INTEGRATED NONFORMAL EDUCATION IN ZAMBIA:  THE CASE OF CHIPATA DISTRICT

by

ELIZABETH CISECE MUMBA

B.A.(Ed.), The University of Zambia, 1976

M.S., Indiana University, 1979

M.A., The University of British Columbia, 1985

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Department of _Adult, Administrative and Higher Education_

The University of British Columbia
1956 Main Mall
Vancouver, Canada
V6T 1Y3

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## ABSTRACT

This research was concerned with integrated nonformal education programmes in Zambia. The purposes of the research were: (1) to identify factors thought by administrators to facilitate and hinder the implementation of integrated nonformal education programmes; (2) to establish the relative influence of each factor; (3) to determine the perceived degree of integration from the perspective of four administrative levels; and (4) to determine skills and knowledge acquired from integrated nonformal education programmes through the perceptions of participants. Critical incident interviews and questionnaires were used to gather data from administrators, extension workers and programme participants in Chipata District of Eastern Zambia. Integrated Rural Development Programmes had been in operation since 1972.

The critical incident technique was used to interview seventy-seven administrators and extension workers at four administrative levels – national, provincial, district and local. Data from the interviews were used to identify a total of eight factors that were thought to facilitate implementation of integrated nonformal education programmes and nine factors that were thought to hinder implementation of integrated nonformal education programmes. Both facilitating and hindering factors were ranked for each administrative level. Data from questionnaires were used to determine the perceived degree of vertical and horizontal integration from the perspectives of four administrative levels as well as to determine outcomes of integration, through perceptions of programme participants.

A total of 106 administrators and extension workers responded to the Administrators' Questionnaire; 50 responded to the Local Level Questionnaire; and 77 selected participants around three local sites answered the

Participants' Questionnaire. Survey questionnaires were analyzed using descriptive statistics and one-way analysis of variance to determine whether there were any differences between administrative groups.

The major findings that emerged from the study were these:

1. Factors perceived as facilitating and hindering implementation of integrated nonformal education programmes rank differently according to the administrative level of respondents. For administrators at three administrative levels (national, provincial and district) seminars/workshops and training facilities is a powerful facilitating factor. At local level, however, administrators ranked seminars/ workshops fourth as a factor facilitating successful implementation. In this research, inadequate skilled personnel ranked as the highest hindering factor at three administrative levels (national, provincial and district) but ranked fourth at local level.

2. Vertical integration is positively correlated with horizontal integration.

3. Administrators at the national level believe that a higher degree of vertical and horizontal integration exists in integrated programmes than do administrators of the other three administrative levels.

4. The small number of extension workers and their inability to adequately cover their constituency, seriously affect the impact of integrated nonformal education programmes.

Based on the results of the study, recommendations for theory, further research, and for practice are presented.

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CHAPTER ONE

THE PROBLEM

## Background to the Problem

In the 1960's, belief that more investment in formal education would lead to development guided the educational planning process of newly independent countries (Dejene, 1980). The classical view saw education from an economic perspective and argued that educational programmes geared to economic incentives underpinned the greatest return to the individual as well as to the modernizing national development process (D'Aeth, 1975). Development was correlated with the nation's per capita income. In the search for national growth, developing countries invested substantial amounts of scarce resources in the expansion of formal education at all levels.

While governments enlarged the educational enterprise, parents continued to demand more schooling for their children and themselves. Bock and Papagiannis (1983) have insisted that, to the individual, schooling is clearly a tool for modernizing. To the government, education is the technique for providing the citizens with modern values and beliefs, and the advanced technological skills essential for national development (Bock and Papagiannis, 1983). The 20-year effort to expand schooling in the developing world has largely succeeded: 46.8 percent of 6-11 year olds in developing countries were attending school in 1960 while 61.8 percent were attending in 1975; university-level enrollment increased from 2.6 million to 12.5 million in the same period (UNESCO, 1980). The figures are impressive. Yet the absolute number of illiterates in developing countries has

increased; unemployment has been on the increase; and the poor groups in society have remained poor (Carnoy, 1986).

Although these governments have invested heavily in education, they can neither meet the rising costs of the formal system nor the demand for education resulting from growing populations and increasing expectations of the potency of literacy (Simmons, 1979). In line with Coombs' (1968) analysis of world educational systems, many observers noted that formal education was failing to meet the needs of the poor majority in rural areas (Coombs, 1968; Evans, 1976; Simmons, 1979). Two of the arguments against the existing formal educational system in developing countries are: that their curricula are unable to equip young school leavers to function productively within their environment; and that the great educational expansion at primary and secondary levels has not been matched with equivalent growth of employment opportunities (Barber, 1976; Forster, 1976; Simmons, 1979).

Many view formal schooling as a main contributor to the rural-urban migration and the unequal distribution of income characteristic of developing countries (Coombs, 1985; Carnoy, 1986). Planners from the World Bank and other international funding agencies have recommended nonformal education as an alternative to existing educational programmes (Coombs, 1968, 1974, 1985; Coles, 1982). Coombs defined nonformal education as:

> ...any organized educational activity carried on outside the
> framework of the formal system to provide selected types of
> learning to particular subgroups in the population, adults as
> well as children (p. 11).

Planners and theorists identify nonformal education as a powerful instrument for development because it can meaningfully assist early school leavers. Nonformal education can facilitate the acquisition of skills,

knowledge, and attitudes for the rural poor, and can indeed utilize scarce
educational resources more efficiently (Coombs and Ahmed, 1974; Coles,
1982). Since nonformal education is diversified, planners hope that it
will alleviate poverty and reduce the growing rural-urban socio-economic
gap occasioned by earlier incomplete development efforts and ineffective
educational policies. Nonformal education as an alternative to investing
into formal schooling has great importance to many developing countries
whose economies continue to decline (Lynch and Wiggins, 1987).

## Development Strategies in Zambia

In Zambia, as in many other developing countries, there has been an
educational expansion at all levels of schooling (Bown, 1970). But such
developments have not been properly matched with the needs of rural
communities (Muyoba, 1979). Coombs (1968), in his analysis of the problems
of education in developing countries, concluded that politicians and
educational planners found themselves in a dilemma - they sensed an ever
increasing demand for education while facing acute resource scarcities and
rising costs of schooling. Other problems relate to the widening differ-
ences between urban and rural areas, and the rising unemployment among
educated people. He recommended more nonformal education as an alternative
to investing in formal schooling. He recognized the potential of nonformal
education for reaching a large number of learners in rural areas, many of
whom never participate in the formal education system.

Nonformal education in Zambia has developed as a result of remedial
efforts to supplement the formal schooling missed by much of the adult
population (Bown, 1970). Nonformal education is offered by several
government departments to provide services to rural areas (UNICEF, 1979).

Although many government departments are offering nonformal education in rural Zambia, those working in the field do not see their efforts as educational (Lowe, 1970). Since there is no single umbrella ministry co-ordinating nonformal education activities, most of these efforts in Zambia are usually not structurally related to other educational services (Coles, 1982; Loveridge, 1978). For example, both the Ministry of Health and the Department of Community Development offer health education programmes, but they do not coordinate their activities. Because nonformal education activities are not linked to other educational systems in the country (Mutemba, 1980; UNICEF, 1979), nonformal education activities have been judged ineffective.

In order to coordinate nonformal services between departments, Zambia promotes interdepartmental seminars and training workshops for extension workers (Muntemba, 1980). The term "extension worker" in this study refers to members of government departments and organizations working at the lowest administrative level in rural areas. But from the experiences of the author, such efforts have little impact unless they are coordinated at all the administrative levels: national, provincial, district and local. Furthermore, the organizational arrangements that have been established at local, district, provincial, and national levels in Zambia are highly centralized and rarely permit the participation of the local people in the planning of major national development efforts (UNICEF, 1979). Serpell (1980) analyzed the services for women in rural areas and noted a similar problem of duplication of activities. In analyzing the situation of women and children in rural Zambia, UNICEF (1979) observed that each government department operated independently, although the programmes which they offered were directed at the same community.

## Rural Development Strategy in Zambia

Nonformal education activities in Zambia should not be examined in isolation, but rather as a component of rural development strategies. To better understand the problems of nonformal education in Zambia, a description of rural development strategies in Zambia will be provided.

In the 1960's, rural development was viewed as an increase in agricultural output (Coombs and Ahmed, 1974; Green, 1974). This resulted in the establishment of agricultural extension programmes aimed at offering agricultural education to farmers in order to increase their agricultural output. Later, in the 1970's, planners and funding agencies adopted a broader view of rural development that integrated all facets of developmental activities that contribute to an improved way of life for rural populations. The broader view of rural development refers to:

> ...far reaching transformation of the social and economic structures, institutions, relationships and processes in any rural area (Coombs, 1974, p. 13).

During the United Nations Second Development Decade, in the 1970's, the growth centre strategy for development was proposed by planners and funding agencies (Paulson, 1975). This approach, formally adopted by many developing countries, involved investing in central development areas with both economic and social services with the anticipation that the benefits would diffuse into surrounding areas. Zambia put into effect the Intensive Development Zones (IDZs) strategy (a variant of the growth centre strategy) for regional planning during the Second National Development Plan (SNDP) (1972). Intensive Development Zones prescribed allocation of resources to those areas where there was mental and physical equipment available to utilize them fully. This called for the concentration of resources along a

fifty mile strip of land of relatively high population with an intensive agricultural zone. This innovative plan was a response to the worsening rural-urban disparities occasioned by the continued dominance of the urban industrial sector.

First implemented in the Eastern Province of Zambia in Chipata District, IDZs were a concept that focused on the concentration of resources in a few areas. This was contrary to Zambia's philosophy of humanism and its desire to foster an egalitarian society. Consequently, in 1979 the IDZ structure was replaced by the Integrated Rural Development Programme (IRDP) in the Third National Development Plan (TNDP, 1979).

Humanism (Kaunda, 1967) advocates establishment of a humanistic society. In order to achieve this, the government has accepted the need for establishing a Man-centred society. Kaunda (1967) stated that humanism places high valuation on Man:

> ... This valuation of MAN and respect for human dignity which
> is a legacy of our tradition should not be lost in the new
> Africa. However modern and advanced in a western sense this
> young nation of Zambia may become, we are fiercely determined
> that this humanism will not be obscured. African society has
> always been Man-centred. Indeed, this is as it should be
> otherwise why is a house built? Not to give Man shelter and
> security? ... And yet we can say with justification and without
> any sense of false pride that the African way of life with its
> many problems has less setbacks towards the achievement of an
> ideal society... (p. 7).

Humanism has guided national development plans and is evident in directing policies of the ruling party and its government since independence in 1964.

In Zambia, two schools of thought exist regarding rural development policy. Elliot (1980) referred to the two as ideological and technocratic. The ideological view revolves around the leadership in the national party (UNIP) and its government, and is supported by other institutions such as

trade unions, educational institutions and churches. This school advocates the interests of the underprivileged and favours equitable distribution of resources to all areas of the country (Mwali et al., 1981). The ideological view is consistent with the national philosophy of humanism.

The technocratic view is held by planners, technocrats, and civil servants in various decision-making bodies. They advocate and seem to represent the interests of the urban, industrial sector. They stress building on existing bases of strength (Woldring, 1984). They argue that given Zambia's particular circumstances, development must start from the centres of population, the already industrialized areas, and spill over to the rural areas (Musakanya, 1970). The advocates of this view are quick to refer to Zambia's thinly distributed rural population and long distances between population centres. They argue that rural development efforts failed during the period of the First National Development Plan (1966-70) not only due to insufficient investment, but due to the inherent incapacity for development of the rural areas (Mwali et al., 1981).

The technocratic view was instrumental in the establishment of Intensive Development Zones in 1972, during the Second National Development Plan (1972-76). The party and its government argued that IDZs were conducted in a manner contrary to the philosophy of humanism. Due to pressure from those who held the ideological view, IDZs were reviewed and evaluated (Mwali et al., 1981). The IDZs were later modified into Integrated Rural Development Programmes because they had concentrated their efforts on families in a better socio-economic situation (Maimbo, 1982). The programme has the following objectives:

(1)  to reduce the existing level of social and economic disparities
between rural and urban areas, between different regions and
between areas in a region;

(2)  to deploy investment resources so as to involve the local popula-
tion fully in development, and more importantly to ensure that
the greatest possible number of people will benefit from the
fruits of economic development (TNDP, 1979).

Integrated Rural Development Programme (IRDP), a growth centre strategy,
was established as a means to bring social and economic development to
rural areas.  It was hoped that IRDP would contribute positively to rural
development by retaining existing rural population, and by attracting those
who intend to migrate to urban areas.  Integrated Rural Development
Programme centres were designed to serve as foci for coordinated social and
physical infrastructure investments, monetary exchange markets,
transportation, and communication networks (Paulson, 1975).

## Rationale for Integrated Programmes

Several views exist as to how nonformal educational programmes should
be implemented, one of which is advocated by Coombs et al. (1973, 1974),
Coles (1982), and Evans (1981).  With knowledge based on research surveys
conducted in several developing countries, Coombs et al. (1980) advocate
integrated nonformal education, arguing that nonformal education should be
seen as part of the overall national development process.  They believe
that when nonformal education programmes are integrated they would be more
efficient in utilizing limited resources (Coombs et al., 1980; Evans,
1981).

Carnoy (1982) and Bock and Papagiannis (1983) view education as a contributing factor in the disparity that exists between rural and urban areas. The urban areas have more schools at all levels, and better equipment, than rural schools. The type of education given by the formal system does not help the rural young people to function in a meaningful way within rural communities (Paulston, 1979). This group argues against state-sponsored nonformal educational programmes because they believe that the state may use these programmes to promote ideological, nationalistic values that maintain the existing social order (Bock and Papagiannis, 1983; Carnoy, 1982). In this way, they believe, the state sponsors nonformal education programmes in rural areas in order to extend its influence beyond formal schools. They advocate the development of liberating nonformal education organized by social movements to promote cultural and ethnic identity (La Belle, 1981). They focus on locally initiated nonformal education programmes which are conducted and organized by local communities.

### Integration Defined

Coombs (1980) defines integration as:

.... Combining naturally related parts into a more cohesive and unified order to enhance their collective cost-effectiveness (p. 15).

In writing on integration, Coombs (1980) elaborated six categories of integration: integration of the national planning process, integration of the components of a particular programme, integration between separate programmes, horizontal integration, vertical integration and inter-organizational integration. This study focused on two of these categories: vertical and horizontal integration. The two categories were more relevant to the study of integrated nonformal education programmes since the study

was concerned with communication channels within and between government departments and other agencies offering nonformal activities to rural communities. Coomb's definitions of vertical and horizontal integration have been adapted in this study.

## Vertical integration

Vertical integration as used in this study refers to the free-flow of communication between the national level and local level. Vertical integration includes the supervisory control within a department from the national to the lowest administrative level. Communication from national level keeps extension workers motivated and aware of new policy guidelines. Vertical integration involves the communication from the local level to the national level. Communication from the local level keeps national level aware of activities and problems in the field. A high level of vertical integration exists when there is constant communication within departments from the national level to the lowest administrative level. A low level of vertical integration exists when there is little communication within departments from national to local level.

## Horizontal integration

Horizontal integration refers to the communication channels between departments, self help projects; and other agencies offering nonformal education programmes. It is assumed that if departments and other agencies work together, they would have better impact on the communities within which they are working. A high degree of horizontal integration exists when there is constant communication between different departments and

other agencies. A low degree of horizontal integration exists when there is little communication between departments and agencies.

Figure 1 illustrates the relationship between vertical and horizontal integration. The horizontal axis represents the degree of horizontal integration from low to high, while the vertical axis indicates the degree of vertical integration. The line cutting across both axes represents a balance between horizontal and vertical integration. Quadrant 2 represents the desired direction of development for nonformal education programmes because there is a balance between vertical and horizontal integration. In quadrant 1, a high degree of vertical integration occurs, with a low degree of horizontal integration. In Quadrant 4, there occurs a low degree of both horizontal and vertical integration. Quadrant 3 represents a high degree of horizontal integration, with a low degree of vertical integration.

**Outcomes of Integration**

Outcomes of integration, as used in this study, refer to both planned and unplanned consequences of integrated nonformal education programmes, focusing on skills that participants have learnt. The investigation was concerned with participants' opinions of what they learned from integrated nonformal education activities. Integrated nonformal education programmes in rural areas need to relate to people's daily activities, their cultural orientations and their aspirations, so that what they learn is easily transferable to their daily activities (Coombs, 1980; Coles, 1982).
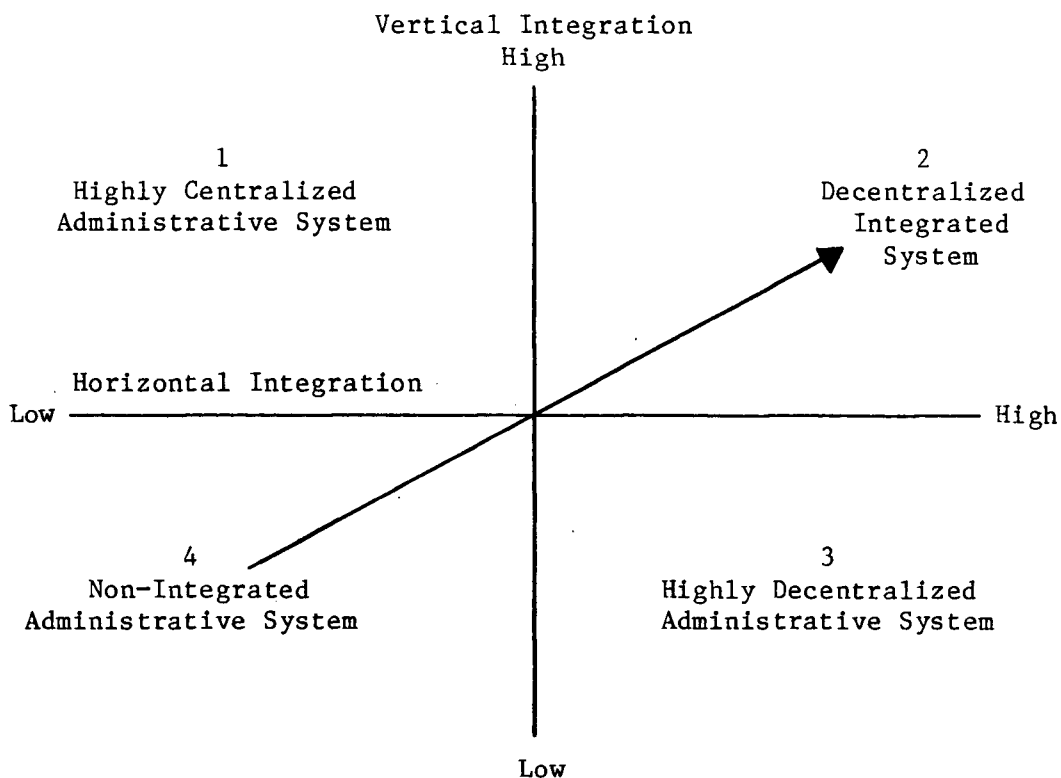
Figure 1:  Conceptualization of relationship between vertical and horizontal integration.


Hypothetical cases:

Quadrant 1 represents a highly centralized administrative system, and
one in which there is constant communication within the department,
but with little communication between the department and agencies
outside of it.

Quadrant 2 represents a decentralized integrated system in which there
is constant communication within itself, between departments and other
agencies.

Quadrant 3 represents a highly decentralized administrative system in
which there is constant communication between departments and
agencies, but little or minimal within department itself.

Quadrant 4 represents a non-integrated administrative system in which
there is very minimal communication within and between departments
with other agencies.

## The Problem

Although Integrated Rural Development Programmes have been in opera-

tion in Zambia for over ten years, no research, to the best knowledge of

the author, has identified factors that facilitate and hinder the implemen-

tation of integrated nonformal education programmes. Evaluation studies

have, by focusing only on programme outcomes, ignored the implementation

process (Mwali et al., 1981; Maramwidze, 1982; SIDA, 1981, 1983; Ministry

of Agriculture, 1983). A need exists to understand what behavioural

changes administrators make; and what obstacles they face in their effort

to implement integrated nonformal education programmes. There is lack of

knowledge of factors affecting implementation of integrated nonformal

education programmes. It was, therefore, important to study integrated

nonformal education programmes in order to determine factors that may

facilitate or hinder implementation of nonformal activities. Knowledge of

these factors will lead to a better understanding of problems facing

administrators and extension workers in their efforts to implement

integrated nonformal education programmes.

