
New technologies and information	r	.09	.00	.06	.17	.13	.21	.00	.14	.14	.08
	p	.12	.96	.25	.00	.02	.00	.98	.01	.01	.17
Total task environment	r	.23	.14	.28	.25	.20	.32	.16	.27	.24	.26
	p	.00	.01	.00	.00	.00	.00	.01	.00	.00	.00
General environment											
Government policies and regulations	r	.32	.19	.39	.34	.38	.36	.27	.23	.25	.35
	p	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Land tenure policy	r	.16	.16	.19	.29	.24	.25	.23	.23	.25	.30
	p	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
Political forces	r	.20	.17	.27	.31	.36	.27	.27	.16	.18	.29
	p	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Agro-ecological	r	.11	.03	.30	.12	.11	.14	.10	.09	-.01	.09
	p	.05	.54	.00	.03	.04	.01	.06	.11	.85	.11
Total general environment	r	.29	.20	.44	.40	.42	.38	.32	.25	.24	.37
	p	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

It appeared that the association between perceived environmental situations and organizational effectiveness are strong (Table 5.9). This is reflected by the fact that, except for the agro-ecological variable, all the variables of environmental factors are significantly correlated with all variables of organizational efficiency measures.

These results suggest that all of the variables included in this study were found to be relevant and important, so that they need attention. More importantly, however, special emphasis should be given to appropriateness and effectiveness of strategic position to deal with (reactively or pro-actively) the general environmental conditions, as well as with the cooperation between supplementary institutions (task environment), if further improvement in the current situation of organizational effectiveness is needed. The importance of these variables are confirmed by the results from the regression analysis indicated in Table 5.10 below.

Table 5.10 Influence of organizational environmental variables

Variable	Beta	t	p
Constant		11.723	.000
New technologies and information	-.169	-3.137	.002
Farmers' willingness	.119	2.025	.044
Government policies and regulations	.332	5.183	.000
Agro-ecological factors	-.053	-.988	.324
Political forces or factors	.184	3.381	.001
Land tenure policy appropriateness	.152	3.074	.002
Smallholder farmers' access to credit and inputs	-.092	-1.655	.099
External coordination	.294	5.062	.000

$R^2 = 0.356$

According to Table 5.10, external environmental factors prove to be the variables contributing most significantly towards explaining the variance of the current organizational efficiency situation, which is 35.6 percent. This is reflected in the significant R^2 of 0.356. Except agro-ecological factors and smallholder farmers' access to credit/ inputs, the influences of all variables of external environment on general organizational performance are significant at the one percent significance level. The findings provide clear evidence of the influence of environmental variables on organizational efficiency in the Ethiopian situation. Government policies and regulations, cooperation between supplementary institutions, and political factors were found the most significant determinants in this set of variables, expressed by high t-value and significance levels. This means increased favourableness in these variables will improve organizational efficiency to a greater extent than other factors considered in this study.

This implies that the organization's management and policy makers should rather focus on addressing issues related to policies, improving the communication with supplementary institutions and networking than on endless organizational restructuring.

CHAPTER 6

STRATEGIC PLANNING IN EXTENSION

6.1 INTRODUCTION

One of the most important things an organization should do, is plan for the future. There are basically two different kinds of planning: operational and strategic. Both kinds are required, as they serve very different needs. Organizations have increasingly move into strategic planning to adapt to changing environmental circumstances or forces, and to maintain a proper fit between them and the demands of their environment (Migliore, et al., 1995:4-5). Without a long-term planning perspective, an organization is bound to face a tough situation. Instead of moving steadily toward its goals, the organization will continually swerve off course due to the endless supply of distractions that can prevent an organization from pursuing its purpose and vision (Migliore, et al., 1995). Successful strategic planning, according to Allison & Kaye (1997):

(a) Improves the focus of an organization, in that it generates:

1. *An explicit understanding of the organization's purpose, business(es), and values among staff, board, and external constituencies. That understanding supports an increased level of commitment to the organization and its goals.*
2. *A blueprint for action (a conceptual framework) that guides and supports the management and governance of the organization, that orientates board and staff as they go about doing the work of the organization.*
3. *Board milestones with which to monitor achievements and assess results.*
4. *Information that can be used to market the organization to the public.*

(b) Improves the process of people working together, in that it:

1. *Creates a forum for understanding why the organization exists and the shared values that should influence decisions.*
2. *Fosters successful communication and teamwork among the board of directors and staff.*
3. *Lays the groundwork for meaningful change by stimulating strategic thinking and focusing on what is really important to the organization's long-term success.*
4. *Most importantly, brings everyone together to pursue opportunities for meeting the needs of clients more successfully.*

In general, ***Strategic planning*** is a systematic process through which an organization agrees – and builds commitment among key stakeholders – about priorities which are essential to its mission and responsive to the environment (Allison & Kaye, 1997). In light of this strategic planning process, the perceptions of respondents from Oromia Bureau of Agricultural and Rural Development (OBARD) are examined in relation to extension mission, environment and priorities.

6.2 EXTENSION MISSION

One of the primary reasons for creating a strategic plan is to establish a common understanding of, and ambition for, an organization's work. The most succinct reflection of this shared understanding lies in the organization's mission statements – declaration of intentions, hopes, and expectations (Allison & Kaye, 1997). A mission statement consists of three elements: *purpose* - which describes the end result an organization seeks to accomplish (and for whom); *business* – a description of the primary means (program, action, services, etc.) used to accomplish the purpose; and *values* – a list of values and beliefs or guiding principles shared by members of an organization and practiced in their work (Allison & Kaye, 1997).

The extent to which the extension purpose and mission is clearly articulated in OBARD is assessed in terms of the societal needs to be focused on by extension, and how the extension concept is currently understood or should be understood.

6.2.1 The focus of extension programmes

Organizations providing a public service are seldom (if ever) in a position to provide all the services that can be expected of them. It is for this reason, and more specifically because of limited resources, that priorities have to be identified and the inputs focused. It is against this background that the identification and prioritization of societal needs is so important (Düvel, 2003), as they will influence the choice and content of programmes.

The "purpose" component of the mission statement explains the solution the organization seeks for the focus problem, since, as Allison & Kaye (1997) put it, the logic of the mission statement says that the ends (the purpose) determine the means .

Priority focused or need-based development is, therefore, an accepted departure point in the methodologies of extension. But how are these needs or priorities to be determined? Respondents' viewpoints were tested by asking them to place a given set of alternatives in rank order of importance. The results are presented in Table 6.1.

Table 6.1 The importance rank order (expressed as weighted mean percentages) of different priority or focus alternatives (N=340)

Priority Alternatives	Mean	Standard Deviation	Rank
1. What the community expressed as important, irrespective of whether it is of an agricultural nature or not	57.8	21.5	4th
2. Agricultural needs that ranked highest by the community	72.5	19.9	1st
3. The biggest agricultural need considered on input/output ratio	67.2	22.8	3rd
4. The community's decision after being presented with findings (3)	69.6	23.4	2nd
5. The department's priorities	52.3	23.6	5th

In general, the most acceptable priorities are the agricultural needs ranked highest by the community (mean ranking percentage of 72.5). The community's decision after being presented with findings based on the biggest agricultural need, considered on input/output ratio, was ranked second with low differences but high variations among the respondents (mean=69.6 percent) The unfelt need representing the biggest agricultural need, based on input/output ratio, was allocated the third position (67.2 percent).

Focusing programmes on community needs (that could be extended beyond agriculture) and the department-based priorities (though they have appreciable support of 57.8 and 52.3 percent, respectively) received the lowest ranking. The variations between respondent groups are summarized in Table 6.2.

Table 6.2 Acceptability (expressed as mean percentage rank order) of different priority alternatives by respondents in different categories (N=340)

Respondent categories	Statistical parameter	Perceived mean percentage rank order of different priority alternatives				
		1. What the community expressed as important (felt needs not restricted to agriculture)	2. Agricultural needs ranked highest by the community	3. The biggest agricultural need based on input/output ratio	4. The community's decision after being presented with findings 3	4. The departments priorities (unfelt needs)
(a) Managerial Positions						
Non- managers	Mean	57.8	72.1	69.0	69.8	56.5
First level managers	Mean	56.9	70.6	65.2	68.4	50.0
Middle level managers	Mean	57.2	76.3	67.6	72.4	47.0
Top level managers	Mean	72.5	73.8	45.0	56.3	23.8
Analysis of variances (ANOVA)	F	1.322	1.019	3.225	1.227	7.479
	df	3,336	3,336	3,336	3,336	3,336
	p	.27	.38	.02	.30	.00
(b) Zones						
Jimma	Mean	49.4	73.2	73.1	77.6	49.1
Arsi	Mean	58.8	69.5	68.0	66.7	58.4
South West Shewa	Mean	65.1	76.2	63.2	62.2	53.0
Borena	Mean	60.0	73.3	61.4	60.2	59.5
East Shewa	Mean	56.9	70.0	59.6	73.1	36.9
Analysis of variances (ANOVA)	F	5.601	1.064	3.719	6.721	6.784
	df	4,317	4,317	4,317	4,317	4,317
	p	.00	.37	.01	.00	.00

The major difference between management groups is that top managers still tend towards a stronger support of what was fashionable at one stage, namely felt needs of the community, which were traditionally captured through PRA techniques. As far as the zones are concerned, Jima and East Shewa stand out with their support of a priority based approach, which implies a decision taken with the community, but subsequent to being exposed to a more objective assessment based on input/output or improvement potential considerations. This viewpoint is interesting and worthy of more general support because it does not only ensure support from the community (based on felt needs) but is more likely to be closer to the optimum priority from an improvement potential point of view or a compromise between the felt and unfelt needs.

6.2.2 The concept of extension education

The mission or purpose and the consequent means of any extension organisation will necessarily be influenced by its policy regarding the concept of extension. This section represents the means aspect of the extension mission, by which the purpose or ends of

extension will be achieved. Düvel (2003) refers to extension as a continuum, illustrated in Figure 6.1.

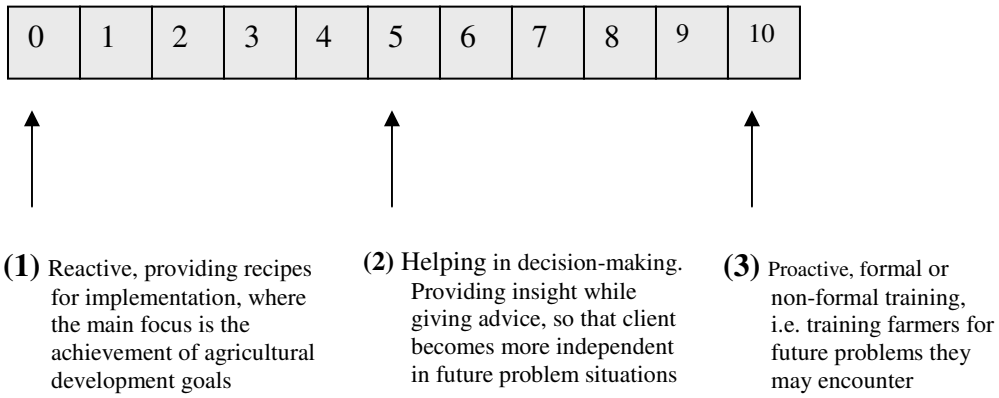


Figure 6.1 The concept of extension expressed in terms of a continuum

Figure 6.1 illustrates how the viewpoint and the consequent approach of extension can vary from, on the one extreme of the continuum, (**1**) an approach that focuses on a strictly advisory and reactive approach (based on request and restricted to advice or provision of a recipe regarding the requested issue), to (**3**) on the other extreme a pro-active approach, which focuses on preparing the client for dealing with future problem situations and thus being more of an educational or capacity-building nature. Between these extremes would be a position (**2**) where current individually-experienced problems are addressed, not only to answer the specific question(s), but also to provide insight and understanding of underlying principles, so that the individual becomes more skilful and independent in future decision-making situations.

Based on the above illustrations, the respondents were requested to indicate their perception of the concept of extension as it is understood currently and what they thought it should be. Table 6.3 gives an overview of how respondents' perceived the current interpretation of extension.

Table 6.3 Respondents' perception of the current and recommended understanding of the concept of extension and its potential contribution, expressed as mean scale point in a continuum ranging from 0 (complete reactive) to 10 (complete pro-active)

Extension concept	N	Mean	SD
The current understanding (where 0=complete reactive, 10=complete pro-active)	348	4.3	2.2
Recommended understanding (0=completely reactive, 10=completely pro-active)	348	7.2	1.8
Difference between recommended and current understanding	348	2.9	-
Percentage contribution of recommendation to increased extension delivery effectiveness	346	58.7	26.2
Percentage contribution of recommendation to increased job satisfaction	345	61.8	25.7

According to these findings in Table 6.3, the concept of extension has to be understood differently (2.9). The current understanding of extension includes both extremes with a slight emphasis on the advisory role (4.3). However, the recommendation is a bigger emphasis on the educational dimension. This means a significant leaning towards a more educational view and thus a clear recommendation that extension should be more educational (7.2) than it currently is. If accepted as policy, this ratio should also be observed in the support and financing of extension.

Some of the variations regarding these perceptions between the different categories of respondents are indicated in Table 6.4.

Table 6.4 The current and recommended understanding of the concept of extension expressed as mean scale point in a continuum ranging from 0 (complete reactive) to 10 (complete pro-active) as perceived by different categories of respondents (N=348)

Categories of respondents	Statistical parameter	How the extension concept is currently understood	How the extension concept is thought should be understood	The scope of shifted understanding (Recommended–Current)
(a) Managerial positions				
Non- managers	186	4.5	7.0	2.5
First level managers	94	4.1	7.4	3.3
Middle level managers	60	4.1	7.4	3.3
Top level managers	8	4.8	8.0	3.2
Analysis of variances (ANOVA)	F	1.507	1.511	
	Df	3,347	3,347	
	p	.21	.21	
(b) Zones				
Jimma	106	3.9	7.2	3.3
Arsi	111	5.0	7.0	2.0
South West Shewa	39	4.7	7.5	2.8
Borena	43	4.1	7.6	3.5
East Shewa	32	2.9	6.7	3.8
Analysis of variances (ANOVA)	F	7.060	1.441	
	df	4,324	4,324	
	p	.00	.22	

The results accommodated in Table 6.4 reveal the significant variation of perceptions observed between respondents from various zones. The biggest difference in perception between zones occurred with respect to the current situation of extension concept understanding (F=7.060; df=4; p=0.00). For example, according to East Shewa zone, the current understanding of the extension concept (29.4 percent) tends even more towards the extreme alternative of recipe provision type of educational approach. Also, in its recommendation, it has little support for the other extreme point (extension as being educational in nature), expressed by the lowest weighted average mean (67.4 percent). However, the demanded change is the highest (38 percent increase) of all the respondents' categories, including managerial positions. Arsi, on the other hand, which has a long experience in various extension projects, appeared with less demand for change (20.6 percent increase), by gauging that the current situation is already at the mid point (49.8 percent).

No significant variations were recorded between respondents with various managerial positions, but the non-managers appeared less supportive of pushing extension towards its extreme educational role, as recommended by various level managers. The non-

managers are of the opinion that a 25 percent increase is reasonable, while the demand by managers, such as those of the first level, was for an increase of 34.1 percent. Also, the desired situation of operational workers was 10 percent lower than the top-level managers' assessments.

6.3 THE OPERATING ENVIRONMENT OF EXTENSION

Agricultural extension organizations in many developing countries are faced with many significant problems, both internal and external. Assessing an organization's internal (resource *strengths* and *weaknesses)* and external (*opportunities* and *threats)* environments, provide a good overview as to whether an organization's business position is fundamentally healthy or unhealthy (Thompson & Strickland, 2001). Understanding the organization's environment is significant to facilitate the way an organization must respond in order to be successful (Raufi, 1989). Otherwise, the task of conceiving a strategy for the organization's well-being becomes a chancy proposition indeed (Thompson & Strickland, 2001).

The purpose of this section is to identify and prioritize the severity of environmental (internal, task and general) problems facing agricultural extension, put them in order of importance, and determine variations in perceptions between the different categories of respondents.

6.3.1 Internal environment: resource strengths and weaknesses

The strength of an organization's resources and its ability to mobilize them in a manner calculated to result in competitive advantage, are the biggest determinants of how well the organization will be able to perform in the context of the prevailing industry and competitive conditions. A *strength* is something an organization is good at doing, or a characteristic that gives it enhanced competitiveness, such as important skills or expertise, valuable physical assets, human assets, organizational assets, intangible assets

like brand name or reputation, competitive capabilities, alliances or cooperative ventures, and its market achievements.

A weakness is something an organization lacks or does poorly (in comparison to others), or a condition that puts it at a disadvantage. An organization's internal weaknesses can relate to (1) deficiencies in competitively important skills or expertise or intellectual capital of one kind or another; (2) a lack of competitively important physical, organizational, or intangible assets; or (3) missing or weak competitive capabilities in key areas.

A weakness may or may not make an organization competitively vulnerable, depending on how much the weakness matters in the market place, and whether it can be overcome by the resources and strengths in the organization's possession (Thompson & Strickland, 2001:120). Some resource strengths and competencies are competitively more important than others, because they add greater power to the organization's strategy or are bigger factors in contributing to a strong market position and higher profitability. Likewise, some weaknesses can prove fatal if not remedied, while others are inconsequential, easily corrected, or offset by company strengths (Thompson & Strickland, 2001).

Against this background, seven variables were selected and respondents' perceptions assessed. The results are summarized in Tables 6.5 and 6.6.

Table 6.5 The perceived adequacy of organizational resources (based on mean scale-point percentage) by respondents (N=338)

Variables	Mean	SD
Coordination between institutions	41.4	20.8
Skilled manpower	36.4	16.9
New agric tech & info	36.4	20.6
Office and accommodation	35.0	17.6
Transport	27.1	18.7
Extension aids	22.9	18.0
Finance	21.4	16.9
Total	35.5	19.7

The overall picture depicted in Table 6.5 is one of resource inadequacy. The seriousness of the situation is reflected in the fact that all assessments fall well below the 50 percent level. Finance, extension teaching aids, and transportation facilities appear to be the most critical, with assessments of 21.4, 22.9, and 27.1 percent, respectively.

These results suggest that an organization's resource inadequacy appears to offer a partial explanation for the low level of organizational effectiveness (discussed in chapter 5).

Table 6.6 The perceived adequacy level of various organizational resources by respondents in management and location categories (N=340)

Respondents categories	Statistical indicator	Perceived mean percentage per resource category						
		Skilled Manpower	Office & accommodation	Transport	Coordination of institutions	Extension aids	Finance	New agricultural technologies & information
(a) Managerial Positions								
Non- managers	Mean	63.5	59.8	47.7	43.1	45.6	42.0	38.5
First level managers	Mean	63.2	62.1	49.2	41.4	40.8	39.9	35.1
Middle level managers	Mean	52.1	52.7	47.5	36.8	35.6	36.6	30.8
Top level managers	Mean	52.5	32.5	26.3	36.3	21.3	22.5	42.5
Analysis of variances (ANOVA)	F	2.003	2.485	.987	1.559	2.286	1.126	1.527
	Df	3,336	3,336	3,336	3,345	3,336	3,336	3,345
	p	.11	.06	.40	.20	.08	.34	.21
(b) Zones								
Jimma	Mean	64.3	59.4	39.9	40.8	39.3	33.0	31.7
Arsi	Mean	66.2	66.5	54.4	45.3	49.8	45.5	41.9
South West Shewa	Mean	55.1	50.9	58.6	46.2	45.1	47.1	38.3
Borena	Mean	55.6	60.7	55.5	40.2	42.6	43.6	34.0
East Shewa	Mean	48.7	36.7	30.3	28.7	27.3	31.7	29.8
Analysis of variances (ANOVA)	F	2.484	5.126	5.279	4.539	2.856	2.844	2.756
	df	4,318	4,318	4,318	4,326	4,318	4,318	4,326
	p	.04	.001	.000	.00	.03	.02	.03

The different management categories do not vary significantly as far as their assessment of resources are concerned. What is conspicuous though, is that in almost all cases, the top level managers tend to have the lowest assessments, implying that they are perhaps more critical and least satisfied with the current state of affairs. This bodes well for future change, because of the potential influence of the top managers. Unfortunately this does not apply to what frontline extension workers and their supervisors regard as the biggest deficiency, namely the availability of new improved agricultural technologies and

information. However, the low assessments by the first level and middle level managers (35.1 and 30.8 percent, respectively), indicates an awareness and possible support from them in addressing the need for change and improvement in this field.

The differences between zones are significant in regard of the assessment of all resources. These differences can be primarily attributed to the very low assessment by respondents from the East Shewa zone and some assessment (level of coordination, extension aids and finances, and transport) in the Jimma zone. Management needs to pay specific attention to the East Shewa zone, irrespective of whether this zone is less endowed with resources (which seem likely) or whether the respondents are more critical.

6.3.2 The organization's external environment

The extension organization operates in an environment which provides it with inputs such as information, energy, and materials and which in turn influence its goals and those of the farmers it serves (Cummings & Worley, 2001; Van den Ban & Hawkins, 1996:236). An organization's environment can be categorized into two: general and task environments.

General environment represents the external environment and forces that can affect the attainment of organization objectives. It is described in terms of the amount of uncertainty in social, technological, economic, ecological, and political forces (Cummings & Worley, 2001). The general environment affects organizations in terms of what it can and cannot do (such as what is legal; what complies with government policies and regulatory requirements; special interest or pressure of politicians).

An organization's task environment, on the other hand, is concerned with competitive conditions and overall industry attractiveness which an organization has to be tailored to, such as customer needs and expectations; new technological developments. It consists of five forces: supply power; buyer (customer) power; threats of substitutes; threats of entry; and rivalry among competitors (Cummings & Worley, 2001).

Eight variables were selected for analysis of the effects of environmental factors. The results are summarised in Table 6.7.

Table 6.7 Respondents' perceived favourableness of external environment factors, expressed by mean percentage scale points (N=338)

External environmental variables	Mean	SD	Rank
Task environment			
Farmers' willingness	56.2	20.4	1
SHF access to credit & inputs	49.2	19.4	2
Coordination between institutions	41.4	20.8	3
New agric tech & info	36.4	20.6	4
Weighted average	45.8	20.0	
General environment			
Agro-ecological	65.9	17.8	1
Government policies & regulations	52.7	17.9	2
Political factors	48.8	22.7	3
Land tenure policy	41.2	22.2	4
Weighted average	52.2	23.0	

According to the findings in Table 6.7, most of the variables of the external environment measures (in terms of favourableness) fall below average expectations of the respondents. Assessments of the general environment (mean = 52.2 percent) are somewhat better than those of the task environment (mean = 45.8 percent), which leads to the conclusion that especially the task environment appeared as a threat to organization's effectiveness and efficiency.

Seen from an opportunity or threat point of view, farmers' willingness appeared as an opportunity reflecting the organization's credibility. But lack of availability of new agricultural technologies and information and coordination between supplementary institutions appear to be the most threatening items in task environment that need to be addressed. Under the general environmental factors, land tenure policy and political interference also emerged as important issues which undermine the effectiveness and efficiency of the organization in pursuing its mission.

Variations regarding categories of management and locality are presented in Table 6.8.

Table 6.8 Perceived favourableness of external environmental factors expressed as mean percentage scale point by respondents in managerial and locality categories (N=338)

Categories of respondents	Statistical parameter	Aspects of task environment				Aspects of general environment			
		Coordination of institutions	Farmers willingness	Smallholders access to credits	Agric technologies availability	Govt policy & regulations	Political interference	Land tenure policy	Agro ecology
(a) positions									
Non-managers	Mean	43.1	56.5	49.6	38.5	52.7	47.0	42.8	67.6
First level managers	Mean	41.4	55.0	48.7	35.1	52.5	49.2	38.4	65.3
Middle level managers	Mean	36.8	57.2	48.3	30.8	54.7	56.6	40.7	62.3
Top level managers	Mean	36.3	53.3	50.0	42.5	48.3	30.8	38.8	59.2
Analysis of variances (ANOVA)	F	1.559	.142	.093	1.527	.240	2.915	.858	1.034
	Df	3,345	3,345	3,345	3,345	3,345	3,345	3,345	3,345
	P	.20	.94	.96	.21	.87	.03	.46	.38
(b) Locations									
Jimma	Mean	40.8	58.6	45.8	31.7	52.0	49.8	37.1	73.0
Arsi	Mean	45.3	58.3	54.1	41.9	54.7	48.9	44.2	66.4
South West Shewa	Mean	46.2	55.4	49.7	38.3	58.5	54.3	46.1	62.5
Borena	Mean	40.2	49.2	47.9	34.0	49.4	40.5	47.4	54.9
East Shewa	Mean	28.7	50.2	46.8	29.8	48.7	54.0	33.4	63.6
Analysis of variances (ANOVA)	F	4.539	1.599	2.737	2.756	1.163	1.576	3.772	5.198
	df	4,326	4,326	4,326	4,326	4,326	4,326	4,326	4,326
	P	.00	.17	.03	.03	.33	.18	.01	.00

The management categories do not differ significantly regarding their assessment of the favourability of external environmental factors, with the exception of political interference (F=2.915; p=0.03), in respect of which the top managers are much more negative than the rest. This is understandable, because if political interference is a limiting factor, the top managers will be the ones most aware of it, as they are more likely to interact with politicians.

Variations between locations were more diversified and the differences highly significant in the case of most external environment variables. East Shewa again has the lowest assessments (especially in regard to availability of agricultural technologies and coordination with other institutions), followed by Jimma.

From the findings it can, therefore, be concluded that within the internal and external environment several constraints occur that were perceived to limit the effectiveness of extension in the Oromia regional state of Ethiopia. The respondents indicated that finance, extension teaching aids, transport (mobility), lack of appropriate technologies and office and accommodation are the most critical problems.

These findings tend to support current knowledge with regard to problems confronting extension, but some differences were observed in terms of priorities regarding the seriousness of the problems. For example, skilled manpower, coordination between institutions, appropriate technologies were identified as the top three most serious problems by Pezeshki-Raad et al., (2001) and Sigman & Swanson (1984). While the respondents of this study largely agreed with them, they gave more emphasis to finance, extension teaching aids and transport, and were thus more in line with the local findings by Fasil & Habtemarium (2006) and Belay (2002).

In the study by Fasil & Habtemarium (2006), shortage of transport and budgetary constraints were ranked first in the lists of problems that development agents face in carrying out their day-to-day activities, while limited availability of logistics and other support for extension personnel was second (2002).

In general, lack of agricultural technology, coordination with supplementary institutions, perceived inappropriateness of land tenure policy and current political situations were perceived by the majority of the groups as issues that had to be addressed.

6.4 PRIORITIES

The identification and matching of opportunities with strengths and weaknesses is basic to identifying strategy alternatives. One must bear in mind the following when choosing extension programmes or priorities: (1) perceptions of the present situation, (2) vision of the desired situation, (3) perception of why the present deviates from the desired situation, and (4) what possibilities one sees for bringing about changes through extension with available resources and manpower (Van den Ban & Hawkins, 1996). Above all, the extension organizations must direct efforts at variables that can be changed by extension, and for which the organizations have the manpower and resources available to bring about change (Van den Ban & Hawkins, 1996).

6.4.1 Clients' focus

The clients' focus or strategy is referring to how the top management intends to deal with clients. It is reflected in the extension target group focus or in the attention given to the various categories of farmers. Types of farmer priorities were assessed in terms of female or male, commercial or subsistence, low or high potential environment, using a scale where emphasis on only the first alternative equalled 1scale point or 0%, and all emphasis on the second alternative equalled 10 scale points of 100%. The results are shown in Table 6.9.

Table 6.9 The perceived (a) current and (b) recommended client focus and contribution of the latter to improvement of (c) extension delivery and (d) job satisfaction (expressed in mean percentage ratio) by respondents (N=341)

Clients' categories	Current situation		Recommended situation		Problem scope (Recommended – current)	% improvement in extension delivery	
	Mean	SD	Mean	SD	Mean	Mean	SD
Male focus versus female	86.0	11.6	64.2	13.4	21.8	61.1	26.5
Small-scale focus versus Commercial	90.1	9.7	70.2	15.2	19.9	56.7	26.7
Low potential areas focus versus high	44.0	20.4	24.0	17.9	20.0	55.6	28.2

*Female-male farmers' ratio: ranges from 0% (only female) to 100% (only male)

**Commercial versus subsistence farmers' ratio: ranges from 0% (only commercial farmers) to 100% (only subsistence farmers)

***Low potential versus high potential area farmers: ranges from 0% (only low potential area) to 100% (only high potential)

The current focus on male and smallholder farmers is clearly reflected in Table 6.9, while the emphasis is almost equally divided between high and low potential areas. However the recommended situation differs significantly from the current situation. Respondents realise that approximately 20 percent more emphasis should be placed on female farmers and on commercial farmers and on farming in high potential areas. The respondents believe that these changes in focus will increase extension services effectiveness and job satisfaction by over 50 percent, which seems overrated or a little bit over-ambitious. More variations occur between respondent groups and these are summarised in Table 6.10.