### Purposes of the Study

The purposes of this study were:

(1) to identify factors thought by administrators to facilitate and

hinder the implementation of integrated nonformal education

programmes;

(2) to establish the relative influence of each factor;

(3) to determine the perceived degree of integration from the

perspective of four administrative levels (national, provincial,

district and local), and

(4) to determine skills and knowledge acquired from integrated

nonformal programmes through the perceptions of participants.

## Research Questions

In order to achieve the purposes of the study, several research

questions were formulated.

1.  What factors are thought by administrators to facilitate implementa-

tion of integrated nonformal education programmes?

2.  What factors are thought by administrators to hinder implementation of

integrated nonformal education programmes?

3.  What do administrators perceive to be the extent of "integration" in

nonformal education programmes?

   (a) To what extent do administrators at different administrative

levels differ in their perceptions of the existence of vertical

integration?

   (b) To what extent do administrators at different administrative

levels differ in their perceptions of the existence of horizontal

integration?

   (c) To what extent are administrators' perceptions of vertical

integration correlated with administrators' perceptions of

horizontal integration?

   (d) How does the correlation between vertical and horizontal integra-

tion differ according to administrative levels?

4.  What skills do participants perceive to gain from integrated nonformal

education programmes?

## Significance of the Study

This study was conducted in Eastern Zambia where the Integrated Rural

Development Programme (IRDP) was introduced in 1972. It involved the

identification and analysis of factors which facilitate or hinder the

implementation of integrated rural development programmes. Since the study

was carried out in a region where integrated rural development has been

officially sanctioned, the findings of this research are important for

planners in the participating selected departments, and could be of interest

to some non-participating departments in a variety of locations in Zambia

and comparable countries, such as Botswana, Kenya, and Malawi where the

integrated approach to implementing nonformal education programmes has been

adopted. In any case, it is of theoretical value to investigate these

phenomena in Zambia so that the concept of integration may be better under-

stood. This study attempted to validate assumptions made in the literature

on nonformal education and integrated rural development. Knowledge of

facilitating factors may lead to reinforcing such factors, while knowledge

of hindering factors may lead to the removal or reduction of some of these

as identified in this study. Information on perceived degree of vertical

and horizontal integration can assist Zambian planners to improve communi-

cation within a particular department and between departments, and other

agencies. It is of equal importance to know participants' perceptions on

the outcomes of integrated programmes in order to enrich existing activities.

## Delimitation of the Study

The study was limited to an investigation of selected rural develop-

ment programmes in Chipata District. It was limited to the behaviours,

role relationships and communication channels that exist between centres at

the national, provincial, district, and local levels. Only the following departments participated in the study: Community Development, Agriculture, Marketing and Cooperatives, and the Health Education Unit of the Ministry of Health. This study did not look at programme effectiveness or the impact of integrated nonformal education programmes. It was limited to investigating perceptions of selected administrators involved in planning and implementing integrated nonformal education activities. Although many nonformal education activities are conducted in urban areas by different government departments and non-governmental organizations, they were not of concern in this study because this investigation focused on activities conducted in rural Zambia.

## Organization of Remaining Chapters

Chapter Two describes the context of the study. It traces the development of nonformal education from colonial to present day Zambia.

Chapter Three reviews the literature on nonformal education as it relates to modernization, factors influencing implementation, and research surveys on integrated nonformal education programmes (especially those in Zambia).

Chapter Four discusses the research methodology used in the study, methods of data collection, and analytical techniques employed. Chapter Five presents results of the study. Chapter Six describes the findings of the study. Chapter Seven presents summary, conclusions, and recommendations.

# CHAPTER TWO

## CONTEXT OF THE STUDY

### Overview

Chapter Two outlines the context of the study. It contains a discussion of rural problems in Zambia, the development of adult education before and after independence, the relationships between nonformal education, and rural development, and participation in nonformal education and integrated rural development programmes.

### General Background

Zambia (the former British colony of Northern Rhodesia) is a landlocked country of 752,000 square kilometres with a population of 5.6 million (Central Statistical Office, 1980) (see Figure 2). Approximately 60 percent of the total population is under 25 years of age. According to the 1980 census, Zambia has one of the highest urban growth rates in Africa (Banda, 1982) (see Figure 3).

At independence (1964), Zambia inherited a dual economy which nad a modern industrial urban sector and a predominantly agricultural rural sector. Such a condition led to the drift of young men from the rural sector to the urban sector in search of wage employment which was readily available during the first decade of independence. The rural areas were places for old men and women. This picture has not changed to date. While the bright lights of the urban sector continue to attract many young men, the rural sector has been unable to retain the population of young school leavers and the younger men in villages. The standard of living in rural areas has not improved in the last two decades, although national
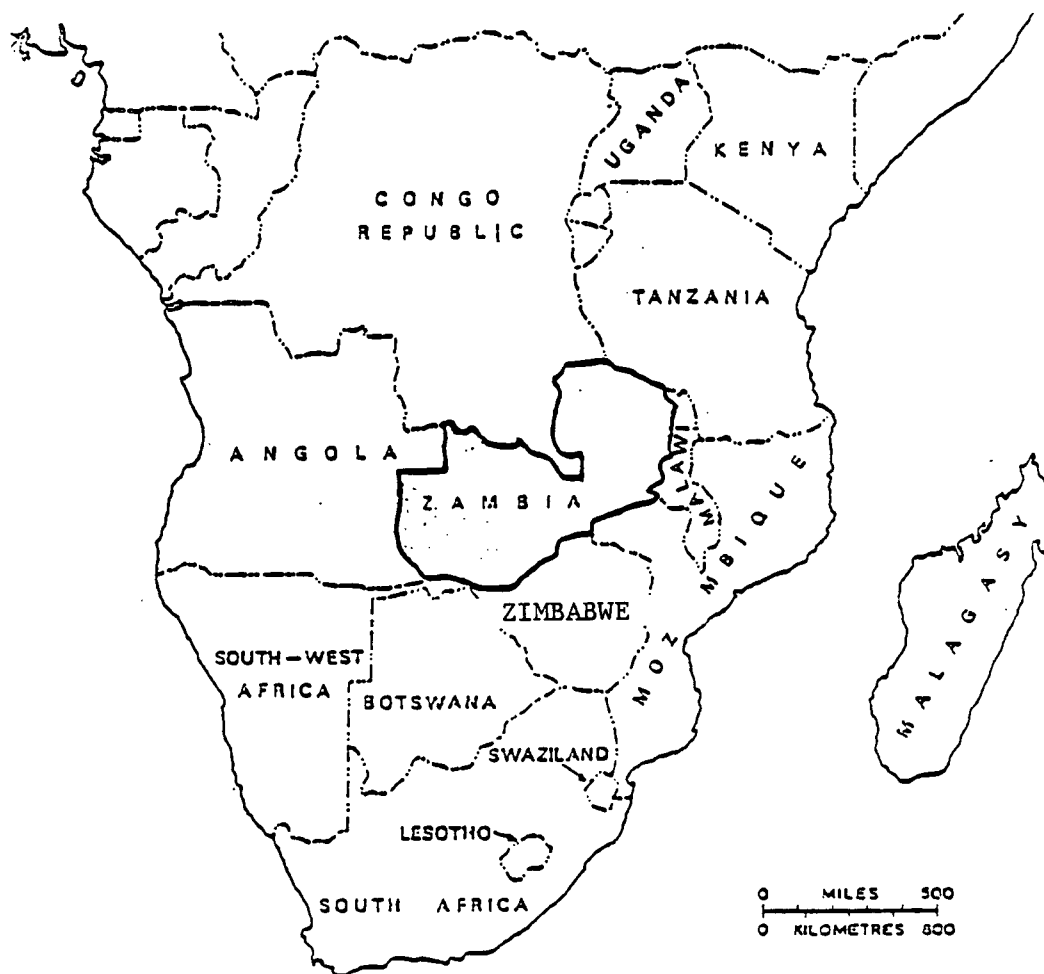
Figure 2.   Geographic location of Zambia in Africa.


Source:   Davies, D.H.   (1971).   _Zambia in maps_.   London: University of
London Press Ltd.
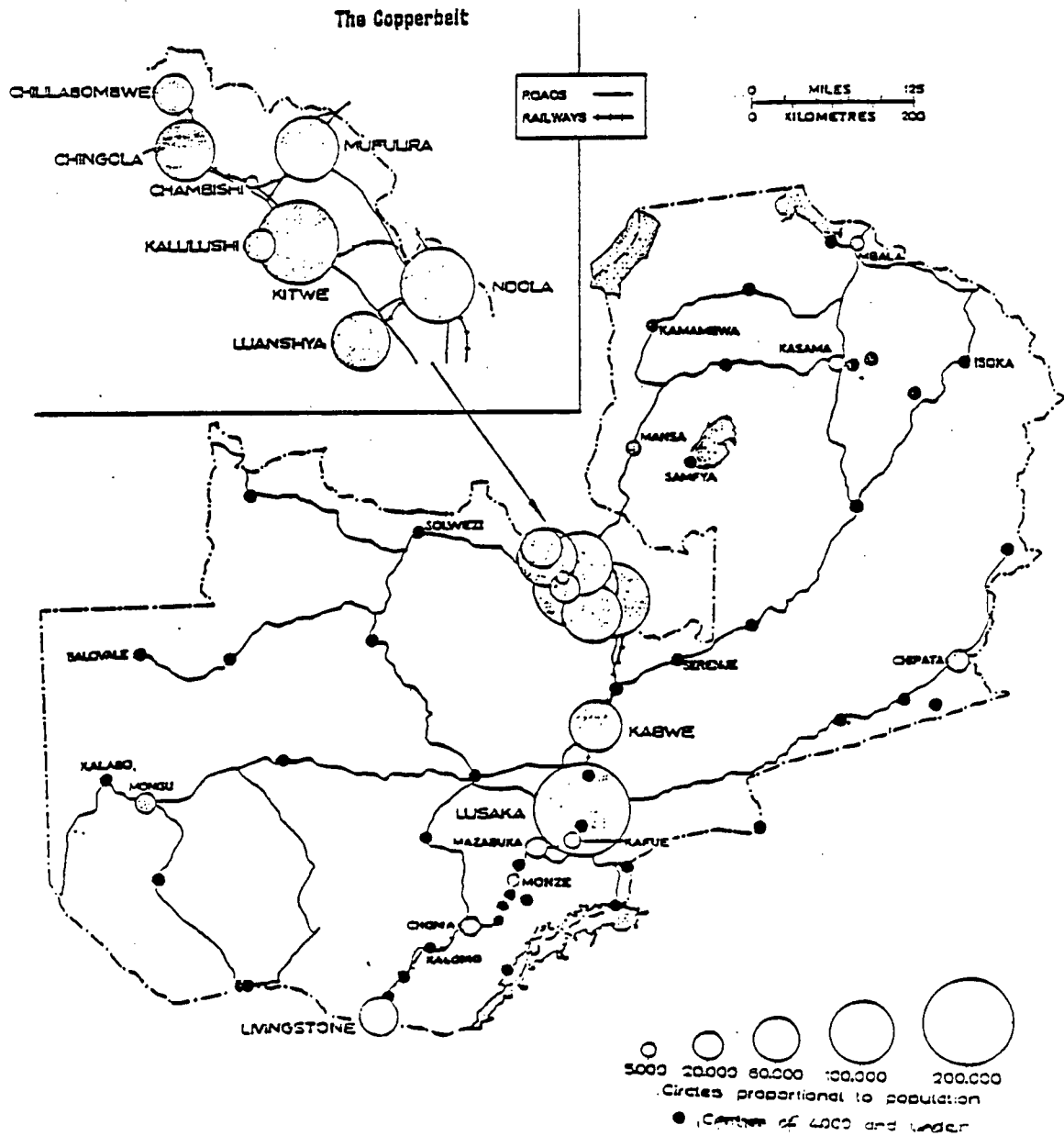
Figure 3. Location and population of Zambia's urban areas.

Source: Davies, D.H. (1971). Zambia in maps. London: University of London Press Ltd.

agricultural policies and pricing for agricultural produce have not had the intended effect of encouraging some young people to remain in farming. Furthermore, although government services and infrastructure in rural areas have increased and improved, these do not seem to have been enough. The bright lights of the city are bright enough for a farmer to leave his hoe (Seidman, 1974).

## Urban Problems

Rural-urban migration results in over-crowding in cities as large numbers of people continue to enter urban areas despite the non-availability of employment opportunities. The urban proportion out of the total population grew from 29.4 percent in 1969 to 43.0 percent in 1980 (Banda, 1982). This trend in population patterns can be explained within the framework of "push" and "pull" factors. Difficult conditions in rural areas are pushing people out of their villages; and at the same time, education, employment opportunities, and modern health facilities; among others are pulling them towards urban areas.

However, it should be recognized that rapid urbanization and high rate of rural-urban migration create problems in housing and provision of basic social amenities. The resources required to provide even minimal housing, transport, health, water, and sewage systems in big cities rise astronomically due to influx of migrants and natural increase. The concentration of people in urban areas is a clear reflection of economic disparities that exist between the rural and urban areas. As such, the problems of rapid urbanization and rural development should be viewed as an integral part of the national development process. Since this study focused on nonformal

education programmes offered to rural communities, the following section discusses rural problems.

## Rural Problems

The general problems facing rural Zambia today may be outlined as follows:

1.  Illiteracy.

2.  Lack of agricultural and technical skills.

3.  Inadequate community organization and leadership.

4.  Lack of rural industries to retain populations within these rural communities.

5.  Lack of marketing facilities in rural areas.

6.  Inadequate maternal and childcare facilities.

Illiteracy:   Illiteracy is higher in rural areas than in urban areas because many young people, especially girls, leave school early (UNICEF, 1979).  Although schools have expanded since independence, rural areas have not really benefited from the expansion.  Many rural schools only offer four years of elementary education, after which pupils travel long distances to schools which offer seven years of elementary education.  Many do not continue with their schooling.  Many young people may not acquire literacy skills in four years.  In Zambia, 52 percent of the total population is illiterate.  Of the illiterate population 35 percent are male and 65 percent are female (Central Statistic Office, 1969).  According to Lerner (1958), literacy alone does not constitute modernity.  In his study of modernity in the Middle East, Lerner (1958) concluded that, apart from literacy, mobility and empathy contributed to individual modernity.  None-

theless, illiterate individuals do not contribute positively to the modernization process. Those who are illiterate are slow to internalize new values, new knowledge and skills. They are unable to read posters at Rural Health Centres, instructions on medicines, and educational materials at their disposal.

Lack of agricultural and technical skills: Many rural households lack agricultural and technical skills that can help them increase agricultural output. The agricultural extension services are inadequate to reach many rural households. In Zambia, one extension worker is expected to cover 1,387 households in the area of operation (Honeybone and Marter, 1979). Farmers are taught theoretical aspects of modern farming techniques. Usually one contact farmer is used so that others can learn a lesson from him. Zambian farmer training is based on the assumption that the spread of innovations is a process of communications, which reaches different individuals at varying speed. But the question arises as to which type of farmer should receive most training, those who are quick to adopt innovations or those who are slow to adopt innovations. Usually, the successful farmers are used as contact farmers (Honeybone, 1979). The term contact farmer in this study refers to the individual an agricultural extension worker regularly deals with in the village. Those farmers who need training the most are often left out because selection procedures favour those who are most likely to adopt innovations.

Inadequate community organization and leadership: Several attempts have been made by the government to encourage people to participate in local projects and local organization, through the establishment of Village and Ward Development Committees under the Registration and Development of Villages Act of 1971. Committees are comprised of elected representatives.

The Village and Ward Development Committees are intended to provide a forum for both the expression of local demands and for the enforcement of central policies (Bratton, 1979). Most studies have reported that village productivity committees are nonexistent in many districts in Zambia (Ollawa, 1979; Bwalya, 1984). They observed that headmen used their traditional authority in conducting the affairs of Village Productivity Committees. They indicated that peasants do not in fact get the chance to participate in decision-making on policies and projects affecting their locality. Ward Development Committees are usually comprised of influential party leaders and some members of the local elite. The peasants and local poor are excluded from participating in these committees.

The Decentralization Act (1981) encourages the participation of individuals at District and local levels. Because peasants are not represented in the Village and Ward Development Committee their chances of being represented in District Development Committees are further reduced. Bwalya (1984) contends that genuine and effective participation depends on adequate supply and dissemination of information to all participants. He argues that effective involvement of more peasants in decision-making depends on their understanding of the issues at play and the socioeconomic implications of available choices. This is related to literacy. Illiteracy prevents men and women from taking advantage of opportunities available to them to raise their quality of life, and it limits their capacity to provide for their families through participation in activities that would raise their family incomes. Their progress in the development process is also limited because they cannot effectively make use of seminars, pamphlets and other facilities that exist.

Lack of rural industries: The rural-urban migration has produced an imbalance in the rural population structure. Lack of industries in rural areas has led many able bodied young people to leave rural areas in search of wage employment in urban areas, leaving the old and females in rural areas. Many rural households are unable to produce enough food for their families due to shortages of labour and resources.

In many rural areas of Zambia, 30 percent of rural households are headed by women (Honeybone and Marter, 1979). Striking features of female-headed households are their paucity of production and food processing equipment, lack of labour, and meagre financial resources, which results in a reduced level of food production both in terms of area cultivated and range of crops grown.[1] Honeybone and Marter (1979) found that the scarcity of labour is a major constraint to rural households since this limits the effectiveness of complementary factors such as equipment and fertilizers and policies directed towards small scale farmers such as credit, extension and training advice.

Lack of marketing and credit facilities: Although there has been a substantial expansion of the national transportation networks of major routes, the minor feeder roads that serve the dispersed rural communities have received very little attention (Evans, 1984). The poor state of feeder roads has inhibited the development of small farm markets. It has equally affected the timely supply of agricultural inputs through the established state marketing institutions, credit and other services to small-scale producers.

The present credit facilities provide seasonal loans for small scale farmers which are usually inadequate and payment is often delayed (Evans, 1984). The credit system favours large-scale commercial farmers.

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Inadequate maternal and childcare facilities: Rural areas receive
fewer health services compared to urban areas. While the towns have big
hospitals, rural areas have Rural Health Centres which offer maternal and
childcare services, and any health services for curative and preventive
purposes. Rural Health Centres emphasize preventive and community health
education but they are usually ill-equipped, and short on staff and medica-
tions. It has been estimated that in 1978, the cost of running the
University Teaching Hospital in Lusaka amounted to almost the same figure
as the total allocation for building new Rural Health Centres throughout
the country.

## Adult Education in Pre- and Post-Independent Zambia

Formal adult education, as we understand it today, was introduced by
the Christian missionaries in 1887 as a tool for the social and cultural
transformation of indigenous cultures. Traditionally in Zambia, adults
have a special place in society. They have power to influence decisions of
their chiefs (Kenyatta, 1979). They are teachers of morals for the young
as they grow up. Elders are a symbol of their ancestral spirits (Kenyatta,
1979). The function of elders in their family, group and community, is one
of harmonizing the activities of various age-groups, living and dead. They
offer help to the community with their advice and experience. In turn, the
community honors them very highly.

Although missionary education attempted to change the traditional way
of life, it persists with modifications. Adult education as introduced by
missionaries included the teaching of the 3Rs: reading, writing and
arithmetic; health education; agricultural extension; crafts and carpentry.
The aim of missionary education was evangelism (Tiberondwa, 1979). Adult

education as a tool for social and economic change was used in the attempts

to transform Zambian traditional societies and their life styles. This is

well summarized by Tiberondwa (1976):

> ... the medicine men and herbalists were persecuted, being
> labelled witch doctors and sometimes punished. The worshipping
> of traditional Gods was regarded as primitive and superstitious,
> the wearing of certain ornaments which were believed to be
> curative was discouraged, the dancing at weddings was regarded
> as sinful, the local drinks were replaced by imported ones and
> the people who continued drinking alcoholic drinks were
> drunkards. Instead of listening to the African riddles and the
> wise sayings of the African elders, the children spent evenings
> trying arithmetic and reading about the Sermon on the Mount and
> the Parables. (p. 59)

The above is a vivid description of the social and economic changes that

took place or were sought with the introduction of formal education from

1887-1964 (Snelson, 1974). The nationalist movement that gained self-rule

used adult education for citizenship training and to meet manpower needs in

the new state (Mwanakatwe, 1968).

After independence (1964), there was a general expansion of education

and other services to rural areas (Mwali, 1979). But expansion of both

primary and secondary education brought other problems: youth unemploy-

ment, rural-urban migration, and high drop-out rates (Dall, 1983). Among

other changes that occurred in the educational expansion was the establish-

ment of evening class programmes from primary to secondary level designed

for adults and youths who had no formal secondary education. These

programmes are more organized in urban areas than in rural areas. The

school curriculum has not assisted young people to learn skills that can

help them solve problems facing rural communities. In this way education

appears to have promoted what is considered by many as undesirable migra-

tion from rural to urban areas. The Education Reform Document (Ministry of

Education, 1976), preceded by several studies done abroad and a public

debate at home, was never implemented. The Education Reform Document

advocated a change in the curriculum which would instill skills that would

be useful in "the world of school and the world of work" (p. 10).

Adult education institutions developed in response to the manpower

training needs that Zambia experienced soon after independence (Mwanakatwe,

1968). Most adult education activities are government-sponsored, although

industries and religious organizations sponsor many training programmes

(Zambia Adult Education Advisory Board, 1978).

## Nonformal Education and Rural Development

Nonformal education, not a new phenomenon in African societies, existed

before the introduction of formal schooling by missionaries (Makulu, 1971;

Thompson, 1981). Education was part of the community life of the tribe in

which the younger generation was prepared for its role in society through

established patterns and systematic instruction because tribal and tradi-

tional education was part of the social order in communities (Makulu, 1971).

Traditional education differed depending on the needs of a particular

society and the demands of its environment. In traditional education,

youth accepted the authority of the elders and learnt specific skills in

hunting, fishing or cultivation.

Missionary education, though committed to formal schooling, placed

emphasis on nonformal education. Centres for elementary industrial train-

ing were all integral parts of evangelism (Makulu, 1971). The early stages

of education in Africa emphasized the spreading of European civilization.

As a result, all tribal institutions which seemed contrary to this were

either discouraged or suppressed. But this approach was challenged by

social anthropologists who gained a better insight and understanding of African society, its institutions and customs. This led to the Phelps-Stoke Commission from America which visited Africa in 1922 and 1925 (Mwanakatwe, 1968). The Phelps-Stoke Commission (1924) made several recommendations, one of which was the establishment of Jeanes schools similar to those in the U.S.A. As a result teachers from all over Africa went to the U.S.A. to study the Jeanes system of education. These teachers were especially interested in the topics of community development, health centres, and methods of teaching (Makulu, 1971).

Jeanes schools concentrated on educational programmes associated with community development (Thompson, 1981). The Jeanes schools established in East and Central Africa after the Phelps-Stoke Commission were based on the community development tradition - a good example of nonformal education existing in Zambia before independence.

Existing community centres in Zambia (one in each province) had been set up partly as a result of the demand for literacy skills and, perhaps, partly due to the pressure from missionaries and the Phelps-Stoke Commission which pressured the colonial office to establish these training centres in rural areas. Community training centres, established in rural areas by the colonial government, portray another aspect of nonformal education which still exists in Zambia today. Earlier emphasis focused on mass literacy, leadership training, vocational training in local skills, health education, and traditional skills.

Agricultural extension, another aspect of nonformal education, was developed, after 1924, by the British colonial office in many African countries, including Zambia (Honeybone et al., 1979; Thompson, 1981). Agricultural Extension Services continue to be operated by the Ministry of

Agriculture and Water Development and seek to persuade farmers to increase and diversify production through the introduction of new farming practices. Although they seek to persuade rural women to adopt new homecraft practices, often agricultural extension programmes have tended to focus primarily on menfolk (Thompson, 1981; Coombs and Ahmed, 1974).

Farmer training centres, established between 1949 and 1951, focused on the training of extension workers. But they expanded their activities to farmer training in 1960 (Honeybone, 1979). They established a farm institute in every province which concentrated its activities on training prosperous farmers as well as extension staff.

Farmer training centres offered the farmer residential courses lasting from one to two weeks. They focused on teaching theoretical aspects of modern farming techniques to small-scale, subsistence-oriented farmers in order to speed up their progress. This approach seemed cheaper than visiting farmers. Honeybone (1979) notes that, at the time, only 25% of rural households had at least one member who had attended a course. The field extension service was unable to provide follow-up assistance to the farmers since the extension staff was required to cover an average area of 500 square kilometres on a bicycle. In Zambia and Kenya, the ratios of extension staff to farm holding was 1 to 1,000, a figure which compares favourably with the situation in other African countries: Malawi, with one to 1800 holdings; Senegal, one to 2000 holdings and Mali with one to 8500 holdings (Thompson, 1982). Apart from the workload, some extension staff lacked sufficient training to carry out their responsibilities. The performance of farmer training centres during the Second National Development Plan was summarized by Honeybone (1979):

> Thus the future of farmer training is unclear. Scepticism in
> some quarters about its contribution is mixed with the desire
> for a symbol of development in others. The under-utilization
> of existing investment and the uncertainty about its impact
> have produced a situation where it is necessary to look more
> fundamentally at the relevance of farmer training to the needs
> and conditions of rural communities. (p. 129)

**Participation in Nonformal Programmes**

There is no clear policy on nonformal education in Zambia today. Non-formal education activities cut across several ministries, non-governmental organizations, and associations. The ministries are: Labour and Social Services; Agriculture; Defence; Marketing and Cooperatives; Health; Youth and Sport; and Education. Besides government departments, several non-formal education activities are conducted by mining companies, parastatal organizations, church organizations, and other non-governmental organizations. Unfortunately, no national body coordinates nonformal education programmes that are conducted by different government departments and non-governmental organizations and associations as is the case in some countries - like Lesotho and Botswana (Coles, 1982). The absence of such a body may contribute to lack of coordination of nonformal education - be it at the planning stage or the implementation stage.

Participation patterns in nonformal education activities have not changed over the years. Table 1 shows attendance in farmer training programmes by province from 1978 to 1983. Although the figures are incomplete, female participation is lower than for men. Table 2 presents data on courses organized for farmers for each province. In six of the nine provinces the number of courses held increased between 1978 and 1983. Participation in functional literacy classes is reported in Table 3. Although there has been about 20 percent increase in some provinces, such

Table 1.  Farmer attendance in training programmes to total population by province, 1978-1983.

| Date | Courses | Central | Copperbelt | Eastern | Luapula | Lusaka | Northern | North-western | Southern | Western |
|------|---------|---------|------------|---------|---------|--------|----------|---------------|----------|---------|
| 1978-79 | Male | | 1031 | 297 | 44 | | 31 | 225 | 113 | 96 |
| | Female | | 653 | 678 | | | | 117 | 78 | 150 |
| 1981-82 | Male | 607 | 109 | 455 | 514 | 345 | 623 | 90 | 91 | 1,370 |
| | Female | 43 | 17 | 90 | 30 | 86 | 109 | 351 | | 340 |
| 1982-83 | Male | – | – | 2,725 | 886 | – | – | 1,717 | 200 | – |
| | Female | – | – | 1,153 | 168 | – | – | 606 | 184 | – |
| 1980          ) | Male | 258,773 | 642,667 | 308,718 | 197,001 | 355,006 | 319,373 | 143,956 | 337,593 | 222,382 |
| Population) | Female | 255,062 | 606,221 | 347,663 | 215,797 | 338,872 | 358,521 | 157,721 | 348,876 | 265,606 |

Source:  Ministry of Agriculture and Water Development.  Annual Reports (1978-83).  Lusaka:  Government Printer.

Table 2. Number of farmer course programmes "planned" and "held" by province, 1978-1983.

| Courses | Central | Copperbelt | Eastern | Luapula | Lusaka | Northern | North-western | Southern | Western |
|---|---|---|---|---|---|---|---|---|---|
| **1978-79** | | | | | | | | | |
| Courses planned | 60 | 58 | 171 | 40 | 83 | - | 93 | 20 | 112 |
| Course held | 13 | 20 | 64 | 34 | 20 | - | 24 | 11 | 26 |
| **1981-82** | | | | | | | | | |
| Courses planned | 88 | 88 | 90 | 125 | 97 | - | 112 | 120 | - |
| Courses held | 58 | 28 | 61 | 93 | 94 | - | 94 | 47 | 62 |
| **1982-83** | | | | | | | | | |
| Courses planned | 108 | 94 | 303 | 158 | 135 | 18 | 158 | 144 | 230 |
| Courses held | 66 | 63 | 191 | 101 | 111 | 11 | 133 | 31 | 145 |

Source: Ministry of Agriculture and Water Development. Annual Reports (1978-83). Lusaka: Government Printer.

Table 3. Participants in functional literacy programmes of province, 1976-1979.

| Number of participants | Central | Copperbelt | Eastern | Luapula | Lusaka | Northern | North-western | Southern | Western | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | 691 | 218 | 888 | 469 | - | 1,049 | 231 | 1,118 | 843 | 5,507 |
| 1977 | 560 | 373 | 436 | 416 | 116 | 617 | 344 | 882 | 545 | 4,289 |
| 1978 | 350 | 305 | 478 | 389 | 84 | 487 | 535 | 421 | 616 | 3,665 |
| 1979 | 968 | 235 | 557 | 438 | 105 | 889 | 489 | 498 | 710 | 4,899 |
| 1980* | | | | | | | | | | |

* No figures were accessible for 1980 or later.

Source: Department of Community Development. Annual Reports (1976-79). Lusaka: Government Printer.

as Central and Northwestern, the total functional literacy participation
figures indicate a downward trend from 5,507 in 1976 to 4,899 in 1979.
Table 4 presents participation figures in Women's Clubs by province.
Participation in Women's Clubs has not increased in some provinces such as
Western, Northwestern and Copperbelt.  The total participation figures
indicate a downward trend from 17,493 in 1976 to 15,190 in 1979.

**Integrated Rural Development Programmes**

Zambia inherited a dual economy which is characterized by two major
contrasting sectors:  a traditional rural subsistence sector and a modern,
urban industrial sector.  These two sectors manifest contrasting patterns
of production, consumption, and exchange.  But despite these differences,
they are closely locked in a relationship of great inequality.[2]  The
urban industrial sector draws resources from the rural sector without
feeding back proportionate returns.

Although Zambia inherited a dual economy at independence (1964), no
attempt was made to bridge the socioeconomic gap between rural and urban
areas (Seidman, 1974).  In fact, that gap has been widening (ILO, 1979).
Resource allocation has tended to favour the modern industrial urban
sector.  During the First National Development Plan (1966-72), three
provinces (Copperbelt, Central and Southern) absorbed 82 percent of the
total budget, in contrast to 69 percent envisaged by the plan (Mwali et
al., 1981).

Although the government has invested in services and infrastructure in
rural areas, such investments have not been complemented by either favoura-
ble agricultural policies or a good pricing system.  For example, prices of
agricultural produce have been too low for farmers to make any profit.

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[2] The historical roots of disorted development during the colonial
period are adequately dealt with by Mutemba (1980).

Table 4.  Participation in Women's Clubs by province, 1976-1979.

| | | Central | Copperbelt | Eastern | Luapula | Lusaka | Northern | North-western | Southern | Western | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | Clubs | 142 | 72 | 135 | 234 | - | 209 | 120 | 250 | 100 | 1,263 |
| | Participants | 1,426 | 820 | 1,392 | 2,505 | - | 2,116 | 1,845 | 5,799 | 1,590 | 17,493 |
| 1977 | Clubs | 132 | 72 | 130 | 237 | 22 | 243 | 169 | 233 | 112 | 1,350 |
| | Participants | 1,596 | 754 | 1,687 | 2,227 | 249 | 2,586 | 1,890 | 3,864 | 1,309 | 16,162 |
| 1978 | Clubs | 138 | 72 | 184 | 198 | 24 | 133 | 110 | 221 | 102 | 1,182 |
| | Participants | 1,797 | 600 | 2,232 | 2,331 | 295 | 2,149 | 1,573 | 1,920 | 1,920 | 14,817 |
| 1979 | Clubs | 103 | 28 | 159 | 208 | 24 | 214 | 100 | 229 | 96 | 1,161 |
| | Participants | 1,437 | 368 | 1,566 | 2,350 | 267 | 2,746 | 1,593 | 3,087 | 1,776 | 15,190 |

Credit facilities and government subsidies have favoured large scale commercial farmers near urban areas and not small scale peasant farmers who are a majority in rural areas. The services offered in rural areas have not gone far enough compared to those in urban areas (TNDP, 1979). Many rural villages are still inaccessible to government services and facilities as well as from essential marketing outlets.

Zambia's policy towards rural development has been evolving. Although the Second National Development Plan (1972-76) focused more on rural development than the First National Development Plan (1966-70), it was not until the period of the Third National Development Plan (1979-83) that the government took positive steps to improve agricultural production. An example is the lima programme which focuses on the production of cash crops by peasant farmers. The Lima is a small plot given to an individual, separate from his own plot, for which he receives a seasonal loan for agricultural inputs and services. Even though emphasis was being placed earlier on rural development and agricultural production, Zambia's short-lived prosperity from copper production did not assist in diversifying the economy by investment in rural areas. Instead, money was invested in capital intensive projects in the industrialized urban sector, at the expense of the rural sector (Meyns, 1984). Part of the rural development strategy in 1972 was establishing Intensive Development Zones (IDZs), which were later reorganized and called Integrated Rural Development Programmes (IRDP). Another rural development strategy involved establishing state farms (Evans, 1984).

The Intensive Development Zones policy was based on the growth pole theory and is a variant of the growth centre strategy which assumes that effects in one area will spread to surrounding areas; the spill-over

effects (Mwali et al., 1981). According to this policy, very little expenditure would be directed to the periphery. The Intensive Development Zone strategy was first adopted in Chipata District of Eastern Province in 1972. This development strategy seemed to concentrate investment efforts on a few, selected areas and seemed to be of primary benefit to already better-off households. It was seen by many to be creating social differentiation in those areas (Mudenda, 1984).

After an evaluation of IDZ in 1978 conducted jointly by the government of Zambia and the Swedish International Development Agency, the Integrated Rural Development Programme (IRDP) was established. Whereas the IDZ programme emphasized the spill-over effect, IRDP emphasized providing direct assistance to those households not being reached by existing government services. The programme was integrated into the regional strategy for the Third National Development Plan (TNDP) (1979-83).

Realizing the gap in social and economic change between urban and rural areas, the government put more emphasis on rural development in the TNDP (1979-83). It identified the following specific objectives for rural development:

(1) to increase agricultural production to achieve self-sufficiency in staple foods, both nationally and regionally, and to provide raw materials for agricultural industries;

(2) to stimulate and increase production for export;

(3) to increase the contribution of the rural sector to the GNP and to promote diversification of the rural economy;

(4) to counter rural-urban migration by creating new employment and income opportunities in rural areas; and

(5)  to decentralize decision-making and encourage greater local

participation in rural development (TNDP, 1979, p. 80).

It was acknowledged at the time that services offered to rural areas
were far fewer than those offered in urban areas (TNDP, 1979). It was
hoped that surrounding areas would benefit from the development of
integrated programmes although there is evidence that the Integrated Rural
Development Programmes have not produced the anticipated benefits.

IRDP were instituted in 1979 in Eastern, Northern and Luapula
provinces and later in Northwestern province (see Figure 4). The objective
of IRDP, in general terms, has been the improvement of the quality of life
in rural areas. It is assumed that the above objectives would be achieved
as follows:

(1)  by strengthening Zambian institutions in rural areas;

(2)  by improving services to the rural population;

(3)  by increasing hectarage under improved cultivation, hence

increasing agricultural productivity;

(4)  by increasing income for the rural populations;

(5)  by improving the standard of living.

Different aid agencies implemented IRDP in different provinces (for
example, the Swedish International Development Agency in Eastern, Northern,
and Luapula provinces). The funding agency worked through existing govern-
ment departments - Agriculture, Community Development, and Health - in the
specific areas in which they were operating. In some situations, the
agency directly implemented the programme as was the case at Kalunga and
Kalichero farm training centers in Eastern Province. A detailed descrip-
tion of these training centres is included later in Chapter 4. But in some
districts in Northern Province, IRDP operated under district planning

Figure 4. Provinces and Districts in Zambia.

—— = Provincial boundaries;  - - - = District boundaries.

Source: The Ministry of Health profile. (1978). Lusaka: Government Printer.

units. The Decentralization Act (1981) required that one funding agency work through district planning committees. Recently, Integrated Rural Development Programmes in Chipata District have changed their approach from directly funding programmes through government departments to funding programmes through District Councils. This is a process in transition that seems to be affecting those activities that received funds from IRDP.

## Summary

This chapter has provided the context of the study. It outlines for the reader the development of nonformal education programmes in Zambia before and after the colonial experience. It focuses on present trends in a country that has experienced tremendous social and political change in less than a century. Contemporary nonformal education in Zambia continues to draw strength from its historical antecedents. The British Colonial Office established Community Development Training Centres farm training institutes, and Marketing Boards in each province as early as 1950's. The Intensive Development Zones that were established in 1972 and later transformed into Integrated Rural Development Programmes were modelled from those established in Malawi under the colonial legacy (Loveridge, 1978). Many original training centres still exist today along with newly established ones.

Nonformal education has a major role to play in rural areas because it embraces educational activities of many government departments and non-governmental organizations. Although training centres have continued to offer nonformal education activities, there is need to strengthen existing training programmes. Nonformal education may help transform rural areas into more desirable places to live and eventually reverse the rural-urban migration.

The IRDP has been one of several attempts to reach the neglected small-scale peasant farmer. But the implementation of the Decentralization Act (1981) may hinder such chances for the small farmer. While the Decentralization Act calls for local participation in the decision-making process, it neither implies nor guarantees increased participation in decision-making at the local level (Kanduza et al., 1985). Bwalya (1984) has argued that participation in power sharing through ward development and village productivity committees tends to favour the local elites. The limiting size of village productivity committees comprising 8 members out of an estimated average of 500 people in a village means that only the politically and economically powerful can participate (Bwalya, 1984; Maramwidze, 1980; Ollawa, 1979). Similar observations relate to ward development councils and district councils. The Decentralization Act may give power for political decisions to district councils, whose Committee members may not be ready for this challenge. Participation in decision-making by provincial and district administrators may not bring much change unless it is accompanied by financial autonomy. So long as major financial decisions are introduced from the headquarters in Lusaka, some of the problems related to delays will persist. It is too early to evaluate the actual impact of the implementation of the Decentralization Act (1981) since it has not yet been implemented fully in some districts such as Chipata.

The next chapter reviews literature on nonformal education, its origins and its role in the development efforts of developing countries. Research studies and other literature on implementation are reviewed and their relevance to this study is discussed.

CHAPTER THREE

REVIEW OF THE LITERATURE

This chapter presents a review of literature relevant to the study.
Literature related to five issues is discussed in detail:

1. The concept of nonformal education.

2. Nonformal education and development.

3. Research on nonformal education.

4. Integration.

5. Implementation.

## The Concept of Nonformal Education

Discussions on the meaning and development of the concept of nonformal
education are centered around three main topics:  international education
planning, critique of schooling, and the practice of nonformal education.

The first topic deals with international education planning issues.
Coombs (1968), in analyzing educational systems of various developing
countries, articulated dissatisfaction with the formal school system and
stressed the rapidly approaching limits of further expansion.  He advocated
nonformal education as a potential solution to this crisis.  This pattern
of criticism and advocacy led several agencies to sponsor a series of
research and development studies to field test programmes facilitative of
the nonformal education approach (Evans, 1981).  Key examples of such
studies are those by Sheffield and Diejomaoh (1972) and the International
Council for Educational Development between 1973 and 1980.

Another topic is dealt with by critics of schooling.  This group of
theorists assert that nonformal education can be traced from the ideas

developed by influential critics of schooling. Illich (1970), Friere (1970), and Carnoy (1976) have forcefully presented the case against schools as institutions for development. They argue that schooling perpetuates inequalities that exist in society and present nonformal education as an alternative to formal schooling.

The third topic is dealt with by a group of practitioners which has allowed the evolution of new definitions in this field of study. This group has sought to distinguish which educational activities are indeed nonformal education in character. Their main concern has been to categorize the various out-of-school activities (Callaway, 1973; Forster, 1975). Nonformal education activities include: basic literacy, functional literacy, farmer education, cooperative education, agricultural extension, population education, family-life planning, nutrition education, community development and youth activities.