Table 6.10 The perceived (a) current and (b) recommended clients' focus (expressed in mean percentage) by respondents of various groups (N=348)

Respondents' category	Statistical indicator	Clients' category					
		Female versus male farmers' focus*		Commercial versus subsistence farmers' focus**		Low versus high potential area farmers' focus***	
		Current	Recommended	Current	Recommended	Current	Recommended
(a) Managerial Positions							
Non- managers	186	85.18	63.82	89.06	70.67	55.16	74.84
First level managers	94	88.42	66.20	91.89	71.82	54.35	74.57
Middle level managers	60	82.49	62.73	90.53	67.57	63.28	79.31
Top level managers	8	88.00	60.63	89.38	60.63	58.75	85.00
Analysis of variances (ANOVA)	F	3.522	1.161	1.803	2.076	2.818	1.774
	Df	3,337	3,337	3,337	3,337	3,337	3,337
	p	.02	.33	.15	.10	.04	.15
(b) Zones							
Jimma	106	90.41	69.92	94.92	75.35	56.19	72.67
Arsi	111	80.28	61.62	85.14	67.29	54.18	79.36
South West Shewa	39	87.18	61.84	90.16	72.43	59.21	75.26
Borena	43	85.60	62.73	90.28	65.92	62.00	73.50
East Shewa	32	87.17	60.69	90.59	69.66	56.43	75.71
Analysis of variances (ANOVA)	F	11.684	7.244	15.635	5.401	1.273	2.066
	df	4,318	4,318	4,318	4,318	4,318	4,318
	p	.00	.00	.00	.00	.28	.09

*Female-male farmers' ratio: ranges from 0% (only female) to 100% (only male)

**Commercial versus subsistence farmers' ratio: ranges from 0% (only commercial farmers) to 100% (only subsistence farmers)

***Low potential versus high potential area farmers: ranges from 0% (only low potential area) to 100% (only high potential)

Middle and top managers tend to be more supportive of a change in emphasis towards commercial farmers and towards farmers in high potential areas

As far as differences between zones are concerned, the change to an increased focus on female farmers is most obvious in South West Shewa (25.3%) and East Shewa (26.5%), while Borena (24.3%) and East Shewa (21%) are most outspoken regarding a necessary shift towards a greater emphasis on commercial farmers. Respondents from Arsi are the stongest supporters of an increased focus on the high potential areas. Their recommendation is a 25 percent shift, while that of Borena is only 11.5 percent.

6.4.2 Extension program focus

Extension service provision strategy refers to what services an organization intends to provide to its clients. Programme foci should spell out the nature or range of the services that a business intends to offer and the boundaries of the specific services that it intends to deliver (Fry & Killing, 1995:28). The major problem in extension is the use of extension personnel for non-extension activities (Sigman & Swanson, 1984), such as providing direct services, collecting rural credit, census data and spending too much time in writing reports, which are seldom used for rural development. These duties distract extension agents from extension work, and reduce their credibility with farmers. Administrators tend to give extension workers all kinds of field tasks (involvement in government administrative works such as tax, regulatory activities, gathering statistics and other ruling parties' politically related issues).

These issues in the Ethiopian situation have been the major topic in debates between the government and the agricultural professionals, practitioners and researchers (Fasil & Habtemarium, 2006; EEA, 2005:390; Habtemarium, 2005; Belay, 2002).

To investigate the focus of extension or extension programmes, nine performance areas or extension activities were identified after wide consultation and review of various reports. Respondents were then asked to indicate the level of current focus and what they thought it should be (Table 6.11). The responses of respondents were obtained on a 10-point scale (See appendix for variables descriptions).

Table 6.11 The perceived current and recommended focus of extension programs and the percentage of the recommended achievable without additional resources (N=348)

Types of services offered	Current			Recommended			Percent of recommendation achievable without additional resources	
	Mean	SD	Rank	Mean	SD	Problem scope*	Mean	SD
Crop	65.5	20.0	1st	84.7	17.3	19.2	58.3	24.0
Non-extension education	61.6	21.1	2nd	76.6	25.1	15.0	54.3	24.8
Non-agricultural tasks	61.1	22.6	3rd	66.6	30.2	5.5	56.1	25.6
Livestock	55.5	20.0	4th	82.9	18.8	27.4	53.9	23.0
Irrigation	54.6	25.0	5th	81.7	23.0	27.1	51.0	24.6
Cooperative management	53.5	21.1	6th	84.0	20.3	30.5	52.1	22.6
Soil & land utilization	49.8	23.3	7th	80.2	22.6	30.4	51.1	23.5
Forest & wildlife	44.6	23.3	8th	79.5	24.7	34.9	46.3	25.1
Home economics	42.3	21.5	9th	81.4	23.1	39.1	46.3	23.1

Problem scope (PS)* is the difference between recommended and current situation (Recommended – current = PS).

It appeared (Table 6.11) that currently the greatest focus was placed on non-extension education and non-agricultural tasks (government administrative, regulatory and other ad hoc activities) thereafter to crop related extension activities. Three extension service aspects (home economics, forest and wildlife, and soil and land utilization) have even received below average (midpoint) emphasis. Consequently, the respondents recommended an increased focus on extension education services by more than 27 percent, except crop. In particular, home economics, usually seen as rural women affairs programmes, received the highest demand (39.1 percent) for change in focus, followed by forest and wildlife, cooperative management, and soil and land utilization extension programmes, in that order. But cooperative management appeared to have the highest chance of implementation, expressed by comparative percentage of achievability without additional resources requirement (52.1 percent).

A further analysis was conducted for the purpose of identifying whether differences of opinion or perception between groups, Table 6.12.

Table 6.12 The perceived problem scope expressed by the mean percentage differences of the current and the recommended focus of the extension services according to respondents of various categories (N=340)

Categories of respondents	Statistical parameter	Types of extension activities								
		Crop	Live stock	Irrigation	Soil & Land	Forest & Wildlife	Cooperatives	Home economics	Non-education	Others**
a) Managerial positions										
Non-managers	MPD*	19.1	25.9	28.0	28.7	33.9	29.8	38.1	16.3	7.0
First level managers	MPD*	23.0	30.7	30.6	35.1	37.2	35.3	42.9	15.9	4.1
Middle level managers	MPD*	14.8	28.1	20.0	28.6	35.2	26.2	36.6	12.4	6.0
Top level managers	MPD*	5.7	15.7	15.7	28.6	27.1	22.9	35.7	-8.6	-26.7
Total	MPD*	19.2	27.4	27.1	30.5	34.9	30.6	39.1	15.0	5.5
Analysis of variance (ANOVA)	F	2.29	1.33	2.17	1.07	.40	1.63	.73	1.80	1.90
	df	3,340	3,340	3,340	3,340	3,340	3,340	3,340	3,340	3,340
	p	.078	.265	.091	.364	.753	.182	.537	.147	.129
(b) Zones										
Jimma	MPD*	19.5	28.3	28.8	33.9	40.7	40.9	56.3	29.2	5.5
Arsi	MPD*	15.8	25.0	23.4	27.1	29.6	24.0	26.8	10.5	9.7
South West Shewa	MPD*	14.6	26.4	23.3	27.4	33.8	30.8	29.7	1.6	1.9
Borena	MPD*	30.5	33.3	38.0	33.6	32.6	25.5	34.5	17.6	13.1
East Shewa	MPD*	25.9	30.3	29.4	29.7	39.0	28.3	47.0	-0.6	-12.8
Total	MPD*	19.7	27.8	27.5	30.4	34.9	30.8	39.4	15.4	5.9
Analysis of variance (ANOVA)	F	4.09	1.01	2.23	.93	2.06	5.99	18.34	12.17	3.00
	df	4,324	4,324	4,324	4,324	4,324	4,324	4,324	4,324	4,324
	p	.003	.406	.065	.448	.086	.000	.000	.000	.019

*MPD = Mean percentage difference;**Others= include activities such as involvement in local government administrative works

The results, shown in Table 6.12, indicate that no significant differences were observed between position groups. But there are some variations. Although they agreed with the other groups on the rank order of emphasis of most of the extension programmes, the top level managers rated the focus on the current priority areas much higher, while they rated the level of attention paid to less priority programmes much lower than the average assessment (reflected by more higher assessed mean scores for the first three highest ranked variables and the lowest for the last in comparison with the assessment of other positions). Furthermore, while in the opinion of the middle managers the current level of attention given to the livestock extension program was low (52.4 percent and ranked as the seventh), but it was the second highest priority (67.1percent) of the current extension programme, according to the top level managers.

More importantly, the top-level managers clearly differed from other groups in terms of the recommended situation (in the sense that increased demands of some programmes have been associated with the reduction of attention to the others). For instance, attention to home economics, soil and land utilization, and forest and wildlife protection and development ought to be increased by 35.7, 28.6 and 27.1 percent, respectively, and corresponding reduction of emphasis to non-agricultural and non-extension education by 26.7 and 8.6 percent.

As far as the variations between zones are concerned, more diversified views were recorded regarding four services (involvement in government works, non-extension agricultural activities, irrigation and livestock). More specifically, for example, Borena and East Shewa appear to be polarized with respect to involvement in government administrative works, ranked as currently the highest focus by East Shewa. For Borena, involvement in non-extension duties was not an issue.

In general, these findings justify the claims of the EEA report (2005:389) and support the findings by Belay (2002), that the extension programme focus has been defective, and that the extension staff has been unnecessarily engaged in administrative matters (like handling input loans, enforcing loan repayment, income tax collection, and agitating farmers to become members of a political party) which at times have put them in conflict with communities.

As far as the extension related services are concerned, the greatest focus was on promotion of crop production and protection technologies. Even the non-extension education activities, such as input and credit, were also mainly related to the extension of crop production and protection.

Some of the reasons could be: comparative availability of the technologies, lower prices of the technologies and observable-ness of impacts of the technologies within short periods of time. Further, these features of the technologies related to crops, appeared to be in line with the government's food security strategy, namely, that focus on crop production can alleviate the current existing food shortage problems.

Relatively, less attention has been given to activities, such as home economics, forest and wildlife and soil and land utilization. The reason could be lack of availability of technologies, expensiveness, and scale.

The findings imply that there is a need for reconsideration of the extension programme focus by extension management and administrative bodies.

CHAPTER 7

OPERATIONAL PLANNING IN EXTENSION

7.1 INTRODUCTION

Planning brings rationality and order into an organization, and facilitates extension workers' concentration on activities aimed at measurable results, instead of dissipating their energies in fighting fires (Buford, *et al.*, 1995). It establishes coordinated efforts, gives direction and minimizes waste and redundancy (Robbins & Coulter, 1999). There are various types of plans. The most popular ways to describe organizational plans are by their breadth (strategic versus operational), time frame (short term versus long term), specificity (directional versus specific), and frequency of use (single-use versus standing) (Robbins & Coulter, 1999). Detailed descriptions of each type of these plans are provided in chapter two. Here the focus is on the operational planning.

An operational (tactical or administrative) plan is primarily focused on efficiency and effectiveness in achieving the overall organizational objectives, defined by strategic planning (Buford, *et al.*, 1995). Operational plans tend to cover shorter periods of time, covering one year or less, and specify details on how overall objectives are to be achieved. It is the "action" or "doing" stage, and refers to the methods, procedures, rules, or administrative practices that guide decision making, and convert strategic plans into actions (Robbins & Coulter, 1999).

A decision is defined as the selection of a course of action from two or more alternatives, while decision making is a process or methodical action considering alternative actions (Robbins & Coulter, 1999). It deals with setting out alternatives, and selecting from those after having applied criteria for effectiveness, communication and implementation. According to Stone, (1991), good managers are managers who seek a systematic approach to decision-making, either to improve performance at work or to structure the organization.

In this regard, respondents' opinions were sought concerning issues related to extension operational planning. The most important issues addressed in this study are approaches to goal setting, priority consideration, extension program development, implementation approach and the purposes of reporting.

7.2 GOAL SETTING: TOP-DOWN VERSUS BOTTOM-UP

Goal setting can influence what people think and do, thus motivating their behaviour. By focusing their behaviour in the direction of the goals, rather than elsewhere, it energizes behaviour - motivating people to put forth the effort to reach difficult goals that have been accepted, and it prompts persistence over time (Cummings & Worley, 2001:380). Goal setting describes the interaction between managers and their sub-ordinates in jointly defining, i.e. clarifying the duties and responsibilities associated with a particular job or work group member behaviours and outcomes (Cummings & Worley, 2001:380). The respondents' perceptions of various alternative ways of Oromia Bureau of Agricultural and Rural Development's (OBARD) annual production goal setting approaches are summarized in Table 7.1. They were asked to assess their appropriateness using a 10 point scale (0 = absolutely inappropriate; 10 = most appropriate).

Table 7.1 The appropriateness of different alternatives for setting regional production goals, as perceived by respondents and expressed as mean scale point percentage (N=346)

Alternative approaches for setting regional production goals	Mean**	SD
Set the goals at PA* level to be coordinated at the district and then at regional level	74.4	27.9
Set goals at district level to be coordinated at regional level	65.6	22.3
Set goals at regional level and control with zones and/or districts	52.2	24.2
Set goals at regional level	40.1	23.1

*PA =Peasant Association (the lowest- grassroots level- government's administrative structure)

**Mean level of appropriateness (0%= absolutely inappropriate; 100%= most appropriate)

The general opinion is that goal setting should be of a bottom-up nature (from PA to region) with support from and coordination at higher levels. This conclusion is based on the high mean rating of goal setting at peasant association level (74.4%) and the significantly lower assessment of goal setting at regional level (40.1%). But not all categories of respondents agree with this preference of goal setting at peasant association rather than regional level, as is evident from Table 7.2.

Table 7.2 The appropriateness of different alternatives for setting regional agricultural production goals, as perceived by respondents in different categories of locality and management, and expressed as mean percentage rank order (N=346)

Respondents' categories	Statistical indicators	Alternative approaches for setting regional production goals			
		Set the goals at PA* level to be coordinated at the district and then at regional level	Set goals at district level to be coordinated at regional level	Set goals at regional level and control with zones and/or districts	Set goals at regional level
(a) Managerial positions					
Non-managers	Mean	74.62	67.47	53.71	41.40
First level managers	Mean	73.26	63.70	53.26	41.20
Middle level managers	Mean	73.50	62.50	48.50	34.00
Top level managers	Mean	88.75	66.25	31.25	41.25
Analysis of variance (ANOVA)	*F*	*.782*	*1.052*	*2.812*	*1.682*
	Df	*3,342*	*3,342*	*3,342*	*3,342*
	p	*.50*	*.37*	*.04*	*.17*
(b) Zones					
Jimma	Mean	72.36	66.23	52.55	38.21
Arsi	Mean	73.91	65.36	51.18	39.09
South West Shewa	Mean	67.57	61.08	58.65	48.92
Borena	Mean	80.23	67.67	57.91	48.37
East Shewa	Mean	77.74	65.81	46.13	28.71
Analysis of variance (ANOVA)	*F*	*1.245*	*.486*	*1.764*	*5.110*
	df	*4,322*	*4,322*	*4,322*	*4,322*
	p	*.29*	*.75*	*.14*	*.001*

These results, shown in Table 7.2, indicate that top level managers show more support for setting production goals at the Peasant Association level by offering about 15 percent

higher ratings and correspondingly also a lower assessment (about 20 percent) for the goal setting at regional level with control by zones/ district than any other managerial category. These variations between top level managers and other manager categories are highly significant (F=2.812; p = 0.04), and could be attributed to the current administrative policy, where the authority/ power and responsibilities regarding all development matters are devolved to districts, in line with decentralization. In this context, the stand of top level managers seems understandable.

7.3 PRIORITY CONSIDERATION: VOLUNTARY VERSUS PRIORITY (OPTIMUM RETURN) EXTENSION

A priority approach is essential in extension, given, on the one hand, the overwhelming task and challenge in agricultural and rural development, and, on the other hand, the limited resources (financial, human and time), especially where the use of public funds has to be accounted for (Düvel, 2003). Accountability of public funds does not necessarily condone the addressing of only the felt needs; even the endeavours to increase the efficiency and effectiveness of extension will be reduced to insignificance if focused on a trivial and potentially unimportant problem (Düvel, 2003).

Seen in this way, the respondents' perceptions were examined with regard to the extent to which priorities are considered in extension programmes planning and implementation, using a 10 point scale (0=no priority/purely voluntary extension; 10=optimum return per unit input). The results are presented in Table 7.3.

In general, the current level of priority consideration in extension program planning and implementation is assessed as low, 47.5 percent. This implies that departmental directives or improvement potentials (unfelt needs) considered only to a lesser degree. The clear preference expressed by respondents (mean assessment of 93.6 percent) is that these mentioned criteria should be the primary if not exclusive considerations, when deciding on development projects. This represents a mean shift of 46.1 percent away from the current.

The most important differences between management categories lies in the fact that the top level managers, more than the other categories, perceive the current situation much more favourably, viz. more priority focused (65.7%) which logically leaves less scope for improvement.

Table 7.3 The perceived current and recommended level of priority considerations, expressed as mean scale point percentage in OBARD by respondents from various zones and managerial positions (N=346)

Respondents' categories	Statistical indicator	Current (C)	Recommended (R)	Problem scope (R -C)
(a) Managerial positions				
Non-managers	Mean*	47.2	92.4	45.2
First level managers	Mean	46.9	95.1	48.2
Middle level managers	Mean	48.1	95.0	46.9
Top level managers	Mean	65.7	94.3	28.6
Total	Mean	47.5	93.6	46.1
Analysis of variance (ANOVA)	*F*	*2.428*	*1.338*	
	Df	*3,335*	*3,335*	
	p	*.07*	*.26*	
(b) Zones				
Jimma	Mean	45.1	92.7	47.6
Arsi	Mean	46.3	93.3	47.0
South West Shewa	Mean	48.4	89.2	40.8
Borena	Mean	51.3	95.7	44.4
East Shewa	Mean	51.4	99.2	47.4
Analysis of variance (ANOVA)	*F*	*1.295*	*3.859*	
	df	*4,320*	*4,320*	
	p	*.27*	*.01*	

*Priority consideration expressed in mean percentages (0%=no priority; 100%= priority based on optimum return per input)

As far as the zones are concerned, no clear differences of tendencies can be observed.

7.4 PROGRAM PLANNING: CENTRALIZATION VERSUS DECENTRALIZATION

Another consideration of importance in any extension approach is the centralisation versus decentralisation of decision making. Decentralization refers to the extent to which upper management delegates authority downward to divisions, departments, branches and lower level organizational units (Verma & Chunder, 1995). Decentralization thus disperses the power and decision making to lower levels of the organization. However, decentralization with no coordination and leadership from the top is highly undesirable (Verma & Chunder, 1995), as the very purpose of the organization would be defeated if there is no centralized control. Alternatives, therefore, range along a continuum from a highly centralized to a highly decentralized system.

The perceptions of the respondents concerning the degree to which the approaches of decision making in extension program planning are/ should be decentralized, is assessed using a 10 point scale (0=complete centralization (top-down); 10=complete decentralization (bottom-up). The results are presented in Table 7.4.

In general, according to the respondents' opinion, there should be more decentralization of decision making (7.3) than is currently the case (4.9). These findings indicate that the current level of decentralization of decision making power in program planning is perceived as insufficient. The respondents are of the opinion that more authority and power should be given to lower level structures in the organization (7.3) with support (i.e. technically, financially and materially) and guidance (i.e. general picture such as national/ regional goals/ strategies) coming from the top. The overall demand for change is a 2.4 scale point shift. But the respondents from different zones appeared to vary concerning the desired level of decentralization ($F = 2.947$; $p = 0.02$).

Table 7.4 The perceived current and recommended level of decentralization in extension program planning, as reflected in mean scale point in OBARD by various categories of respondents (N=346)

Respondents' categories	Statistical indicator	Current (C)	Recommended (R)	Problem scope (R -C)
(a) Managerial positions				
Non-managers	Mean	4.9	7.2	2.3
First level managers	Mean	4.5	7.4	2.9
Middle level managers	Mean	5.5	7.7	2.2
Top level managers	Mean	5.0	7.7	2.7
Total	**Mean**	**4.9**	**7.3**	**2.4**
Analysis of variance (ANOVA)	*F*	*2.085*	*1.216*	
	Df	*3,340*	*3,340*	
	p	*.10*	*.30*	
(b) Zones				
Jimma	Mean	4.6	7.6	3.0
Arsi	Mean	5.1	6.8	1.7
South West Shewa	Mean	4.9	7.5	2.6
Borena	Mean	5.4	7.7	2.3
East Shewa	Mean	4.4	7.5	3.1
Analysis of variance (ANOVA)	*F*	*1.422*	*2.947*	
	df	*4,320*	*4,320*	
	p	*.23*	*.02*	

Centralization versus decentralization (0=Complete centralization; 10 = Complete decentralization)

In particular, East Shewa and Jimma zones expressed their need for a significant shift towards a more decentralized decision making approach in program planning than the current situation. This shift represents 3.1 and 3.0 scale points for East Shewa and Jimma, respectively, but can mainly be attributed to more centralised assessment of the current situation.

As far as managerial positions are concerned, there are no significant differences between the groups.

7.5 EXTENSION SERVICE DELIVERY AND KNOWLEDGE SUPPORT: PRO-ACTIVE VERSUS REACTIVE APPROACHES

For effective and efficient extension service delivery, extension workers should work in a systematic and planned manner. The nature of the extension service delivery and knowledge support programmes of the extension organization can be reactive or pro-active or both.

According to Düvel (2003), both reactive and programmed (pro-active) extension approaches are important. The reactive approach has the advantage that it responds to felt needs, and, therefore, is likely to be effective and show quicker results. For this reason time should be reserved for it. The effectiveness of the pro-active approach lies in the purposeful pursuit of objectives, identified on the basis of a situation analysis and subsequent regular monitoring and evaluation (Düvel, 2003). The two major advantages of this approach are (a) the improvement of the effectiveness and efficiency of extension and (b) that it allows for the implementation of the "help towards self-help" principle.

Although both approaches have their own pros and cons, it is a serious concern that development is generally approached on a reactive (*ad hoc)* basis (de Beer, 2000), with little impact on development on the one hand and clear evaluation difficulties on the other. The poor performance of extension could, amongst other reasons, be attributed to a non-commitment to organized and programmed working procedures (de Beer, 2000). This implies that there is a need for an appropriate combination or balance of both reactive and pro-active extension approaches. The following section reflects the opinions of respondents in this regard, both in regard to the extension workers as well as subject matter specialists (SMSs).

7.5.1 Extension workers

The findings in Table 7.5 indicate that the extension workers are currently spending more than two-thirds of their time, in terms of number of days per week, in reactive extension work, i.e. in what Buford, *et al.,* (1995) refer to as "fighting fires". The time spent on purposeful initiations of development changes and their implementations is only about 27 percent (calculated in days per week).

The disadvantage of a strong focus on the reactive type of extension approach is that the service invests little time in planning extension programmes, with the result that new problems or unfelt needs will be identified too late. This means that the main aim of extension to initiate change will be jeopardized. With such a reactive, ad hoc, extension work approach, the workers have to divide their attention between many different problems, so they are unable to pursue any one problem in depth (van den Ban and Hawkins, 1996).

In view of this, the respondents' recommendation that the focus of pro-active extension should be increased from a current mean of 1.93 days per week to 4.49 days per week, which represents an increase of 37 percent. However, there are differences in the perceptions of the various categories of respondents.

Table 7.5 The perceived current and recommended days per week spent on pro-active extension delivery, expressed in mean percentages (0%=completely reactive; 100%=completely pro-active) by various categories of respondents

Respondents categories	Statistical indicator	Current (C)	Recommended (R)	Problem scope in % (R - C)
(a) Managerial positions				
Non-managers	Mean	1.89	4.42	38.5
First level managers	Mean	1.91	4.59	40.4
Middle level managers	Mean	2.09	4.63	38.8
Top level managers	Mean	1.50	3.50	36.3
Total	**Mean**	**1.93**	**4.49**	**37.2**
Analysis of variance (ANOVA)	*F*	*.605*	*2.130*	
	df	*3,316*	*3,316*	
	p	*.61*	*.10*	
(b) Zones				
Jimma	Mean	2.06	4.06	32.0
Arsi	Mean	1.74	4.59	40.0
South West Shewa	Mean	1.85	4.76	40.4
Borena	Mean	1.87	4.82	37.4
East Shewa	Mean	2.52	5.20	35.9
Analysis of variance (ANOVA)	*F*	*2.789*	*4.976*	
	df	*4,303*	*4,303*	
	p	*.03*	*.00*	

Top managers are strangely enough more conservative regarding programmed extension, which could be attributed to a more limited insight regarding the conditions of effective purposeful extension. Amongst the zones it is particularly East Shewa that is most convinced about a need for a more purposeful extension approach in future.

7.5.2 Subject Matter Specialists (SMS)

Table 7.6 gives an overview of the time spent by subject matter specialists on purposeful development activities, which is currently about 42 percent (assessed in days per week). Although this is slightly better than the extension service delivery, the subject matter specialists also spend most of their time in responding to unplanned requests or routine activities. The general recommendation is that time spent on purposeful development activities should be increased to about 87 percent, which means an increase of 45 percent over the current. The insignificant differences ($p>0.05$) between the management

categories are an indication that there is general agreement regarding this required change towards a more pro-active and purposeful approach.

There are variations of perceptions between zone categories of respondents with respect to the current ($F_{4, 318} = 6.516$; $p = 0.00$) and recommended ($F_{4, 318} = 13.6$; $p = 0.00$) days per week for programmed SMS supports (Table 7.6). The greatest differences occur between respondents in Jimma, who are more conservative, and East Shewa, who are most outspoken, regarding the needed change in terms of a more purposeful and pro-active approach. However, the very big proposed change of 63 percent by respondents in East Shewa, can be largely attributed to low assessment of the current approach, which is only 28.7 percent, compared to the 39 to 47.8 percent in the other zones.

Table 7.6 The perceived current and recommended days per week spent on pro-active SMS knowledge support, as expressed in mean percentages (0% = completely reactive; 100 % = completely pro-active) by various categories of respondents (N=341)

Respondents categories	Statistical indicator	Current (C)	Recommended (R)	Problem scope (R - C)
(a) Managerial positions				
Non-managers	Mean	43.0	86.0	43.0
First level managers	Mean	42.2	87.6	45.4
Middle level managers	Mean	37.9	90.2	52.3
Top level managers	Mean	37.1	92.9	55.8
Total	**Mean**	**42.0**	**87.0**	**45.0**
Analysis of variance (ANOVA)	*F*	*1.021*	*1.082*	
	df	*3,337*	*3,337*	
	p	*.38*	*.36*	
(b) Zones				
Jimma	Mean	39.0	77.3	38.3
Arsi	Mean	46.7	91.5	45.0
South West Shewa	Mean	39.7	89.2	49.5
Borena	Mean	47.8	93.2	45.4
East Shewa	Mean	28.7	91.7	63.0
Analysis of variance (ANOVA)	*F*	*6.516*	*13.600*	
	df	*4,318*	*4,318*	
	p	*.00*	*.00*	

Reactive versus pro-active (0=completely reactive; 100= completely pro-active)

These findings leave little doubt about the large scale changes required in the approaches of both extension workers and SMSs. Currently, extension workers and SMSs spend only one third of their time in a proactive and purposeful manner, and the general suggestion is that this should be increased to two-thirds in the case of extensionists and even higher (about 80 %) in the case of SMS's. In the latter case this means that the primary role of SMSs should be the knowledge support of extension workers, rather than the direct dissemination of knowledge to farmers. It is rather surprising, that with the entire consensus in this regard, especially also among top and middle management, nothing has been done to date to implement it.

7.6 OWNERSHIP OF EXTENSION PROJECTS

According to Düvel (2003) a programmed extension approach allows for community development by guiding the community to take ownership and responsibility for the program, because successful agricultural development will only be sustainable if communities are empowered to be able and willing to accept ownership.

According to Table 7.7, the respondents are of the opinion that the current level of ownership by community is not enough; and recommend a substantial shift (3.3 scale points) towards more involvement and empowerment of the community in extension of development projects, to shift the responsibility of these extension projects from the extension department to the community.

Table 7.7 The (a) current and (b) recommended ownership* of extension projects, expressed in mean scale points by respondents in categories of management and locality (N=341)

Respondents categories	Statistical indicator	Current (C)	Recommended (R)	Problem scope (R - C)
(a) Managerial positions				
Non-managers	Mean	4.3	7.6	3.3
First level managers	Mean	4.1	7.5	3.4
Middle level managers	Mean	4.3	7.9	3.6
Top level managers	Mean	5.4	8.0	2.6
Total	**mean**	**4.3**	**7.6**	**3.3**
Analysis of variance (ANOVA)	*F*	*.959*	*.472*	
	df	*3,338*	*3,338*	
	p	*.41*	*.70*	
(b) Zones				
Jimma	Mean	3.9	7.1	3.2
Arsi	Mean	4.7	8.1	3.4
South West Shewa	Mean	4.6	8.0	3.4
Borena	Mean	4.5	7.8	3.3
East Shewa	Mean	3.4	6.9	3.5
Analysis of variance (ANOVA)	*F*	*4.134*	*5.507*	
	df	*4,320*	*4,320*	
	p	*.01*	*.00*	

Ownership* (0 = Ownership only with department; 10 = Owned only by community)

The differences between the management categories are not significant (F=.959, p=.41), the only noteworthy difference being the high assessment of the top level managers regarding the current involvement and ownership of communities. This appears to be an overrating (5.4 scale points), compared to the rest of the respondents.

The differences between the zones can also be primarily attributed to differences in the current assessment, and here it is especially the respondents in zones of Jimma (3.9) and East Shewa (3.4) who assess the current ownership of their communities very low. The proposed degree of change to a higher level of ownership is similar in all zones.

CHAPTER 8

ORGANIZING IN EXTENSION MANAGEMENT

8.1 INTRODUCTION

Having examined the nature of strategic and operational planning aspects in management of extension in the preceding two chapters, this chapter continues the investigation focusing on the organizing dimension. According to Verma & Chander (1995), organizing is extremely important because it provides the managers with the structural framework to pursue a set of goals - a mechanism for putting organizational goals and strategic plans into action, based on effective operational planning. Thorough organizing efforts help all extension managers at all organizational levels to minimize weaknesses (such as duplication of effort, slack time, and wasted resources), because people will work more effectively when they understand their own roles, and how they relate to those of others (Buford, et al., 1995).