There is no general agreement in the literature as to what nonformal education is (Coombs, 1968, 1974; Brembeck, 1973; Grandstaff, 1971). Several recent field studies attempted to classify activities that are construed by them to be within the domain of nonformal education (Callaway, 1973; Forster, 1975). Their classification scheme has been useful in identifying nonformal education activities. A major task in the plethora of field studies was that of subclassification of out-of-school educational activities in each region of developing countries (Sheffield and Diejomaoh, 1972; Ahmed and Coombs, 1975; Coombs et al., 1973). These early attempts identify additional activities which, though out-of-school in nature, were clearly nonformal in character.

The definition proposed by Coombs (1973) is the most widely accepted. Coombs (1973) defines nonformal education as:

... any organized educational activity carried on outside the framework of the formal system to provide selected types of learning to particular subgroups in the population, adults as well as children. (p. 11)

The definition seeks to differentiate a wide range of nonformal educational activities carried on in educational institutions (schools).

Coombs (1976) argued that both formal and nonformal education are organized to complement and improve upon informal learning. (For example, literacy and numeracy are skills that individuals cannot easily acquire through their environment). But formal and nonformal education systems differ in their sponsorship, institutional arrangements, educational objectives and in the target groups they try to serve (Coombs et al., 1973).

Brembeck (1973) saw formal and nonformal education as two distinct systems each having its own merits in fostering learning. Unlike the case of formal schooling the merits of nonformal education lie substantially in its ability to be used for immediate needs (Brembeck, 1973). He argued that learned behaviour is determined by the environment in which it takes place. The learning environments of formal and nonformal education tend to have different characteristics (Brembeck, 1973). These characteristics in turn shape learned behaviour. The merits of nonformal education lie in its ability to be used for immediate needs. It is therefore essential, he argued, to have both educational environments in order to produce all behaviours required in a society. It may appear as though Brembeck was proposing two distinct educational systems: a system of schooling and a system of nonformal education.

Evans (1981) defined nonformal educational activities according to how they relate to formal schools. His classification scheme for nonformal education activities identified:

(a) complementary education, which rounds out the school curriculum;

(b) supplementary education, which adds on to schooling at a later time; and

(c) education which replaces schooling.

Included under the complementary education category are nonformal educational activities involving youth organizations like scouting, young farmers clubs, sports clubs and hobby groups, debating societies, and voluntary service activities which are often sponsored by private organizations. Although some of the activities listed within this category are organized by the schools, some of them are organized and supervised by non-school personnel or organizations.

Supplementary education refers to nonformal educational activities that add to the learning produced in school settings. These activities include a wide range of apprenticeships, skill-training programmes, farmer training courses and family or home economics training (Evans, 1981, p. 21).

The last category of nonformal education identified by Evans (1981) is replacement education. Its programmes replace or substitute for formal schooling. Such nonformal endeavors include basic-literacy courses, normally attended by a mixture of unschooled and lesser schooled children and adults. Here the content covered embraces basic skills of literacy and numeracy, and rudimentary skills in practical subjects such as health, nutrition, and agriculture. This category of nonformal education has attracted much attention from planners who recognize it as a technique for alternative schooling. Yet several have argued against replacing formal

schooling with out-of-school activities. Despite such criticism nonformal education has the potential of reaching a large group of the population not served by formal education.

Harbison (1973) followed Coombs definition but viewed nonformal education as the generation of skills and knowledge offered outside the formal schooling system. He is especially concerned with human resource development. Harbison attributed great importance to nonformal education in meeting a nation's new and expanded knowledge and skill requirements. He laid out possible functions of nonformal education which are:

1. Activities oriented primarily to development of the skill and knowledge of members of the labour force who are already employed.

2. Activities designed primarily to prepare persons, mostly youth, for entry into employment.

3. Activities designed to develop skill, knowledge, and understanding which transcend the work world (Harbison, 1973, p. 59).

Harbison's views were guided by the human capital theory. He was writing during a time most African countries had just attained their independence, and was concerned about how the countries could expand their economies. His views, however, assumed that nonformal education would be tied to nationally defined aims, chiefly economic, and its implementation would be controlled by those whose interests reflect the national aims. Harbison's model, however, ignores implementation of nonformal education programmes organized by different social movements in society, such as those offered through trade union movements.

Paulston's (1972) definition views the education system of a society as four concentric circles. The outer, largest circle represents formal education systems. The second ring is the nonformal component where

structured non-school educational programmes are offered. The third inner circle represents informal education, where people learn in a non-systematic manner from exposure to cultural facilities, social institutions, political processes, personal media, and mass media. The last ring, international education, includes knowledge inputs made by entities outside national boundaries. Paulston's (1972) definition deals inadequately with the interaction between educational processes between the different circles: a special concern is the ability to deal with the inner and outer circles.

La Belle (1975) outlined a close relationship between formal, non-formal, and informal educational systems by analyzing the predominant learning modes through which each takes place. He follows the definitions of Coombs and Ahmed (1974) in his analysis. While Coombs and Ahmed (1974) seem to treat the three modes of education as discrete entities, La Belle (1975) sees the three educational modes, that is, informal, nonformal and formal, to exist all at the same time. This is illustrated in Figure 5.

Figure 5 illustrates the three interactive modes of informal, non-formal, and formal education systems. In formal education, what is taught in the curriculum is related to other educational modes like peer group. At the same time, the school offers nonformal education programmes through extra-curricular activities. Along the vertical line are the predominant modes of education. These reflect the dominant type of learning process from the perspective of the observer or the learner. For example, an observer may decide to choose to focus observation on learning activities that the teacher is offering based on the curriculum rather than on what is learnt from peer groups.

Educational characteristics

Informal

Nonformal

Formal

Graded hierarchy schools

Extra curricular

Peer group

Certifi- cates

Systematic out of school

Partici- pation

Daily experi- ence

Workplace

Parent Instruction

Examples of process and organizational implications

Educational modes

Formal Education

Nonformal Education

Informal Education
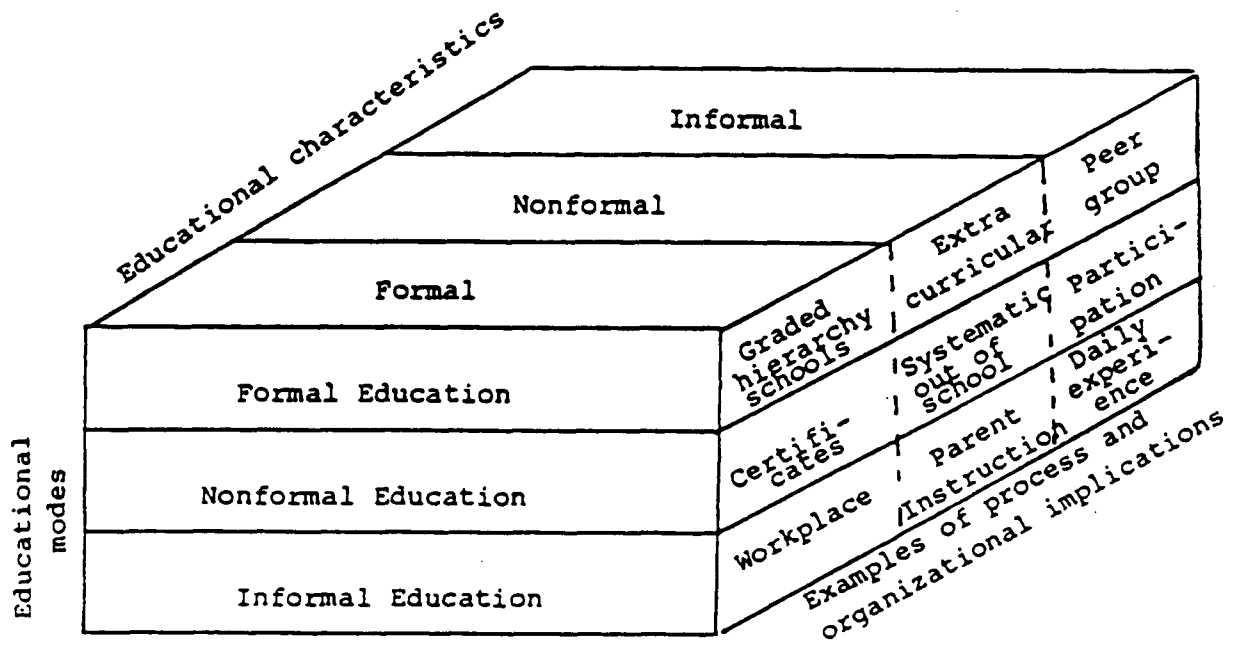
Figure 5. La Belle's typology of formal, nonformal, and informal education.

Source: La Belle, T.J. (1979). Liberation, development, and rural nonformal education. In R.O. Niehoff (ed.), Nonformal education and the rural poor. East Lansing: Michigan State University.

At the top of the figure are educational characteristics. Here the emphasis is on the structure rather than the process of education. Characteristics of formal education include: ordering of programme levels; compulsory attendance; admission requirements; and certification. Characteristics of nonformal education include: extra curricular activities, systematic out-of-school activities and parental instruction and guidance. Characteristics of informal education include: peer group activities and everyday experiences.

The aim of the figure is to display the interrelationships among the three educational modes. However, within the three educational modes, there exist other learning opportunities that occur simultaneously in the same instructional setting. For example, children in school learn from their involvement in extra curricular activities and from their interaction with peers in addition to the learning that occurs in the classroom.

This author's conceptualization of nonformal education is presented in Figure 6. In Figure 6, quadrants 1 and 4 represent the formal schooling system from elementary to institutions of higher learning. Quadrant 2 represents nonformal education activities designed for children and youth, who are not part of the formal school system. There is an overlap between nonformal education and adult education as presented in quadrant 3. Some adult education activities are offered outside the formal education system and are therefore nonformal. It is here that the overlap between nonformal and adult education occurs. Since this research focuses on nonformal education activities for rural youths and adults, the programmes represented by quadrants 2 and 3 were relevant.

Definitions of nonformal education have followed that of Coombs (1973). He argued that there is a close relationship between formal, non-

Formal Education          Nonformal Education

|   |   |   |
|---|---|---|
| 1 | 2 | Pre-Adult (Youth) |
| 4 | 3 | Adult Education |
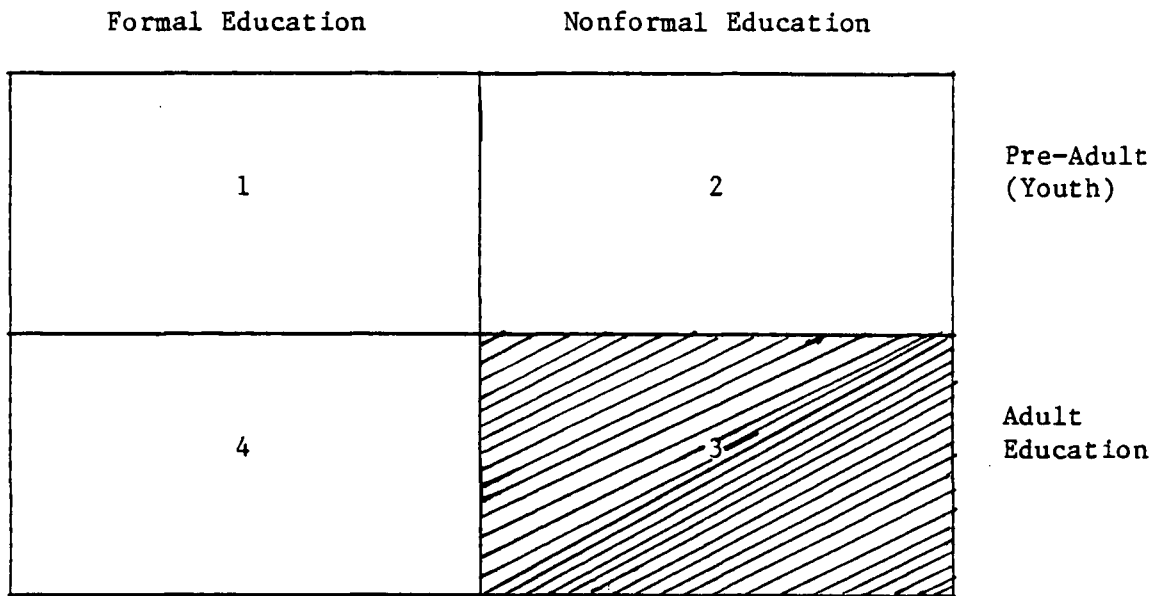
Figure 6.   Relationship between nonformal and adult education.

Quadrants 1 and 4 represent the formal school system.

Quadrant 2 represents nonformal education for children and youth.

Quadrant 3 represents nonformal education activities for adults.  The shaded area represents an overlap between nonformal education and adult education.

formal and informal systems of education. Although Coombs (1976) insisted that there are no marked differences between formal and nonformal education systems, he was not clear on the close relationship that exists between the two systems since formal education is largely funded by the state while nonformal education programmes may be funded by private organizations or the state. It may be difficult for privately funded nonformal education activities to have a close relationship with the formal educational system.

While Coombs (1974) believes that there is a close relationship between formal and nonformal education, Brembeck (1974) saw the two as distinct systems each having its own merits in fostering learning. Since nonformal education is flexible, he argued, it can easily adapt to innovations and it can be applied to immediate needs of learners. He strongly argued that formal education alone is not able to produce all the behaviours required in society as it is often assumed. It appears that Brembeck (1973) was proposing two distinct kinds of educational systems, i.e., schooling and nonformal education. This analysis differs from Coombs (1974) in which formal education is closely related to nonformal education.

Harbison (1973), using a definition similar to Coombs, saw many functions of nonformal education. He believed that the major function of nonformal education is to provide people with skills for high level jobs in the economy as well as a means of counterbalancing some distortions created by formal education. Coombs' (1974) model differs from Harbison's because it emphasizes rural development and the improvement of life for rural people.

The common theme that emerges in the literature on nonformal education is as follows: nonformal education encompasses a wide range of educational and developmental activities that aim to relate to the immediate needs of the target population. Nonformal programmes tend to be practical in nature, and are designed to provide skills and knowledge for immediate use. Nonformal education programmes tend to be short term and tangible (Simkins, 1971). The nonformal programme may be organized by government, private or voluntary associations but its implementation is not rigidly structured. It is offered to all age groups in society. Nonformal education has great potential as its structure and form can be made flexible to bring about a desired objective (Dejene, 1980).

### Nonformal Education and Development

Two dominant theoretical positions about education and change hold special significance for this thesis: the equilibrium and the conflict positions. They influence the way different authors view the relationship between nonformal education and development. Yet within these two main categories, numerous perspectives exist. Before we discuss these two theoretical positions, it is important to define development.

### Development Defined

The concept of development was at one time equated with economic development (Dejene, 1980). The broader view of development encompasses all areas of development: social, political and economic. Rogers (1976) defines development as:

> ... a widely participatory process of social change in a society,
> intended to bring about both social and material advancement
> (including greater equality, freedom, and other valued qualities)
> for the majority of the people through their gaining greater
> control over their environment. (p. 133)

This definition of development differs from an earlier one that
centered on materialist, economic growth. This approach is broad, more
flexible and, at the same time, more humanitarian in its implications. The
valued qualities must be decided by the people themselves through a widely
participatory process. Each group might pursue a different pathway to
development. In this way, development represents a powerful change toward
the kind of social and economic system that a country desires (Schramm and
Lerner, 1976). Development is a process of social, economic, and political
change towards modernity.

Myrdal (1972) regards development as the movement upward of the entire
social system to an improved standard of life. Because this definition of
development is directed to the social systems level, it includes both
economic and non-economic factors such as health, education, and other
social needs. This definition incorporates both Rogers' (1976) ideas and
those of Schramm and Lerner (1976).

**Modernization**

Smelser (1968) defines modernization as a process of transformation
of traditional societies, where institutional roles are differentiated and
diffused. Other changes that may occur often relate to the following areas
(Smelser, 1968: 28):

1. The change from simple and traditional techniques toward the
   application of knowledge.

2. The evolution from subsistence farming toward commercial production of agricultural goods.

3. The transition from the use of human and animal power toward industrialization.

4. The movement from the farm and village toward urban centres.

Modernization theory emerged in the 1950s as an intellectual response to the two world wars (Fagerlind and Saha, 1983). Early forms of modernization theory focused on the advancement of newly independent states by studying the path followed by industrialized societies. Huntington (1976) characterized modernization as revolutionary:

> ... A dramatic shift from traditional to modern, complex (multiple causes), systematic, global (affecting all societies), phased (advance through stages), homogenizing (convergence), irreversible and progressive. (Fagerlind and Saha, 1983, p. 15)

Modernization theory is based on the idea that there is a direct linkage between the following sets of variables: modernizing institutions, modern values, modern behaviour, modern society and economic development (Inkeles and Smith, 1974; Fagerlind and Saha, 1983). MacLelland (1961) in major studies in Japan and Asia, examined modernity and argued that the rise and fall of civilizations is due to the individual values held by the majority of the population in society. He proclaimed that the achievement motive (n Ach) which an individual acquires through socialization makes a society open to economic and technological advancement.

Fagerlind and Saha (1983) argue against the underlying assumptions of the modernization theory which stipulates that modern attitudes and values are incompatible with traditional ones. They have examples from Japan where traditional forms of labour seem to have contributed to economic

growth. Modernization theory assumes that modern values and behaviours by individuals necessarily lead to socioeconomic development at the societal level. They argue that society is not simply the sum total of the individuals within it. They give as an example of the emigration of professionals from less-developed countries, a form of modern behaviour which could not be said to contribute to economic development of those countries.

Modernization efforts in Zambia have taken many forms. Several government development efforts have been designed to transform the Zambian society from a traditional to a modern society. Several contradictions emerge in a society that is in the process of transformation, whether to completely abandon the traditional way of life and internalize new values or to keep traditional values while at the same time internalizing new values. What one may observe is a mixture of two cultures, at times in harmony with each other. But the government of Zambia is committed to transform the society into a modern society while keeping desirable values from a traditional society of the past. Nonformal education activities offered in rural areas have been designed to assist rural communities in the move towards modernity while maintaining traditional values.

## Structural Functionalism

Equilibrium theory shows the social system always moves toward a preferred state. Such a state is arrived at as a result of natural order as well as certain mechanisms such as socialization and social control processes. Structural/functionalists believe in equilibrium, that socialization is what holds society together (Karabel and Halsey, 1977).

Society is seen as a system composed of interrelated parts (religion, education, political structures, the family, etc.). These parts are said to be in equilibrium. Non-normative events or arrangements are said to produce tensions (Fagerlind and Saha, 1983).

Structural/functionalist theory shows change to be either internal or external to the system. Internal changes are adjustments to some dis-equilibrating pressure which results in some alterations in the system. Structural changes occur when disturbances are sufficient to overcome the forces of equilibrium.

Structural/functionalists view educational systems as being able to offer opportunities for mobility of individuals. Coombs (1968) and Harbison (1973) use the structural/functionalist assumptions in their analysis of the relationship between nonformal education and development. Nonformal education is seen as a vehicle for bringing about desired change within a system. Hence, as proponents, they believe that the state should plan nonformal education programmes in order for such change to occur (Evans, 1981).

Evans (1981) concludes that:

> Nonformal education has demonstrated its capability of carry-
> ing out many educational tasks which cannot and should not be
> attempted in schools. The future development of nonformal
> education lies in its integration into the overall educational
> sector along with formal education. Planning for nonformal
> education must function to encourage its strengths while pro-
> viding an overall framework within which it can grow in a
> manner consistent with the goals of national development.
> (p. 97)

Structural/functionalism has been criticized for focusing on static aspects of society to the neglect of change, process, conflict, and dissent (Fagerlind and Saha, 1983). Harmony and integration are seen as functional,

whereas conflict, change, and tension are seen to be dysfunctional and to
be avoided. But Parsons' later works incorporated evolutionary theory
where societies were said to move along an evolutionary path through the
processes of integration, differentiation, and reintegration, taking into
account both internal and external factors. Fagerlind and Saha (1983)
suggest that neo-evolutionary theory is responsible for the emergence of
modernization theory.

## Conflict Theories

Conflict theory rests upon the assumption that human intervention is
the decisive force in the shaping of history and social change (Karabel and
Halsey, 1977). This intervention results as conflicting groups gain or
lose relative political power and thus the ability to influence change.

Education is seen as playing a key role in the acquisition of attri-
butes, skills, and expertise necessary to function in an effective manner
to influence change. While structural/functionalists view educational
systems as being able to offer opportunities for mobility of individuals,
conflict theorists stress the role of education in maintaining a system
of structured inequality (Carnoy, 1976; Bock, 1976; La Belle, 1976). They
believe that the educational system helps to define which people may legi-
timately play which roles in society.