Organizing is defined as the process of arranging an organization's structure, and coordinating its managerial practices and use of resources to achieve its goals. Four basic dimensions of organizing processes are identified, beginning with those that apply to jobs, and moving through work groups to the organization of an entire extension service (Verma & Chander, 1995). These are work specialization, departmentalization and formal structure, span of management, chain of command and authority, coordination, and organizational change and development.

8.2 SPECIALIZATION

Specialization is important for the simple reason that neither is one person physically able to perform all the operations nor can one person acquire all the skills needed to perform the various tasks (Verma & Chander, 1995). However, if an assignment is overly specialized, an individual may lose sight of the "big picture" and become alienated (Buford, et al., 1995). Therefore, managers should be sensitive to situations in which

specialization is inappropriate. The respondents were requested to indicate the appropriate level of specialization of extension personnel, using a 10 point scale ranging from 0 to 10 (where 0=generalist, 5=specialization in one of a few general categories, 10=specialized to level of commodity or within commodity). The respondents' opinions concerning the current and required level of specialization for Development Agents (DAs), Extensionists and Subject Matter Specialists (SMS) are summarized in Table 8.1.

Table 8.1 Respondents' perception of the current and recommended level of specialization, expressed as mean scale point in a continuum ranging from 0 (no specialisation) to 10 (highly specialised in one commodity) N=340

	Current (C)		Recommended (R)		Difference (R-C)
Types of staff	Mean	SD	Mean	SD	Mean
Development Agents (DAs)	2.1	2.3	5.8	2.0	3.70
Extensionists	3.6	1.8	7.4	1.7	3.78
Subject matter specialists (SMS)	4.3	1.6	8.0	1.6	3.68

The general feeling is that the level of specialization of extension staff across all categories needs to be increased by about 3.7 scale points (3.7) with a slightly higher demand for extensionists' (3.78) specialization. These findings (Table 8.1) suggest that the current level of specialisation of extension personnel is far too low. Even the subject matter specialists' (SMS) who are supposed to be specialised, are not rated much higher (4.3) than the extensionists, regarding their current level of specialization.

The reason for this low level of specialization could be attributed to the low level of formal education of the extension staff. About 63.2 percent of respondents were diploma holders, and those having BSc or above constitutes only 8.2 percent (Chapter 4). Consequently, the recommendation for increased specialization implies that the level of formal qualification of the extension staff would also have to be increased. Variations between different categories of respondents are indicated in Table 8.2.

Table 8.2 Current and recommended level of specialization expressed as mean scale point on a continuum ranging from 0 (no specialisation) to 10 (high specialisation in one commodity) as perceived by different categories of respondents (N=340)

		DA			Extensionist			SMS		
Categories		Current (C)	Recommended (R)	Difference (R-C)	Current (C)	Recommended (R)	Difference (R-C)	Current (C)	Recommended (R)	Difference (R-C)
(a) Managerial Positions										
Non-managers		2.2	5.8	3.6	3.8	7.4	3.6	4.5	8.0	3.5
First level managers		1.9	5.5	3.6	3.5	7.1	3.6	3.9	7.9	4.0
Middle managers		2.1	6.1	4.0	3.4	7.7	4.3	4.3	8.2	3.9
Top level managers		2.6	6.4	3.8	3.0	6.9	3.9	4.9	7.0	2.1
Analysis of variance (ANOVA)	F	.38	1.08		1.06	1.78		3.83	1.39	
	df	3	3		3	3		3	3	
	p	.77	.36		.37	.15		.01	.24	
(b) Zones										
Jimma		2.1	5.6	3.5	3.6	6.8	3.2	4.3	7.3	3.0
Arsi		2.0	5.8	3.8	3.8	7.6	3.8	4.3	8.4	4.1
South West Shewa		1.3	5.1	3.8	3.5	7.7	4.2	3.8	7.8	4.0
Borena		2.0	6.3	4.3	3.5	8.0	4.5	4.5	8.7	4.2
East Shewa		2.9	6.4	3.5	3.0	7.8	4.8	4.1	8.1	4.0
Analysis of variance (ANOVA)	F	2.03	2.65		1.11	5.62		1.41	10.56	
	df	4	4		4	4		4	4	
	p	.09	.03		.35	.00		.23	.00	

As far as managerial positions are concerned, the greatest variations in the assessment of level of specialisation occur in relation to SMS. Top level managers were significantly more satisfied with the current situation in the sense that they expected the least change from SMS, regarding more specialisation. They assessed the required increased specialisation to be 2,1 scale points as opposed to the 3.5 to 4.0 scale points of the other management categories.

Noteworthy is the general demand for higher specialisation by development agents (DAs). This could be attributed to the realization that a certain minimum level of agricultural-technical competence is essential for credibility and effective extension. This threshold value of 5.8 (see Table 8.1) is significantly higher than the current level

attributed to extensionists (3.6), and thus also questions the long term impact of DAs with their current relatively low qualifications.

The Ethiopian government has started to establish about 15000 farmer training centres (FTCs) throughout the country as part of the second 5-year agricultural development programme. In line with this, the Ministry of Agriculture has started the middle level Agricultural Technical Vocational Education and Training (ATVET) programme in 2001 using 25 former training institutions. The training, extended over a period of three years at colleges, is focused on five major agricultural fields, namely, plant science, animal science, natural resource development and conservation, animal health and cooperatives (MoA, 2004). The graduates were assigned to the newly constructed FTCs, three at each centre (one specialized in plant science, one in animal science, and one in natural resource conservation and development) (MoA,2004).

As far as SMS specialization is concerned, further investigation was conducted in terms of the eight identified functions of SMSs. The respondents' perceptions in relation to the acceptability levels of these various roles of SMSs are summarised in Table 8.3.

Table 8.3 Importance assessment by respondents of the different functions to be performed by SMS in OBARD, expressed in mean percentage scale points

Roles/ functions of subject matter specialists (SMS)	Mean	SD
1. Assistance and advice to farmers and development agents with problem cases, and when requested	61.2	28.36
2. Training of farmers where knowledge base does not exist among development agents	57.3	25.52
3. Training of development agents (courses where necessary) – reactive function	67.7	23.69
4. Continuous and purposeful knowledge upgrading and capacity building of development agents working in the respective fields (pro-active)	76.9	20.80
5. Assistance of development agents with message design (where requested)	72.1	20.26
6. Becoming specialist regarding relevant commodity/discipline in area of responsibility	75.2	34.62
7. Seeking solutions through adapted research/demonstrations	78.5	20.62
8. Remain abreast of new research, developments and knowledge in field of specialisation	75.7	23.71

Although all functions are seen as important, there are clear differences in the importance rating, which can be critical when priorities have to be set. A very significant finding is that the proactive functions focused on the continuous knowledge upgrading of development agents (rated 76.9%) is regarded to be more important than advising farmers (61.2%) or training farmers when requested (57.3%). An implementation of this principle could go a long way in minimizing the low technical competence of development agents as well as extensionists.

Variations of opinion between different categories of respondents are summarized in Table 8.4.

Table 8.4 The importance assessments of SMS functions as reflected in mean scale point expressed in percentage by respondents in different categories (N=345)

Respondents categories	Statistical parameter	1. Assistance and advice to farmers and DAs with problem cases and when requested	2. Training of farmers where knowledge base does not exist among DAs	3. Training of DAs (courses where necessary) – reactive function	4. Continuous and purposeful knowledge upgrading and capacity building of DAs working in the respective fields (pro-active)	5. Assistance of DAs with message design (where requested)	6. Become specialist regarding relevant commodity/discipline in area of responsibility	7. Seeking solutions through adapted research/demonstrations	8. Remain abreast of new research, developments and knowledge in field of specialisation
(a) Managerial Positions									
Non-managers	Mean	61.8	56.4	68.1	76.4	73.2	76.7	78.4	77.4
First level managers	Mean	58.6	57.6	67.0	76.1	73.9	74.6	81.2	78.7
Middle managers	Mean	61.2	57.0	65.0	79.8	66.7	73.0	75.2	68.7
Top level managers	Mean	78.8	76.3	88.8	76.3	68.8	62.5	73.8	55.0
Analysis of variance	F	1.316	1.570	2.441	.482	1.946	.559	1.193	4.775
	df	3,341	3,341	3,341	3,341	3,341	3,341	3,341	3,341
	p	.269	.197	.064	.695	.122	.643	.312	.003
(b) Zones									
Jimma	Mean	44.5	42.7	58.0	76.0	73.9	77.5	78.8	78.6
Arsi	Mean	69.7	64.2	72.1	80.5	71.4	75.8	77.4	71.4
South West Shewa	Mean	61.6	54.1	74.1	76.2	71.9	74.1	83.5	79.5
Borena	Mean	72.1	69.5	72.1	74.9	73.3	75.1	83.3	80.2
East Shewa	Mean	64.1	62.5	67.5	72.5	70.0	71.9	72.8	74.7
Analysis of variance	F	15.46	16.12	6.76	1.30	.34	.18	1.81	1.9
	df	4,321	4,321	4,321	4,321	4,321	4,321	4,321	4,321
	p	.000	.000	.000	.269	.849	.947	.126	.111

As far as the influence of different levels of management is concerned, the outstanding finding is that the top level managers clearly differ from the other categories, in regard to many of the assessments. They are more supportive of the traditional reactive functions of helping with the provision of advice and training for farmers, but the necessity to remain abreast of all new research and development in their field of specialisation is not

regarded as being important. Fortunately they have a similar opinion or feel equally strong regarding the importance that SMSs should function proactively with their major target group, namely, development and extension agents rather than farmers. This enhances the chances of implementation of this new vision or approach.

Assessment variations in terms of locality (zones) are also most significant with regard to the perceived traditional functions of helping in advising and training farmers when requested. Respondents in the Jimma zone regard these functions as much less important (mean assessment of 44.5%) than those in Borena (with importance assessment of 72.1 percent) and Arsi (69.5 percent). The function of continuous and purposeful knowledge upgrading and capacity building finds the biggest support in the Arsi zone (80.5%), which is the most experienced in terms of implementation of various extension approach projects in Ethiopia.

8.3 DEPARTMENTALIZATION

The purpose of departmentalization is to facilitate the achievement of established objectives (Buford, et al., 1995). It is a grouping of activities into departments, which makes it possible to manage a large organization effectively. Four types of departmentalization, which are applicable to an extension services are examined, namely, functional, commodity, customer, and matrix based departmentalization (Chapter 2). The respondents' assessments of the nature of the current and recommended types of departmentalization of extension in OBARD are shown in Table 8.5.

Table 8.5 Percentage distribution of respondents according to the current and recommended type of extension organization's departmentalization in OBARD

Types of departmentalization	Current type of departmentalization (%)	Recommended type of departmentalization (%)
Commodity based (a logical grouping of organizational activities in terms of specialities)	67.9	8.5
Function based (a grouping of organizational activities based on the work to be done)	31.2	42.9
Matrix based (administrative and program lines of authority overlaid to form a grid or matrix where many staff members belong/ report to two or more superiors)	0.6	41.7
Customer based (a grouping of organizational activities to reflect different clientele)	0.3	7.0
Total	100.0	100.0

According to the majority (67.9 percent) of the respondents, the current nature of grouping of extension organizational activities are based on specialities of agricultural enterprises (commodity based), while about one third of the respondents regard the departmentalization as function based. These differential perceptions of the current situation could be attributed to the inability or the difficulty to distinguish between the commodity and the function based types of departmentalization. Other contributing factors could be the respondents' working area in terms of farming system (e.g. integrated versus single enterprise focus) and degree of exposure to or insight into government's current agricultural policy of strategies.

As far as the recommended type of departmentalization is concerned, the respondents are almost equally divided between those who support further reinforcement of function based (42.9%) and those who are in favour of the introduction of a matrix based (41.7%) type of departmentalization. An investigation into the variations between different

localities and levels of management does not reveal any significant differences or tendencies.

8.4 SPAN OF MANAGEMENT

The span of management (also called span of control) refers to the number of subordinates who report directly to a manager (Verma & Chunder, 1995). A span of management which is neither too narrow nor too wide is effective. What is, therefore, needed, is to select an appropriate span which is best suited to a given situation, compatible to the subordinates and efficiently manageable for the managers (Verma & Chunder, 1995).

The span of management (horizontal span) in this study is regarded as the number of frontline development agents (DAs) assigned at village level who report to one supervisor (Table 8.6).

Table 8.6 Percentage distribution of respondents according to the current and recommended number of Development Agents (DAs) subordinate to one supervisor in OBARD

Categories of number of DAs supervised by one supervisor	Percentage distribution of respondents per category	
	Current (%)	Recommended (%)
< 5 DAs report to a supervisor	0.0	1.0
5 DAs report to a supervisor	1.0	84.0
6-9 DAs report to a supervisor	1.0	7.0
10 DAs report to a supervisor	83.0	7.0
≥11 DAs report to a supervisor	15.0	1.0
Total *	100.0	100.0

*Mode, the most frequent, is (current = 10 DAs, Recommended = 5 DAs should report to one supervisor)

The general viewpoint, as shown in Table 8.6, is that the current number of development agents supervised by a supervisor in OBARD are too many, namely 10 and above, and

the general recommendation is that it be reduced to five DAs per supervisor, if supervision is to be effective.

Another form of span of management refers to the number of supervisory levels in the organizational structure, and is an indication of the complexity of the organisational structure. This so-called vertical span of management was tested within the context of the zone management level, by asking respondents whether they were in favour of the zone structure to be expanded, maintained as it is or disbanded.

These recommendations, in order of priority, are summarized in Table 8.7.

Table 8.7 The recommended role of the zone structure of the department of agricultural and rural development offices, as expressed in rank order nominations by respondents

The zone should be:	Nomination frequency per rank order					
	1st	2nd	3rd	Total nominations	Total* weighting	Mean rank order %
Expanded	274	39	30	343	930	85.5
Remain as it is	58	269	16	343	728	56.1
Disbanded completely	11	35	297	343	400	8.3

* Based on a weighting of 3 for 1st rank order, etc. and 1 for 3rd rank order

The clear indication (Table 8.7) is that the zone level department of agricultural and rural development offices in the organizational structure of OBARD should be expanded to coordinate and manage all issues relating to the districts. This is reflected by the mean rank order percentage of 85.5, which is far in excess of the other alternatives, namely, maintaining as it is (56.1%) and complete disbanding (8.3%).

8.5 CHAIN OF COMMAND

While specialization, departmentalization, and span of management are the "building blocks" of an organizational structure, authority is the "glue" that holds these structures together (Buford, et al., 1995). For these structures to fit together and facilitate the

accomplishment of plans, authority and its derivatives (such as responsibility, accountability, and the chain of command) are needed. Applied to a managerial job, authority is the right to issue orders, or to act in a manner that furthers the organization's purpose (Buford, et al., 1995).

The degree of managerial authority is highest at the top and is scaled downward through an organization. This line of authority is known as the chain of command; a concept that is closely related to two other well-known management principles: the scalar principle and unity of command (Buford, et al., 1995). The scalar principle states that a clear line of authority from the top manager to every subordinate position leads to more effective communication and decision making. The principle of unity of command states that, in order to minimize conflict and maximize responsibility for results, an individual should report to a single superior (Buford, et al., 1995).

The basic tenet of unity of command is that no man can serve two masters. However, in today's complex organizations the story seems to be altogether different. Most employees receive instructions from many managers. This is referred to as "dual control", (Verma & Chunder, 1995).

In this study, the unity of command is investigated at the district level and district heads' accountability. The respondents' perception in terms of the current situation and the recommended situation is presented in Table 8.8.

Table 8.8 Perceived appropriateness of accountability alternatives at district level, expressed in mean rank order percentages

	Current			Recommended		
Accountability alternatives	Mean	SD	Rank	Mean	SD	Rank
Only to the District Administration	60.7	26.6	1st	46.7	29.4	3rd
Both to the District Administration and Bureau of Agriculture	52.1	24.7	2nd	71.9	26.2	1st
Only to the Bureau of Agriculture	42.5	24.1	3rd	57.4	28.4	2nd

When comparing the current with the recommended assessments, there is a clear tendency towards an increased accountability towards the Bureau of Agriculture, but in general, the results (Table 8.8) suggest that the district agricultural and rural development office heads should be dually accountable both to the district administration council and the department bureau of agricultural and rural development. This should be an acceptable compromise for the two camps that either support accountability to only the district administration (60.7%) or only to the bureau of agriculture (42.5%).This implies that their selection as well as promotion should, as far as possible, be based on agreement or consensus between the districts administrative councils and the department or its representatives. This does not mean that extension personnel falls under both the bureau and the district administration from a disciplinary point of view. The bureau of agriculture still has the final responsibility of and authority over its personnel. Table 8.9 has summarized views of various categories of respondents.

Table 8.9 Perceived appropriateness of accountability alternatives at district level, expressed in mean rank order percentages by various groups of respondents

		Currently the district heads are accountable to:			The district heads are recommended to be accountable to:		
Respondent categories		only the District Administration	only the Bureau of Agriculture	both*	only the District Administration	only the Bureau of Agriculture	both*
(a) Job position							
Non-managers		61.4	48.3	54.2	46.9	59.9	71.5
First level managers		57.3	36.6	49.0	46.5	54.6	73.7
Middle level managers		64.8	35.2	51.9	46.6	52.2	72.5
Top level managers		48.0	22.0	35.0	44.0	76.0	40.0
Analysis of variance (ANOVA)	F	1.382	8.794	1.538	.020	2.149	2.180
	df	3,332	3,332	3,332	3,332	3,332	3,332
	p	.248	.000	.204	.996	.094	.090
(b) Zones							
Jimma		62.4	43.5	49.7	50.1	57.8	66.9
Arsi		59.4	43.5	53.9	44.3	56.5	74.6
South West Shewa		66.2	44.0	58.4	48.6	50.3	77.0
Borena		54.2	37.2	48.8	47.8	51.2	73.1
East Shewa		64.7	42.3	47.7	38.3	69.0	75.0
Analysis of variance (ANOVA)	F	1.325	.591	1.415	1.172	2.298	1.797
	df	4,314	4,314	4,314	4,314	4,314	4,319
	p	.260	.669	.229	.323	.059	.129

Both* to the district Administration and Bureau of agriculture

All categories of respondents (both locality and management) are in favour of an increased accountability to the bureau of agriculture and significantly less to the district administration. Especially the top level managers, with an assessment of 76%, are most outspoken in this regard, with a similar tendency in the East Shewa zone. A safe and appropriate compromise is accountability to both district administration and bureau of agriculture, but the former should never replace the latter.

8.6 COOPERATION AND COORDINATION

The terms "coordination" and "cooperation" do not have fixed meanings in the antitrust enforcement context (Finch & Delrahim, 2004). Although there is a degree of interchangeability between the two concepts, the term "cooperation" to refer to situations where one agency assists another in an enforcement action and *also* to refer to policy discussions and efforts to clarify, and perhaps reach consensus on, legal theories (Finch & Delrahim, 2004). According to Robert (2006), cooperation is the process of working or acting together, which can be accomplished by both intentional and non-intentional agents (Robert, 2006). In its simplest form cooperation involves things working in harmony, side by side, while in its more complicated forms, it can involve something as complex as the inner workings of a human being or even the social patterns of a nation. It is the alternative to working separately in competition (Robert, 2006).

In contrast, the term "coordination" to refer to interaction where two or three agencies work together on specific enforcement actions, where each agency is operating under its own laws (Finch & Delrahim, 2004). Managers divide work into specialized functions and departments to increase efficiency. Each unit or department must be informed about the activities of other units or departments, so that all of them work together smoothly (Verma & Chunder, 1995). According to Verma & Chunder (1995), endeavour towards common goals can only be achieved through effective coordination, which is defined as the synchronization of the efforts of the individuals, of various departments, at each level of the hierarchy of the organization and horizontally with other supporting institutions.

In this view, the respondents were provided with these alternatives to choose: (a) extension organizations, agents and/or departments assist each other and work together to be more effective and efficient (cooperation), (b) extension organizations and/or agents work in such a way that they don't do the same work but complement each other by either focussing on different areas, different communities, different commodities or different functions (coordination). The respondents' preferences most appropriate to their area are presented in Table 8.10.

Table 8.10 Percentage distribution of respondents according to their priority regarding collaboration and coordination choice between different alternative types of coordination practices

Respondents categories	Extension organizations assist each other and work together (cooperation)	Extension organizations do not do same work but complement each other (coordination)	Total
(a) Job position			
Non-managers	63.2	36.8	100
First level managers	59.1	40.9	100
Middle level managers	65.0	35.0	100
Top level managers	37.5	62.5	100
Total	61.8	38.2	100
	Chi-Square (X^2) Value	**df**	**Sig.**
	2.704	3	.440
(b) Zones			
Jimma	62.3	37.7	100
Arsi	59.1	40.9	100
South West Shewa	73.0	27.0	100
Borena	58.1	41.9	100
East Shewa	77.4	22.6	100
	Chi-Square (X^2) Value	**df**	**Sig.**
	5.531	4	.237

The majority (61.8 percent) of the respondents favour cooperation in which departments or institutions work together to accomplish specific goal instead of integration type of coordination (Table 8.10). Cooperation allows members to maintain their independence and allow them more freedom. But the top level managers are not of this view. About 63 percent of them favour coordination between extension departments and/ or service providers' institutions that extension organizations do not do same work but complement each other. However, no significant variations of opinions are observed between various groups of respondents, both in terms of managerial positions ($x^2 = 2.704$; df = 3; p=0.44) and zones ($x^2 = 5.531$; df=4; p=0.24).

Further, the current efficiency situation of OBARD organizational coordination status is assessed. The results in Table 8.11 indicate that coordination within the organization and between extension service providers seems unsatisfactory. This finds its expression in the perceived internal and external coordination which is 4.63 and 4.14 scale points and thus below the level of reasonable. It is similarly reflected in a comparison of the current level and what respondents regard to be desired and thus recommended level. In general the difference and thus the possible scope of improvement is about five scale points. But there are significant variations, especially between zones, in terms of efficiency assessments (Table 8.11).

Table 8.11 The perceived current and recommended level of coordination expressed as mean scale points by various categories of respondents

		Kinds of coordination					
		Internal coordination			External coordination		
Respondents categories		Current (C)	Recommended (R)	Difference (R-C)	Current (C)	Recommended (R)	Difference (R-C)
(a) Job position							
Non-managers		4.61	9.68	5.07	4.31	9.67	5.36
First level managers		4.53	9.87	5.34	4.14	9.73	5.59
Middle level managers		4.82	9.42	4.60	3.68	9.67	5.99
Top level managers		4.63	9.25	4.62	3.63	9.25	5.62
Analysis of variance	F	.284	4.107		1.559	.692	
(ANOVA)	df	3,343	3,343		3,343	3,343	
	p	.837	.007		.199	.558	
(b) Zones							
Jimma		4.44	9.89	5.45	4.08	9.86	5.78
Arsi		5.00	9.70	4.70	4.53	9.69	5.16
South West Shewa		4.95	9.46	4.51	4.62	9.46	4.84
Borena		4.63	9.49	4.86	4.02	9.30	5.28
East Shewa		3.74	9.58	5.84	2.87	9.94	7.07
Analysis of variance	F	3.354	2.992		4.539	4.322	
(ANOVA)	df	4,323	4,323		4,323	4,323	
	p	.010	.019		.001	.002	
Total		**4.63**	**9.67**	**5.04**	**4.14**	**9.68**	**5.54**

For example, Arsi and South West Shewa zones assessed the organization's internal coordination as mediocre. But the opinion of East Shewa zone is different in the sense that the coordination of the organization is assessed to be far below average, both in terms of internal and external coordination.

As far as managerial positions are concerned there is a tendency for higher level managers to rate the current level of internal coordination higher and the external

coordination lower than the lower level management categories, which however has no significant bearing on the perceived cope of improvement.

Respondents are also asked to indicate how serious coordination is as a problem in their work area, using a 10 point scale. Table 8.12 summarizes these results.

Table 8.12 The perceived seriousness of coordination as a problem, assessed on a 10-point scale* by respondents in different categories (N=343)

Respondents categories	Statistical parameter	Level of coordination as a serious problem
(a) Job position		
Non-managers	Mean	7.3925
First level managers	Mean	7.5699
Middle level managers	Mean	7.5833
Top level managers	Mean	8.7500
Total	Mean	7.5043
Analysis of variance (ANOVA)	F	.973
	df	3,343
	p	.406
(b) Zones		
Jimma	Mean	7.4906
Arsi	Mean	7.7727
South West Shewa	Mean	6.7568
Borena	Mean	7.2326
East Shewa	Mean	7.5000
Analysis of variance (ANOVA)	F	1.483
	df	4,323
	p	.207

* 1=no problem whatsoever; 10=very serious problem

The results show that the coordination problem is perceived to be very severe, (7.5 scale points, especially for top managers (8.75). This concern is shared by most categories (Table 8.13), with the exception of South West Shewa, who are somewhat less concerned (6.75 scale points).

Considering the importance of coordination and its influences on overall success of the organization with respect to achieving its stipulated goals, the respondents were probed regarding the severity of coordination problem in comparison with other organizational

related problems. The respondents' perceptions, in terms of rankings are indicated in Table 8.13.

Table 8.13 Rank order coordination problem in comparison with other organizational problems

Organizational issues	Rankings							Total nominations	Weighted average nominations	Rank order
	1st	2nd	3rd	4th	5th	6th	7th			
Political intervention	147	63	30	22	24	23	37	346	1800	1
Frequent restructuring	56	101	36	38	32	43	40	346	1552	2
Lack of coordination	39	38	90	55	44	37	43	346	1420	3
Inappropriate extension approach	38	50	52	28	100	32	46	346	1348	4
Lack of commitment of extension personnel	15	26	32	49	65	93	66	346	1064	5
Poor competence of DA	19	30	32	51	51	67	96	346	1060	6

The findings indicate that coordination is one of the three most important organizational issues that need to be addressed and resolved if Oromia Bureau of Agriculture and Rural Development is to be effective in its extension service provision; the other being political intervention and frequent organizational restructuring (Table 8.13).

8.7 ORGANIZATIONAL CHANGE AND DEVELOPMENT

Every organization must be highly adaptive to changes. Forces for change can be external or internal or both. External forces, for example, include changes in society, technology, and the global economy, while changes that are caused by revision of organizational objectives, new program initiatives, replacement of top management, and shifting attitudes concerning jobs and work, count among the internal pressures (Buford, et al.,

1995; Jayaratne, 2003). The extension organization should be responsive to these changes.

Although change is inevitable, it rarely occurs smoothly and in a balanced fashion, and the level of success varies from organization to organization. It hinges on three key factors: (1) thorough redistribution of power in decision making, (2) the occurrence of a developmental change process – such as pressure and arousal, intervention and reorientation, diagnosis and recognition, intervention and commitment, experimentation and reinforcement, and (3) allowance of adequate time to enable the change interventions to bear fruit (Boyed, 1992; Buford, et al., 1995; Cummings & Worley, 2001).

8.7.1 The use of feasibility studies

It is assumed that any major restructuring of an organisation should be preceded by a proper feasibility study, to ensure that the envisaged change is worth direct and indirect costs. Using a 10 point scale, the respondents were asked to assess the degree to which politicians, top managers and feasibility studies had been the source or incentive for organisational changes. These findings are summarised in Table 8.14.

Table 8.14 Respondents' assessments of the degree to which politicians, top managers and feasibility studies (a) were and (b) should be the main source of motivation for organisational change (N=346)

Categories of respondents		Assessments of Source of Change								
		Politicians			top managers			feasibility study		
		Current (a)	Recom-mended (b)	Difference (b)-(a)	Current (a)	Recom-mended (b)	Difference (b)-(a)	Current (a)	Recom-mended (b)	Difference (b)-(a)
(a) Positions										
Non-managers		65.82	21.24	-44.58	22.24	26.95	4.71	13.03	50.52	37.49
First level managers		69.03	20.86	-48.17	21.05	24.84	3.79	10.45	53.87	43.42
Middle level managers		68.15	21.17	-46.98	20.93	22.28	1.35	12.25	55.75	43.50
Top level managers		80.00	10.00	-70.00	12.50	17.50	5.00	7.50	72.50	65.00
ANOVA*	F	1.771	1.879		1.848	3.048		1.446	3.706	
	p	.152	.133		.138	.029		.229	.012	
(b) Zones										
Jimma		71.54	27.29	-44.25	20.28	25.57	5.29	9.90	45.14	35.24
Arsi		61.95	19.86	-42.09	23.75	26.12	2.37	15.35	52.96	37.61
SW Shewa		67.43	14.81	-52.62	22.68	26.59	3.91	9.89	58.59	48.70
Borena		69.74	21.77	-47.97	20.49	23.53	3.04	10.47	54.70	44.23
East Shewa		69.00	14.84	-54.16	19.06	27.61	8.55	11.94	57.55	45.61
ANOVA	F	3.742	10.907		1.704	.518		4.171	4.889	
	p	.005	.000		.149	.722		.003	.001	
Total		**67**	**21**	**-46.0**	**21**	**26**	**5.0**	**12**	**53**	**41.0**

ANOVA* Analysis of variance

The findings in Table 8.14 present a very clear picture, namely, that politicians are the main cause of structural changes with 67 scale point percent, compared to the 21 and 12 percent for top managers and feasibility studies, respectively, but that the justification for structural or organisational changes should stem from proper feasibility studies. Particularly outspoken in this regard are the top managers – probably because they observe the current intervention of politicians more closely.

The findings reveal that the motivation and the justifiable basis for structural changes come from the politicians, without adequate support of feasibility studies. The respondents would like a reduction of political influence by about 46 percent, and increased influence of feasibility studies by 41 percent.