Bock and Papagiannis (1983) contend that the institutionalization and
legitimization of nonformal education further perpetuates the distortions
and inequalities that exist between the urban and rural sector. They argue
that the state may sponsor nonformal education programmes to extend its
influence beyond the formal schools. Such influence would foster

participation and promote nationalistic values which would in turn help to maintain the existing social order (La Belle, 1976; Bock and Papagiannis, 1983). They argue against institutionalization of nonformal education, as it legitimizes the inferior status of its graduates and therefore perpetuates the existing inequalities in society.

The literature indicates that different theoretical orientations influence how the theorists perceive the relationship between nonformal education and development and how nonformal education may be implemented. Those influenced by the structural/functionalist theories stress state-planned nonformal education systems (Coombs et al., 1973; Coles, 1982). It is hoped that planning of nonformal education at the national level will increase its contribution to the modernization process (Harbison, 1975; Evans, 1981).

This study uses the structural/functionalist theoretical framework in analyzing state-sponsored integrated rural development in Zambia. It assumes that government efforts to encourage development do contribute to the modernization process.

Those that are influenced by the conflict theories argue that non-formal education should not be institutionalized (Bock, 1976; La Belle, 1976; Paulston, 1976). They view the role of nonformal education as an alternative system in development that may help individuals bring change in society. In most developing countries, both state-planned and locally initiated nonformal education programmes exist side by side (Evans, 1981).

## Research on Nonformal Education

Before discussing the concept of integration, it is important to review some research studies that have been conducted on nonformal education. Most research on nonformal education has focused on finding out which activities existed where and in what form. Research was initiated by international aid agencies that became interested in investing in nonformal education.

Earlier research on nonformal education consisted of surveys that tried to find out which nonformal education programmes existed. Specific examples of such research studies were those conducted in several African countries (Kenya, Zambia, Botswana, Nigeria and Tanzania) by Sheffield and Diejomaoh (1972); Coombs et al. (1973); and Coombs and Ahmed (1974).

Later studies focused on the projects of individual countries (La Belle, 1976; Bock, 1975; Forster, 1975; Coombs, 1980). These studies focused on the impact of nonformal education on the individual. Results of the studies indicated limited participation among those with little previous education. The findings of these studies indicated that most nonformal education programmes developed in response to some specific needs as identified by the government or by the community. The findings that integrated nonformal programmes that involved local people were effective in achieving their goals.

Other studies on the impact of nonformal education on the individual have been conducted in Latin America by La Belle (1975). He found that non formal education programmes utilized mainly psychological approaches and did not markedly improved the power and prestige of the participants. Bock (1975) conducted a study in Malaysia in which he found that the graduates

of nonformal education training did not get better jobs compared with those who graduated from formal training. But they accepted their inferior position due to the rudimentary quality of their training from the non-formal education programme. Dall (1983) studied nonformal education training programmes for youths who leave school early. He found that young men from these programmes did not aspire to higher paying jobs.

In many developing countries, a large number of nonformal education activities are state-sponsored such as those recommended by Coombs and Ahmed (1974) and Evans (1981). Specific examples are those from Botswana, Zambia, and Kenya (Coombs and Ahmed, 1974). Coombs and Ahmed (1974) found that projects which had links with other agencies had higher cost effec-tiveness than those which did not. They have argued the need for integra-tion of nonformal education programmes vertically with government agencies and horizontally with other complementary services within the geographical area. Although many nonformal education activities are organized by non-governmental organizations, these activities tend to be fewer than state-sponsored programmes.

## Integration

The concept of integration is based on the system-centered approach, which emphasizes the linkage between individuals, institutions and the environment. This linkage will seek to promote the improvement of the individual by modifying the patterns of relationships in society. Non-formal education, in this perspective, is one of several important elements in the process of development.

Integration is based on systems theory. A nonformal education programme is seen as a sub-system of the larger system. Systems theory regards the political system as having inputs, capabilities, and outputs. Inputs relate to what the system offers while outputs include outcomes of the system. System capabilities are institutions set up through which inputs are translated into outputs.

At the programme level, this approach focuses on the relationships between different departments and agencies. Figure 7 shows how nonformal education can be organized and implemented. Inputs represent what is offered through nonformal education programmes (agricultural extension, community development, health education, and cooperatives). Outputs represent outcomes of integrated nonformal education activities as they bring change to the lives of participants of programmes. System capabilities represent administrative arrangements that are utilized at national, provincial, district, and local levels. There is feedback from the local level to national on the outputs of the system.

Integration relates to the planning of programmes at administrative levels: it involves both decentralized and centralized control. It is important to strike a balance between supervisory control from the national to the local level in order to encourage local participation. It also involves coordinating activities of non-governmental organizations. Integration incorporates coordination. Coordination is an aspect of integration.

Integration implies the linkage and coordination of efforts between educational and developmental services. It also refers to the maintenance of essential information from among them to promote their objectives. In this way, integration deals with communication within and between organizations.

ENVIRONMENT
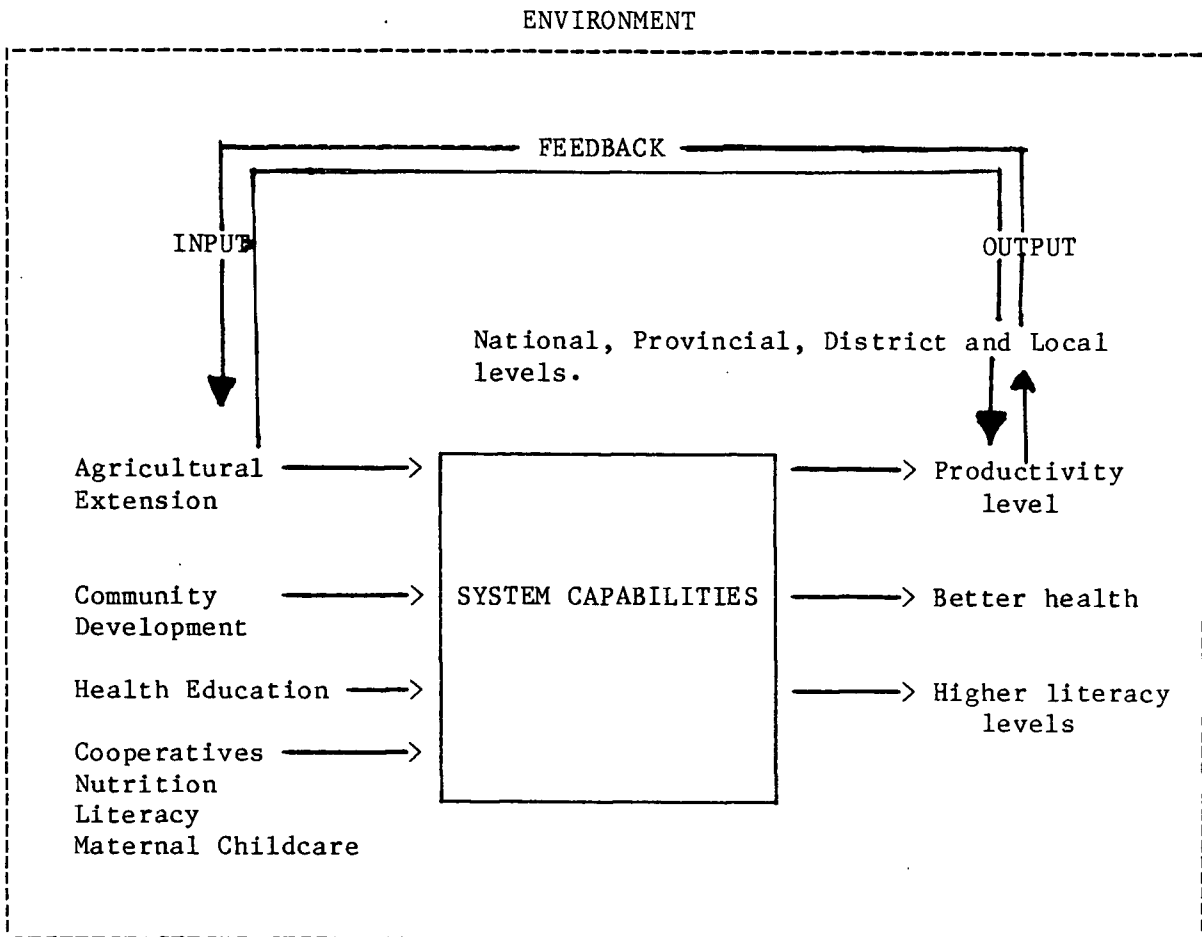


Figure 7:  A systems model representing inputs and outputs of nonformal
           education.

Since integration deals with linkage of one organization with another, it is assumed that the more linkages an organization has with other organizations, the more resources it could have at its disposal. This may not always be true in developing countries. Nonetheless, it is assumed that integration has the potential to improve utilization of limited resources.

## Implementation

Early literature on organizational change focused on individuals' resistance to change (Rogers and Shoemaker, 1964). The literature revealed that the major explanation offered for the success or failure of organizations to implement innovations assumed that members of an organization are initially resistant to change. The literature also assumed that it was the ability of management or a change agent to overcome resistance that accounts for the success or failure of efforts to implement an innovation. Gross et al. (1971) argued that such an explanation ignores obstacles to which members who are not resistant to change may be exposed to when they make efforts to implement innovations. They believed that the literature ignored the possibility that members who are not resistant to organizational change may later develop a negative orientation to it.

Literature on implementation has increased only during the early '70s through the following groups of researchers (Kritek, 1976):

1. scholars involved in organizational change;

2. political scientists concerned with the problem of translating government policies into workable programs, and

3. evaluators who have come to realize that programmes cannot be condemned for failing to achieve intended outcomes if, in fact, they have not been successfully implemented.

Aoki (1977) contends that implementation is not a linear scheme of the practical events of putting a programme into practice. Rather, implementation involves a relationship between the developers of the innovation and the users.

Implementation is a highly complex process involving relationships between users and managers, and among various groups of users, in a process characterized by inevitable conflict and by anticipated and unanticipated problems that one should be prepared for prior to implementation, and should be continually addressed after.

> Always think about implementation problems, and always worry
> that others are not thinking about them, but do not expect major
> improvements to come quickly. (Williams, 1975, p. 566)

Implementation of innovation in developing countries poses even more complex problems since most innovations introduced in these countries come from industrialized western countries (Jennings-Wray, 1985). Jennings-Wray (1985) argues that the assumptions embedded in many innovations from the developed world are often in conflict with traditional cultural values and beliefs in developing countries.

Fullan (1980) stipulated that most studies stress the outcomes of innovations once they have been adopted, ignoring whether change has really occurred. He argued that it is important to study the implementation process in order to determine what actually happened, the roles and role relationships of those organizational members most directly involved in the change process. He believed that for changes to occur the roles and role relationships of organizational members ought to change during implementation. It is important to study implementation on its own in order to

determine, firstly, if in fact change has happened, and secondly to under-
stand why change occurs or fails to occur (Fullan, 1980).

According to Fullan (1979) implementation is defined as:

> ... the actual use or putting into practice of a particular
> change ... it is much more complex in reality because
> implementation is multi-dimensional. (p. 336)

An examination of the components of implementation according to Fullan
(1979) and Ashley and Butts (1971) poses two problems, namely, 1) the
criteria of inclusion, and 2) the degree of explicitness.

The criteria of inclusion comprises the implementation characteristics
that are considered worthy of inclusion in the process. Fullan and Pomfret
(1977) posit that implementation involves considering the following five
characteristics or components of the process:

1. Structure/organization

2. Materials

3. Role/Behaviour

4. Knowledge/understanding

5. Internalization (commitment).

Fullan (1979) stresses structural changes among these components as
necessary and argues that the actual use of the innovation often involves a
change of structures or organization.

Consideration of materials involves the actual use of new materials by
the users. Consideration of role/behaviour raises questions such as "what
behavioural change is required by the user?" Knowledge of the innovation
is a necessary part of implementation. Commitment is a necessary condition
for successful implementation, so lack of commitment may explain why the
introduction of an innovation fails.

Fullan and Pomfret (1977) identify four major categories of determinants of implementation derived from studies. They suggest that a determinant can be described in terms of its complexity and its explicitness. Within the four categories are sub-categories. The four analyzed are listed here as:

## Characteristics of the Innovation

Fullan and Pomfret (1977) argue that the more explicit an innovation, the higher the degree of implementation. Low explicitness causes confusion for the user and results in low degrees of implementation. Complexity or degree of difficulty in using the innovation is another important characteristic of an innovation (Fullan and Pomfret, 1977). Fullan and Pomfret believe that the more difficult the change, or the more new learning required by it, the more likely that the degree of implementation will vary across groups. They conclude that:

> The greater the complexity, the more difficult it is to be explicit about the operational characteristics of the innovation. (Fullan and Pomfret, 1977, p. 371)

## Strategies and Tactics

Fullan and Pomfret (1977) devised the following strategies for effective implementation:

1. In-service training.

2. Resource support.

3. Feedback mechanisms.

4. Participation in decision-making.

There is a need to see implementation as a socialization process where the users and developers work in collaboration with one another in order to specify and redefine the essential traits of an innovation.

## Characteristics of the Adopting Units

In their analysis, Fullan and Pomfret (1977) developed the following characteristics of the adopting units that affect implementation. These are:

1. Adopting process.

2. Organizational climate.

3. Environmental support.

4. Demographic factors.

The question whether the potential users of the innovation felt free to accept or reject the innovation is important as it affects implementation as it relates to the adopting process. Organizational climate of adopting units plays a critical role on whether or not implementation occurs, and how it occurs. Support from leadership and fellow workers improves the chances of implementing an innovation. The geographic environment whether urban or rural is another characteristic that affects implementation. Lastly, the demographic characteristics of users that is: value orientation in relation to the innovation; type of previous training; and ability to use the innovation affect implementation (Fullan and Pomfret, 1977).

## Characteristics of Macro Sociopolitical Factors

Fullan and Pomfret (1977) argue that implementation of innovative programmes can be affected by all the factors identified. At the macro level they identify the following factors:

1. Design issues.

2. Incentive systems.

3. The role of evaluation.

4. Political complexity.

Design issues involve those factors that relate to who is involved in designing the proposed change. Fullan and Pomfret (1977) observe that large-scale programmes proposed by political agents in power have several characteristics that increase the possibility of adoption but decrease the likelihood of effective implementation. They recognized a need for implementors of an innovation to be rewarded and to be consulted in the decision-making process regarding the innovation. Political factors affect evaluation of the implementation of an innovation. If politicians are strong advocates of an innovation, users of an innovation may be afraid to discuss problems associated with its implementation. Another political factor associated with problems of implementing an innovation relates to lack of linking policy and implementation (Fullan and Pomfret, 1977).

The various factors identified under different headings highlight interrelated variables that affect implementation of an innovation. They may appear in different degrees in various innovative programmes but they, nonetheless, affect the implementation of an innovation.

This study of integrated rural development programmes in Zambia analyzed the implementation process to determine what factors facilitate or hinder the change process. The study had the following purposes:

(1) to identify factors thought by administrators to facilitate and hinder the implementation of integrated nonformal education programmes;

(2) to establish the relative influence of each factor, and

(3) to determine the perceived degree of programme integration from the perspective of four administrative levels.

(4) to determine skills and knowledge acquired from integrated programmes through the perceptions of participants.

Several evaluation surveys have been conducted nationwide to review activities of specific government departments and of the IRDP in Zambia. Most studies have focused on the evaluation of the activities of integrated programmes (Mwali et al., 1981; Maramwidze, 1982; Maimbo, 1982; Ministry of Agriculture and Water Development, 1984). Some surveys concentrate on evaluating the situation of women in rural Zambia (Serpell, 1980; UNICEF, 1979; Mutemba, 1981; Chilibvumbo and Kanyangwa, 1985; Safalios-Rothschild, 1985). Each evaluation studies offer recommendations on how programmes can be improved. Other surveys initiated by the funding agencies, focus on how funds have been utilized (SIDA, 1980, 1983).

Despite all the evaluation surveys, programmes are faced with insurmountable problems. Evaluation surveys, it appears, have focused on the impact of the Integrated Rural Development Programmes, rather than on the implementation process of programmes.

### Summary

This chapter provided a review of literature related to this study. It traced the development of the concept of nonformal education and its relationship to development. Relevant research studies were reviewed. It has reviewed literature on implementation, and explained why a focus on factors affecting implementation of programmes is important.

Several evaluations on nonformal education in Zambia have been completed. They have sought to identify the impact of integrated programmes on rural communities rather than to identify factors affecting implementation of programmes. This study focused on the implementation process. It was designed to determine factors that facilitate or hinder implementation

of integrated programmes based on the perceptions of administrators of specific government departments involved in implementing the programmes. The research questions, along with the methods and procedures for this study, are fully described in the next chapter.

CHAPTER FOUR

RESEARCH METHODOLOGY

The last chapter discussed literature related to: the concept of non-formal education; nonformal education and development; integration, research on nonformal education; and implementation. Research on integrated nonformal education programmes in Zambia has tended to focus on impact of these activities on the rural population (Mwali et al., 1981; Maramwidze, 1982; Maimbo, 1982). Some surveys, especially those conducted by funding agencies, have concentrated their efforts on financial accountability (SIDA, 1980; 1983). Yet others have analyzed the situation of one group of rural people, that is women (Chilibvumbo and Kanyangwa, 1985; Mutemba, 1981; Serpell, 1980; UNICEF, 1979; Safalios-Rothschild, 1985). Research has ignored communication within and between government departments through which integrated nonformal education programmes are conducted. Issues related to factors facilitating or hindering implementation of these activities have not been adequately dealt with. This investigation focused on the communication within and between selected departments, and identified factors that facilitate and hinder implementation of integrated non-formal education programmes.

For the benefit of the reader, the purposes of the study are again presented here.

The purposes of this study were:

(1) to identify factors thought by administrators to facilitate and hinder the implementation of integrated nonformal education programmes;

(2)  to establish the relative influence of each factor;

(3)  to determine the perceived degree of programme integration, from

the perspective of four administrative levels (national, provin-

cial, district and local), and

(4)  to determine skills and knowledge acquired from integrated

nonformal programmes through the perceptions of participants.


## Research Design

The case study approach was utilized in order to achieve purposes of

the study of integrated rural development programmes.  The case study as a

research method is particularly useful in answering "why" questions because

it is intensive and brings to light the important variables, processes, and

interactions that deserve more extensive attention (Bulmer, 1983).  In this

way, attention was focused on questions such as:  "What factors promote or

hinder the implementation process?"  "In what ways has implementation

failed?"  "Where has implementation succeeded and why?"  While experimental

and quasi- experimental designs are concerned with controlling confounding

variables, the case study focuses on the interrelationships between these

variables (Le Compte and Goetze, 1984; Bulmer and Warwick, 1983; Stake and

Keasey, 1978).

According to Smith (1978), the case study is different from other

educational research methods in that it is the study of a bound system:

> The crux of the definition is some conception of unity or
> totality to that bounded system.  The key notion is that you've
> got some kind of entity, a case, and it has some kind of unity.
> Somebody perceives a part of that unity and wants to study some
> more of it.  (p. C:30)

Along the same line, Stake (1978) argues that the principal difference

between case studies and other research studies is that the case is made

the focus of attention rather than the population. It is a focus on the

happenings around a single actor (be it child or institution or enter-

prise), so as to understand that actor, that bound system, in its habitat

(Stake, 1978). The uniqueness of a case is not considered "error variance."

> It is considered a handle for better understanding the way the
> case does or does not maintain equilibrium under environmental
> stress and strain. The case is something deemed worthy of
> close watch. It has character, it has totality, it has
> boundaries. It is not just an instance representable by a
> score; it is not only an entity which could be represented by
> an endless array of scores. It is a complex, dynamic system,
> some thing to be thought of as an existing entity, even when
> simple descriptions are being made of it. (Stake and Keasey,
> 1978, p. C:30)

## The Local Sites

The case study involved selected administrators of four government

departments at national, provincial, district and local level and partici-

pants at three training centres at the local level. These local sites

comprising three training centres were selected after several discussions

with officers in the Ministry of Agriculture and Water Development,

Community Development, and Integrated Rural Development Programme (IRDP) at

the provincial level. IDRP funds nonformal education activities directly

through various government departments operating in this area. Selection

of the local sites depended on the criterion of length of time in

existence. Since the Integrated Rural Development Programmes started in

the Chipata district of the Eastern province of Zambia, it was decided to

select local sites situated in that district. After several discussions

with officials from the Department of Agriculture in Chipata, the Katopola,

Kalichero and Kalunga training centres were selected as local sites for this study. Katopola was established as a farm institute prior to independence. The other two were established after independence (1964) and are about thirty-five kilometres away from Chipata, the provincial administrative centre (see Figure 8).

**Site 1: Katopola Farm Institute**

Katopola Farm Institute, established around 1960, is a provincial training centre for extension staff, artisans, and blacksmiths. It teaches appropriate technology, rural structures, and farm implements engineering. Participants of programmes at the centre vary: seminars are held for extension staff; farmers are drawn from all over the province to be trained in a specific skill so that they can teach others in their village; and sometimes participants come from a specific district to learn skills in appropriate technology. Although one may get a course for male and female participants, the centre largely caters for male participants. This may be attributed to the technical nature of the programmes offered. Courses run from eight to twelve weeks and only ten to fifteen participants can attend a specific course at a time. Several courses may run concurrently, depending on the availability of the instructor and technical facilities. Because the courses are residential, only a few participants can be trained at one time.

The training centre is also used for week-long seminars and short courses for staff members of the Ministry of Agriculture and Water Development and any department wishing to use the residential facilities.
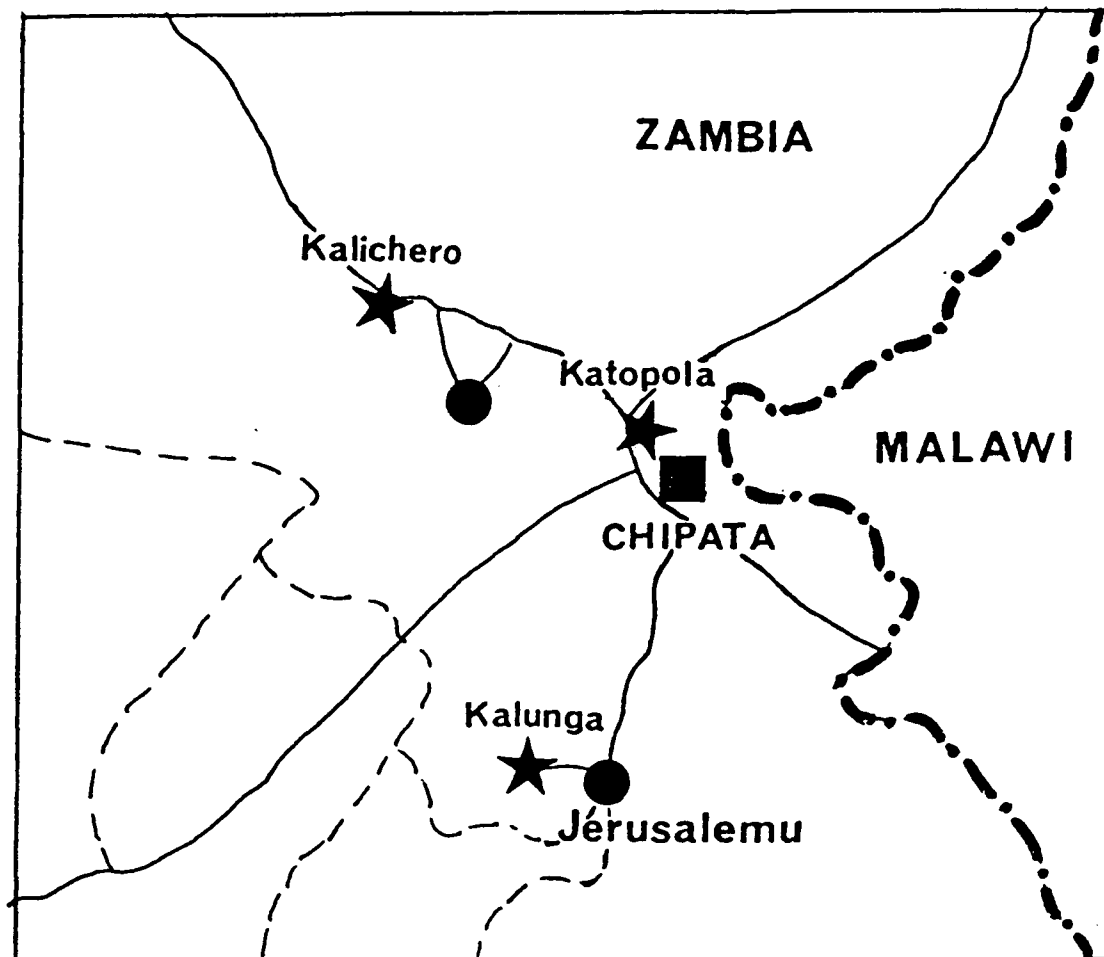
Scale: 1 cm to 7 km.

Figure 8.  Map showing locations of three local sites included
in the study.

Legend:
    —·—·— International boundary.
    ——— ▪ District boundary.

Chipata District Population size = 32,291                    (1980 Census)
District GNP = K30 p.a.        National GNP = K250 p.a.       (1980 Census)

    Value of (Kwacha)-K4 was approximately $5.00 (U.S.) in 1980.
    Presently K15.00 is approximately $1.00 (U.S.) in 1987.

## Site 2: Kalichero Farm Training Centre

Kalichero Farm Training Centre instituted in 1972, is located thirty-five kilometres away from the Chipata administrative centre and serves the population in Chipata North (the northern section of Chipata District). There are nine extension workers at Kalichero. Around the Kalichero Farm Training Centre are the Rural Health centre and a social development sub-centre. Members of staff at Kalichero are supposed to coordinate their efforts in conducting nonformal education activities. The Rural Health Centre, situated six kilometres from Kalichero, serves mainly as a centre for curative medicines. Health assistants, assisted by social development workers, teach a captured audience of patients who come for treatments at the Rural Health Centre. They teach patients nutrition, maternal-child care, general hygiene and how to take care of their sick relatives. There are five health workers and one social development worker. There are nine extension workers at Kalichero.

The farm training centre conducts one to two long seminars for farmers, and sometimes for extension staff, at the centre. Other departments like Health and Community Development are welcome to conduct courses related to health and women's activities for people around the area. Agriculture and Community Development coordinate the running of women's clubs and functional literacy programmes.

## Site 3: Kalunga Farm Training Centre

Kalunga, established thirty-seven kilometres from the Chipata administrative centre, serves the population in Chipata South (the southern section of Chipata District). Near Kalunga is a Rural Health Centre and a Community Development Centre that provide nonformal education to the

community around Kalunga. The farmer training centre has seven staff members, one of whom is female. There are three community development workers, one being female. The Rural Health Centre has four staff members: two male, two female. The Rural Health Centre and Agricultural Camp, are located at the same place as the Community Development Centre.

The centre conducts one- to two-week long seminars for farmers and is also available for other departments who would like to hold seminars there. It is a centre for farmers to market their produce and to buy farm implements, seeds and fertilizers. It has a consumer cooperative shop serving all the villages in that area. It works closely with the Department of Marketing and Cooperatives. The female extension worker at the training centre works in collaboration with the female community development assistant in establishing and supervising women's clubs in the area. This trend is similar to that with the clubs around Kalichero area, though there the community development assistant is a man.

The extension message at the last two centres may be put in a diagrammatic form (see Figure 9). Members of staff from Agriculture, Health, and Community Development are supposed to work closely together in conducting training programmes in the area. In Figure 9, the extension message comes from Agriculture, Health and Community Development to rural communities. Extension workers are supposed to train participants not only in their area of expertise, but to integrate all other activities in order to meet the basic needs of the rural people. Figure 9, is an example of the type training extension workers in IRDP training centres receive. Although women, do the bulk of agricultural tasks, they do not often receive the extension message. In Figure 9, extension workers are encouraged to focus on female participants in the training programmes.

Participants use/skills and knowledge
to increase production.



The Extension worker
trains participants in
various aspects of
rural life.

The Extension message to reflect
the needs of participants.
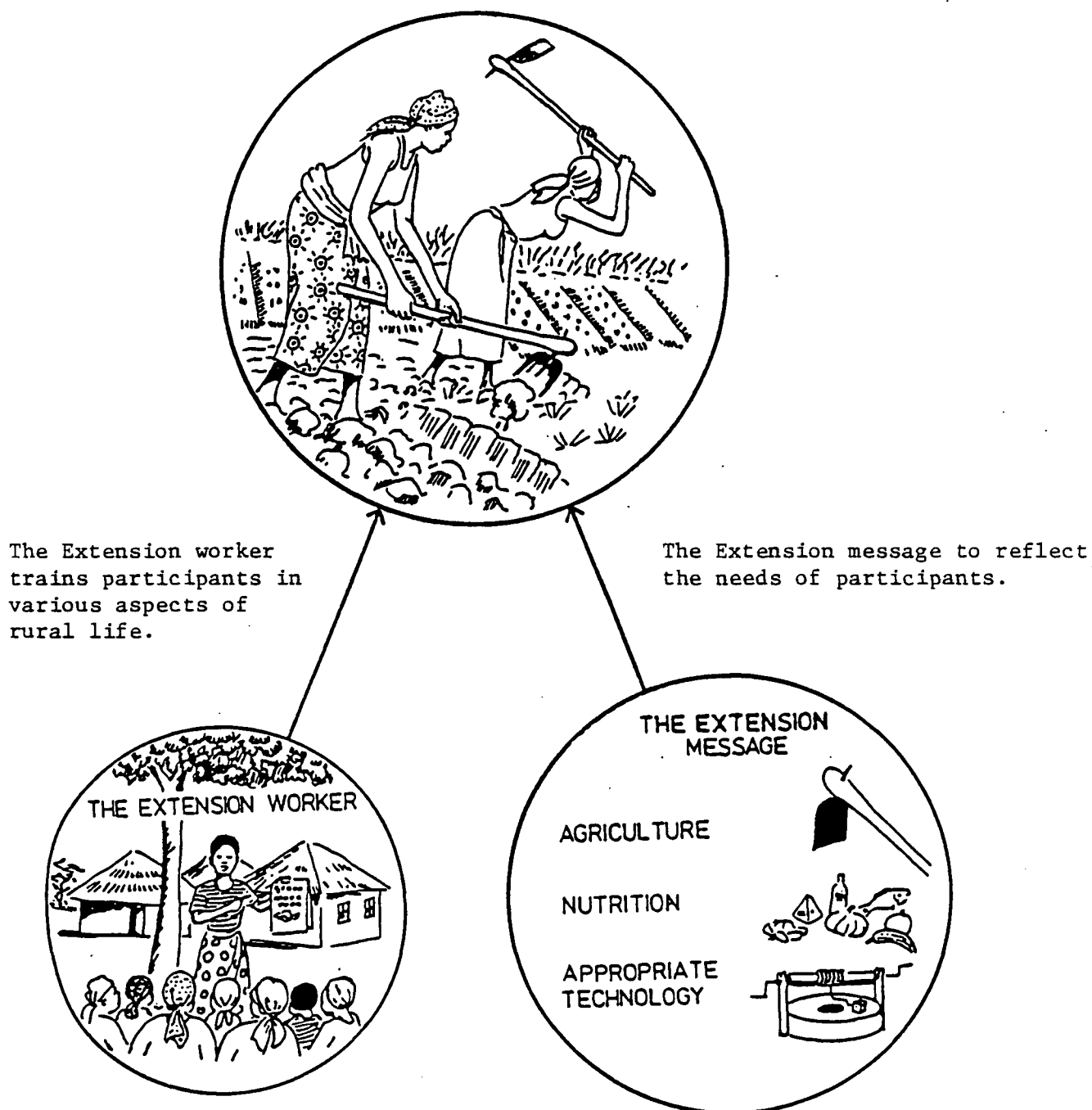
Figure 9. Diagram showing the training and delivery of integrated nonformal
education activities to participants by Extension workers.

Source: Zambia Government/SIDA Mission. (1981). Women's development programmes.
Report to the 1981 GRZ/SIDA Mission on Agricultural Sector Support.
Lusaka: Cooperative College Press.

## Subject Selection

Several discussions were held with heads of the four participating departments at national level. A decision was reached that only administrators who were directly involved in planning and implementing nonformal education activities should respond to the questionnaire. The same selection procedure was used for other administrative levels.

## Research Questions

In order to achieve the purposes of the study, several research questions were formulated.

1.  What factors are thought by administrators to facilitate implementation of integrated nonformal education programmes?

2.  What factors are thought by administrators to hinder implementation of integrated nonformal education programmes?

3.  What do administrators perceive to be the extent of "integration" in integrated nonformal education programmes?

    (a)  To what extent do administrators at different administrative levels differ in their perceptions of the existence of vertical integration?

    (b)  To what extent do administrators at different administrative levels differ in their perceptions of the existence of horizontal integration?

    (c)  To what extent do administrators' perceptions of vertical integration correlate with administrators' perceptions on horizontal integration.

    (d)  How does this correlation between vertical and horizontal integration differ according to administrative levels?

4.  What skills do participants perceive to gain from integrated nonformal
    education programmes?

## Methods of Data Collection

In order to answer the research questions, the study utilized several
data collection procedures:  survey questionnaires, structured interviews
and document analysis (see Table 5).  Because of scarcity of documented
research and lack of knowledge on who is doing what kind of research, and
where, the research environment in most developing countries is particular-
ly problematic (Shaeffer and Nkinyangi, 1983).  Warwick (1984) argues that
the integration of several methodological approaches in one study is
particularly useful when conducting research in developing countries.
Firstly, when one uses several methods for data collection, one obtains
additional categories of information which may not be available from a
single method; second, there is increased accuracy in measuring a single
phenomenon; and third, qualitative depth is obtained when observations as
well as survey methods are used to complement each other (Warwick, 1984).

Bennett and Thais (1967) believe that research must capture a variety
of perspectives.

> The human reality must be apprehended by a variety of view points,
> not by one alone, because this very reality is always in part a
> construct, always in part an image, and only by encouraging
> difference in perspective and approach can one obtain the needed
> richness of imagery, and consequently theory. (Bennett and Thais,
> 1967, p. 307)

Multiple methods of data collection have proved useful in evaluation
research by Stake and others.  Although this study is not an evaluation
study, it has benefitted from multiple data collection procedures.

Table 5. Data collection procedures

| Administrative level | Data sources | Data collection methods |
|---|---|---|
| National level | 26 administrators<br>18 administrators | Administrators' Questionnaire<br>Critical Incident Interview |
| Provincial level | 30 administrators<br>23 administrators | Administrators' Questionnaire<br>Critical Incident Interview |
| District level | 21 administrators<br>15 administrators<br>21 administrators | Administrators' Questionnaire<br>Critical Incident Interview<br>Local Level Questionnaire |
| Local level<br>   Site 1 | 6 administrators and instructors<br>4 administrators and instructors<br>6 administrators and instructors<br>15 participants | Administrators' Questionnaire<br>Critical Incident Interview<br>Local Level Questionnaire<br>Participants' Questionnaire |
|    Site 2 | 11 administrators and extension workers<br>9 administrators and extension workers<br>11 administrators and extension workers<br>31 participants | Administrators' Questionnaire<br>Critical Incident Interview<br>Local Level Questionnaire<br>Participants' Questionnaire |
|    Site 3 | 12 administrators and extension workers<br>8 administrators and extension workers<br>12 administrators and extension workers<br>31 participants | Administrators' Questionnaire<br>Critical Incident Interview<br>Local Level Questionnaire<br>Participants' Questionnaire |

## The Critical Incident Technique

The critical incident technique was used in the study to gather information about factors that are perceived to facilitate or hinder the process of implementing integrated programmes.

The critical incident technique has had a variety of applications. It has been used widely in education, commerce, psychology and nursing (Dachelet et al., 1981). Evidence regarding reliability and validity of the critical incident technique has been provided by Andersson and Nilsson (1964). These authors employed it to analyze the job of store managers in a Swedish company and found that the information collected by this method is both reliable and valid. One potential weakness of the critical incident technique can be due to the fact that the technique will not always yield results that are valid and reliable depending on how the incidents are reported. Due to this limitation, the technique was employed only in conjunction with other data collection methods.

The critical incident technique is a type of projective interview (Cochran, 1985). Its main characteristic is its flexibility in eliciting negative and positive responses to an activity. The technique is designed to collect data on incidents that may hinder or facilitate an activity (Flanagan, 1954). Such incidents may be recorded by observers from daily reporting, or by recalling from memory.

An incident is defined as any event or happening that is sufficiently complete in itself to permit the making of inferences and predictions. An incident could occur at a point in time, recurrently over time or more continuously over a period of time. According to Flanagan (1954), an incident is critical "if it makes a significant contribution, either positively or negatively, to the general aim of the activity."

Three specifications must be clearly stated for a successful critical incident study: the general aim of the activity must be specified, the criterion for accepting an incident—or for allowing the observer to elaborate upon it—must be stated; and the interview questions must be clearly established from the start.

The critical incident technique employs the following procedures: (Flanagan, 1954):

(1) a brief introduction to the purpose of the study is given to the observers;

(2) the interviewer requests descriptions of helpful events;

(3) each incident is subjected to a criterion check which provides assurance that the incident has had significant impact upon the activity;

(4) then specific questions are asked.

## Procedures

Interviews were conducted with administrators at the national, provincial, and district levels as well as with administrators and extension workers at the three selected training centres. Administrators and other technical staff were asked to recall incidents that they found particularly helpful in their work. Later they were asked to describe incidents which they felt hindered their work. Interviewees were assured of their anonymity on all that was discussed.

Discussions were held with heads of participating departments at the national level. They identified officers who were to be interviewed. Two pilot interviews were conducted to determine whether this approach would work. The two interviews were successful, and were subsequently included

in the study. Some modifications to the form of the interview questions

had to be made because each officer was specialized in a different field.

The same approach proved useful at the provincial level. Provincial heads

of departments selected officers who were interviewed.

When possible, interviews were tape recorded and notes made simul-

taneously. Each respondent had a separate recording form (see Appendix 2).

Recorded interviews were later transcribed and incorporated with the

written notes. Prior to the beginning of the interview the interviewee was

informed of the purposes of the study and what information would be sought

during the interview. If someone objected to the tape recording, it was

not done. Forty-two interviews were not tape recorded because of technical

problems. Table 6 provides a list of interviews conducted at each adminis-

trative level.

Critical incident interviews were designed to determine events that

helped and hindered administrators and extension staff in their work.

Interviews were semi-structured. Administrators were asked to recall

Table 6. Summary of interviews.

|  | Interviews recorded | Interviews not recorded | Total |
|---|---|---|---|
| National | 8 | 10 | 18 |
| Provincial | 12 | 11 | 23 |
| District | 6 | 9 | 15 |
| Site 1 | 4 | 0 | 4 |
| Site 2 | 5 | 4 | 9 |
| Site 3 | 0 | 8 | 8 |

critical incidents that happened to them, or to others, that they felt facilitated their efforts to implement integrated programmes. Later administrators were asked to recall incidents that hindered their efforts to implement integrated programmes. There were separate recording forms for positive and negative incidents for each individual (see Appendix 2). The interview questions were modified if an intervieweee could not recall incidents with allowances for particular contexts. The following specific questions were asked about facilitating events:

1. Think back to a time when you did something that facilitated your work.

2. Tell me which behaviors of yours produced a noticeable improvement of your work.

3. What led to this incident?

4. What exactly happened that was so helpful?

5. Why was it so helpful in your work?

6. Can you think of another activity that helped facilitate your work?

The set of questions were repeated to solicit new incidents. Then, negative incidents were reported.

The following questions were asked about hindering events:

1. Now, think back to a time when you did something that hindered your daily work.

2. Did this event impede action?

3. What was that event?

4. What were the general circumstances around this event?

5. What exactly hindered your daily work?

6. Why did this event hinder your daily work?

7. Can you think of another event?

## Categorization of Incidents

Incidents recorded during the interview were verified by transcribing the tape recorded interviews. Incidents were first classified either "Positive" or "Negative." For each respondent there was a recording form listing all positive incidents, and one for listing all negative incidents. Categories were developed by counting the number of times similar or related incidents reappeared in a particular administrative level. Each category represented a factor if the incidents occurred very often or over a long period of time. After setting categories, incidents of each respondent were classified under the category to which they best fit.

## Instrument Development

To respond to research questions, three sets of questionnaires were developed: Administrators' Questionnaire (national, provincial, district and local levels); Local Level Questionnaire (district and local); and Participants' Questionnaire.

## Administrators' Questionnaire

The Administrators' Questionnaire was administered to the following:

(a) selected administrators at national level;

(b) selected administrators at provincial level;

(c) selected administrators and extension workers at district level;

(d) administrators and extension workers who were available at the local level.