8.7.2 Stakeholders' influence in organisational change

The ultimate success of an organization depends less on organizational structure, than on the capacity of participants to communicate, and on their willingness to serve and strive towards common goals (Adams, 1990; Cummings & Worley, 2001). Using a 10 point scale, the respondents were asked the extent of the influences of different stakeholders in decision-making, regarding the structural changes and adaptations of OBARD. Responses of the respondents are summarized in Table 8.15.

Table 8.15 The current and recommended level of influence of various stakeholders on organizational change and development, as perceived by respondents of various categories (N=346)

Categories of respondents		Level of influence by various organizational stakeholders:								
		Politicians			Top managers			Senior experts		
		current	Recommended	Difference	current	Recommended	Difference	current	Recommended	Difference
(a) positions										
Non-managers		66.25	23.35	-42.90	22.32	30.55	8.23	12.75	45.48	32.73
First level managers		67.96	21.33	-46.63	21.87	29.44	7.57	10.55	48.37	37.82
Middle level managers		67.52	24.70	-42.82	22.03	29.25	7.22	11.62	46.22	34.60
Top level managers		74.38	21.88	-52.50	19.13	39.37	20.24	6.50	42.50	36.00
ANOVA*	F	.720	.671		.210	1.386		1.499	.603	
	p	.540	.570		.890	.247		.215	.613	
(b) zones										
Jimma		68.43	25.58	-42.85	22.32	28.80	6.48	11.06	43.67	32.61
Arsi		64.04	23.55	-40.49	24.00	31.45	7.45	13.30	44.81	31.51
SW Shewa		64.73	18.59	-46.14	23.38	29.22	5.84	11.89	53.81	41.92
Borena		69.58	24.88	44.70	18.53	24.07	5.54	11.88	50.58	38.70
East Shewa		69.16	17.26	-51.90	19.06	36.77	17.71	12.10	45.97	33.87
ANOVA	F	1.531	2.899		2.427	4.585		.565	2.760	
	p	.193	.022		.048	.001		.688	.028	
Total		**67.00**	**23.00**	**-44.00**	**22.00**	**30.00**	**8.00**	**11.00**	**47.00**	**36.00**

ANOVA* Analysis of variance

The findings (Table 8.15) indicate that currently the power distributions with regard to the motivation and decision-making in organizational change and development practices are concentrated in the hands of politicians (about 67 percent) and other key stakeholders share the remaining one third (top managers 22 percent and the senior experts 11

percent). Change based on this type of influence is unlikely to meet with enthusiasm and dedication needed from employees to enhance their performance and that of the organisation. This type of change can allow little contribution and/ or dedication from employees towards improved organizational performance. For this reason, the general opinion expressed by respondents should be taken seriously, namely, that political influence be reduced by about 44 scale point percentages, and that of senior experts increased by almost the same degree (36 scale point percentages). Evidence of the consensus that prevails in this regard is the fact that there are very few significant differences between the various categories of respondents.

8.7.3 Frequency of organizational changes/ restructuring

The respondents were requested to give an indication of: frequency of structural changes, using a 10 point scale (0= far too infrequent; 5= acceptable frequency; 10= far too frequent). The responses are summarized in Table 8.16.

Table 8.16 Perceived current and recommended frequency of organizational structural changes, expressed in mean scale point (0-10) by various categories of respondents (N=346)

Categories of respondents	Statistical parameter	Current	Recommended	Difference
(a) positions				
Non-managers	Mean	9.41	4.86	-4.55
First level managers	Mean	8.99	4.60	-4.39
Middle level managers	Mean	9.07	4.68	-4.39
Top level managers	Mean	9.00	4.29	-4.71
Analysis of variance ANOVA	F	2.256	1.420	
	p	.082	.237	
(b) zones				
Jimma	Mean	9.63	4.73	-4.90
Arsi	Mean	9.05	5.01	-4.04
SW Shewa	Mean	9.30	4.65	-4.65
Borena	Mean	8.98	4.53	-4.41
East Shewa	Mean	8.71	4.55	-4.16
Analysis of variance ANOVA	F	4.203	1.854	
	p	.002	.118	
Total	**Mean**	**9.23**	**4.75**	**-4.48**

In reference to the assumed acceptable frequency of organizational changes (5 scale point), the overall assessment of respondents is 9.23, which is very far in excess of what is regarded as acceptable. These frequent restructurings are perceived as uprooting, with

much time and energy required for adaptation and re-orientation, and before it is possible to learn from experience, the next restructuring is announced.

In short, the overall organizational change and development practice is characterized by extremely frequent changes; the changes have been inadequately supported by feasibility studies and a diagnosis of the root cause of the problems, and lack of involvement of key stakeholders in decision-making. Furthermore, the organizational changes have been highly influenced by political forces.

Consequently, it is recommended that the current direct influence of politicians should be reduced from 67 to 23 percent, while the role of senior experts and feasibility studies should be increased to 47 and 53 percent, respectively. This does not imply that politicians and top level managers are less important than senior experts, rather it means that, since ultimately they are the ones to approve the proposed changes, they should make use of the senior experts, and get the work done through them.

CHAPTER 9

STAFFING AND HUMAN RESOURCE MANAGEMENT

9.1 INTRODUCTION

According to Donnelly, Gibson & Ivancevich (1995), people are an organization's most precious internal resource, because they provide the knowledge, skills, and drive that create, maintain, and advance it. They are the organization's lifeblood. If an organization does not take its human resource management responsibilities seriously, work performance and goal achievement may suffer (Lindner, 2001). This is due to the fact that the common thread in high-performance work practices seems to be a commitment to improving the knowledge, skills and abilities of an organization's current and potential employees, increasing their motivation, reducing loafing on the job, and enhancing the retention of quality employees, while encouraging non-performers to leave the organization (Robbins & Coulter, 1999). This process involves working with and through people and seeing them as partners, not just as costs to be minimized or avoided (Donnelly *et al*., 1995).

The human resource management activities in extension that are shared by top, middle, and first level managers, involve selecting, developing, appraising and rewarding employees (Lindner, 2001:21).

9.2 SELECTING, AND HIRING EMPLOYEES

Recruiting, selecting and hiring are closely related parts and, when combined, make up the staffing process of human resource management (Lindner, 2001:23). Recruitment seeks to develop a pool of potential job candidates and is the process of locating, identifying, and attracting capable applicants, while selection is the process of screening job applicants to ensure that the most appropriate candidates are hired (Robbins & Coulter, 1999). Selection is an exercise to predict which applicants will be successful if hired. Successful in this case means performing well on the criteria the organization uses

to evaluate employees (Hooi, 2008). Against this background, the respondents' perceptions of the current and recommended level of entry qualification requirement for various extension work positions in Oromia Bureau of Agriculture and Rural Development (OBARD) is presented in Table 9.1.

Table 9.1 Respondents' perceptions of the current and recommended entry qualification requirement for extension staff in OBARD (N=339), as reflected in mean assessments on a 6-point scale *

Entry requirement for:	Current	Recommended
Development Agents (DA)	2	3
Extensionists	3	4
Subject matter specialists (SMS)	3	5

Qualification categories (1-6): 1=Secondary school graduate; 2= Certificate 3=Diploma 4=Bachelor's degree 5=MSc and 6=PhD

Table 9.1 indicates that the current entry requirement for the frontline development agents (DAs) is the appropriate certificate, and for extensionists and subject matter specialists the diploma from agricultural colleges.

For the recruitment of DA there are traditionally two sources, namely high schools and agricultural colleges. Those recruited from high school graduates are sent to agricultural vocational training centres for 6-12 months' training and, after being awarded a certificate, are employed and are assigned to Rural Development Centres (RDCs) as DAs. Those who are recruited from agricultural colleges, are employed directly, and they also assigned to RDCs for one to three days' orientation at their respective districts. The respondents expressed the view that the minimum qualification should be a college diploma.

The positions of extensionists and SMSs are currently filled by internal promotion, from DAs or transfers from other departments or institutions or new recruitments (graduates from colleges or universities). Therefore, the current entry qualification can be the appropriate certificate or diploma. No clearly outlined qualification level exists so far,

although the mean average respondents perceive it to be the diploma. The respondents recommended that BSc and MSc should be a requirement for qualification as extensionists and SMSs, respectively.

9.3 TRAINING AND DEVELOPMENT

Training and development help to improve employee performance by developing and enhancing worker competence (Lindner, 2001:23). As job demands change, employee skills have to be altered and updated. According to Robbins & Coulter (1999), managers are responsible for deciding when subordinates need training and what form that training should take, because human errors could be significantly reduced, if not prevented, by better employee training. Respondents' perceptions of the current and the recommended situation of in-service training in OBARD are presented in Table 9.2.

Table 9.2 Respondents' perceptions of the current and the recommended training expressed in terms of the number of weeks per year (N=340)

Staff category	Current	Recommended
Extension	1.26	6.49
SMS	1.14	6.30
Management	.96	6.07

Overall, the respondents regard the current situation of in-service training for extension staff as inadequate, which is about a week per year. According to Table 9.2, the current in-service training for extensionist (1.26 weeks per year) is slightly higher than that of SMS (1.14 weeks per year) and management (0.96 week). The recommendation is a dramatic increase of in-service training: 6.49 weeks per year for extensionist and not much less for SMSs and managers. However, significant differences occur between the different zones (Table 9.3).

Table 9.3 The current and the recommended in-service training per year, expressed in terms of the number of weeks per year by respondents in various managerial positions and zones (N=340)

		In-service training per year (mean number of weeks)					
		Extensionist		SMS		Management	
Respondents categories		Current	Recommended	Current	Recommended	Current	Recommended
Managerial positions							
Non-managers		1.29	6.57	1.19	6.29	.95	6.03
First level managers		1.22	6.15	1.22	6.16	.82	6.22
Middle level managers		1.27	6.97	.92	6.68	1.20	6.08
Top level managers		1.29	5.00	.71	5.14	1.14	4.86
Total		**1.26**	**6.49**	**1.14**	**6.30**	**.96**	**6.07**
Analysis of variance (ANOVA)	F-value	.042	.888	.803	.502	.705	1.004
	df	3,338	3,338	3,338	3,338	3,338	3,338
	Sig.	.989	.447	.493	.681	.549	.391
Zones							
Jimma		1.75	6.07	1.54	6.35	1.22	6.40
Arsi		.94	6.29	.72	6.18	1.16	5.87
South West Shewa		1.16	9.32	1.03	7.41	.78	5.24
Borena		1.40	6.37	1.65	6.30	.49	6.86
East Shewa		.39	6.18	.70	5.37	.11	5.86
Analysis of variance (ANOVA)	F-value	7.134	5.530	6.377	1.334	4.184	4.190
	df	4,323	4,323	4,323	4,323	4,323	4,323
	Sig.	.000	.000	.000	.257	.003	.003

According to Table 9.3, the current situation of in-service training offered by Jima (coffee dominated) and Borena (pastoral area) appeared almost four times compared to the ratings by the respondents from East Shewa and double Arsi zones. These findings could imply that those zones well focused on a single enterprise have conducted more in-service training per year than those zones with more diversification.

As far as managerial positions are concerned, no significant variations between them are observed. However, for top level managers the demand for in-service training of extensionists, SMSs and managers appear to be less than for the other management categories.

9.4 MANPOWER APPRAISAL

The process of manpower performance appraisal is often emotional, as it brings into play ideas and perceptions of fairness and equal treatment. It involves individuals judging the quality and quantity of job performance of other individuals (Donnelly, *et al*., 1995). The effectiveness of the appraisal system depends on the quality of the three elements of all control techniques: standards, information, and corrective action (Chapter 11).

Managers must decide on three issues regarding performance information: the source, the schedule, and the method. Concerning the sources of information five possible parties can provide appraisal information: the supervisors of the appraisee, the peers, the appraisee, subordinates of the appraisee, and individuals outside the work environment (Donnelly, *et al*., 1995). In Ethiopia, prior to the decentralisation in 2002, the sources of information for manpower appraisal had been based only on the appraisee's immediate supervisor and the appraisal had been conducted every three months.

However, the current system involves a combination of peers, subordinates and even individuals outside the work environment and is conducted irregularly. Respondents' perception of the effectiveness of the current appraisal systems are assessed using a 10-point scale. These results are summarized in Table 9.4.

Table 9.4 The current efficiency level of the staff appraisal system (expressed as mean scale point percentage) as perceived by respondents in different managerial positions and from different zones (N=353)

Respondent categories	Mean scale point percentage
(a) Managerial	
Non-managers	38.0
First level managers	35.6
Middle level managers	39.7
Top level managers	35.0
Total	**37.6**
Analysis of variance (ANOVA)	
Degree of freedom (df)	*3,339*
F-value	*.558*
Significance (p-value)	*.64*
(b) Zones	
Jimma	34.8
Arsi	43.7
South West Shewa	28.9
Borena	45.1
East Shewa	26.9
Analysis of variance (ANOVA)	
Degree of freedom (df)	*6,336*
F-value	*5.897*
Significance (p-value)	*.00*

The general impression is that OBARD's current system of human power appraisal is perceived to be lacking. This is reflected in the current average efficiency score of 37.6 percent (Table 9.4). However, significant differences occur between the zones (F=5.897; p=0.00).

The assessments of the appraisal systems for East Shewa (26.9 percent) and South West Shewa (28.9%) fall significantly below the mean assessment (37.6%). This could be attributed to their proximity to the capital city and the subsequent bigger exposure to political influences.

The situation in the Arsi (43.7 percent) and Borena (45.1 percent) zones, comparatively, appears much better. One of the contributing reasons could be the presence and strong support (financially as well as technically) of agricultural projects over longer periods of time. For example, the Arsi zone has been under extension projects from 1967 onwards (such as CADU, supported SIDA, the Swedish Government, the Arsi-Bale project

financed by the Italian Government). In Borena, also, the GTZ project (financed by the German Government) has been providing strong support to the area for extension activities over the past two decades. The presence of these projects together with the close supervision of expatriate consultants might have contributed towards a more fair and equitable way of dealing with people.

9.5 REWARD SYSTEM

An organization must attract, hire, and retain a work force with the necessary competencies. In order to retain a competent work force, organizations should have a reward system that ensures that employees are fairly compensated in exchange for their efforts in achieving organizational goals (Lindner, 2001:23). According to Otley (1999) the links that should exist between the systems of designs of payment and performance measurement, should be documented and, in view of their motivational impact, assessed and evaluated. In this connection, respondents' were requested to indicate how important the following four criteria are for promotions or appointments, namely: qualification, proven performance, personality and political affiliation. A 10 point scale (where 0 represents 'unimportant' and 10 is decisive or extremely important) was used to assess the importance level of each criteria. The findings are summarized in Table 9.5.

Table 9.5 Respondents' assessment (expressed as mean percentage scale point) of the current and recommended importance of different criteria for appointment and promotion purposes in OBARD (N=314)

	Current importance		Recommended importance	
Lists of criteria	Mean	SD	Mean	SD
Qualification	68.4	17.6	85	14.6
Proven performance	65.4	17.8	84	15.6
Personality	64.4	18.0	79	19.7
Political affiliation	76.1	20.4	49	24.0

The outstanding feature in Table 9.5 is that political affiliation currently counts as the most important criterion (76.1%) in the appointment and promotion of personnel, whilst it should be the least important (49%). More emphasis should be placed on the other

criteria, namely, qualification (85%) and proven performance (84%) and, to a slightly lesser degree, personality (79%).

Nevertheless, significant variations between respondents' perceptions are observed, Table 9.6.

Table 9.6 Perceived mean percentage use of various promotion criteria by respondents in different zones and managerial positions in OBARD (N=340)

Respondents' categories	Statistical parameter	Qualification	Proven performance	Personality	Political affiliation
Managerial positions					
Non-managers	Mean	69.8	66.3	66.6	76.9
First level managers	Mean	68.0	64.7	60.0	77.0
Middle level managers	Mean	66.5	65.2	65.3	72.2
Top level managers	Mean	51.4	51.8	53.7	74.7
Total	Mean	68.4	65.4	64.4	76.1
ANOVA	F-value	2.773	1.544	3.501	.781
	P-value	.04	.20	.02	.51
Zones					
Jimma	Mean	71.8	68.6	58.5	82.8
Arsi	Mean	70.1	66.0	68.4	69.5
South West Shewa	Mean	67.0	65.3	70.9	75.4
Borena	Mean	61.5	60.8	66.8	80.5
East Shewa	Mean	72.2	67.1	63.4	66.8
ANOVA	F-value	5.174	3.488	4.728	5.282
	P-value	.00	.00	.00	.00

According to Table 9.6, significant differences between managerial positions are observed concerning the assessments of qualification (F=2.773; p=0.04) and personality (F=3.501; p=0.02) criteria. According to the top level managers' perceptions, personality is regarded as the second extensively applied criterion next to political affiliation, while the current application of qualification criterion is the least. But according to all lower position managers, qualification is given the second place in order of importance.

Finally, the extent of contribution of each promotion criterion to the various aspects of organizational efficiency is examined and the findings are summarized in Table 9.7.

Table 9.7 Relationship between the current application of promotion criteria and different aspects of organizational efficiency (N=340)

		Organizational efficiency aspects				
Criteria for promotion	Statistical parameter	Extension delivery	Job satisfaction	Functional efficiency	Return on investment	Total
Qualification	r	.35**	.27**	.07	-.07	.21**
	p	.00	.00	.19	.24	.00
Proven	r	.33**	.26**	.05	-.05	.20**
performance	p	.00	.00	.42	.43	.00
Personality	r	.30**	.11*	.04	.08	.19**
	p	.00	.05	.48	.15	.00
Political	r	-.05	-.01	.08	.11	.04
affiliation	p	.43	.81	.17	.05	.45

According to the findings in Table 9.7, qualification and proven performance criteria for promotion appear strongly associated with organizational performance. This is reflected in the stronger correlation between these two criteria and variables of organizational effectiveness, suggesting that they are the most important contributors towards organizational effectiveness. These results are in line with the respondents' recommendations, indicated in Table 9.5.

The implication of these findings is that there is a need to revisit the promotion system, specifically regarding the level of focus on political affiliation. This is due to the fact that although political affiliation is currently the most extensively used criterion for promotions and appointments of managers; it is unfortunately negatively or not at all associated with organizational efficiency.

CHAPTER 10
LEADERSHIP AND INFLUENCE

10.1 INTRODUCTION

Regardless of their respective organization's size or structure, most leaders strive to maximize the performance of their subordinates, in order to achieve organizational goals (Yukl, 1998). Of all the management functions, leading is the most human-oriented (Robbins & Coulter, 1999). Though the functions of planning, organizing, and staffing provide guidelines and directives in the form of plans, job descriptions, organization charts, and policies, it is people who do the work. But people have different needs, ambitions, personalities, and attitudes. Each person perceives the workplace and his job uniquely (Donnelly *et al*., 1995). Agricultural extension managers must take into account these unique perceptions and behaviours, and somehow direct them towards common purposes. This is the essence of leading or leadership.

According to Chemers (2002), leadership has been described as the process of social influence in which one person is able to enlist the aid and support of others in the accomplishment of a common task. In the context of management theory, Donnelly *et al.,* (1995) define leadership as the ability of a person to influence the activities of followers in an organizational setting

Leading involves day-to-day interactions between managers and their subordinates in influencing and motivating them to complete tasks; and in this sense leaders are individuals who positively influence the behaviour of followers. This exercise of influence by leaders in solving problems of an organization is a key to its successful operation or its effectiveness in overcoming constraints in its internal and external work environment (Robbins & Coulter, 1999).

In this regard, the extension managers' leading and influencing efficiency level, leadership behaviour and competency level of Oromia Bureau of Agricultural and Rural Development (OBARD) are examined.

10.2 CURRENT EFFICIENCY

Operationally, the leading and influencing ability of managers is defined as the level of inducing individuals or groups to assist willingly and harmoniously in accomplishing organizational objectives. The respondents were asked to assess the leading and influencing ability of Oromia Bureau of Agricultural and Rural Development (OBARD) managers in their situation, using a 10 point scale (0 = extremely low; 10 = extremely high). The respondents were also advised to make their judgements in terms of what they expected of them, according to their positions in the organizational managerial levels (top, middle and first level managers) that they occupy. The results are summarized in Table 10.1.

The results indicate that the overall leading and influencing abilities of OBARD managers is mediocre, about 52 percent. These findings are consistent with previous results in Chapter 5 where it was found that there were low employee motivations, communication and work climate that could be associated with poor leadership. However, there are significant variations in the assessments of respondents from different categories of management and locality.

Table 10.1 Extension managers' leading and influencing effectiveness, as perceived by respondents in categories of management and locality, and expressed in mean scale percentages) (N=353)

Categories of respondents	Statistical parameter	Leadership efficiency level of:		
		First level managers	Middle level managers	Top level managers
(a) Managerial positions				
Non-managers	Mean	49.9	49.3	50.5
First level managers	Mean	55.4	53.1	53.6
Middle level managers	Mean	56.6	59.2	55.3
Top level managers	Mean	42.5	52.5	58.8
Total	**Mean**	**52.4**	**52.1**	**52.4**
Analysis of variances (ANOVA)	F	2.906	4.058	1.090
	Sig.	.035	.007	.353
(b) Zones				
Jimma	Mean	51.4	50.5	53.8
Arsi	Mean	50.7	52.2	53.0
South West Shewa	Mean	56.3	54.7	52.9
Borena	Mean	57.4	56.7	55.1
East Shewa	Mean	49.7	47.7	37.7
Analysis of variances (ANOVA)	F	1.293	1.352	3.660
	Sig.	.27	.25	.01

According to Table 10.1, it appears that all managers tend to overrate their leadership ability. This conclusion is based on the fact that in every case a management category assesses itself higher that it is assessed by any of the other categories. Taking the non-managers ratings as a reference, the first, middle and top level managers have over-rated their leadership by about six, ten and eight percent respectively. Differences in assessment are significant in the case of first level managers (F=2.906; p=0.035) and middle level managers (F=4.058; p=0.007) The general low level of leadership effectiveness is a concern, which is exacerbated by the fact that managers tend to overrate themselves, and are thus less inclined to understand the scope of the problem.

As far as the zones are concerned, the only significant differences in leadership assessment occur with regard to top level managers (F=3.66; p=0.01). Here it is especially the staff from East Shewa that gave low assessment, also decreasing with higher levels of management. The possibility that these assessments were made out of

ignorance is unlikely, because, due to proximity to the head quarters, they were more likely to observe or experience the performance of senior management.

The tendency to award lower assessment to the more senior management levels does not necessarily imply that they have less leadership skills, but rather that subordinates have higher expectations of them, and it is against these expectations that they are evaluated, In general, the findings indicate a tremendous scope for improvement regarding leadership in all levels of management.

10.3 LEADERSHIP BEHAVIOUR

Leadership is one of the most salient aspects of any organization. Theorists began to research leadership as a set of behaviours, evaluating the behaviour of successful leaders, determining behaviour taxonomy and identifying broad leadership styles (Fiedler, 1967). Various aspects of the theories of leadership are discussed in Chapter 2: leadership in different contexts, how it may differ from related concepts (i.e., management), and some criticisms that have been raised about leadership and theories of leadership. The following sections provide a description of only the most popular styles of leadership, consistently associated with leadership effectiveness and organizational performance.

Whether managers are managing a team at work, captaining the sports team or leading a major corporation, the leadership style is crucial to an organizations' success. Consciously, or subconsciously, managers use some of the leadership styles featured, at least some of the time. By understanding these leadership styles and their impact, the managers can become more flexible and better leaders. So, different models provide an excellent guide to help managers choose the most appropriate leadership style in different situations.

This section presents the most common leadership styles emanating from different models and having found to be positively associated with organizational performance or the performance of subordinates. The styles referred to are: task- and/ or people- oriented,

participative/ democratic and visionary leadership styles. Against these four leadership styles, the OBARD managers' efficiency levels are assessed.

10.3.1 Task-Oriented and People-Oriented Leadership style

Research consistently demonstrates the benefits of task- and people-oriented leadership styles over the traits theories, in terms of achieving organizational goals (Awamleh, 1999). A highly task-oriented leader focuses only on getting the job done, and can be quite autocratic. He or she will actively define the work and the roles required, put structures in place, plan, organize and monitor. These leaders spare little thought for the well-being of their teams, and in this regard suffer from many of the flaws of autocratic leadership, like difficulties in motivating and retaining staff.

People-oriented style of leadership is the opposite of task-oriented leadership: the leader is totally focused on organizing, supporting and developing the people in the leader's team. It tends to lead to good teamwork and creative collaboration. However, taken to extremes, it can lead to failure in achieving the team's goals.

In practice, most leaders use combinations of both the task-oriented and people-oriented styles of leadership. This is in agreement with the managerial grid model developed by Blake & Mouton (1964). The managerial grid model identifies five main leadership styles based on the *concern for people* and the *concern for production*.

The model is represented as a grid with *concern for production* as the X-axis and *concern for people* as the Y-axis; each axis ranges from 1 (Low) to 9 (High). The five resulting leadership styles are as follows (Donnelly *et al*., 1995):

- The impoverished style (1, 1): in this style, managers have low concern for both people and production. Managers use this style to preserve job and job seniority, protecting themselves by avoiding getting into trouble.
- The country club style (1, 9): this style has a high concern for people and a low concern for production. Managers using this style pay much attention to the

security and comfort of the employees, in the hope that this will increase performance. The resulting atmosphere is usually friendly, but not necessarily that productive.

- The produce or perish style (9, 1): with a high concern for production, and a low concern for people. Managers using this style find employee needs unimportant; they provide their employees with money and expect performance in return. Managers using this style also pressure their employees through rules and punishments to achieve the company goals.

- The middle-of-the-road style (5, 5): Managers using this style try to balance between company goals and workers' needs. By giving some concern to both people and production, managers who use this style hope to achieve suitable performance, but neither production nor people needs are met.

- The team style *(9, 9)*: in this style, high concern is paid both to people and production. As suggested by the propositions of Theory Y, managers choosing to use this style encourage teamwork and commitment among employees. This method relies heavily on making employees feel as a constructive part of the company.

In accordance with the managerial grid, the respondents assessed the leaders in all the categories in terms of both the level of concern for task and concern for people, using a nine point, 1 to 9, scale (1=very low; 9=very high). Table 10.2 summarizes respondents' perceptions of the OBARD managers' leadership styles.

Table 10.2 The perceived level of extension managers' task and people orientation, as reflected in mean scale points by various categories of respondents (N=353)

Categories of respondents	Statistical parameter	Task orientation	People orientation
(a) Managerial Positions			
Non-managers	Mean	4.8	4.4
First level managers	Mean	4.5	4.0
Middle level managers	Mean	5.6	4.5
Top level managers	Mean	5.4	3.4
Total	**Mean**	**5.0**	**4.0**
Analysis of variance	F-value	3.255	1.365
	df	3,342	3,342
	Sig.	.02	.25
(b) Zones			
Jimma	Mean	4.8	4.1
Arsi	Mean	5.1	4.3
South West Shewa	Mean	4.2	4.0
Borena	Mean	5.2	5.5
East Shewa	Mean	4.7	3.2
Analysis of variance	F-value	1.909	6.472
	df	4,325	4,325
	Sig.	.11	.00

The mean assessments of 5.0 for task orientation and 4.0 for people orientation do not reflect very positively as far as the general level of management is concerned, but it does not allow any conclusions regarding the predominant leadership style. However, the findings clearly indicate that, in general, there is a greater focus on production than on people, and this tendency seems to be directly related to the level of management, meaning that with increase in level of management, there tends to be an increase in task orientation and a systematic decrease in people orientation. This discrepancy between a clearly higher task orientation (5.4) than people orientation (3.4) is particularly conspicuous among the senior managers.

Also as far as the zones are concerned, there are significant differences, particularly as far as people orientation is concerned (F=6.472; p=0.00). The extremes in this case are East Shewa with a mean people orientation assessment of 3.2, and Borena where the mean people orientation (5.5) is even higher than the task orientation.

The findings suggest that the leaders should improve both the concern for task and people orientation in order to increase organizational effectiveness and employee satisfaction. More specifically, people orientation is a concern.

10.3.2 Participative Leadership

The participative style of leadership can be most suitable where team work is essential, and quality is more important than speed to market or productivity (Robbins & Coulter, 1999). This style often leads to reduced tension, stress and conflict, more commitment to goal attainment, less resistance to change, effective two-way communication, high achievement drive, high employee morale, and high satisfaction (Verma & Saha, 1999).

A participative leader invites other members of the team to contribute to the decision-making process. This not only increases job satisfaction by involving employees or team members, but it also helps to develop people's skills. Employees and team members feel in control of their own destiny, and so are motivated to work hard for more than just a financial reward (Robbins & Coulter, 1999). According to Verma and Saha (1999), participative leadership is defined as a sharing process in which the leaders and their followers exchange information, delegate a good deal of authority to their subordinates and encourage them to play an active role in the performance of their jobs, motivate employees to feel more involved and create an environment of working together in a team.

In this context, the respondents were requested to evaluate the level of their leaders' emphasis on participation, using a 10 point scale (0 = extremely low; 10 = extremely high). Their perceptions are presented in Table 10.3.

Table 10.3 Perceived extension managers' level of participatory focus (mean scale points expressed in percentage) by various categories of respondents (N=353)

Respondents' categories	Statistical parameter	Mean
(a) Managerial positions		
Non-managers	Mean	55.4
First level managers	Mean	54.9
Middle level managers	Mean	59.1
Top level managers	Mean	56.4
Total	**Mean**	**55.9**
Analysis of variance (ANOVA)	F	.654
	Sig.	.58
(b) Zones		
Jimma	Mean	52.6
Arsi	Mean	60.1
South West Shewa	Mean	54.6
Borena	Mean	61.6
East Shewa	Mean	46.6
Analysis of variance (ANOVA)	F	5.242
	Sig.	.00

The results, as shown in Table 10.3, indicate that the overall level of extension managers' participatory focus is rather mediocre, almost half way of the expectation, about 56 percent. Significant differentials of perception are observed between respondents in the different zones. According to the respondents from East Shewa, the current level of managers' participatory focus is poor (46.6 percent), while the situation is comparatively better for respondents from Borena (61.6 percent) and Arsi (60.1 percent) zones. There are no significant differences between the different management categories regarding the perceived participatory focus (F=0.654; p=0.58), which implies that the need for more participatory leadership applies very generally.

10.3.3 VISIONARY LEADERSHIP

According to Donnelly *et al.*, (1995), the twenty-first century organization virtually demands visionary leadership. It cannot function without vision. For an organization

driven by accelerating technological change, staffed by a diverse, multicultural mix of highly intelligent, knowledgeable workers, facing global complexity, a vast variety of individual customer needs, and the incessant demands of multiple constituencies, not to have a common sense of direction, would mean self-destruction (Donnelly *et al*., 1995). Vision is the glue that binds individuals into a group with a common goal. When shared by employees, it can keep an entire organization moving forward in face of difficulties, enabling and inspiring leaders and employees equally (Robbins & Coulter, 1999).

Vision taps people's emotions and energy (Snyder & Graves, 1994). Properly articulated, a vision creates the enthusiasm that people have for sporting events and other leisure time activities, bringing the energy and commitment to the workplace (Nutt & Backoff, 1995).

Three qualities that, according to Collins & Porras (2004), are related to effective visionary leadership are the following:

(1) The first skill is the ability to identify and explain the vision to others. The leader needs to make the vision clear in terms of required goals and actions through clear oral and written communication.
(2) The second skill needed, is the ability to express the vision not just verbally but through behaviour. This skill requires behaving in ways that continually convey and reinforce the vision.
(3) The third skill is the ability to extend or apply the vision to different leadership contexts. For instance, the vision has to be as meaningful to the people in accounting as to those in production.

In evaluating the visual leadership found in OBARD, respondents were asked to evaluate the degree to which their leaders had demonstrated the visionary style of leadership in their work place, using a 10 point scale (0 = extremely low; 10 = extremely high). Table 10.4 summarizes the responses to a pre-coded question on visions of the future and its significance, in terms of awareness of vision's contribution to extension delivery effectiveness and employees job satisfaction.

Table 10.4 Perceived vision awareness level of OBARD and its potential influence on extension delivery and job satisfaction (mean scale point expressed in percentage) by respondents of various categories (N=353)

Categories of respondents	Statistical parameter	Level of vision Awareness	Influence on Extension Delivery	Influence on Job Satisfaction
(a) Managerial positions				
Non- managers	Mean	55.5	58.04	60.94
First level managers	Mean	51.1	59.05	63.84
Middle level managers	Mean	55.0	61.22	61.39
Top level managers	Mean	65.0	41.88	45.63
Total	Mean	54.4	58.49	61.44
Analysis of variances (ANOVA)	F	2.345	1.475	1.302
	df	3,349	3,346	3,345
	p	.07	.22	.27
(b) Zones				
Jimma	Mean	53.2	52.2	54.6
Arsi	Mean	53.8	55.7	58.5
South West Shewa	Mean	56.2	64.6	77.2
Borena	Mean	54.9	67.9	68.2
East Shewa	Mean	54.4	70.0	68.8
Total	Mean	54.1	58.6	61.8
Analysis of variances (ANOVA)	F	.233	7.219	9.001
	df	4,326	4,328	4,328
	p	.92	.00	.00

According to the findings in Table 10.4, the level of clarity of extension vision is 54.4 percent. The respondents feel that the increased awareness vision (in terms of what it does, what it will not do, and this clearly communicated to all concerned bodies or all stakeholders) will, in turn, increase extension delivery effectiveness and job satisfaction of employees by 58.5 and 61.4 percent, respectively. These results tend to imply that lack of clarity of extension vision statements in the current situation have negatively influenced extension delivery effectiveness and job satisfaction, in one way or another.

The vision awareness varies between the different management groups. Although the difference is only significant at a probability level of 7 percent (F=2.345; p=0.07), the top managers are more convinced of personnel's awareness of the vision. For example, the top-level managers have the opinion that currently there is already reasonable awareness (65 percent), which also explains why they expect less improvement (41.88 percent in the case of extension delivery improvement and 45.6 percent for improvement of job satisfaction) from future awareness campaigns.

As far as the zones are concerned, there are no significant differences observed, but certainly as far as the perceived influence of an awareness campaign on the improvement of extension delivery (F=7.2, p=0.00) and job satisfaction (F=9.0; p=0.00) are concerned. For example, Jimma Zone expects much less from an awareness campaign (52.2 and 54.6 percent improvement of extension and job satisfaction, respectively) than East Shewa and South West Shewa with percentages in the vicinity of 70 percent. The general conclusion is that there is scope for improving the awareness of extension staff regarding the organization's vision. Staff should, based on their overall understanding of the potential influence of such awareness on the improvement of extension and job satisfaction, welcome campaigns promoting such awareness.

CHAPTER 11
MANAGEMENT CONTROL

11.1 INTRODUCTION

Management is responsible for building an effective human organization and for motivating the people in that organization to work toward its goals (Anthony & Herzlinger, 1980:21). In order to fulfil this responsibility, management has five functions – planning, organizing, staffing and human resources management, leading and influencing, and controlling. Controlling completes the process of management by measuring accomplishments against plans (Buford, et. al; 1995:277). Controlling is necessary since things do not always go as planned, and, consequently, problems have to be anticipated, plans adjusted and corrective action taken, in order to enable organizations to survive and prosper (Buford, et. al., 1995:278). In extension, the term *control* is not used frequently, but it is not difficult to recognise the close association with the familiar monitoring *and evaluation* (Buford, et. al; 1995:278). This familiar process of monitoring and evaluation of programs in extension is fundamentally similar to the managerial function of control.

Controlling processes have been characterized in many different ways. According to Otley (1987), controlling has three basic building blocks or phases, namely: (a) identifying or establishing indicators of performance; (b) performance measurement and (c) corrective action. The current efficiency level of management control of the Oromia Bureau of Agriculture and Rural Development (OBARD) is assessed in terms of these three aspects of controlling.

11.2 INDICATORS OF PERFORMANCE

Management control systems provide information that is intended to be useful to managers in performing their jobs and to assist organizations in developing and maintaining viable patterns of performance (Otley, 1999:364). Therefore, there is a need

for setting indicators against which the organizational or managerial performance can be gauged and can thus also be used as a management control. Indicators are simply measures or yardsticks of success that are concerned with the achievement of the organizational goals (Adams, 1990:76). Control is said to be effective if there is clear statement of measurement of success, and various indicators are applied to measure all aspects of goal achievement. For extension organizations, eight categories or levels of indicators were first identified by Bennett (1977), and can be used in measuring the extension organization's performance. They include the following: inputs (namely, the resources to be used), activities (implementation of decisions in terms of extension activities), clients' participation (in decision making that affects them), clients' reactions (opinions of clients about the performance), change in behaviour determinants (such as knowledge, attitude, skills, motivation and group norms), change in behaviour of clients (practice adoption), change in efficiency (as a consequences of practice adoption) and change in outcome (consequences for society). These performance indicators are frequently seen as representing a hierarchy, ranging from lowest level of inputs (level 1) to level 8 representing the outcome or impact as the highest level. These indicators are used in this study to test the extent of various aspects of organizational performances.

11.2.1 Current application status

Using a 10-point scale (where 0 = not at all, 5=sometimes/to a limited degree, and 10=always/very extensively) the extent of application of these 8 levels or indicators of control in the Oromia Bureau of Agriculture and Rural Development (OBARD) were evaluated. The respondents were asked to indicate the extent to which these indicators are used by extension organization in their area. Respondents' perceptions are summarized in Table 11.1.

Table 11.1 Degree to which the different indicators of performance are applied in OBARD, expressed as mean percentage and respondents' distributions

Performance indicators	Percentage distribution of respondents per efficiency categories				Summary statistics (Percentage)	
	Rarely	Sometimes	Intensively	Total	Mean	SD
Input resources	18.2	55.1	26.7	100	56.1	18.3
Activities implementation	24.6	45.0	30.4	100	55.9	20.0
Clients' participation	30.1	40.1	29.8	100	55.0	21.8
Clients' reaction	37.4	37.1	25.4	100	52.7	21.2
Change in behaviour determinants	49.4	34.5	16.1	100	46.3	20.3
Practice adoption	55.8	31.0	13.2	100	44.7	20.8
Change in efficiency	58.2	29.8	12.0	100	42.8	21.5
Change in outcome	68.7	26.0	5.3	100	36.6	24.3
Total indicators weighted average	46.3	49.8	3.9	100	47.4	12.3

Table 11.1 suggests that the current level of use of these indicators varies significantly between the different indicators, namely from as low as 36.6 percent in the case of outcome criteria and 56.1 percent for input indicators. This and a comparison of other mean percentages indicate that the input indicators are more frequently used, while the outcome indicators receive much less attention. This means that the lower level criteria, like input resources, activities and clients' assessment are used more intensively than the outcome focused indicators, such as behaviour determinants, behaviour (practice adoption) and behaviour results (efficiency and outcome). One of the reasons for this tendency could be that the input indicators are easily measurable, easily achievable and data becomes readily available.

Table 11.2 investigates whether there are differences between different localities (zones) and different managerial positions in terms of the application of the different control indicators.

Table 11.2 Mean percentage application of control indicators in OBARD by respondents in the different locations and managerial positions

Respondents' categories		Input resources	Activities implementation	Clients' participation	Clients' reaction	Behaviour determinants	Practice adoption	Change in efficiency	Change in outcome
(a) Managerial Positions									
Non - managers		68.8	67.5	58.8	57.5	35.0	31.3	26.2	32.5
First level managers		54.1	50.5	49.5	46.8	41.7	40.3	38.3	28.7
Middle level managers		55.2	54.4	54.0	49.7	46.1	42.7	39.8	32.9
Top level managers		57.5	59.1	56.6	53.1	45.9	42.9	41.4	34.0
Total		**56.6**	**56.6**	**54.7**	**51.2**	**45.0**	**42.1**	**40.1**	**32.8**
ANOVA:	df	3,340	3,341	3,341	3,341	3,341	3,341	3,341	3,341
	F-value	1.85	4.17	1.77	1.95	1.59	1.21	1.76	1.07
	Sig.	.14	.01	.15	.12	.19	.31	.15	.36
(b) Locations									
Jimma		57.2	55.9	53.8	50.2	46.1	42.7	41.0	32.4
Arsi		55.6	57.4	57.4	57.1	51.9	49.2	49.5	42.7
South West Shewa		59.7	58.9	49.7	47.0	41.6	41.6	37.8	30.3
Borena		54.0	55.8	55.4	47.9	39.3	35.8	33.5	24.0
East Shewa		52.0	50.7	54.8	46.3	33.0	30.0	22.6	15.6
Region		63.0	57.1	67.1	51.4	37.1	31.4	30.0	24.3
National		65.8	63.3	44.2	41.7	33.3	30.0	20.8	27.5
Total		56.6	56.6	54.7	51.2	45.0	42.1	40.1	32.8
ANOVA:	df	6,341	6,341	6,341	6,341	6,341	6,341	6,341	6,341
	F-value	1.33	.76	1.53	2.90	6.59	7.14	13.29	11.34
	Sig.	.24	.60	.17	.01	.00	.00	.00	.00

As far as management positions are concerned, it appears that the difference found in terms of the differential application of the input and outcome indicators, is more pronounced among the higher-level managers. This means that the input indicators are applied to an even higher degree, and the output criteria to an even lesser extent.

Greater differences occur between the various zones regarding the application of control indicators. The differences are more significant in regard to the farmers' opinions and the output indicators. The previously observed tendency of senior managers being more supportive of the input than output indicators, is further supported here in that the tendency is even more pronounced among the national level extension workers.

11.2.2 Influence of the use of indicators of performance on organizational efficiency

The purpose of this section is to examine the degree to which the uses of improved management practices can contribute to the organizational performance. The stronger the relationship between aspects of management practices and organizational performance, the more significant the contribution of those is towards performance improvement. In this way the importance of the control indicators can be identified and placed in importance rank order. The results of this procedure are summarized in Table 11.3.

Table 11.3 Relationship between perceived application of control indicators and organizational efficiency (N=332)

		Organization efficiency aspects				
Performance indicators	St	Extension delivery	Job satisfaction	Functional efficiency	return on investment	Total weighted
Input resources	r	.18**	.15**	.07	.01	.13*
	p	.00	.01	.22	.81	.03
Activities	r	.14*	.13*	.01	-.05	.04
	p	.01	.02	.85	.35	.45
Clients' participation	r	.06	.11*	.07	-.01	.06
	p	.25	.04	.23	.85	.32
Clients' reaction	r	.04	.09	.05	.01	.04
	p	.44	.12	.39	.91	.47
Behaviour determinants	r	.17**	.18**	.04	.03	.14*
	p	.00	.00	.43	.54	.01
Practice adoption	r	.09	.12*	.10	.08	.15**
	p	.10	.03	.07	.14	.01
Change in efficiency	r	.19**	.21**	.15**	.15**	.27**
	p	.00	.00	.00	.01	.00
Change in outcome	r	.10	.16**	.16**	.13*	.19**
	p	.06	.00	.00	.03	.00
Total indicators (weighted)	r	.19**	.23**	.13*	.07	.21**
	p	.00	.00	.02	.22	.00

Table 11.3 suggests that the findings are supportive of the hypothesis as the applications of all indicators show relationships with variables of organizational performance. This

applies more particularly to the output indicators, where the majority of correlations are highly significant. This means that the input indicators are useful and should be applied, as they contribute towards organisational performance, but the output indicators are more critical in this regard and deserve particular attention.

11.2.3 Factors influencing the use of performance indicators of control

Based on the conceptual model of this study (which is based on Düvel's (1991) model for the analysis of behaviour), managerial and organizational efficiencies are hypothesized as the function of independent and intervening variables (discussed in the literature review and previous chapters). Independent variables include individual respondents' demographic and personal characteristics (for more detail see chapter 4), organizational resources positions and external environment factors (as discussed in chapter 6); while intervening variables are related to needs, perceptions and knowledge (as discussed in chapter 5).

11.2.3.1 Influence of personal demographic and socio-economic characteristics on the use of performance indicators of control

This section provides the results of analysis, Table 11.4, regarding the test of hypothesis 3.1 which states that the uses of performance indicators are influenced by personal demographic and socio-economic characteristics of the respondents.

Table 11.4 Relationship between respondents' personal characteristics and perceived application of control indicators (N=340)

Personal characteristics	Statistical parameter	Input resources	Activities implementation	Clients' participation	Clients' reaction	Behaviour determinants	Practice adoption	Change in efficiency	Change in outcome
Job position	r	-.06	-.17**	-.12*	-.12*	-.12*	-.10	-.13*	-.10
	p	.28	.00	.03	.03	.02	.06	.02	.07
Age	r	.04	-.08	-.03	-.03	.06	.11*	.08	.04
	p	.46	.12	.57	.64	.27	.04	.15	.48
Gender	r	-.10	-.18**	-.15**	-.17**	-.10	-.12*	-.10	.00
	p	.06	.00	.01	.00	.08	.03	.07	.98
Marital status	r	-.06	-.14**	-.08	-.00	-.00	.04	.04	.01
	p	.32	.01	.17	.97	.96	.46	.49	.92
Formal education	r	-.08	-.14**	-.10	-.08	-.15**	-.10	-.04	-.07
	p	.14	.01	.07	.13	.01	.07	.48	.22
IST*in extension	r	.01	.03	.02	-.01	-.07	-.11*	-.10	-.04
	p	.80	.62	.68	.83	.17	.04	.08	.48
IST*in management	r	.02	.08	.12*	.03	.03	-.04	-.04	-.01
	p	.79	.12	.04	.58	.63	.51	.51	.87
Total service years	r	.08	-.06	-.01	-.02	.05	.12*	.07	.05
	p	.13	.30	.81	.75	.39	.03	.20	.36
NSY** in management	r	.01	-.12*	-.04	-.09	-.08	-.03	-.05	-.08
	p	.92	.04	.51	.10	.13	.59	.38	.14
NSY** in current position	r	.14*	.14**	.06	.07	.18**	.18**	.09	.05
	p	.01	.01	.24	.20	.00	.00	.10	.40
Salary	r	-.05	-.16**	-.11*	-.16**	-.20**	-.13*	-.14*	-.17**
	p	.34	.00	.04	.00	.00	.01	.01	.00

IST*= in-service training; NSY** = Number of service years

In general, the correlations between independent variables of individual respondents and perceived level of uses of various performance indicators vary from low positive to low negative. The size of the absolute value (ignoring the sign) of correlation coefficients (r) provides an indication of the strengths of the relationships (which in this case range from negligible (r = 0.00 – 0.09) to small (r = 0.10 – 0.20) suggesting that the overall strengths of relationships are low.

The factor having the greatest positive influence on the perceived application of performance indicators is experience (years of service) in the current position. The correlations are significant or highly significant with more than 50 percent of the indicators. This means that the more experience in the current position, the higher the perceived application of performance indicators.

Factors that tend to have a more critical influence on the perceptions regarding the degree of implementation of performance indicators are position, education (qualification), and even more so gender and salary level. This is indicated by statistically significant negative correlations in the case of several indicators, and implies that males and respondents of higher managerial position, education, and salary level and who have attended in-service training in extension, tend to be more critical or reserved regarding the implementation of performance indicators for control purposes.

An explanation for this could be the understanding of the concepts of performance indicators, or the ability to distinguish more accurately the degree to which they are currently in use in their areas. Consequently, the higher the managerial position, and level of education level and the more in-services training in extension the respondents have attended, the more likely they are to understand the concepts of performance indicators and their uses. As a result, they are more critical in their assessment. The gender influence can be attributed to the fact that male respondents are more educated than female respondents (Chapter 4) and, consequently, they are more critical in their assessment of the current application of control indicators.

11.2.3.2 Influence of organizational resources strength on the use of performance indicators of control

The variables relating to the adequacy of organizational resources are: extension teaching aids, office and accommodation facilities, transportation, finance, and skilled manpower availability (see chapter 6 for details).

The correlation analysis between the respondents' perception of the adequacy level of resources and the use of indicators of control are summarised in Table 11.5.

Table 11.5 Relationship between perceived organizational resources adequacy and the use of control indicators (N=336)

Organizational resource strength variables	Statistical parameter	Input resources	Activities implementation	Clients' participation	Clients' reaction	Behaviour determinants	Practice adoption	Change in efficiency	Change in outcome
Extension aids	r	.20**	.22**	.20**	.03	.24**	.18**	.10	.11*
	p	.00	.00	.00	.53	.00	.00	.07	.04
Office & accommodation	r	.15**	.21**	.27**	.16**	.18**	.12*	.10	.11*
	p	.01	.00	.00	.00	.00	.03	.07	.04
Transportation	r	.19**	.13*	.20**	.05	.16**	.13*	.09	.08
	p	.00	.02	.00	.41	.00	.02	.11	.15
Finance	r	.14**	.14*	.26**	.07	.20**	.15**	.13*	.11*
	p	.01	.01	.00	.20	.00	.01	.02	.04
Skilled manpower	r	.28**	.29**	.25**	.19**	.29**	.20**	.19**	.18**
	p	.00	.00	.00	.00	.00	.00	.00	.00

In contrast with personal characteristics, the perceived adequacies of resources are significantly higher correlated with the perceived application of performance indicators (Table 11.5). Skilled manpower appears to have the highest correlation and is highly significantly correlated with the use of all performance indicators of control.

The directions of relationships between variables of organizational resources factors and performance indicators of control are all positive. These findings suggest that the higher use of performance indicators of control is associated with the perceived adequacy of organizational resources.

11.2.3.3 Influence of the external environmental factors on the use of performance indicators of control

The use of improved management practices (performance indicators in this case) was hypothesized to be influenced by external environmental factors such as the task and the general environment related factors that were discussed in detail in chapter 6. The same variables are used in Table 11.6.

Table 11.6 Relationship between perceived favourableness of external environmental factors and application of indicators of control

Environmental factors	Statistical parameter	Input resources	Activities implementation	Clients' participation	Clients' reaction	Behaviour determinants	Practice adoption	Change in efficiency	Change in outcome
Task environment									
Collaboration between institutions	r	.15**	.12*	.08	.10	.26**	.21**	.27**	.31**
	p	.01	.03	.15	.07	.00	.00	.00	.00
Availability of new agricultural technologies and information	r	.24**	.21**	.34**	.20**	.20**	.12*	.13*	.09
	p	.00	.00	.00	.00	.00	.03	.02	.11
Accessibility of small scale farmers to agric inputs and credit	r	.12*	.15**	.10	.11	.19**	.17**	.19**	.17**
	p	.02	.01	.06	.05	.00	.00	.00	.00
Farmers' willingness	r	.20**	.26**	.26**	.24**	.25**	.18**	.20**	.23**
	p	.00	.00	.00	.00	.00	.00	.00	.00
General environment									
Government policy & regulations	r	.18**	.13*	.15**	.17**	.21**	.18**	.21**	.18**
	p	.00	.02	.01	.00	.00	.00	.00	.00
Land tenure policy	r	.07	.05	.14*	.14*	.05	.01	.09	.06
	p	.19	.37	.01	.01	.35	.84	.11	.28
Political	r	.02	.03	.03	.04	.15**	.15**	.11*	.14*
	p	.67	.54	.58	.43	.01	.01	.04	.01
Agro-ecological	r	.09	.10	.05	.11*	.06	.02	.05	.02
	p	.10	.06	.40	.04	.31	.77	.40	.73

The overall impression gained from Table 11.6 is that perceived environmental factors are, judged by the number of significant correlations, closely associated with the perceived application of control indicators. It is particularly the task environment (availability of new technology and information, farmers' willingness, collaboration between institutes) and government policy and regulations under the general environmental factors that are prominent.

As far as the task environmental factors are concerned, the biggest correlation coefficient occurs between perceived farmers' willingness and collaborations between institutions and the use of performance indicators.

Similarly, concerning the general environment, the factors that appear to have stronger association with the application of control indicators are government policy & regulations and political factors (reflected by significant correlation with all indicators).

All these above factors, although not a direct cause, are seen by respondents to be associated with the application of control indicators. This implies that top level managers and office heads at different levels should communicate or negotiate effectively as well as tactfully (to convince and defend systematically at least not to compromise basic extension/organizational principles) with government and political officials so that they will be able to create a favourable working environment for their subordinates.

11.3 PERFORMANCE MEASUREMENT

Performance tracking and measurement is vital for a manager's decision making, as it tells him/her what has happened regarding implementation of activities, and serves as the basis for any action needed to improve the performance of an organization in moving towards predetermined objectives. Besides, adequate immediate managers' control over subordinates is very crucial, as there are dangers to leaving employees to their own devices in meeting performance standards (Thompson & Strickland, 2001:393). Such immediate managers' supervision or directions over their subordinates helps to ensure that the actions of subordinates stay within acceptable bounds. Thus, every organization needs systems for gathering and storing data, tracking key performance indicators, identifying and diagnosing problems, and reporting strategy-critical information (Thompson & Strickland, 2001:393).

In the context of Oromia Bureau of Agricultural and Rural Development (OBARD), performance tracking and measurement systems efficiency status were evaluated using three variables. They are: (a) immediate managers' support and control over subordinates; (b) employee appraisal system (discussed in Chapter 9); and (c) monitoring and evaluation system of extension activities or programs.

11.3.1 Immediate managers' support and control over subordinates

In the measurement of the current efficiency level of immediate managers' support and control over subordinates more additional steps were employed. First, respondents were requested to indicate how efficient they were in their current work position using a 10-point scale. In a follow up question, they were asked what the level of their efficiency in their current work position would have been without immediate managers' support or control over them. Finally, immediate managers' support and control over subordinates' efficiency was obtained by subtracting the respondents' current efficiency from what would have been without immediate managers from their total perceived efficiency in current work position. These results are summarized in Table 11.7.

Table 11.7 The perceived mean percentage efficiency level of immediate managers' support and control over subordinates in OBARD by respondents (N=353)

Respondents' categories		Immediate managers' support and control
(a) Managerial Positions		
Non-managers		-1.7
First level managers		-3.1
Middle level managers		-3.0
Top level managers		0.0
Total		-2.3
	Analysis of variance (ANOVA)	
	df	3,326
	F-value	.265
	Sig.	.85
(b) Locations		
Jimma		-1.1
Arsi		-0.6
South West Shewa		-3.0
Borena		-3.1
East Shewa		-10.4
	Analysis of variance (ANOVA)	
	df	4,336
	F-value	1.783
	Sig.	.10

In general OBARD's current performance of managers' support and control over subordinates is perceived as poor (Table 11.7). This is indicated by the respondents assessments that the average mean percentage current efficiency scores for immediate managers' support/ control subordinates is -2.3 percent. There are no significant

differences between respondents of various categories observed implying that the problem is applicable to all, though there are slight variations.

One of the reasons for this poor performance of support and control over subordinates could be an inappropriate selection of managers based on political affiliation rather than competence (see Chapter 9).

11.3.2 Monitoring and Evaluation of extension activities/ programs

In Chapter 7 types of extension activities or programmes and their mode of implementations of OBARD were discussed. Here the focus is on the monitoring and evaluation systems effectiveness in assessing the implementation and achievement of the organizational goals. Respondents' perception of the current efficiency level of monitoring and evaluation systems is assessed using a 10-point scale. The results are summarized in Table 11.8.

Table 11.8 The perceived efficiency level of current monitoring and evaluation systems of extension programmes mean scale point expressed in percentage by respondents (N=353)

Respondents' categories		Mean percentage
(a) Managerial		
Non-managers		41.6
First level managers		39.8
Middle level managers		39.8
Top level managers		35.0
Total		40.7
ANOVA:	df	3,339
	F-value	.401
	Sig.	.75
(b) Locations		
Jimma		39.8
Arsi		48.2
South West Shewa		32.4
Borena		45.6
East Shewa		24.1
ANOVA:	df	4,336
	F-value	7.865
	Sig.	.00

In general OBARD's current efficiency of extension programmes monitoring and evaluation system is perceived as poor. This finds expression in a mean total of 40.7 percent, (Table 11.8). The perceived efficiency levels of all the three measures appear below respondents' minimum expectations. This is indicated by the respondents' assessments that the average mean percentage current efficiency scores for extension evaluation is 40.7 percent. The results show that there are no significant differences between respondents of various managerial positions, though there are slight variations ($F=0.401$, $p=0.75$).

Unlike managerial positions, the differences between respondents of various zones were significant at one percent significance level ($F=7.865$, $p=0.00$). The current efficiency level of extension programmes evaluation by Arsi and Borena zones seem better than others as reflected by comparatively higher mean percentage of 48.2 and 45.6 percent respectively although still below mid-way.

One of the contributing reasons for better performance of in these two zones could be related to the presence and strong support (financially as well as technically) of agricultural projects over longer periods. For example, Arsi zone has been the target area over the last three regimes (due to its high potential, especially for wheat and barley production) and has been under extension project from 1967 (CADU, supported SIDA, Swedish Government) to the present (Arsi-Bale project financed by Italian Government). In Borena, also, the GTZ project has been providing strong support to the area for extension activities over the past many years, financed by German Government).

11.3.3 Purposes of reporting

Considering the various report forms sent in by OBARD extension workers every month, the question arises as to what their current purpose of these various reports is and what it should be. Respondents were asked to prioritize the various alternative purposes in order of current and recommended preference (Table 11.9).

Table 11.9 Respondents' perceptions of the current (C) and recommended (R) purposes of reporting in OBARD as reflected by rank order nominations

Purposes of reports:	Nomination frequency per rank order								Total weighted nominations		Rank order	
	1st		2nd		3rd		4th					
	C	R	C	R	C	R	C	R	C	R	C	R
To provide information that serves as evidence for accountability	181	83	69	79	46	95	46	85	1069	844	1	3
To provide information that allows frontline extension personnel to improve their extension	70	135	121	101	82	80	69	26	876	1029	2	1
To provide information used to improve management	34	63	92	124	174	114	42	41	802	893	3	2
To provide information mainly for policy makers	57	61	60	38	40	53	185	190	673	654	4	4

According to the findings in Table 11.9, reporting in OBARD is primarily conducted for the purpose of accountability, which shows as evidence of success or progresses. This is evidenced by respondents' ranking for accountability that amounted to a total of 1069 weighted nominations, which is far higher than nominations for the others. The variation between the other three variables is very little. Relatively, the least nominations (673) were for policy makers.

These findings imply that little is expected, regarding critical review of reports and provision for feedback for the purpose of corrective actions in order to improve extension delivery or management efficiency, as the target receiver of the reporting system is government administrators (where reports are mainly used for statistical purpose).

Understandably the respondents (Table 11.9) suggested that the primary purposes of reporting should be to improve frontline extension service provision. This is clearly shown by the highest rank order and the total weighted nominations of 1029. The second and the third ranks, with relatively small differences of nominations, are offered for management and accountability purposes respectively.

CHAPTER 12

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

12.1 INTRODUCTION

Against the background of frequent organisational changes and restructuring, often based on impulsive decisions rather than structured feasibility studies or evaluations, this study examines the nature and influence of management on the performance of the Ethiopian public extension service. The specific objectives of the study were to examine: (1) the current situation of overall organizational and managerial functioning, (2) the impact or influence of the 2002 organizational interventions, and (3) determinants of organizational effectiveness.