The Administrators' Questionnaire consisted of statements derived from the literature review on the integration of nonformal education programmes (Coombs, 1980; 1985; Coles, 1982; Evans, 1974). Statements from the Third National Development Plan (1979) and statements from a framework for analyzing nonformal education systems developed by Mumba (1985).

**Vertical Integration.** In Section A of the Administrators' Questionnaire items 1 to 10 contains items on vertical integration. From the literature review indicators of vertical integration included statements from the following:

(1) existence or absence of strict supervisory control;

(2) communication networks between national, regional and local levels;

(3) financial support from national to local level;

(4) curriculum preparation;

(5) the type of control exercised: centralized or decentralized.

Items were rated on a 4 point scale from low to high (see Appendix 1). A high degree of vertical integration is considered to be evidenced if there is:

(a) direct communication networks between national, provincial, district, and local levels;

(b) financial support for programmes from national to local level; and

(c) strict supervisory control.

A low degree of vertical integration was evidenced by the absence of communication networks between the administrative levels, and the lack of financial support from the national level for rural programmes, and loose supervisory control.

<u>Horizontal Integration</u>. In Section A, items 11-20 included statements derived from the literature review on horizontal integration (Coombs, 1974; 1980; 1985; Coles, 1982; Evans, 1981). Indicators of horizontal integration included:

(1)  communication networks between departments offering nonformal education in development centres;

(2)  existence of committees with cross-departmental membership;

(3)  coordination of activities between different nonformal education agencies;

(4)  utilization of facilities between agencies and departments;

(5)  seminars held jointly between agencies;

(6)  programmes jointly offered with government sponsored programmes.

These items were rated on a 4 point scale from low to high (see Appendix 1). A high degree of horizontal integration was considered to exist where communication networks were established between departments, and where committees at regional and local levels had cross departmental membership. The absence of these features indicated a low degree of integration.

<u>Opinions on Integration</u>. Section B of the Administrators' Questionnaire contained items that assessed administrators' perceptions of integration. Items were rated on a 5 point scale from low (1) to high (5).

<u>Opinions on Implementation</u>. Section C of Administrators' Questionnaire focused on the behavioural change administrators and extension workers made towards implementing integrated programmes. The questionnaire consisted of statements that relate to the following questions:

1. When was it that they first heard about the integrated programmes?

2. Was it clear what was expected of them?

3. What steps did they take in order to implement the required change?

4. Did they make subsequent efforts to continue to work with Integrated Rural Development Programmes?

5. What barriers did they experience in their efforts?

6. What factors facilitated the required changes?

The responses were rated on a 5 point scale from low (1) to high (5).


## Local Level Questionnaire

The Local Level Questionnaire was developed using statements from the literature on nonformal education (Coombs, 1980; 1985; Coles, 1982; Evans, 1974). The questionnaire focused on eliciting information on administrators' perceptions on the existence of integration. Only administrators and extension workers at district level and at the three local sites responded to this instrument. The statements were rated on a 3 point scale from low to high. Items 1 through 12 solicited respondents' opinions on the existence of integration. The last ten items focused on respondents' opinions on what they perceive as obstacles in the implementation of integrated nonformal education programmes (see Appendix 3).

## Participants' Questionnaire

The questionnaire developed to assess participants' opinions focused on outcomes of integrated nonformal activities conducted by selected departments at the three training centres and in nearby rural communities. The questionnaire contained items that focused on the following: What skills they felt they had learned from the programme, whether facilities and equipment at the centre were available in their home, and their opinions on the centre's activities in general. The questionnaire had items rated on a 3 point scale from low to high.

The objective of the structured interviews was to determine the anticipated benefits through participants' opinions on what they hoped to gain from integrated nonformal education programmes. Not all respondents interviewed had participated in nonformal activities actually held at the three training centres; some had heard an extension message regarding health, functional literacy, women's clubs, or agricultural extension.

## Respondents to Survey Questionnaires

A total of one hundred and six administrators and extension workers responded to the Administrators' Questionnaire. The Administrators' Questionnaire was administered to the following:

1. Twenty-six selected administrators at the national level.

2. Thirty selected administrators at provincial level.

3. Twenty-one selected administrators and extension workers at district level.

4. Twenty-nine administrators and extension workers at local level.

The Local Level Questionnaire was administered to administrators and extension workers at district and local levels. Some district offices were stationed at the local sites. The following responded to the questionnaire:

1. Twenty-nine administrators and extension workers at district level.

2. Six administrators and extension workers at Katopola Farm Training Institute.

3. Eleven administrators and extension workers at Kalichero Farm Training Centre.

4. Twelve administrators and extension workers at Kalunga Farm Training Centre.

The Participants' Questionnaire was administered to seventy-seven selected members of rural households residing near the three training centres. They were selected if they had received any extension message, regarding health, agricultural, literacy or women's clubs.

All coding of the questionnaires was performed by the researcher. Verification of the coding was accomplished by selecting at random twenty responses and comparing them to the original coding of data. Verification of the data entry onto the U.B.C. computing system by the Data Entry Department was performed by the researcher. Three identified errors were corrected.

## Reliability of Instruments

Reliabilities of the measures were established through the use of the LERTAP computer programme (Nelson, 1974). All three sets of questionnaires had a high internal consistency among the items. Results of the analysis are presented in Table 7.

Table 7. Reliability of instruments

| Instrument | Hoyt estimate of reliability |
| --- | --- |
| Administrators' Questionnaire | .88 |
| Local Level Questionnaire | .74 |
| Participants' Questionnaire | .72 |

## Validity

### Content Validity

Content validity was the primary consideration in developing the instruments. According to Nunnally (1970) the question of content validity is principally one of the "adequacy with which a specific domain of content is sampled." Content validity was considered in the construction of questionnaires. At the development stage, a panel of three Zambian students at the University of British Columbia were asked to comment on the questionnaires' content validity. Two of the raters had worked in the Ministry of Agriculture and Water Development under which Integrated Rural Development was established. A few questions were modified.

### Face Validity

Face validity was established through discussions with students and faculty members who are specialists in the area of nonformal education. The questionnaire was discussed with other students in a doctoral seminar at U.B.C. The questionnaires were presented to students and a faculty member who reviewed them item by item, and offered systematic comments.

Changes were made to items identified as unclear. Students generally

agreed that survey questionnaires contained items that were a valid measure

of integration and its outcomes.

## Summary

This chapter has outlined the research methodology utilized in the

study. The case study design which was adopted proved a useful framework

for gathering data related to the research questions. The critical

incident interviews illuminated dimensions of administrators' perceptions

on factors that facilitate or hinder their work, and survey questionnaires

elicited administrators' perceptions on the extent of integration in

integrated nonformal education programmes. These two methodological

approaches complemented each other, providing a richer portrayal of what

goes on at different administrative levels than a single method might have.

The Participants' Questionnaire was designed to determine outcomes of integrated

nonformal education programmes through participants' perceptions. Table 5

provides a summary of the research methodology utilized and the groups

studied.

CHAPTER FIVE

RESULTS

This chapter presents administrators' responses to semi-structured interviews and survey questionnaires as well as results of participants responses to the survey questionnaire. The chapter is organized in four sections, beginning with a section which provides results of the semi-structured interviews. It outlines how categories have been developed and presents them for each administrative group. The second section presents a description of the individual respondents and the groups to which they belonged. The next section displays correlations on variables in all the three sets of survey questionnaires: Administrators' Questionnaire, Local Level Questionnaire and Participants' Questionnaire. Lastly results of one way analyses of variance on each variable are presented to determine any significant differences between the groups.

## Results of Interviews

This section presents results of the critical incident interview. The technique focused on identifying factors that facilitate or hinder the implementation of integrated nonformal education programmes. The interview focused on the following research questions:

1. What factors are thought by administrators to facilitate the implementation of integrated nonformal education programmes?

2. What factors are thought by administrators to hinder the implementation of integrated nonformal education programmes?

A total of 77 administrators and extension workers participated in the interview: 18 (23%) at the national level, 23 (29%) at the provincial level, 15 (19%) at the district level, and 21 (27%) at three local sites.

The first step in the analysis of the interview data was to develop categories into which incidents could be organized. Categories were established by taking into account the research questions. Other considerations related to how persistent the incident was. All incidents mentioned by each respondent were counted and sorted into positive or negative columns as shown in Table 8.

Table 8. Positive and negative incidents reported by Administrative group.

| Group | No. of respondents | Number of incidents | | | Percent of incidents | |
|---|---|---|---|---|---|---|
| | | Positive | Negative | Total | Positive | Negative |
| National | 18 | 238 | 103 | 341 | 69.8 | 30.2 |
| Provincial | 23 | 304 | 149 | 453 | 67.1 | 32.9 |
| District | 15 | 149 | 69 | 218 | 68.3 | 31.7 |
| Site 1 | 4 | 31 | 18 | 49 | 63.3 | 36.7 |
| Site 2 | 9 | 105 | 68 | 173 | 60.7 | 39.3 |
| Site 3 | 8 | 91 | 37 | 128 | 71.1 | 38.9 |
| Total | 77 | 918 | 444 | 1362 | 67.4 | 32.6 |

**Basic Categories**

Incidents were then divided into the categories into which they belonged within each administrative group. The responses were ranked and percentages for each category were computed. The respondent percentages were calculated by comparing the number of respondents under each category

to the total number of respondents within each group. The number of responses represents the number of people who mention an incident in that category.

## Reliability of Categories

Is the category scheme reliable in the sense that independent judges can use the categories consistently to place incidents? This question differs from the questions of reliability of the critical incident interview. Flanagan (1954) and Nilsson (1964) provide evidence that similar incidents are elicited from people responding to different interviewers, and upon re-interviewing people after an interval of time. Along with its long history of successful use in a variety of fields (e.g. Dachelet et al., 1981), these findings provide reasonable ground for interview reliability.

At another instance, is the method of forming categories reliable? The method of searching for similarities and differences is characteristic of categorization. But an argument cannot be made that the category scheme used is the only one that could be justifiably formed, but that it fits the data and this can be determined largely by whether or not independent judges can use the categories consistently to place incidents (Andersson and Nilsson, 1964).

Two judges listened to two recorded interviews. The judges were two Zambian students studying at the University of British Columbia. They were asked to fit incidents into categories that had already been formed. Firstly, they were requested to place incidents into basic categories: positive and negative. They were later requested to place incidents into categories of factors. The results indicated interjudge agreement of 80%.

Independent judges can therefore differentiate and categorize incidents in the same way as the investigator using the categories that were formed 8 out of 10 times.

## Validity of Categories

Categories are formed because of the similarity of a group of incidents reported by different people. That is, a category is formed by the researcher as a result of people independently reporting the same kind of event. When one person reports an incident, it might be dismissed. But when several people report the same kind of incident, it greatly increases the likelihood that a category is well founded. This form of validity is inherent in the critical incident technique. Agreement among independent people is one criterion for objectivity (Kaplan, 1964). In this study, the basis of agreement was constituted by people independently reporting the same kind of event.

The categories that were developed in this study relate to findings of previous research on nonformal education (Coombs et al., 1973; 1974; Thompson, 1982). The total number of responses represents the total number of responses from all categories. The percentages of total responses were obtained by dividing the number of responses in each category by the total number of responses. Categories for the four administrative levels are presented in Tables 9 and 10.

### Facilitating Factors

From the list of positive incidents that were mentioned, the following categories were developed:

Table 9. Percentages of responses for facilitating and hindering factors at administrative level.

| Factors | Administrative levels | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| | National | Provincial | District | Total number of respondents | % of respondents | % of total responses |
| **FACTORS FACILITATING IMPLEMENTATION (n = 56)** | | | | | | |
| 1. Seminars/workshops and training facilities | 16 | 22 | 11 | 49 | 87.5 | 16.5 |
| 2. Coordination with other departments and agencies | 16 | 20 | 12 | 48 | 85.7 | 16.2 |
| 3. Financial assistance | 14 | 12 | 9 | 35 | 62.5 | 11.8 |
| 4. Availability of transport | 7 | 16 | 10 | 33 | 58.9 | 11.1 |
| 5. Communication between provincial, district and national headquarters | 13 | 13 | 6 | 32 | 57.1 | 10.8 |
| 6. Target population being reached | 9 | 8 | 10 | 27 | 48.2 | 9.9 |
| 7. Training and visit system good | 7 | 11 | 8 | 26 | 46.4 | 8.8 |
| 8. Support for decentralization | 10 | 14 | - | 24 | 42.9 | 8.0 |
| TOTAL NUMBER OF RESPONSES = 297 | | | | | | |
| **FACTORS HINDERING IMPLEMENTATION (n = 56)** | | | | | | |
| 1. Inadequate skilled personnel and lack of training facilities | 15 | 10 | 7 | 32 | 57.1 | 15.1 |
| 2. Inadequate transport | 7 | 14 | 8 | 29 | 51.8 | 13.6 |
| 3. Lack of adequate inputs, material, seeds, etc. | 6 | 15 | 7 | 28 | 50.0 | 13.2 |
| 4. Over-centralized system | 9 | 11 | 3 | 24 | 42.9 | 11.3 |
| 5. Unstable funding | 8 | 10 | 6 | 24 | 42.9 | 11.3 |
| 6. Lack of monitoring and evaluation of on-going programmes | 10 | 4 | 5 | 19 | 33.9 | 9.0 |
| 7. Lack of adequate housing | 2 | 3 | 8 | 13 | 23.2 | 6.1 |
| 8. Lack of awareness among participants | - | 6 | 6 | 12 | 21.4 | 5.7 |
| TOTAL NUMBER OF RESPONSES = 212 | | | | | | |

Table 10. Percentages of responses for facilitating and hindering factors at local level.

| Factors | Local level | | | | | |
| | Site 1 | Site 2 | Site 3 | Total number of respondents | % of respondents | % of total responses |
|---|---|---|---|---|---|---|
| **FACTORS FACILITATING IMPLEMENTATION** (n = 21) | | | | | | |
| 1. Coordination with other departments and agencies | 4 | 8 | 8 | 20 | 95.2 | 13.8 |
| 2. Reaching target population | 3 | 7 | 8 | 18 | 85.7 | 12.4 |
| 3. Financial support, loan or credit facilities | 4 | 6 | 5 | 15 | 71.4 | 10.3 |
| 4. Seminars/workshops, conferences and training facilities | 4 | 5 | 6 | 15 | 71.4 | 10.3 |
| 5. Availability of inputs (fertilizer, seeds, materials, etc.) | 4 | 5 | 5 | 14 | 66.7 | 9.7 |
| 6. Availability of transport | 4 | 6 | 4 | 14 | 66.7 | 9.7 |
| 7. Communication with district, provincial and national headquarters | 4 | 5 | 4 | 13 | 61.9 | 8.9 |
| 8. Improved infrastructure | 3 | 6 | 4 | 13 | 61.9 | 8.9 |
| 9. Training and visit and mobile courses | 0 | 7 | 5 | 12 | 57.1 | 8.2 |
| 10. Supporting decentralization | 2 | 4 | 5 | 11 | 52.4 | 7.6 |

TOTAL NUMBER OF RESPONSES = 145

| Factors | Site 1 | Site 2 | Site 3 | Total number of respondents | % of respondents | % of total responses |
|---|---|---|---|---|---|---|
| **FACTORS HINDERING IMPLEMENTATION** (n = 21) | | | | | | |
| 1. Lack of adequate inputs (agricultural teaching materials etc.) | 3 | 6 | 9 | 18 | 85.7 | 15.0 |
| 2. Lack of coordination with other departments and agencies | 3 | 4 | 5 | 12 | 57.1 | 10.0 |
| 3. Apathy among participants | 4 | 5 | 3 | 12 | 57.1 | 10.0 |
| 4. Delays in releasing funds and loans | 3 | 5 | 3 | 11 | 52.4 | 9.3 |
| 5. Shortage of skilled personnel | 2 | 5 | 4 | 11 | 52.4 | 9.3 |
| 6. Delays in releasing inputs | 2 | 4 | 4 | 10 | 47.6 | 8.3 |
| 7. Inadequate transport | 3 | 4 | 3 | 10 | 47.6 | 8.3 |
| 8. Over-centralized system | 2 | 3 | 3 | 8 | 38.1 | 6.6 |
| 9. Unstable funding | 2 | 3 | 3 | 8 | 38.1 | 6.6 |
| 10. Late payment of farmers for their produce | 0 | 3 | 4 | 7 | 33.3 | 5.8 |
| 11. Lack of monitoring and evaluation | 2 | 3 | 2 | 7 | 33.3 | 5.8 |

TOTAL NUMBER OF RESPONSES = 114

### 1. Coordination with other departments and other agencies

This category included incidents that were related to planning, holding regular meetings with another department, meeting with donor agencies, producing materials in conjunction with another department, and holding seminars with another agency or department.

From observations, not all departments in this study coordinate their activities at the national level. The Planning Division and the Department of Agriculture under the Ministry of Agriculture and Water Development coordinate closely with the National Commission for Development Planning and donor agencies while the Department for Social Development works closely with the Health Education Unit and donor agencies. Administrators in the Ministry of Marketing and Cooperatives coordinate their activities with the Zambia Federation of Cooperatives and donor agencies. Departments do not coordinate all their efforts simultaneously with one another, but two or three departments collaborate in planning and holding regular meetings that relate to their activities.

### 2. Seminars, workshops and training facilities

Incidents that related to attending a seminar or workshop were placed under this category. Respondents from all groups viewed attending a seminar or workshop to be very helpful in their work. They indicated that further training assisted them in learning new skills and knowledge that was required in their work. Therefore, further training and seminars and workshops were put under the same category. This category included the possibility of attending a seminar or going for further training.

### 3. Financial assistance

Administrators cited incidents that were related to receiving financial assistance from the government or from international organizations to

be particularly helpful in conducting their programmes. The category of financial assistance included donations of equipment and materials. It also included the presence of technical experts from outside countries who brought new ideas to Zambia.

### 4. Communication with provinces

Incidents associated with communication between the national level and the provincial and district offices fell under this category. Feedback from the provinces on new policies was a positive sign that things were going well in the regions. This category included incidents concerned with receiving reports, requests, plans, and policy guidelines.

### 5. Support decentralization

Incidents in which decentralization facilitated programmes fell under this category. Many administrators seemed to view the implementation of the Decentralization Act (1981) as one thing that would bring changes to their programmes. Whereas the Integrated Rural Development Programme (IRDP) had previously funded programmes through the separate departments that conduct programmes, it was hoped that after implementation of the Decentralization policy, district councils would get direct access to funds from IRDP. This, they felt, would reduce delays in funds coming from the ministry headquarters. In this way, decentralization was expected to facilitate the implementation of integrated rural development programmes.

### 6. Target population being reached

This category included incidents that were concerned with increases in the number of those who participated in programmes. Some respondents mentioned incidents that indicated that participation in IRDP programmes has increased, as more farmers were being reached through the programme.

This is a positive factor because it motivates administrators to work harder.

## 7. Availability of transport

Respondents cited incidents indicating that availability of transport enabled them to perform their work better. International organizations (UNICEF and SIDA) donated transport to some departments. Transport enabled extension workers to visit the provinces and projects more regularly. Administrators at the national and provincial levels indicated that transport was readily available to them. However, respondents at the district level and at the three training centres indicated that the unavailability of transport made their work difficult (see Table 9). They could not visit farmers or conduct mobile courses wherever they wanted, since they had to rely on the limited transport available to the whole group.

## 8. Training and visit system

Extension workers mentioned incidents about the training and visit system and how it helped them to reach more people than residential courses had done. The new training and visit system involved visiting farmers in their own homes rather than having the farmers come to the training centres. Mobile courses conducted in the farmers' homes fell under this category. Although a training and visit system was viewed as facilitating, it did not replace residential courses. Administrators at all administrative levels, and in the three local sites, held favourable opinions regarding training and visit.

**Hindering Factors**

Administrators at different administrative levels mentioned different kinds of incidents that hindered their work (see Table 9).

1. **Inadequately skilled personnel and lack of adequate training facilities**

Included in this category were incidents related to lack of training in the area in which they were working as a factor making their work more difficult; and if incidents mentioned expressed an unfulfilled desire for further training.

2. **Inadequate transport**

Incidents relating to lack of adequate transport to travel long distances, and lack of fuel, fell under this category. In some cases, extension workers complained that even though vehicles were available, the use of the vehicle by a senior officer prevented them from going out when they wanted to. Such incidents were grouped under this category.