In order to achieve these objectives, the study was guided by the following research questions:

1. How efficiently is the OBARD organization currently functioning?
2. What is the current situation of OBARD regarding managerial efficiency level and the application of improved management practices?
3. Are there any differences between before and after the 2002 organizational restructuring in terms of improvements in organizational performance?
4. What are the factors that currently influence, (enhance or restrain) the organizational and managerial functioning of OBARD?
5. Are there any variations regarding assessed organizational and managerial performance between various categories of respondents?

The study was undertaken in Oromia Region, which is one of the nine regions of Ethiopia. Using purposive sampling, the Oromia region was selected mainly for reasons of cost saving (proximity to Haramaya University) and because it is representative of most of the country's agro-ecological climate zones (such as high, middle and low altitudes) and all main types of agricultural enterprises.

Extension staff from five of the twelve zones (selected on the basis of their representation of the region) were selected, and from each zone all extension personnel as well as extension specialists working at region and national headquarters were invited to participate and received questionnaires. Of the total of 566 who were invited, 353 (162 managers and 191 non-managers) correctly completed and returned their questionnaires, which represents a response rate of 62.4 percent.

Using a pre-tested and validated semi-structured interview schedule, the interviews were conducted in group sessions at various venues at each district, zone, region and national offices levels. The data was coded, captured and analyzed using the Statistical Package for Social Sciences (SPSS) program.

Correlations and regressions were used to determine the relationship between variables, while analyses of variance (ANOVA) and Chi-square were used to compare the level of variations between variables.

12.2 SUMMARY AND CONCLUSIONS

Using the research questions as framework, the following is an overview of the findings and conclusions of this study:

Question 1. How efficiently is the OBARD organization currently functioning?

Based on the three main dimensions of organizational efficiency (namely operating, organizational health and process efficiency aspects) the current efficiency level of Oromia Bureau of Agricultural and Rural Development is summarized below.

(a) Operating efficiency

In the context of non-profit organizations, organizational operating efficiency refers to tasks and activities related to the organization's operational goals. Four variables were identified and operationally defined to measure the operating efficiency level of OBARD. They are: (1) Extension delivery effectiveness in terms of both quantity (target farmers' reached by services) and quality (impact of extension messages on target farmers) of services; (2) Resource utilization efficiency - manpower, time, finance and materials - to achieve organizational goals at district level; (3) Return on investment in extension (input-output ratio of investment in extension, expressed as a return per 100 Birr invested in extension by OBARD); and (4) the degree of under-performance or under-efficiency (the percentage of their current work time that respondents would require to achieve what they are currently doing assuming that they were highly competent, productive and effective).

The current extension delivery and resource use efficiency are assessed to be 56.88 and 60.24 percent respectively. The return on investment in extension of OBARD is perceived as 93.10 percent, which means that for every 100 Birr invested in extension, the return is currently estimated as 93.10 Birr. This implies that the organization is working at a loss. Further evidence in support of the low efficiency is the high level of perceived under-performance, namely 36.8 percent. This means that on average, the respondents' were of the opinion that they could have accomplished the same work in 63.2 percent of their normal time under more favourable conditions.

(b) Process efficiency

Organizational process efficiency refers to the level of consensus regarding goals/procedures, cooperation and smooth flow of work, ideas and information. Three variables were selected to capture this concept, namely: coordination (coordination among departments and between stakeholder organizations in confronting common problems and finding synergistic solutions), communication (communication and

openness between workers/ managers and between organizations' managerial hierarchies), and participation (involvement of subordinates or workers in decisions that affect them). The results indicate that the process efficiency seems comparatively better than the other two aspects with assessed current efficiency levels of 54.46, 55.06, and 55.82 percent for coordination, communication and participation variables respectively.

(c) Organizational health efficiency

Organizational health refers to non-financial aspects of organizational performance, such as human outcomes and interpersonal relations. Three variables were selected, namely job satisfaction (the extent to which the job provides interesting tasks, opportunities for learning and accepting responsibilities), motivation (achievement recognition and justice in workers' placement, transfer and promotion) and work climate (trust and support among workers and between subordinates and managers). The results show that the current efficiency for work climate, job satisfaction, and motivation are 51.38, 49.73, and 46.28 percent respectively.

In general, the findings indicate that the organizational efficiency can be described as mediocre, thereby meeting only the minimum expectations in relation to the three aspects of the overall organizational functioning. Variation between management groups and different zones indicate that some are more critical of the situation and give an assessment well below 50 percent. This applies in particular to return on investment in extension and job satisfaction and motivation..

Question 2 What is the current situation of OBARD regarding managerial efficiency level and/ or the application of improved management practices?

All of the five management functions were considered in the evaluation of the current nature of management functioning and the findings are summarized under the various functions as follows.

(a) Planning function

Extension Activities

Currently much attention is given to non-extension education and non-agricultural tasks (such as government administrative, regulatory and other ad hoc activities) next to crop related extension activities. Relatively less emphasis has been on activities such as home economics, forest and wildlife and soil and land utilization. The findings imply that there is a need for reconsideration of the extension programme focuses by extension management and administrative bodies.

Priority consideration: Voluntary versus priority extension

In general, the current level of priority consideration in extension program planning and implementation is assessed as low, namely 47.5 percent. This implies that only to a limited degree departmental directive or priority problems based on improvement potentials (unfelt needs) are considered. The clear preference expressed by respondents (mean assessment of 93.6 percent) is that the priority approach should be the primary if not exclusive consideration when deciding on development projects. This represents a mean shift of 46.1 percent away from the current.

Planning: Centralization versus decentralization

The findings indicate that the current level of decentralization of decision making power in program planning is perceived as insufficient (4.9). The respondents are of the opinion that more authority and power should be given to lower level structures in the organization (7.3) with support (i.e. technically, financially and materially) and guidance (i.e. general picture such as national/ regional goals/ strategies) coming from the top. The overall demand for change is a 2.4 scale point shift.

Pro-active versus reactive approaches

The findings indicate that the extension workers are currently spending more than two-thirds of their time, in terms of number of days per week, in reactive extension work ("fighting fires"). The time spent on purposeful initiatives of development changes and their implementations is only about 27 and 42 percent for extensionists and subject matter specialists respectively.

The time spent by subject matter specialists on purposeful development activities is slightly better than that of frontline extension workers. But the general recommendation is an increase of 37 and 45 percent over the current for extensionists and SMSs respectively.

The disadvantage of a strong focus on the reactive type of extension approach is that the service invests little time in planning extension programmes with the result that new problems or unfelt needs will be identified too late. With such a reactive extension work approach the workers have to divide their attention between many different problems, so they are unable to pursue any one problem in depth and are also challenged as far as competence in a variety of fields is concerned.

Reporting

Four alternatives of evaluation reporting are compared, namely to: provide information that serves as evidence for accountability, provide information that allows frontline extension personnel to improve their extension, provide information used to improve management, and provide information mainly for policy makers

The findings indicate that reporting in OBARD is primarily conducted for the purpose of accountability, which shows as evidence of success or progresses. This is evidenced by respondents' ranking for accountability that offered a total of 1069 weighted

nominations, which is far higher than nominations offered for others. The variation between the other three variables is very little. Evaluation for the purpose of policy makers received the least nominations (673).

These findings imply that the value of evaluation results for general accountability is appreciated, but that its role in improvement of extension is not yet fully realised and may still be overshadowed by evaluation being perceived primarily as a control measure and/or for mere statistical purposes of extension inputs.

(b) Organizing function

Departmentalization

The current nature of grouping of extension organizational activities is based on specialities of agricultural enterprises (commodity based), while about one third of the respondents regard the departmentalization as functionally based. The respondents are almost equally divided between those who support further reinforcement of functionally based (42.9%) and those who are in favour of the introduction of a matrix based (41.7%) type of departmentalization in their recommendation.

Span of management

The span of management in this study refers to the number of frontline development agents (DAs) assigned at village level that report to one supervisor and the number of supervisory levels in the organizational structure. The general viewpoint is that the current numbers of DAs supervised by a supervisor are too many (10 and above) and should be reduced to five DAs per supervisor if supervision is to be effective.

Regarding the number of supervisory levels in the organizational structure, the recommendation is that the zone level department of agricultural and rural development offices in the organizational structure of OBARD should be expanded to coordinate and

manage all issues relating to the districts. This is reflected by the mean rank order percentage of 85.5, which is far in excess of the other alternatives, namely maintaining as it is (56.1%) and complete disbanding (8.3%).

Chain of command

The unity of command is investigated in terms of district heads accountability. All categories of respondents (both zones and management) are in favour of an increased accountability to the Bureau of Agriculture and significantly less to the district administration. Especially the top level managers with an assessment of 76% are most outspoken in this regard, with a similar tendency in the East Shewa zone. A safe and appropriate compromise is accountability to both District Administration and Bureau of Agriculture, but the former should never replace the latter.

Coordination

The respondents were asked to indicate the seriousness of coordination as a problem in their work area, using a 10 point scale (1=no problem whatsoever; 10=very serious problem). The results show that the coordination problem is very severe (7.5 scale points, especially for top managers (8.75). This concern is shared by most categories, with the exception of South West Shewa, who are somewhat less concerned (6.75 scale points). In comparison with other organizational related problems, the findings indicate that coordination is one of the three most important organizational issues that need to be addressed and resolved if the organization is to be effective in its extension service provision; the others being political factors and frequent organizational restructuring.

Organizational change

The organisation (OBARD) is characterized by extremely frequent changes. These changes have been inadequately supported by diagnostic and feasibility studies and by a

lack of involvement of key stakeholders in decision making. It appears as if many of these changes can be attributed to the intervention of political forces.

Current level of formal education of staff

The formal education levels of extension workers are very low. 63.2% of respondents are diploma holders, 27.2% have no training of extension at all, and more than 50 percent of managers don't have any knowledge about the general principles of management.

Selecting and hiring of employees

The current entry requirements for the frontline development agents (DAs) is a certificate and for extensionists and subject matter specialists a diploma from an agricultural college.

As to the desired situation, the top level managers recommended that the minimum level of entry qualification for the job position of development agents (DAs) should continue to be the certificate level while all the rest of the respondents should have the recommended diploma level of education. On the other hand, the top level managers unanimously agreed that for the position of Subject Matter Specialists (SMS) the minimum entry qualification should be a BSc degree.

These findings imply that the current situation of filling the vacancies of SMS positions by experienced diploma holders through internal employee promotion should be abandoned.

Training and development

In general the respondents consider the current situation of in-service training of extension staff, which amounts to about one week per year, as inadequate. In-service training for extensionists is slightly more than that of SMSs and management. The

respondents have recommended that the in-service training be increased significantly namely to up to 6.5 weeks per year for extensionists. The recommendation for managers is slightly less, namely a mean of 6.1 weeks per year.

Manpower Appraisal and Reward System

The current system of appraisal is perceived as not fair enough, as is evident from the mean efficiency assessment score of 38 percent. Although the zones vary significantly from as low as 27 percent (East Shewa) to 44 percent (Arsi) and 45 percent (Borena), the mean efficiency ratings are very low and leave much scope for improvement.

The results also indicate that all the identified criteria (qualification, proven performance, personality and political affiliation) of the reward system in the organization contribute reasonably but political affiliation is with a mean assessment of 76 percent judged to be the most important criterion for appointments and promotions. Personality, on the other hand, was assessed to be the least important criterion with an importance rating of 64.4 percent.

The respondents recommended that proven performance and qualification should be given more weight, as is reflected in mean assessed emphasis level of about 85 and 84 percent respectively.

(d) Leadership and influence

The results indicate that the overall leadership and influencing abilities of OBARD managers is mediocre, namely 52 percent. It appears that all managers tend to overrate their leadership ability. Taking the non-managers ratings as a reference, the first, middle and top level managers have over-rated their leadership by about six, ten and eight percent respectively. The general low level of leadership effectiveness is a concern, which is exacerbated by the fact that managers tend to overrate themselves and are thus less inclined to understand the scope of the problem.

Task-Oriented and People-Oriented Leadership style

In accordance with the managerial grid, the respondents were asked to evaluate their managers' leadership style in terms of both the level of concern for task and concern for people using a nine point, 1 to 9, scale (1=very low; 9=very high). The findings indicate that with increase in level of management there tends to be an increase in task orientation and a systematic decrease in people orientation. This discrepancy between a clearly higher task orientation (5.4) than people orientation (3.4) is particularly conspicuous among the senior managers.

The findings suggest that the leaders should improve both the concern for task and people orientation in order to increase organizational effectiveness and employee satisfaction. More specifically, people orientation is a concern.

Leader participation

The results indicate that the overall level to which extension leaders allow or encourage participation by subordinates in decision making is 56 percent. These assessments by respondents imply a considerable scope of improvement above which they currently assess to be mediocre.

Visionary leadership

The clarity of the extension vision received a mean assessment of 54.4 percent. Respondents feel that increased clarity accomplished through increased awareness (in terms of what it does, what it will not do, and this clearly communicated to all concerned bodies or all stakeholders) will, in turn, increase extension delivery effectiveness and job satisfaction of employees by 58.5 and 61.4 percent respectively. These results tend to imply that the current lack of clarity of the extension vision statement has negatively influenced extension delivery effectiveness and job satisfaction. The findings leave a clear impression of the big improvement potential, and staff should, based on the

potential influence of such awareness on the improvement of extension and job satisfaction, welcome campaigns promoting such awareness

(e) Control function

The evaluation results of the extent of application of the 8 indicators of control efficiency indicate that the current level of use of these indicators ranges from as low as 36.6 percent in the case of outcome criteria to 56.1 percent for input indicators. This means that the lower level criteria, like input resources, activities and clients' assessment are used more intensively than the outcome focused indicators such as behaviour determinants, behaviour (practice adoption) and behaviour results (efficiency and outcome).

Correlation analyses indicate significant relationships between both the number of indicators applied and the output indicators with organizational performance. Especially the latter correlations, namely between output indicators and organizational performance are highly significant, suggesting that especially the output indicators are more critical and deserve special attention.

Question 3. Are there any differences between before and after 2002 organizational restructuring in terms of improvements in organizational performance?

Opinions regarding the influence of the 2002 decentralisation are mixed, varying from negative to positive, but also depending on the type of organisational performance which were analysed in terms of three main performance dimensions.

(a) Operating efficiency

The influence of decentralization on the operating efficiency of OBARD is, in general, limited but more significant at the district level than at regional level. The biggest positive change is in resource use (manpower, time, finance and materials) at district

level (Mean difference =5.6 percent; t=3.92; p=0.00). But noteworthy is also the increased extension delivery of 3.5 percent (t=2.55; p=0.01) which was achieved in spite of a reduction in the financing of 4.2 and 11.6 percent at district and region level respectively.

(b) Process efficiency

All variables of organizational process efficiency show an improvement after decentralization (coordination 3.3%, communication 3.1%, and participation at district level 8.14%), except participation of staff/workers at Region level. The biggest improvement is recorded in the area of extension workers' participation (involvement in decision making) at the district level (mean difference of 8.14 percent; t-value = 5.30; p=0.00). It appears as if the improved participation at district level might have happened at the expense of participation at regional level, which showed a decline, although not statistically significant (mean difference =-0.67 percent; t-value=0.43; p=0.67).

(c) Organizational health efficiency

The overall organizational health efficiency showed the least improvement with restructuring. In fact in all cases there has been a decrease in efficiency; highly significant in the case of motivation (mean difference = -8.3 percent, t-value = -4.83, p = 0.00) and job satisfaction (mean difference = -7.0 percent, t-value = -4.61, p = 0.00).

Question 4. What are the factors that currently influence, (enhance or restrain) the organizational and managerial functioning of OBOARD?

As far as the determinants of organizational factors are concerned, three sets of variables were considered, namely personal, organizational, and environmental factors. All three were found to have influence on organizational performance, with environmental factors being most dominant, explaining about 36 percent of the organizational efficiency variance (R^2 =0.356).

Various factors, which, according to the literature, can be expected to have an influence on organizational behaviour, were identified and categorised into personal, organizational and environmental variables. Their influence on organizational efficiency was investigated by means of correlation and regression analyses and is briefly as follows:

(a) Personal characteristics

Thirteen variables concerning respondents' socio-economic and demographic characteristics were identified (see chapter 5, Table 5.4). The emphasis is on the influence of these variables on the different aspects of organizational efficiency.

The overall impression is that personal variables have little influence on the way the organizational efficiency is perceived. An exception is the level of salary, showing significant relationships with most of the efficiency aspects. However, in all of these cases the correlations are negative, which implies that higher earning respondents tend to be more critical as far as the organizational efficiency is concerned.

The only other determinants having a limited but noteworthy influence are education and in-service training, but a more valid indication of the comparative influence of these variables is offered by regression analyses. They confirm salary and managerial positions as variables contributing most significantly to the perception variations of the current organizational efficiency situations. However the total contribution of personal characteristics towards explaining the variance is only six percent. This is reflected in the significant R^2 of 0.060.

(b) Organizational (internal) factors

According to Thompson and Strickland (2001), an *organization's strength* is something it is good at doing or a characteristic that gives it enhanced competitiveness (such as a skill/ important expertise, valuable physical assets, valuable human assets, valuable organizational assets, valuable intangible assets/brand name or reputation/, competitive

capabilities, alliances or cooperative ventures, and its market achievements determine the complement of resources at its command with which it competes). Five variables were selected (Skilled manpower, Offices & accommodation, Extension aids, Finance, and Transportation).

The overall picture is that there is an inadequacy of resources. The seriousness of the situation is reflected in the fact that all assessments fall well below the 50 percent level. Finance, extension teaching aids, and transportation facilities appear to be the most critical, with assessments of 21.4, 22.9, and 27.1 percent respectively.

All these variables were significantly correlated with most criteria of organizational efficiency. Based on correlation coefficients and level of significance, availability of the skilled manpower and offices/accommodations can be considered as more important, because of the stronger and more significant association with all organizational efficiency variables. Regression analyses support these findings namely that out of the five selected variables reflecting organisational strength, skilled manpower and offices & accommodation variables are found to be the variables contributing most significantly to the variations of the current organizational efficiency situation. The overall contribution of this set of variables (R^2 = 0.101 or 10%) is higher than that of the personal characteristics (R^2 = 0.060) in explaining variation in perceived organisational efficiency.

(c) Environmental (external) factors

External environments are related to the larger social, economic, administrative, political and diplomatic arena, and the two aspects distinguished here are the task and the general environment. While task related environment factors are referring to the organization's competitive conditions, factors of the general environment are related to what an organization is complying with. A total of eight variables (four for each aspect) were identified and their causal relationship with organisational efficiency analysed.

According to the findings in Table 6.7, most of the variables of the external environment (in terms of adequacy or favourableness) fall below average expectations of the respondents. Assessments of the general environment (mean = 52.2 percent) are somewhat better than those of the task environment (mean = 45.8 percent), which leads to the conclusion that especially the task environment constitutes a threat to organization's effectiveness and efficiency.

The association between perceived environmental situations and organizational effectiveness are strong. This is reflected by the fact that, except for the agro ecological variable, environmental factors are significantly correlated with all organizational efficiency measures. According to regression analyses their contribution towards explaining the variance of the current organisational efficiency is 35.6 percent (R^2 = 0.356)

These results suggest that all of the environmental variables included in this study were found to be relevant and important and need attention, especially government policy (dealing with development problems through pro-active and purposeful extension, and the collaboration between supplementary institutions. This implies that the organization's management and policy makers should focus on addressing issues related to extension policies, improving the communication and networking with supplementary rather than endless organisational restructuring.

Question 5. Are there any variations regarding assessed organizational and managerial performance between various categories of respondents?

There are significant variations observed between various groups of respondents. Specifically highly significant variations observed between respondents categories by zones than by managerial positions. The findings imply that there appears to be more mutual influence and sharing of information within zones than between different hierarchical management levels.

12.3 RECOMMENDATIONS

The current functioning of OBARD, the scope of its activities and the development challenges facing it, emphasise the necessity of an effectively functioning organisation, which is in essence the function of effective management. Based on the findings and on observations, the following recommendations are made.

1. Re-structuring should not be seen as the major means of achieving improved management, and, subsequently, improved extension delivery. This does not mean that restructuring cannot have a positive outcome, but invariably they are an excuse to start afresh. Whenever and wherever they are considered it should be preceded with the necessary feasibility studies and followed up with meaningful monitoring and evaluation for purposes of accountability and justification

2. Improve in-service training of extension workers and managers. This could be the biggest contributing factor towards improving extension delivery, but is a long term undertaking. In the training a good balance will have to be found between competence in agriculture and in extension, and even managers will, in addition to management skills, need to have a good understanding of extension. Added impetus could be given by the following:

    - A strengthened and adapted Knowledge Support System in the form of Subject Matter Specialists whose primary function would become the knowledge support of extension workers in the form of systematic and purposeful upgrading in those areas or commodities that are a priority in their specific areas.

    - Closer cooperation and mutual support with the local Universities as there is at least one in every ecological zone.

- The establishment of professional associations to enhance scholarship and professionalism among extension personnel.

3. Introduction of the priority approach principle. The reason for this is that the challenges and service demands are more that OBARD can cope with in terms of its resources. Against this background it is important that attention is focused where the biggest return in terms of input/output ratio can be expected. This will require a new approach regarding the reconciliation of "felt" and "unfelt" needs.

4. Bigger focus on pro-active rather than re-active approaches and this also implies a more purposefulness. The implementation of extension programs is seriously obstructed by involvement of extension workers in non-extension activities or by outside interference resulting in derailing from scheduled programmed activities. Steps need to be taken to minimise this derailment. Possibilities include the following:
    - Involvement of management in decisions regarding that time ratio of programmed versus ad hoc activities,
    - Allowing for more flexibility in programs,
    - Timely announcement of other dates and responsibilities so that planning can accommodate them, and
    - Protection by managers from "outside interference".

5. Introduction of a national monitoring and evaluation (M&E) programme. The choice of monitoring and evaluation criteria should be guided by the following considerations:
    - The objectives should be chosen and formulated to focus on or include the full spectrum of criteria ranging from resource and activity inputs to clients' responses and opinions, behaviour determinants, behaviour change (practice adoption), outcome or efficiency aspects and, where possible, the impact in terms of job creation, increase in living standard, etc.

- For monitoring purposes criteria need to be chosen that are focused on behaviour determinants (i.e. needs, perceptions and knowledge). They are the actual focus of extension and their positive change is a precondition for behaviour change (practice adoption) and the consequent change in efficiency and the resulting financial and other outcomes. Behaviour determinants are the focus of every encounter and thus lend themselves to monitoring after every extension delivery. In this way extension can continuously (on a monthly basis) come up with evaluation evidence.
- Revisit and adapt the current criteria for promotions and appointments of managers to ensure that it serves the purpose of: motivation, rewarding those that deserve it and ensuring that the best personnel are retained.

6. As far as future research is concerned, the following is recommended:

- That this study be extended to other regions to verify whether or to what degree the findings in Oromia Region also apply to other regions. In addition, if time and other resource constraints allow, it is advisable to include the views of other stakeholders (such as the farmers and the politicians or government administrators at various levels) of the organization.

- That efforts be made to find more objective scales and criteria for measuring management efficiency. These would not only serve the purpose of more accurate analyses of the data and interpretation of the findings, but could also be used for evaluation or performance assessments of managers.

REFERENCES

ADAMS, M.E. 1990. Agricultural extension in developing countries. Longman Scientific & Technical, ELBS edition Singapore Publishers Pte Ltd. Singapore. PP 108

ALEX, G., ZIJP, W., & BYERLEE, D. 2002. Rural extension and advisory services: new directions. Rural development strategy background paper #9, pp.12-16. Washington, DC: World Bank. Agricultural and rural development department. Retieved, April 17, 2007 from http://www-wds. World Bank.org/servlet/ DSContentServer/WDSP/lB/2002/12/06/000094946_02112104065677/ Rendered/PDF/multi0page.pdf

ALLISON, M. & KAYE, J., 1997. Strategic planning for nonprofit organizations: A practical guide and workbook. The support center for nonprofit management. John Wiley & Sons, Inc., 605 Third Avenue, New York, USA. PP=278.

ARGYRIS, C. and SCHON D., 1978. Organizational Learning. Addison-Wesley, Reading, Mass.

AWAMLEH, G.R. 1999. Perceptions of leader charisma and effectiveness: the effects of vision content, delivery, and organizational performance. The Leadership Quarterly 10 3 (1999), pp. 345–373.

BARLING, J. WEBER, T. & KELLOWAY, E.K. 1996. Effects of transformational leadership training and attitudinal and fiscal outcomes: a field experiment. Journal of Applied Psychology 81 (1996), pp. 827–832. Abstract |

BARNARD, C.I. 1938. The Functions of the Executive. Cambridge: Harvard University Press. Pp 92-94

BECKHARD, RICHARD 1969. Organization Development Strategies and Models. Reading, Mass.: Addison-Wesley.

BELAY, K. 2002. Constraints to agricultural extension work in Ethiopia: The insiders' view. South African Journal of Agricultural Extension. Volume 31. PP 63-79.

BELAY, K. 2003. Agricultural extension in Ethiopia. The case of participatory demonistration and training extension system. Journal of Social Development in Africa. January 2003, volume 18(1): pp 49-83. (http://www.extenza-eps.com/extenza/loadPDF?objectIDValue=16791).

BEMBRIDGE, T.J. 1980. Evaluation: A key factor in agricultural extension. South African Journal of Agricultural Extension. Volume 9. PP 39-43.

BEMBRIDGE, T.J., 1987. Agricultural extension in the less developed areas of southern Africa. Agricultural Administration and Extension. 27:245-248. Applied Science Publishers: Great Britain.

BENNETT, C. 1975. Up the hierarchy. *Journal of Extension*, 13 (2): 7-12.

BERSON, Y.B. SHAMAIR, B. AVOLIO, B.J & POPPER, M. 2001. The relationship between vision strength, leadership style and context. The Leadership Quarterly 12 (2001), pp. 53–73. Article | PDF (175 K) | View Record in Scopus | Cited By in Scopus (29)

BERTALANFFY, L.V. 1968. General systems theory: A critic Review. In: Modern Systems Research for the Behavioral Scientist. (ed). Water Buckley. Chicago: Aldine

BETRU, G. 1975. Integrated rural development in rural Ethiopia: An evaluative study of the Chilalo Agricultural Development Unit. Bloomington: University of Indiana, International Development Research Center.

BLAKE, R. & MOUTON, J., 1964. The Managerial Grid: The Key to Leadership Excellence. Houston: Gulf Publishing Company.

BLISS, J., MONK, M. & OGBORN, J. 1983. Qualitative Data Analysis for Educational Research. Croom Helm.

BOLTON, M. & HEAP, J., 2002. The myth of continuous improvement. In: Journal of work study. MCB University Press. 51(6): pp 309-313.

BOLTON, M. 2003. Public sector performance measurement: delivering greater accountability. In: Journal of work study. MCB University Press. 52(1): pp 20-24.

BOTHA, C.A.J., STEVENS, J.B., & STYN, G.J., 1999. The compatibility between extension aims of staff and their organizations: Implications for management. In: South African Journal of Agricultural Extension. The South African Society for Agricultural Extension. Vol 28. pp 12-31.

BOULDING, K.E., 1956. General systems theory: The skeleton of the science. In: Management science. Chicago: Aldine. 197-208

BOYED, C. (1992). Individual commitment and organizational change: A guide for human resource and organizational development specialists. New York: Quorum Books.

BRUNETTO, Y., 2001. Mediating change for public-sector professionals. In: The International Journal of Public Sector Management. MCB University Press. 14 (6): pp 465-481.

BUFORD, J.A., BEDEIAN, G.A. & LINDNER, J.R. 1995. Management in Extension. (3rd ed). Ohio State University Extension. Columbus, Ohio USA. PP 357.

CAMPBELL, J.P., 1973. Research into the Nature of Organizational Effectiveness: An Endangered Species? Unpublished manuscript. Minneapolis: University of Minnesota.

CARROL, G.R., 1988. Organizational Ecology in Theoretical Perspective. In: Ecological Models of Organizations. Ballinger, Cambridge, Mass. Pp 1-2

CENTRAL STATISTICAL AGENCY (CSA) 2005. Ethiopia Statistical Abstract Annual Report. CSA. Addis Ababa, Ethiopia.

CENTRAL STATISTICAL AGENCY (CSA) 2007. Ethiopia Statistical Abstract Annual Report. CSA. Addis Ababa, Ethiopia.

CHEMERS, M.M., 2002. Cognitive, social, and emotional intelligence of transformational leadership: Efficacy and Effectiveness. In R. E. Riggio, S. E. Murphy, F. J. Pirozzolo (Eds.), Multiple Intelligences and Leadership.

COHEN, J.M., 1987. Integrated Rural Development: The Ethiopian Experience and the Debate. The Scandinavian Institute of African Studies, Uppsala. Sweden: Motala Grafiska. Pp 267.

COLLINS, J., & PORRAS, J.I., 2004. Built to Last: Successful Habits of Visionary Companies. First edition. Harper Business Publisher, USA. PP 368.

CROOK, R. & MANOR, J., 1994. Democracy and decentralization in South Asia and West Africa: participation, accountability and performance, Cambridge University Press, Cambridge.

CUMMINGS, T.G. & WORLEY, C.G. 2001. Organization Development and Change. (7th ed). South-West College Publishing, USA. PP 706.

CUNNINGHAM, J.B., 1977. Approaches to the Evaluation of Organizational Effectiveness. In: Academy of Management Review. 2:463-74

CUNNINGHAM, J.B., 1978. A System Resource Approach for Evaluating Organizational Effectiveness. In: Human Relations. 31:631-56

CUNNINGHAM, J.B., 1987. Extension's crossroads in turbulent times – Downsizing or downgrading? Journal of extension, 25 (1). http:www.joe.org/joe/1987spring/al.html

DAFT, R.L., 1992. *Organization theory and design*. 4th edition. West Publishing Company, St. Paul, MN. USA.

DAFT, R.L., 1995. *Understanding Management*. The Dryden Press, Harcourt Brace College Publishers. Fort Worth, TX76102. USA. PP: 591.

DAFT, R.L., 2001. *Organization theory and design.* 8th edition. St. Paul, MI: West, USA.

DEN BEER, L. 2000. The specialist or the generalist: what does the year 2000 and beyond require for sustainable agricultural development? In: South African Journal of Agricultural Extension. The South African Society for Agricultural Extension. Vol 29. pp 58-72.

DONNELLY, J.H., GIBSON, J.L. & IVANCEVICH, J.M. 1995. Fundamentals of management. Ninth edition. IRWIN Chicago, USA. Pp 719.

DRURY, C. 2000. Management and cost accounting. London: Business Press/ Thomson Learning.

DÜVEL, G.H., 1975. The mediating function of perception in innovation-decision. In: South African Journal of Agricultural Extension. The South African Society for Agricultural Extension. Vol 4.

DÜVEL, G.H., 1991. Towards a model for the promotion of complex innovation through programmed extension S. Afr. J. Agric. Ext., 20:70-86.

DÜVEL, G.H., 1994: Coping with felt and unfelt needs in programmed extension. S. Afr. J. Agric. Ext.,: 28-34.

DÜVEL, G.H., 1995. Resistance against stock reduction: A cognitive field analysis. S. Afr. J. Agric. Ext., 26: 45-60.

DÜVEL, G.H., 1998. Monitoring extension: a cognition oriented approach towards evaluation. The South African Society for Agricultural Extension. Vol 27. pp 54-68.

DÜVEL, G.H., 2001. Some realities of extension management in South Africa. In: South African Journal of Agricultural Extension. The South African Society for Agricultural Extension. Vol 30. pp 40-51.

DÜVEL, G.H., 2003. Towards an appropriate extension approach for South Africa. Executive Report. South African Institute for Agricultural Extension. University of Pretoria.

DÜVEL, G.H. & BOTHA, A. J., 1999. Human constraints to sustainable agriculture in the arid regions of South Africa. The Journal of Agricultural Education and Extension, Vol.6, no.1: 47-60

DÜVEL, G.H. & SCHOLTZ, H.P.J., 1986. The non-acceptability of recommended veld management practices. S. Afr. J. Agric. Ext., 15:1-10.

ELIAS, Z. & AGAJIE, T. 2001. The history, present challenges and future approaches to agricultural technology transfer in Ethiopia. In: Berhanu, M. and Vogel, E. (eds.) International conference on public management, policy and development. Proceedings Government and Sustainable Development: Promoting Collaborative Partnership, held in Addis Ababa, Ethiopia, June 3-6, 2001. pp 344-349.

EMMANUEL, C., OTLEY, D., & MERCHANT, K. 1991. Accounting for management control. London: Chapman & Hall.

ETHIOPIAN ECONOMIC ASSOCIATION (EEA) 2005. Report on the Ethiopian Economy: Transformation of the Ethiopian agriculture – potentials, constraints and suggested intervention measures. Addis Ababa, Ethiopia. Pp=460.

EVAN, W.M., 1976. Organization Theory and Organizational Effectiveness: An Exploratory Analysis. In: Organization and Administrative Sciences. 7:15-28

FASIL, R. & HABTEMARIUM, K. 2006. Assessment of the current extension system of Ethiopia: a closer look at planning and implementation. Working paper 2/2006. Addis Ababa, Ethiopia: Ethiopian economic association/ Ethiopian economic policy research institute (EEA/EEPRI). Pp 34.

FIEDLER, E. 1967. A theory of leadership effectiveness. McGraw-Hill: Harper and Row Publishers Inc.

FINCH, A.C. & DELRAHIM, M. 2004. Facing the challenge of globalization: coordination and cooperation between antitrust enforcement agencies the U.S. and E.U. ABA Administrative Law Section Fall Meeting. Washington, DC.

FLINT, H.D. 2003. Downsizing in the public sector: Metro-Toronto's hospitals. In: Journal of health organization and management. Vol. 17 No. 6. pp 438-456.

FRENCH, L.W. & BELL C.H., 1973. Organizational Development. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

FRY, J.N. & KILLING, J.P., 1995. Strategic Analysis and Action. (3rd ed). Prentice-Hall Canada Inc., Scarborough, Ontario. PP 244.

GEBRE-SELASSIE, SAMUEL. 2001. The development of integrated management information systems for agricultural extension institutions of developing countries: The case of Oromia agricultural development bureau of Ethiopia. PhD dissertation. Bonn university, Germany.

GEORGE, C.S., 1968. The History of Management Thought. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

GEORGE, C.S. 1972. The History of management thought. 2d ed. Upper Saddle river, NJ: Prentice Hall.

GIBSON, J.L., IVANCEVIEH, J.M., & DONNELLY, J.H., 1997. Organizations: Behavior, Structure and Processes. (9th ed.). Richard D. Irwin, a Times Mirror Higher Education Group, Inc. Company. Chicago, USA. Pp 538

GREGERSEN, H. & SAILER, L. 1993. Chaos Theory and Its Implications for Social Science Research. Human Relations, pp.777-802.

GRYSEELS, G. & ANDERSON, F.M. 1983. Research on farm and livestock productivity in the central Ethiopian Highlands: Initial results, 1977-80. ILCA Research Report 4. ILCA. Addis Ababa, Ethiopia. Pp-52.

GUISLAIN, P. 1997. The privatization challenge: A strategic, legal, and institutional analysis of international experience, Washington, D.C.: World Bank.

HAPTEMARIUM KASSA. 2005. Historical development and current challenges of agricultural extension with particular emphasis on Ethiopia. Working paper 2/2005. Addis Ababa, Ethiopia: Ethiopian economic association/ Ethiopian economic policy research institute (EEA/EEPRI).

HARRISON, M.I., 1987. Diagnosing Organizations: Methods, Models, and Processes. Sage Publications, Inc. California, USA. Pp 160.

HASSANULLAH, M. 1992. Organizational Properties and Manifestations of Different Models of Extension Work. In: Journal of Extension Systems.No.1, Vol. 8. PP: 80-102.

HENDERSON, A.M. & PARSONS, T., 1947. Max Weber: The Theory of Social and Economic Organization. Free Press, New York. pp 330

HERSEY, P. & BLANCHARD, K.H., 1988. Management of Organizational Behavior: Utilizing Human Resources. (5th ed). Englewood Cliffs, New Jersey: Prentice-Hall, Inc. pp 474

HOFSTEDE, G. 1981. Management control of public and not-for-profit activities. Accounting organization society. 15(4):373-398.

HOPE, K. Sr. 2000. Decentralization and local governance theory and practice in Botswana. *Development southern Africa.* Vol. 17. No. 4, pp 519-534.

HUSE, E.F, 1975. Organizational Development and Change. St. Paul, Minn.: West Publishing.

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI). 2006. Atlas of the Ethiopian Rural Economy (Advanced copy). IFPRI, Washington, DC, USA.

JAYARATNE, K.S.U. (2003). Going forward in agricultural extension: Helping cooperative extension service employees adjust to organizational changes. In: Proceedings of the 19th annual conference. AIAEE. Raleigh, North Carolina, USA. Pp 316-324.

KENNEDY, L. 1991. Quality management in the nonprofit world. Jossey-Bass, Inc., San Francisco, USA.

KEREHERO, K.J.B. & MTHUPHA, D.M., 1997. Job Satisfaction as perceived by agricultural extension workers in Swaziland. In: South African Journal of Agricultural Extension. The South African Society for Agricultural Extension. Vol 26. pp 12-30.

KHAN R.R. 1991. Japanese management: a critical appraisal. Management decision. Volume 29, No. 6. pp 17-23.

KONO, T. & CLEGG, S. 2001. Trends in Japanese management: Continuing strengths, current problems and changing priorities. Antony Rowe Ltd, Chippenham, Wiltshire. Great Britain. Pp 322.

LINDNER, J.R, 2001. Managing human resources in extension. In: Journal of Extension Systems. Issue no 1. Volume 17. pp 15-27.

LOUW, G & DUVEL, G.H (1993) The Adoption of oldman saltbush (Atriplex Nummularia) as influenced by an extension program. South African Journal of Agricultural Extension. 22:29-37

LUTHANS, F., 1998. Organizational Behavior. (8th ed). McGraw-Hill Companies, Inc. India. PP667.

MESCON, M.H., ALBERT, M. & KHEDOURI. 1981. *Management: Individual and Organizational Effectiveness.* Harper & Row, publishers, New York, USA. Pp 714.

MINISTRY OF AGRICULTURE (MOA). 1984. Agriculture in Ethiopia – The establishment and development of MoA. Committee for compiling the history of MoA. Addis Ababa, Ethiopia. (Amharic Text).

MINISTRY OF AGRICULTURE (MOA). 1987. Task force for assessment of agricultural extension system. Addis Ababa, Ethiopia. (Amharic version).

MINISTRY OF AGRICULTURE (MOA). 1992. The commencement and development of agricultural extension in Ethiopia. MoA. Addis Ababa, Ethiopia. (Amharic Text).

MINISTRY OF AGRICULTURE (MOA). 1993. Principles of organization and implementation of agricultural extension services. MoA. Addis Ababa, Ethiopia. (Amharic Text).

MINISTRY OF AGRICULTURE (MOA). 1994a. The establishment and development of MoA. Prepared by the ad-hoc committee to compile the history of the ministry. MoA. Addis Ababa, Ethiopia.

MINISTRY OF AGRICULTURE (MOA). 1994b. Evaluation of the agricultural extension systems undertaken in Ethiopia. Task force evaluating agricultural extension system. May 1994, MoA, Addis Ababa, Ethiopia. (Amharic Text).

MINSTRY OF FINANCE AND ECONOMIC DEVELOPMENT (MOFED). 2005. A plan for accelerated and sustained development to end poverty (pasdep) (2006 -2010). mofed, the federal democractic republic of ethiopia. addis ababa, ethiopia.

MINSTRY OF INFORMATION PRESS AND AUDIOVISUAL DEPARTMENT (MOIPAD). 2001. Rural development policies, strategies and instruments. Draft translation. the federal democractic republic of ethiopia. addis ababa, ethiopia.

MIGLIORE, R.H., STEVENS, R.E, LOUDON, D.L., & WILLIAMSON, S. 1995. Strategic planning for not-for-profit organizations. The Haworth Press, Inc. 10 Alice Street, Binghamton, New York. Pp 197.

NAIR, K.N.N.S. 1984. Economic analysis of land use. Assistance to lanad use planning/ Ethiopia. Technical report – 8. FAO. Rome.

0PIO-0DONGO, J., 2000. Roles and Challenges of Agricultural Extension in Africa. In: Breth, S. (ed.). Innovative extension education in Africa. Mexico City: Sasakawa African Association.

OTLEY, D. T. 1987. Accounting control and organizational behavior. CIMA

OTLEY, D.T. 1999. Performance management: a framework for management control systems research. Journal of management Accounting Research. 10, 363-382.

OUCH, W.G. 1981. *Theory Z: How American business can meet the Japanese challenge.* Addison-Wesley publishing company. New York, USA. Pp 244.

PENNINGS, J.M. & GOODMAN, P.S., 1979. New Perspectives on Organizational Effectiveness. San Francisco: Jossey-Bass. P.152

PERROW, C., 1961. The Analysis of Goals in Complex Organizations. In: American Sociological Review. 26: 854-66.

PFEFFER, J., 1993. Barriers to the Advance of Organizational Science: Paradigm Development as a Dependent Variable. Academy of Management Review, October 1993, pp. 599-620.

PRICE, J.L., 1972. The Study of Organizational Effectiveness. In: The Sociological quarterly. 13: 3-15.

PUGH, D.S. & HICKSON, D.J., 1989. Writers on Organizations. Sage, Newbury Park, Calif.

QUINONES, M.A., BORLAUG, N.E., & DOWSELL, C.R. 1997. A fertilizer-based green revolution for Africa. In: Buresh, R.J., Sanchez, P.A., and Calhoun, F. (eds). Replenishing soil fertility in Africa. Soil science society of America special publication number 51. Madison, Wisconsin, USA. Pp 81-96.

ROBBINS, S.P. & COULTER, M., 1999. Management. (6th ed). Prence Hall International, Inc. New Jersey, USA. PP 645.

ROBERT, A. 2006. The Evolution of Cooperation. (Revised ed.), Basic Books

ROGERS, E.M., 1983. Diffusion of innovations. 3rd Ed. New York: Macmillan Publishing Co., Inc.

RÖLING, N.G., 1970. Problem solving research: a strategy for change. Paper presented at the International Seminar on Extension Education, Helsinki. Mimeograph.

RONDINELLI, D., NELLIS, J. R., & CHEEMA, G. S. 1984. Decentralization in developing countries: A review of recent experience. World Bank Staff Working Papers No. 581, Washington, DC: The World Bank

RONDINELLI, D., MCCULLOUGH, J.S. & JOHNSON, R.W. 1989. Analysing decentralization policies in developing countries: a political-economy framework. Development and Change 20 1, pp. 57–87. Full Text via CrossRef | View Record in Scopus | Cited By in Scopus (72)

RUBENSTEIN, R., SCHWARTH, A.E., & STIEFEL, L. 2003. Better than Raw: A guide to measuring organizational performance with adjusted performance measures. Public Administration Review. Volume 63, issue 5, pp 607-615.

SAKER, A.E. 2003. The illusion of decentralization: evidence from Bangladesh. *The international journal of public sector management.* Vol. 16. No. 7, pp 523-548. MCB UP Limited. Available at: http://www.emeraldinsight.com/0951-3558.htm.

SANDEFUR, G.D., 1983. Efficiency in Social Service Organizations. Administration φ Society. 14: 449-68.

SIMON, H.A., 1960. The New Science of Management Decision. Harper, New York. pp 40-41

SHIRLEY, M.M. 1999. Bureaucrats in business: the role of privitazation versus corporatization in state-owned enterprise reform. *World development*. Vol.27. No.1, pp 115-136.

SLAGMULDER, R. 1997. Using management control systems to achieve alignment between strategic investment decisions and strategy. Journal of Management Accounting Research. 8, 103-139

STEYN, G.J. & STEVENS, J.B., 2002. Attributes like attitude and commitment for effective extension. In: South African Journal of Agricultural Extension. The South African Society for Agricultural Extension. Vol 31. pp 50-62.

STOELWINDER, J. U. & CHARNS, M.P., 1981. The Task Field Model of Organization Analysis and Design. In: Human Relations. 34:743-62

STOMMES, E. & SISAY, S. 1979. The administration of agricultural development programmes: A look at the Ethiopian approach. In: Agricultural administration, VI, 3:219-39; VI, 4:253-67.

STONE, B. 1991. Supervisory skills. -2nd ed. – (Banking certificate series). Pitman publishing 128 Long Acre, London, England. Pp 216.

STRASSER, S., EVELAND, J.D., CUMMINS, G., LYNN DENISTON, O., & ROMANI, J.H., 1981. Conceptualizing the Goal and Systems Models of organizational Effectiveness: Implication for Comparative Evaluation Research. In: Journal of Management Studies. 18:321-40

SWANSON, B.E. & CLAAR, J.B. 1984. The history and development of agricultural extension. In: Swanson, B.E. (ed.). Agricultural extension: A reference manual. Second edition. Rome FAO. Pp 1-19.

SWANSON, B.E., SAMY, M.M., & SOFRANKO, A.J. 2003. The new agricultural economy: Implication for extension programmes. In: Proceedings of the 19th annual conference. AIAEE. Raleigh, North Carolina, USA. Pp 641-647.

TEHRANI, M., MONTANARI, J.R., & CARSON, K.P., 1990. Technology as a Determinant of Organization Structure: A Meta- Analytic Review. Academy of management best papers proceedings. Pp. 180-184.

TERBLANCHÉ, S.E., & DÜVEL, G.H., 2000. The catalystic function of leadership in efficient group functioning. In: South African Journal of Agricultural Extension. The South African Society for Agricultural Extension. Vol 29. pp 105-116.

TER BOGT, H.J. 2003. Performance evaluation styles in government organizations: how do professional managers facilitate politicians' work? Management accounting research. 14: 311-332.

TESFAYE, B. 1995. Training needs assessment. In: Proceedings of the First International Workshop on Innovative Training Programmes for Mid-Career Agricultural Extension Professionals in Sub-Saharan Africa, held in Addis Ababa, Ethiopia. Sasakawa Africa Association.

TESFAYE, B. 2003. Understanding farmers. Explaining soil and water conservation in Konso, Wolaita and Wello, Ethiopia. PhD Thesis. Wageningen University and Research Center. Wageningen.

THE CONSTITUTION OF THE FEDRAL DEMOCRATIC REPUBLIC OF ETHIOPIA PROCLAMATION No. 1/ 1995. A proclamation to pronounce the coming into effect of the Constitution of the Federal Democratic Republic of Ethiopia. Federal Negarit Gazeta of the Federal Democratic Republic of Ethiopia. 1st Year No. 1. Addis Ababa – 21st August, 1995.

THOMPSON, A.A., & STRICKLAND, A.J. 2001. *Strategic Management: concepts and cases.* Twelfth edition. McGraw-Hill Companies, Inc. 1221 Avenue, New York, USA. PP 440.

TURNER, M. & HULME, D. 1997. *Governance, administration and development*. Macmillan, London.

VAN DEN BAN, A.W., & HAWKINS, H.S. 1996. *Agricultural extension*. Second Edition. Blackwell Science Ltd. 350 Main Street, Malden, USA. PP 294.

VERMA, O.S., & SAHA, G.S. 1999. Participative Management: Leadership Styles are not Determinants. *Journal of Extension Systems*. Volume 15 No. 2. Pp 1-19.

VIJAYRAGAVAN, K. & SINGH, Y.P, 1997. Managing human resources in extension. In: *Improving Agricultural Extension.* Edited by Swanson, B.E, Bentz, R.P, & Sofanko (Eds). Pp 127-142.

WACKER, G.D. 1981. Towards a cognitive methodology of organizational assessment. *Journal of applied behavioural science.* 17:114-129.

WATSON, T.J., 2002. Organizing and Managing Work: Organizational, managerial and strategic behavior in theory and practice. Pearson Education Limited, Harlow, England. Pp 535.

WHITE, S. 1999. NGOs, civil society, and the state in Bangladesh. *Development and change.* Vol. 30. pp 307-326.

WORLD BANK. 1993. Implementation completion report. Republic of Ethiopia. Peasant agricultural development project I. Agricultural technical group. Africa Regional Office. Report No. 17256. The World Bank. Washington, D.C.

WREN, D.A. 1979. The evolution of management thought. Second edition. John Whiley & Sons, Inc. New York, USA. Pp 598.

YUCHTMAN, E. & SEASHORE, S.E., 1967. A System Resource Approach to Organizational Effectiveness. In: Administrative Science Quarterly. 12:377-95

YUKL, G. 1998. Leadership in organizations. (4th ed.). Prentice Hall, Englewood Cliffs.

APPENDIX A
SURVEY QUESTIONNAIRE

General Instruction

In this questionnaire there are a number of questions and scales designed to measure your perceptions, opinions, and expectations regarding Bureau of Agriculture's state of performance and what would have been or should be done. Please answer the questions as honestly as possible.

Some sets of questions ask you to choose one or to rank in order of importance among different alternatives that are numbered/ coded. Others ask you to rate the degree or extent of certain situation using 11 points scale (0 - 10). In all cases write the code number of your choice only in the box provided at the right side next to each question. If a question is not relevant to you, write NA (Not applicable) in the box.

I IDENTIFICATION

Respondent Name _____ ☐

District _____ ☐

Zone _____ ☐

Region _____ ☐

Federal _____ ☐

Respondent's Work Area Category ☐

Federal Department Heads	(1)
Federal Team Leaders	(2)
Federal level expert	(3)
Regional Bureau Head	(4)
Deputy Bureau Head	(5)
Heads of Departments	(6)
Regional Team Leaders	(7)
Zonal coordinators	(8)
Zonal level expert	(9)
District Coordinator (Rural & Agric, Dev.)	(10)
District Agricultural Office Head	(11)
District Team Leaders	(12)
Development Agents	(13)
District level expert	(14)

Respondent's Job position Category ☐

Top-level manager (*includes federal or regional heads or deputy heads; service departments – planning, administration, finance etc – leaders etc*) (1)

Middle level manager *(includes federal or regional level department heads, district office heads or coordinators etc)* (2)

First level manager *(team or section or project leaders at all levels)* (3)

Non-managers *(all none managers at all levels)* (4)

II DEMOGRAPHIC CHARACTERSTICS

1. Age (in years) _____ ☐
2. Gender: [1] female [2] Male… ☐
3. Marital status: Never married (1) ☐
   Married (2)
   Separated/divorced (3)
   Widowed (4)
4. What is your highest level of formal education/qualification?
   Primary school (Grade 1-6) (1)
   Junior secondary school (Grade 7& 8)….. (2)
   Secondary school: (Grade 9-12.) …… (3) ☐
   Certificate ……... (4)
   Diploma (2 or 3yr)…….. (5)
   Bachelor's degree…… (6)
   MSc. …… (7)
   PhD……... (8)

5. Please indicate your field of specialisation in the highest qualification mentioned above:
   Plant Production (1)
   Crop Protection (2)
   Horticulture (3)
   Soil Science (4) ☐
   Animal Science (5)
   Agricultural Economics (6)
   Agricultural Extension (7)
   Agricultural Engineering (8)
   General Agriculture (9)
   Other (Specify:……. (10)

6. Please indicate your highest formal qualification in extension.

None……	(1)	☐
Extension courses in in-service training……..	(2)	
Extension courses in agricultural diploma programme…	(3)	
Extension courses in BSc programme.....	(4)	
Diploma in extension.....	(5)	
BSc degree in extension……	(6)	
Masters degree in extension. ……	(7)	
PhD degree in Extension. ……	(8)	

7. What formal training have you had in Management (indicate your highest qualification)

None……	(1)	
Management courses in in-service training…	(2)	☐
Management courses in Diploma Programme	(3)	
Diploma in Management	(4)	
Bachelor in Management	(5)	
Masters degree in Management……	(6)	

8. Did you take part in any in-service training in extension? ☐
   Yes. (1) No. (2)
9. If yes, for how long? Total number of weeks:_____ ☐
10. Did you take part in any in-service training regarding management? ☐
    Yes. (1) No. (2)
11. If yes, for how long? Total number of weeks: _____ ☐
12. Have you done any self-study in extension (read books etc,)?

No ……	(1)	☐
A little……	(2)	
Yes ……	(3)	

13. Have you done any self-study in management (studied books, etc.)? ☐

No ……	(1)
A little…..……..	(2)
Yes ……..	(3)

14. For how long (in years) have you been employed in the Department of Agriculture? Indicate number of years ☐

15. How many years of experience have you had in extension on the following operational levels

a. Frontline extension work (DA)	☐
b. Subject matter specialist/expert	☐
c. Supervision or management of extension	☐
Total	☐

16. What is your current job position/title at work?
    Title (Position) _____

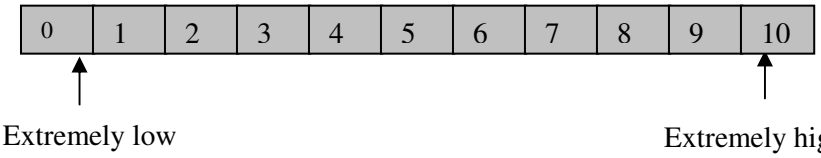
17. For how many years have you worked in your current position? ☐
18. What is your current monthly salary in Birr? _____ ☐

III EXTENT OF ORGANIZATIONAL EFFECTIVENESS IN EXTENSION DELIVERY AND MANAGEMENT

A good manager is generally regarded as one who is instrumental in effectively and efficiently achieving with and through his subordinates the organisations goal.

19. How would you rate yourself and your managers (your district or region) at the different levels regarding management using the following 10-point scale?

(Make assessments in terms of what you expect of them at their different levels and use the following scale:)



General managerial ability (a)
Task oriented (b)
People oriented (c)

	a	b	c
First level managers			
Middle level managers			
Top level managers			
Your immediate manager			
Your own			
The managerial ability of your colleagues in the same rank			
Where you think others rate you			

20. How would you, using the same 10-point scale rate the different management levels (a = Top level managers; b = Middle level managers and c = First level managers) in your situation or district/region in terms of the following main aspects of management:

	(a)	(b)	(c)
1. Planning (*Determining objectives of Organisation and selecting approach and course of action for their accomplishment.*)	☐	☐	☐
2. Organising (*Process of relating employees and their jobs to each other to accomplish organizational objectives.*)	☐	☐	☐
3. Staffing and Human Resource Management (*Selecting competent employers, developing them and rewarding accomplished organizational objectives*)	☐	☐	☐
4. Leading and Influencing (*Inducing individuals or groups to assist willingly and harmoniously in accomplishing organizational objectives*)	☐	☐	☐
5. Controlling (*Assuring the efficient accomplishment of organizational Objectives*)	☐	☐	☐
6. Budgeting (*Effective budgeting and budgeting control*)	☐	☐	☐

21. How do you assess your own functional efficiency in your current position (post) using the same scale? ☐

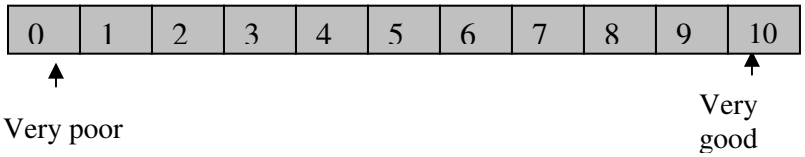
21(a) How effective would you be without your immediate manager? (Please indicate using the same scale) ☐

21(b) How effective would you be without knowledge support from subject matter specialist(s). (Answered by development agents only) ☐

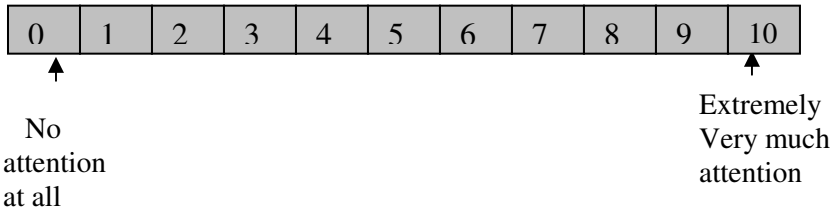
21(c) How effective would you be without knowledge support from regional subject matter specialist(s). (only answered by district level subject matter specialists) ☐

22. Using the scale below, how do you rate the following aspects of knowledge in terms of:
(a) Your own knowledge
(b) Knowledge of first level managers
(c) The knowledge of second level managers
(d) The knowledge of top level managers

	(a)	(b)	(c)	(d)
Agricultural-technical knowledge	☐	☐	☐	☐
Extension knowledge and skills	☐	☐	☐	☐
Economic knowledge	☐	☐	☐	☐
Managerial knowledge and skill	☐	☐	☐	☐
Marketing knowledge	☐	☐	☐	☐



23. Indicate what extension services are currently offered and the extent of their focuses or emphasis in your work area, using a (0-10) point scale: emphasis recommended emphasis achievable level of recommendation (in %) without additional resources:

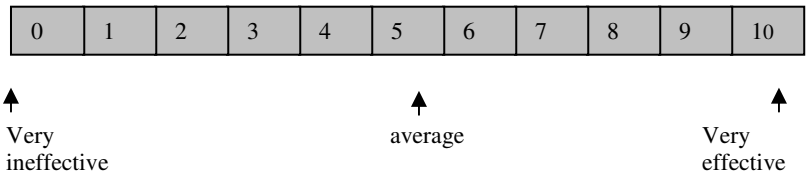


Type of services	(a) Current focus	(b) Recommended	(c) Achievable (%) without additional resources
Crop development & protection	☐	☐	☐
Livestock development & protection	☐	☐	☐
Water (irrigation) use & management	☐	☐	☐
Soil and Land utilization	☐	☐	☐
Forest and wild life dev't & protection	☐	☐	☐
Cooperative management	☐	☐	☐
Home economics	☐	☐	☐
Non-agriculture activities (inputs distribution and loan repayment collection)	☐	☐	☐
Involvement in Local government administrative work	☐	☐	☐
Theoretical training	☐	☐	☐
Practical training	☐	☐	☐

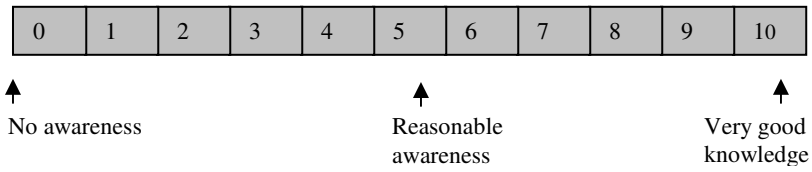
PART IV DETERMINANTS OF ORGANIZATIONAL EFFECTIVENESS

The following questions (24 -52) are related to some of key factors can affect organizational effectiveness. To what degree, in your opinion, improvement in these factors can contribute towards improvement of extension delivery or improvement of job satisfaction? Indicate:

(a) the current level of situation
(b) level to which it needs to be increased (changed)
(c) percentage increase on extension delivery (as a result of change at (b))
(d) percentage improvement of job satisfaction (as a result of change at (b))

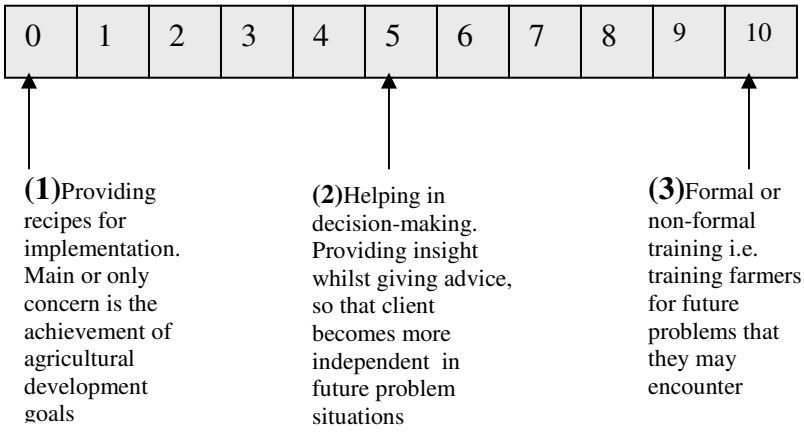


24. Better awareness of mission and objectives of organisation



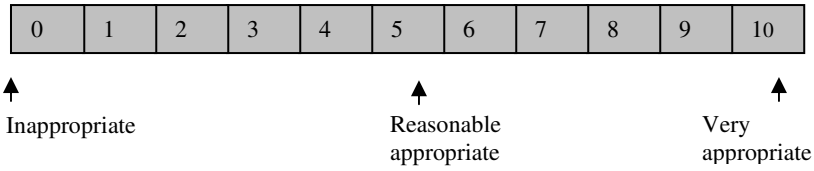
(a) (b) (c) (d)

25 A more educational approach in extension



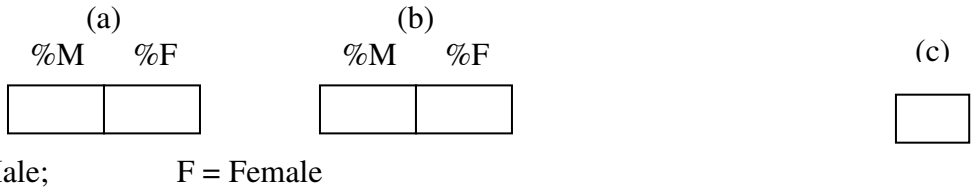
(a) (b) (c) (d)

26. More appropriate land tenure policy



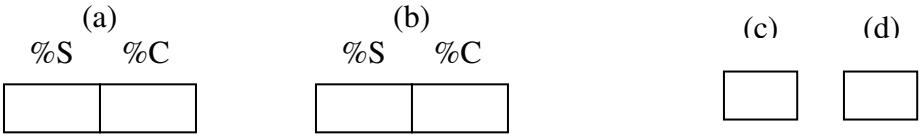
(a) (b) (c)

27. More focus on female farmers



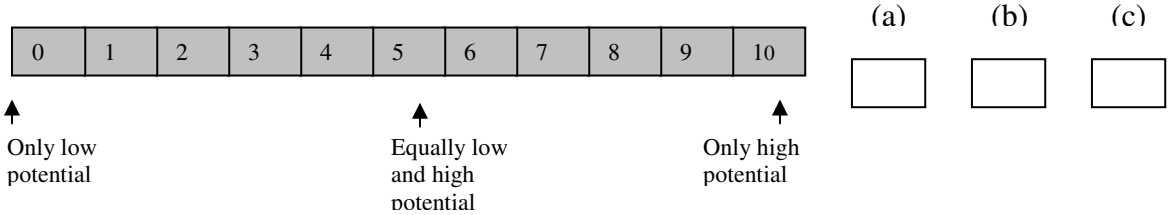
M = Male; F = Female

28. More focus on commercial farmers

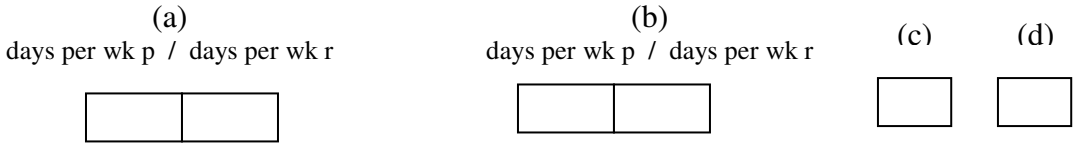


S = Smallholder; C = Commercial

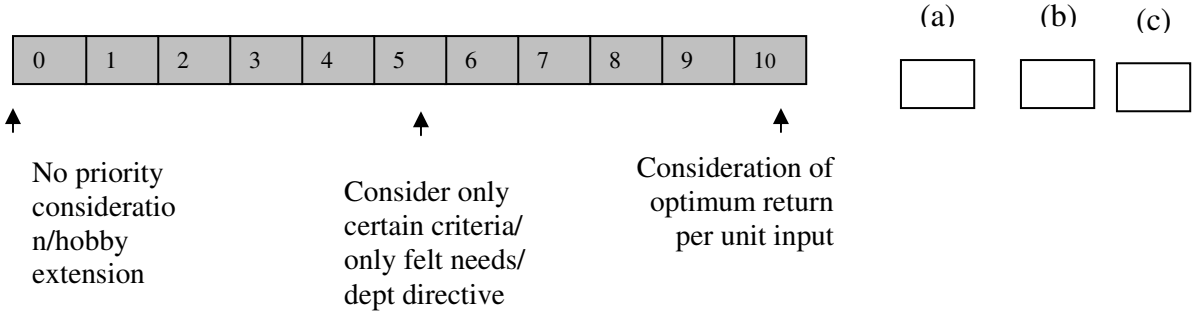
29. More emphasis on high potential areas



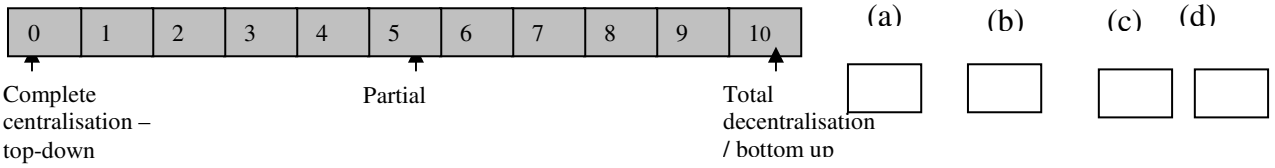
30. Increased programmed (pro-active = p) versus re-active (= r) approach (wk = week)



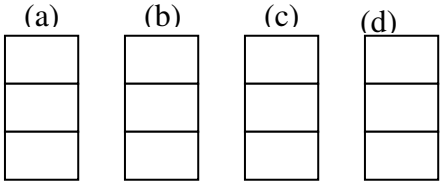
31. Increased priority approach

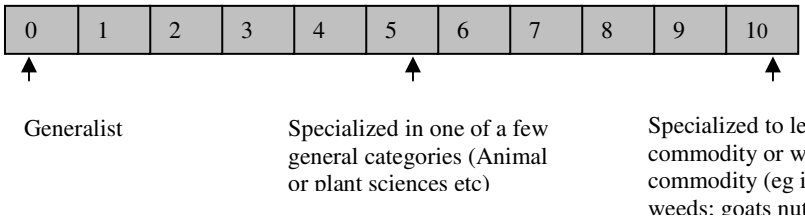


32. Increased decentralisation (in terms of program planning approach – such as bottom/top-down)

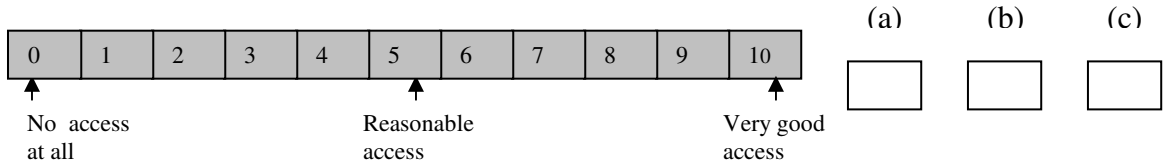


33. Increased Specialisation
    DA (Site Development agents)
    Extensionist
    Subject matter specialists (SMS)

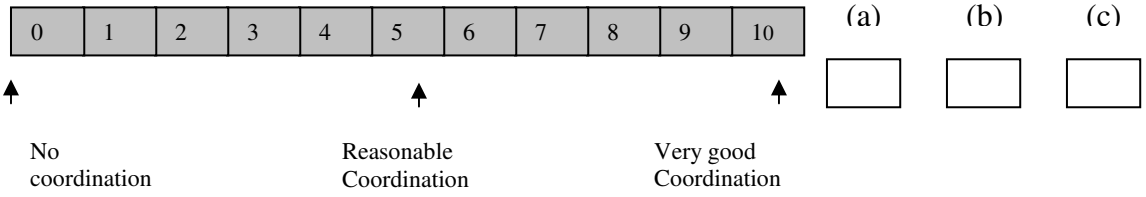




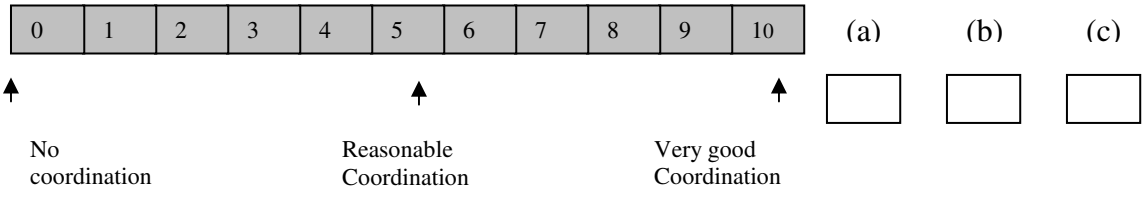
34. Improved access of small farmer to credit and other production inputs



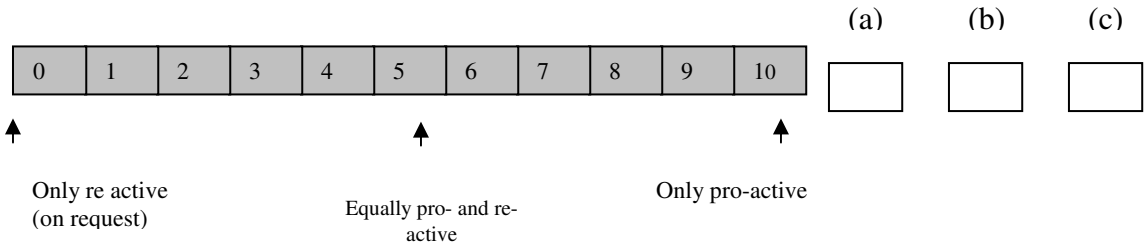
35. Improved internal coordination (among departments or support service sections)



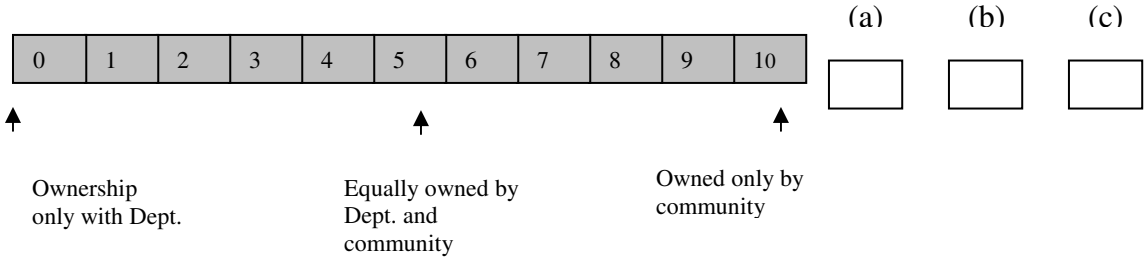
36. Improved external coordination (i.e. with other service providers)



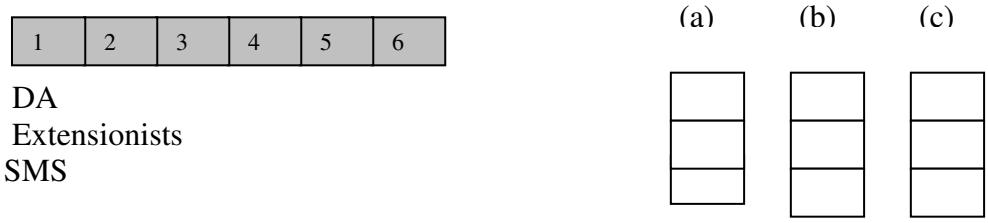
37. More pro-active support services (SMS)



38. Increased community ownership of development (projects)

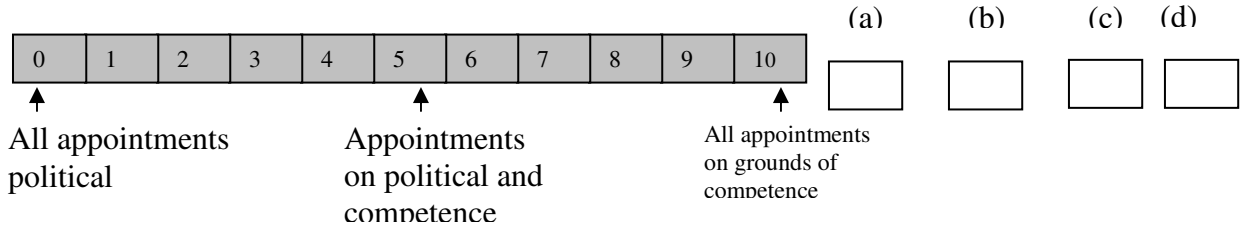


39. Higher entry requirements in terms of qualifications



Secondary school: Grade 9-12. …… (1)
Certificate …… (2)
Diplomа (2 or 3yr)…… (3)
Bachelor's degree…… (4)
MSc. …… (5)
PhD…… (6)

40. Appointments based more on competence (qualifications)



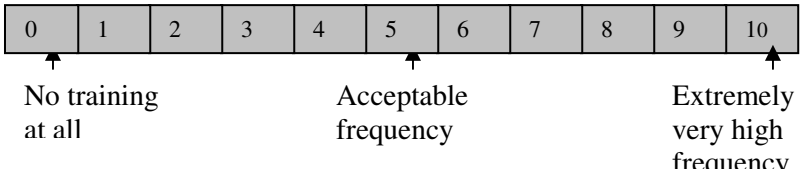
41. Increased in-service training in extension

(a) **Current No of weeks in-service training/year**	(b) **Recommended No of weeks in-service training/year**	(c)	(d)

42. Increased in-service training in subject matter

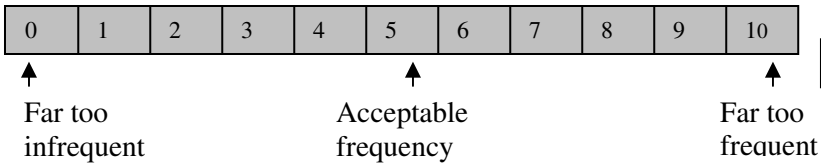
(a) **Current No of weeks in-service training/year**	(b) **Recommended No of weeks in-service training/year**	(c)	(d)

43. Increased in-service training in management



(a)	(b)	(c)	(d)

44. Less frequent restructuring of organisation



(a)	(b)	(c)

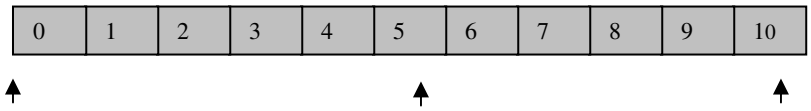
45. More involvement in planning of structural changes or adaptations
(Indicate percentage influence of different stakeholders)

	(a)	(b)	(c)
Politicians (political forces)			
Top managers			
Senior Experts			
Total	100%	100%	

46. More justifiable basis for restructuring

	(a)	(b)	(c)
When deemed necessary by politicians			
When deemed necessary by top manager (s)			
When supported by feasibility study			
Total	100%	100%	

47. More task orientation by managers



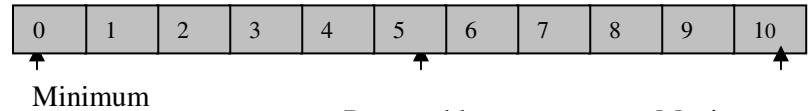
Minimum task orientation

Reasonable Task orientation

Maximum task orientation

(a) (b) (c) (d)

48. More people orientation by managers



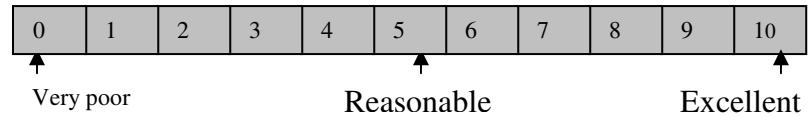
Minimum people orientation

Reasonable People orientation

Maximum people orientation

(a) (b) (c) (d)

49. Improved internal communication



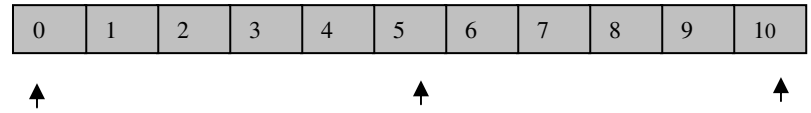
Very poor

Reasonable

Excellent

(a) (b) (c) (d)

50. Improved monitoring and evaluation



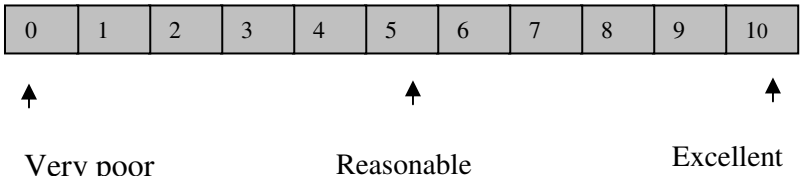
Very poor

Reasonable

Excellent

(a) (b) (c) (d)

51. Improved appraisal system for recognising performance

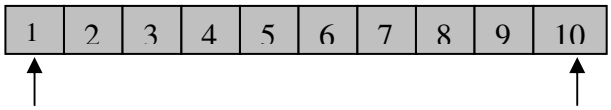


(a) (b) (c) (d)

52. More appropriate departmentalization

		(a)	(b)	(c)
Commodity based departmentalization	(1)			
Functional based departmentalization	(2)			
Matrix based departmentalization	(3)			
Customer based departmentalization	(4)			
Other (specify) _____	(5)			

53 How important do you rate each one of the following functions of the SMS (Subject Matter Specialist):



1. Assistance and advice to farmers and development agents with problem cases and when requested. ☐
2. Training of farmers where knowledge base does not exist among development agents. ☐
3. Training of development agents (courses where necessary) – reactive function ☐
4. Continuous and purposeful knowledge upgrading and capacity building of development agents working in the respective fields (pro-active) ☐
5. Assistance of development agents with message design i.e. designing messages that are technically, economically and human behaviour relevant(where requested) ☐
6. Become specialist regarding relevant commodity/discipline in area of responsibility in relation to current production, prevailing problems, needs of farmers (including research needs if there is no solution), priorities and solutions to be promoted by extension ☐
7. Seeking solutions through adapted research/demonstrations (adapting innovations to specific local conditions) ☐
8. Remain abreast of new research, developments and knowledge in field of specialisation ☐

54. Regarding the span of management, please indicate the current (where applicable) and the recommended no of sub-ordinates per supervisor or manager for management to be effective.

	Current number of sub-ordinates	Recommended Number of sub-ordinates
Number of DAs subordinate to supervisor		
Number of District office Heads subordinate to Agricultural and Rural Development Office coordinator		
Number of District Heads of agricultural offices subordinate to Zone coordinator		
Number of District Heads subordinate to Bureau Head		

55. Which of the following statements come closest to your view regarding the recommended future role of the Zonal Department of Agriculture? Please place in rank order of acceptability.

1. The Zone Agriculture should be disbanded completely.
2. The Zone Agriculture should remain as it is.
3. The Zone Agriculture should be expanded to coordinate and manage all issues relating to the districts.

1st	2nd	3rd

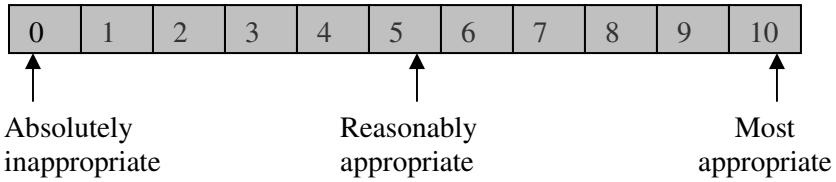
56. What is your view regarding the accountability of the District head: Agricultural Development Office? Please indicate the acceptability of each of the following alternatives by means of the following 10 point scale:

1	2	3	4	5	6	7	8	9	10

Unimportant — Extremely important

1. The district head should be accountable only to the District Administration
2. The district head should be accountable only to the Bureau of Agriculture
3. The district head should be accountable to both the District Administration and the Bureau of Agriculture

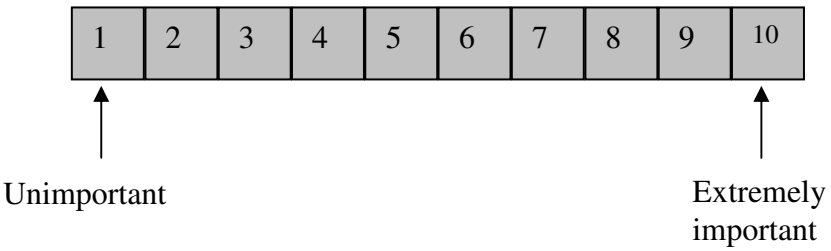
57. In setting regional goals the following are alternative approaches. Assess them in terms of their appropriateness, using the following 10-point scale:



1. Set the production goals at regional level. ☐
2. Set the goals at regional level and control with zones and/or districts. ☐
3. Set goals at district level to be coordinated at regional level. ☐
4. Set goals at PA (peasant association) level to be coordinated at the district and then at regional level. ☐

58. 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 utilised, thereby seriously reducing or undermining the potential extension input.

How serious is this problem in your opinion? Please give an assessment on the following scale:



☐

59. 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.

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

1. Lack of coordination
2. Poor competence of development agent
3. Lack of commitment of extension personnel
4. Poor management of extension
5. Inappropriate extension approach
6. Frequent restructuring
7. Political intervention

60. Which of the following is closest to your idea of good coordination:

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

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 (co-ordination).

61. Considering the various report forms sent in by extension workers every month, what purpose do you think they currently mainly serve and should they mainly serve (In both cases list the following alternatives in order of preference)

(a) 1st 2nd 3rd 4th ☐☐☐☐

(b) 1st 2nd 3rd 4th ☐☐☐☐

1. To provide information mainly for policy makers
2. To provide information for management (to improve management)
3. To provide information that allows frontline extension personnel to improve their extension
4. To provide information that serves as evidence of success or progress for purposes of accountability

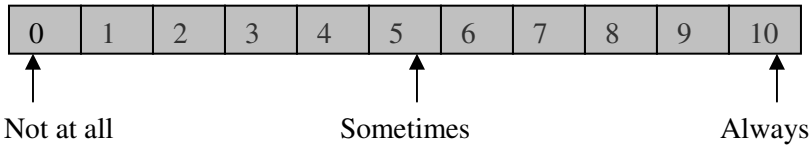
62. Assess the adequacy or sufficiency or favourableness (using the scale provided) of the following in your working situation (or the extension situation of your development agents).

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

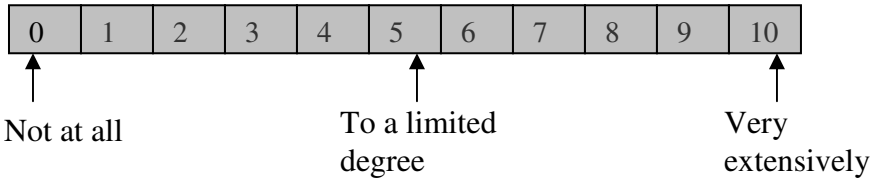
Altogether Insufficient/ unfavourabl — Sufficient/ favourable — Much more than sufficient/ favourable

1. Extension or teaching aids (materials and equipment) ☐
2. Office accommodation and equipment: ☐
3. Transportation (Vehicles, cycles, draft animals etc) ☐
4. Finance (For fuel, per diem allowance, etc) ☐
5. New technologies and information (availability and relevance) ☐
6. Skilled manpower (in their respective fields) ☐
7. Farmers' willingness ☐
8. Government policies and regulations (such as land and agri.related inputs) ☐
9. Agro ecological factors (climate, land fertility etc) ☐
10. Political forces or factors ☐

63 The following are different levels of criteria that can be used in monitoring and evaluation. Could you please indicate whether you use them or believe they are used by extension.

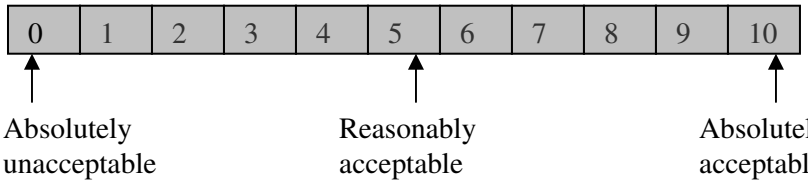


Indicate the degree to which they should be used



	(a)	(b)
1. Input resources (e.g. used personnel, km., funds etc.)	☐	☐
2. Activities (e.g. farm visits, demonstrations, etc)	☐	☐
3. Farmers' participation (in terms of demonstration plots visits, attendance of farmers' days, etc.)	☐	☐
4. Farmers' opinions regarding extension performance	☐	☐
5. Change in behaviour determinants (*change in needs, knowledge, perception, attitude)*	☐	☐
6. Change in behaviour (improved practice adoption)	☐	☐
7. Change in efficiency (e.g. yield, quality, grazing condition, etc)	☐	☐
8. Change in outcome (*e.g. higher standard of living, reduction in unemployment, etc.)*	☐	☐

64 Regarding a need-based and priority approach in extension, the following are alternative approaches. Assess the acceptability or appropriateness of each of them using the following scale:



1. The program should be focused on what the community expressed as most important need, irrespective of whether it is of an agricultural nature or not. ☐

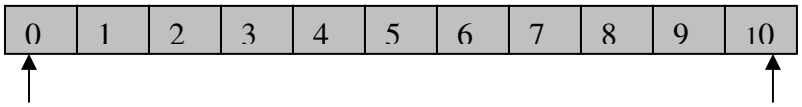
2. The program should be focused on the agricultural need that is ranked highest by the community. ☐

3. The program should be based on the biggest agricultural need, usually on a commodity that has the biggest improvement potential considered on an input/output ratio. Where necessary, farmers need to be persuaded about the priority. ☐

4. The program should be focused on the community's decision after being presented with findings regarding (3). ☐

5. The program should be focused on the Departments priorities, which are the promotion of "common" rather than "individual" good. ☐

65 Indicate how important the following criteria (1 to 4) are (a) currently and (b) should be for promotions or appointments in the following ranks: (Assess the importance by using the following scale)

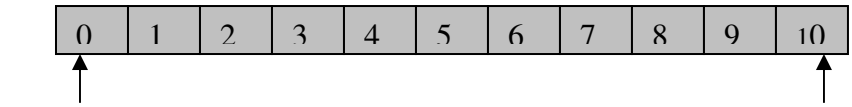


Counts nothing / should not count at all

Is decisive / should be decisive (count everything

Types or levels of managerial ranks	C R I T E R I A							
	1. Qualification		2. Proven Performance		3. Personality		4. Political affiliation	
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
Development agents' supervisor								
Team leader at District level								
District Head at District level								
Team leader (Regional level)								
Department Head (Regional level)								
Deputy Bureau Head								
Bureau Head								

66. What, in your opinion, has been the influence of the changes in the organisational structure of 2002 on the following: (Indicate by giving an assessment – using the following scale – of the situation (a) prior to 2002 and (b) after 2002:)



Categories	(a) Before 2002		(b) After 2002	
	At district level	At regional level	At district level	At regional level
1. Management effectiveness (effective utilization of resources - manpower, time, finance and materials - to achieve organizational goals)				
2. Management participativeness (involvement of subordinates or workers in decisions that affect them)				
3. Work climate (trust and support among workers and between subordinates and managers)				
4. Coordination (among departments and between stakeholder organizations in confronting common problems and finding synergistic solutions)				
5. Level of communication and openness (between workers/ managers and between organization's managerial hierarchies)				
6. Extension delivery effectiveness				
7. Job satisfaction (your own situation)				
8. Job satisfaction at development agent level				
9. Motivation (Achievement recognition, workers' involvement in decision making that affect them and justice in workers' placement, transfer and promotion)				
10. Financial resources availability(amount)				

67. Most development agents can increase their productivity and efficiency. Assuming that you/the development agents were highly competent, productive and effective, what percentage of your/their current work time would you/they require to do and to achieve what you/they are currently accomplishing? ☐

68 The average efficiency of Extension is, according to some literature sources, approximately 130 percent, i.e. for every 100 Birr invested in extension, the return is 130 Birr. What would you guess is the average efficiency of the development agents (Department of Agriculture), expressed as a return per 100 Birr invested as above

1. in your area (or your own efficiency) ☐
2. in your District (Region) ☐
3. in Ethiopia:
   (a) in the small scale farming situation ☐
   (b) in the commercial or large scale farming situation ☐

69 Considering your assessment of the current state of Extension, please rank the following in terms of their potential contribution to improve the effectiveness:

Highest contribution →

Improved management	(1)	☐
More accountability	(2)	☐
Better or more training	(3)	☐
Less restructuring	(4)	☐
Better staff selection	(5)	☐
Better extension approach	(6)	☐
More financial resources	(7)	☐
Less political interference	(8)	☐
More transportation facilities, materials and equipment	(9)	☐
More agricultural new technologies and information	(10)	☐
Better government policies and regulations	(11)	☐

Lowest contribution →