3. **Lack of adequate inputs, materials, seeds, and equipment**

This category included all incidents which administrators mentioned as hindering their work because of a lack of inputs. Incidents that indicated a lack of agricultural inputs, teaching materials and equipment were grouped under this category. Such incidents indicated that prior to the introduction of the Decentralization Act, the funding agency supplied agricultural inputs like fertilizer and seeds directly to departments offering training programmes. However, this has stopped while new administrative arrangements are being made to implement the new system. Other incidents were also mentioned that hindered activities of Women's Clubs. Women's Clubs were previously given materials and other inputs. This category ranked highest at the local level.

## 4. Delays in releasing funds, loans and other agricultural inputs

Incidents under this category included all those mentioned relating to delays in releasing funds from the ministry headquarters for use by extension staff, incidents that were associated with late arrival of fertilizers and seeds for farmers to purchase; and incidents related to the late payment of loans and late payment to farmers for their produce. Administrators at the national and provincial levels did not mention incidents that fell under this category.

## 5. Unstable funding

Administrators and extension staff worry about future funding for existing programmes because fewer and fewer inputs are supplied for their training programmes. The poor economic conditions in the country make them unsure whether what they have today will be there tomorrow. Incidents related to lack of adequate funds for programmes were placed under this category, as well as those that are concerned with unstable funding. This category ranked higher among administrators at the national level than among administrators at the local level.

## 6. Lack of communication

Incidents were placed under this category if they were associated with communication problems with the national headquarters. Administrators cited incidents in which correspondence to the national headquarters took too long, or in which papers were lost in the process of approval. Some incidents related delays that jeopardized the whole programme for one fiscal year. The system required that funds not used in one fiscal year be returned to Lusaka, and funding applications made for the new fiscal year. Such a centralized system led to unnecessary delays in programmes or in programmes never getting off the ground in some cases. This category of

incidents ranked higher at the provincial level than at any other level, since these administrators are the middlemen between the national and local levels.

### 7. Lack of monitoring and evaluation

Administrators cited incidents in which they expressed dissatisfaction with the system of monitoring and evaluating existing programmes. More often than not, incidents were mentioned that related to lack of monitoring of what was going on in the field, especially as regards to policy changes. Certain policy changes were made without any prior knowledge of current activities. Extension staff were merely told to change their approaches without knowing why such a change occurred. Incidents mentioned indicated that administrators doubted the benefits of integrated programmes. They expressed dissatisfaction with the system of reporting progress.

A committee established at the national level to deal with the issues of monitoring and evaluation had not produced results. To date, the committee has not issued directives on how the monitoring should be done. Incidents under this category ranked second to all other hindering factors at the national level, but ranked quite low at the local level.

### 8. Apathy and lack of awareness among participants

Incidents cited indicating a lack of awareness among the community concerning the training programmes fell under this category. No incidents were mentioned under this category at the national level. For those communities aware of the training programmes, administrators and extension workers list incidents in which participants showed apathy towards programmes. They harbour feelings of helplessness due to poverty. They are resigned to their way of life and do not see how it can be changed. Incidents were mentioned in which participants were unable to use knowledge

of existing facilities for their benefit. More incidents refer to women as showing such feelings of helplessness. For extension staff, such apathy discouraged them from continuing with their work.

### 9. Lack of adequate housing and bad living conditions for extension workers

Extension staff mentioned incidents in which their personal problems were not solved or listened to by provincial and national headquarters. In some incidents, the provincial personnel have never visited the training centre in the last two years. In one incident, the roof of a house was washed away due to too much rain that occurred in the area. Although this was a natural disaster, no emergency steps were taken, nor long-term solution put forward by the provincial office or the national headquarters, nor did they acknowledge the existence of that problem. No incidents were reported at the national level under this category (see Table 9).

The association among the factors was tested by Kendalls Coefficient of Concordance. Results indicate a significant association between facilitating factors ($\alpha$ = .003). The association on hindering factors was not significant.

### Basic Categories for Each Administrative Level

Percentages of respondents represented in each category at each administrative level are reported in this section. Percentages of respondents are one indication of the soundness of the category. They indicate the extent to which different people report the same kind of event as facilitating or hindering and is analogous to the use of inter-subjective agreement by independent observers to achieve objectivity.

## National Level

At the national level (see Table 11), coordination with other departments and agencies, and seminars, workshops and training facilities were ranked first among facilitating factors (88% of respondents). Coordination in the production of educational materials ranked lowest with 22% of respondents selecting this factor. Inadequate skilled personnel was the most frequently mentioned hindering factor (61% of respondents). Lack of training facilities was the hindering factor least frequently mentioned (28% of respondents).

## Provincial Level

At the provincial level, seminars, workshops and training facilities was the most frequently mentioned facilitating factor (96% of respondents; see Table 12). Coordination with other departments and agencies ranked next with 87% of respondents mentioning it. Target population being reached (35%) and importance of technology (27%) were the least frequently mentioned facilitating factors. Lack of adequate materials and other inputs (fuel, seeds, batteries, etc.) was ranked as the most important hindering factor at the provincial level (65% of respondents). Inadequate transport was ranked next (61% of respondents). Nine percent of respondents indicated that programmes did not reflect participants' needs. The next lowest ranking hindering factor was lack of accommodation for extension staff (13% of respondents).

## District Level

At the district level, coordination with other departments and agencies featured as the most frequently mentioned facilitating factor (80% of

Table 11. Percentages of responses for facilitating and hindering factors at national level.

| Factors | National level | | |
|---|---|---|---|
| | Number of respondents | % of respondents | % of total responses |
| **FACTORS FACILITATING IMPLEMENTATION (n = 18)** | | | |
| 1. Coordination with other departments and agencies | 16 | 88.8 | 16.6 |
| 2. Seminars/workshops and training facilities | 16 | 88.8 | 16.6 |
| 3. Financial assistance | 14 | 77.7 | 14.5 |
| 4. Communication with provinces | 13 | 72.2 | 13.5 |
| 5. Supporting decentralization | 10 | 55.5 | 10.4 |
| 6. Target population being reached | 9 | 50.0 | 9.3 |
| 7. Availability of transport | 7 | 38.8 | 7.2 |
| 8. Training and visit system good | 7 | 38.8 | 7.2 |
| 9. Coordination between departments in producing educational materials | 4 | 22.2 | 4.1 |
| **TOTAL NUMBER OF RESPONSES = 96** | | | |
| **FACTORS HINDERING IMPLEMENTATION (n = 18)** | | | |
| 1. Inadequate skilled personnel | 11 | 61.1 | 14.8 |
| 2. Lack of clear national policy on integrated rural development programmes | 10 | 55.6 | 13.5 |
| 3. Lack of monitoring and evaluation of on-going programmes | 10 | 55.6 | 13.5 |
| 4. Lack of communication | 9 | 50.0 | 12.2 |
| 5. Unstable funding | 8 | 44.4 | 10.8 |
| 6. Inadequate transport | 7 | 38.9 | 9.5 |
| 7. Lack of inadequate inputs, materials, etc. | 6 | 33.3 | 8.1 |
| 8. Lack of training facilities | 5 | 27.8 | 6.8 |
| **TOTAL NUMBER OF RESPONSES = 66** | | | |

Table 12. Percentages of respondents and responses for facilitating and hindering factors at provincial level.

| Factors | Provincial level | | |
| --- | --- | --- | --- |
| | Number of respondents | % of respondents | % of total responses |
| **FACTORS FACILITATING IMPLEMENTATION** (n = 23) | | | |
| 1. Seminars/workshops and training facilities | 22 | 95.7 | 16.6 |
| 2. Coordination with other departments and agencies | 20 | 86.9 | 15.1 |
| 3. Availability of transport | 16 | 69.6 | 12.1 |
| 4. Supporting decentralization | 14 | 60.9 | 10.6 |
| 5. Good communication with national headquarters and district | 13 | 56.5 | 9.8 |
| 6. Financial support, loan or credit facilities | 12 | 52.2 | 9.0 |
| 7. Training and visit system good | 11 | 47.8 | 8.3 |
| 8. Regular meetings within department | 10 | 43.5 | 7.5 |
| 9. Target population being reached | 8 | 34.8 | 6.0 |
| 10. Importance of appropriate technology | 6 | 26.7 | 4.5 |

TOTAL NUMBER OF RESPONSES = 132

| Factors | Number of respondents | % of respondents | % of total responses |
| --- | --- | --- | --- |
| **FACTORS HINDERING IMPLEMENTATION** (n = 23) | | | |
| 1. Lack of inadequate materials and other inputs (fuel, seeds, batteries, etc.) | 15 | 65.3 | 15.9 |
| 2. Inadequate transport | 14 | 60.9 | 14.89 |
| 3. Over-centralized system | 11 | 47.8 | 11.7 |
| 4. Inadequate funds, credit facilities unstable funding | 10 | 43.4 | 10.6 |
| 5. Shortage of skilled personnel | 10 | 43.4 | 10.6 |
| 6. Lack of coordination with other departments and agencies | 7 | 30.4 | 7.4 |
| 7. Communication with national headquarters | 7 | 30.4 | 7.4 |
| 8. Lack of awareness and education among participants | 6 | 26.1 | 6.3 |
| 9. Lack of support from superiors, feeling you cannot do much | 5 | 21.7 | 5.3 |
| 10. Lack of (clear national policy) monitoring | 4 | 17.4 | 4.2 |
| 11. Lack of staff accommodation | 3 | 13.0 | 3.1 |
| 12. Programmes not related to participants needs | 2 | 8.7 | 2.1 |

TOTAL NUMBER OF RESPONSES = 94

respondents as presented in Table 13). Seminars, workshops and training facilities followed with 73% of respondents mentioning this factor. However, communication with national and provincial headquarters (40%) and good infrastructure (20%) were the least frequently mentioned facilitating factors.

The most frequently mentioned hindering factors were inadequate transport (53% of respondents) and shortage of skilled personnel (47%). Lack of adequate staff housing (13%) and communication problems (13%) were the least frequently mentioned hindering factors.

**Local Level**

At local level, coordination with other departments and agencies ranked the highest facilitating factor. Although it ranked high at Kalichero (Site 2) and Kalunga (Site 3), it ranked third at Katopola (Site 1). Reaching target population was the next highest ranking factor, ranking higher at Kalichero and Kalunga than at Katopola (see Table 10). Seminars/ workshops and training facilities was the next ranking facilitating factor followed by availability of transport and inputs. Although training and visit was cited as a facilitating factor at Kalichero and Kalunga it was not applicable to Katopola Centre which focuses on residential courses.

At local level, lack of adequate inputs and lack of coordination with other departments and agencies were the highest ranked hindering factors. Apathy among participants was the second highest ranked hindering factor at all training centres. Delays in releasing funds for loans and shortage of skilled manpower ranked the next hindering factor at local level. Apathy among participants ranked the lowest hindering factor as it was not applicable at Site 1.

Table 13. Percentages of respondents and responses for facilitating and hindering factors at district level.

| Factors | District level | | |
| --- | --- | --- | --- |
| | Number of respondents | % of respondents | % of total responses |
| FACTORS FACILITATING IMPLEMENTATION (n = 15) | | | |
| 1. Coordination with other departments and agencies | 12 | 80.0 | 17.3 |
| 2. Seminars/workshops and training facilities | 11 | 73.3 | 15.9 |
| 3. Availability of transport | 10 | 66.7 | 14.4 |
| 4. Target population being reached | 10 | 66.7 | 14.4 |
| 5. Financial support, credit facilities | 9 | 60.0 | 13.0 |
| 6. Supporting training and visit system, mobile courses | 8 | 53.3 | 11.5 |
| 7. Communication with provincial and national headquarters | 6 | 40.0 | 8.6 |
| 8. Good infrastructure | 3 | 20.0 | 4.3 |
| TOTAL NUMBER OF RESPONSES = 69 | | | |
| FACTORS HINDERING IMPLEMENTATION (n = 15) | | | |
| 1. Inadequate transport | 8 | 53.3 | 15.3 |
| 2. Shortage of skilled personnel | 7 | 46.7 | 13.4 |
| 3. Lack of inadequate inputs | 7 | 46.6 | 13.4 |
| 4. Unstable funding | 6 | 40.0 | 11.5 |
| 5. Lack of awareness among participants | 6 | 40.0 | 11.5 |
| 6. Late payment of farmers for their produce | 5 | 33.3 | 9.6 |
| 7. Lack of staff involvement in planning and lack of clear national policy, evaluation and monitoring | 5 | 33.4 | 9.6 |
| 8. Delays of inputs (seeds, fertilizer, equipment) | 4 | 26.6 | 7.6 |
| 9. Over-centralized system | 2 | 13.3 | 3.8 |
| 7. Lack of adequate staff housing | 2 | 13.3 | 3.8 |
| TOTAL NUMBER OF RESPONSES = 52 | | | |

This section presented results of the critical incident interviews conducted with selected administrators and extension workers at four administrative levels. The section that follows will display results of three sets of survey questionnaires administered to selected administrators at all administrative levels and to selected participants of integrated nonformal education programmes.

## Survey Questionnaire Results

## Characteristics of Respondents

This section provides a description of respondents and their groups. Groups are described in terms of administrative level: national, provincial, district, and local level comprising Site 1, Site 2, and Site 3. Individual respondents are described in four demographic variables: sex, age, level of education, and number of years in employment. The data were collected as responses to the Administrators' Questionnaire. Tables 14 to 16 present respondents' sex, age, level of education and number of years employed. Level of education and gender are reported as frequencies and percentages over the whole population and by the administrative group to which they belonged. All analysis of data from survey questionnaires used the computer programme SPSSX (Nie and Hull, 1980). Significance was set at $p < .05$.

Table 14 shows the distribution of male and female respondents. The figures of Table 14 indicate a predominance of males (79%) in the sample of administrators who participated in the study. At the national level 73% were male, at the provincial level 80%, at the district level 81%, and at the local level 100%, 82%, and 75%, respectively. At the three institu-

Table 14. Distribution of males and females within administrative groups.

| Administrative group | Number | | Percent | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| National | 19 | 7 | 73 | 27 |
| Provincial | 24 | 6 | 80 | 20 |
| District | 17 | 4 | 81 | 19 |
| Local | | | | |
| Site 1 | 6 | - | 100 | - |
| Site 2 | 9 | 2 | 82 | 18 |
| Site 3 | 9 | 3 | 75 | 25 |
| Total | 84 | 22 | 79 | 21 |

n = 106

tions representing the local level the percent of male administrators ranged from 75-100%.

Table 15 displays the distribution of respondents' levels of education. The results indicate that the majority of respondents had at least a certificate (56%). The highest concentration of those holding certificates appears at Sites 2 and 3, and at the provincial and district administrative levels. Sixty-two percent of administrators who participated in this study at national level have university degrees.

Table 16 displays a breakdown of years of employment by administrative group. The results show a concentration at the national level and at Sites 1 and 3 of administrators that have worked less than ten years.

One hundred and six administrators and extension workers responded to the Administrators' Questionnaires which included items on demographic data. Demographic data for the respondents appear to indicate: (a) that a very small proportion of females are currently employed at different administrative levels; (b) that females tend to have lower educational attainment than males; and (c) that those with high educational attainment appear to have been employed for a relatively shorter period of time.

**Responses to Administrators' Questionnaire**

The Administrators' Questionnaire was designed to answer the following questions:

1.  What do administrators perceive to be the extent of "integration" in nonformal education programmes?

    (a) To what extent do administrators at different administrative levels differ in their perceptions of the existence of vertical integration?

Table 15. Distribution of respondents' level of education within administrative groups.

| Administrative group | Number | | | Percent | | |
|---|---|---|---|---|---|---|
| | Certificate | Diploma | Degree | Certificate | Diploma | Degree |
| National | 4 | 6 | 16 | 16 | 2 | 62 |
| Provincial | 18 | 7 | 5 | 60 | 23 | 17 |
| District | 15 | 5 | 1 | 17 | 24 | 5 |
| Local | | | | | | |
| Site 1 | 2 | 4 | - | 33 | 67 | - |
| Site 2 | 11 | - | - | 100 | - | - |
| Site 3 | 10 | 2 | - | 83 | 17 | - |
| Total | 60 | 24 | 22 | 56 | 23 | 21 |

n = 106

Table 16. Distribution of years of employment within the administrative groups.

| Administrative group | Number | | Percent | |
|---|---|---|---|---|
| | 1-10 years | 11+ years | 1-10 years | 11+ years |
| National | 13 | 12 | 52 | 48 |
| Provincial | 8 | 22 | 27 | 73 |
| District | 10 | 11 | 48 | 52 |
| Local | | | | |
| Site 1 | 5 | 1 | 83 | 17 |
| Site 2 | 5 | 6 | 46 | 54 |
| Site 3 | 9 | 3 | 75 | 25 |
| Total | 50 | 55 | 48 | 52 |

n = 105

(b)   To what extent do administrators at different administrative

levels differ in their perceptions of the existence of horizontal

integration?

(c)   To what extent are administrators' perceptions of vertical

integration correlated with administrators' perceptions of

horizontal integration?

(d)   How does this correlation between vertical and horizontal

integration differ according to administrative levels?

In order to answer these questions, the questionnaire had four

sections.   Each section of the Administrators' Questionnaire was designed

to answer a different question.   Section A of the Administrators' Question-

naire (Items 1 to 10) contained measures of vertical integration.

Responses to Items 11 through 20 measured horizontal integration.   Section

B of the questionnaire explored administrators' opinions on integration.

The last section (C) focused on items pertaining to the implementation

process of integrated rural development programmes.   Only 34% of adminis-

trators at the national level completed Section C of the questionnaire.

Table 17 presents correlations between the four variables:   vertical

integration; horizontal integration; opinions on integration; and opinions

on implementation.   Correlations between vertical, horizontal and opinions

on integration are significant ($\alpha$ = .05).   The positive correlations

indicate a high internal consistency among the variables.   However,

correlations of administrators' opinions on implementation are not

correlated with other three variables.   The variables were later analyzed

separately.

## Summary of Responses to Local Level Questionnaire

The results of the Local Level Questionnaire, developed to determine

administrators' opinions on integrated programmes, can be located in

Table 17.    Correlations among measures of vertical, of horizontal
integration, opinions on integration and opinions on
implementation:    Administrators' Questionnaire (n = 106).

| | Variable | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1. | Vertical | 1.00 | | | | |
| 2. | Horizontal | .48* | 1.00 | | | |
| 3. | Opinions | .30* | .33* | 1.00 | | |
| 4. | Implementation | -.15 | -.06 | .06 | 1.00 | |
| 5. | Total | .28 | .37 | .43 | .84 | 1.00 |

* Significant at $\alpha$ = .05.

Appendix 10. Results of item analysis using Lertap computer programme indicate a positive correlation between facilitators and coordination (see Table 18). But the two variables have a very low positive correlation with obstacles. There is internal consistency among the items.

Table 18. Correlations between opinions on facilitators, coordination and obstacles: Local Level Questionnaire (n = 50).

| | Variable | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| 1. | Facilitators | 1.00 | | | |
| 2. | Coordination | .45* | 1.00 | | |
| 3. | Obstacles | .14 | .10 | 1.00 | |
| 4. | Total | .18 | .71 | .56 | 1.00 |

* Significant at $\alpha$ = .01.

Analyses of variance were performed to determine if there were differences between the groups on administrators' perceptions of the degree of integration and on obstacles to integration. Results indicate that there were no significant differences between the four groups as presented in Tables 19 to 22.

**Summary of Responses to Participants' Questionnaire**

In this study, participants of integrated programmes around the three training centres were requested to respond to a questionnaire. The questionnaire was designed to solicit responses on participants' opinions with regard to outcomes integrated programmes: Seventy-seven participants were interviewed. The questions focused on whether they strongly agreed,

Table 19.  Means and SD on administrators' perceptions on degree of integration.

| Group | n | $\bar{x}$ | SD |
|---|---|---|---|
| District | 21 | 21.6 | 4.6 |
| Local level | | | |
|     Site 1 | 6 | 17.0 | 7.5 |
|     Site 2 | 11 | 24.0 | 4.0 |
|     Site 3 | 12 | 20.0 | 7.4 |
| Total | 50 | 21.4 | 5.7 |

Table 20.  Analysis of variance of differences among administrative groups on degree of integration.

| Source | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| Between Administrative Groups | 165.32 | 3 | 55.1 | 1.69 | .18 |
| Within Groups | 1492.45 | 46 | 32.44 | | |

Table 21. Means and SD on administrators' perceptions of obstacles
to integration: Local Level Questionnaire.

| Group | n | $\bar{x}$ | SD |
|---|---|---|---|
| District | 21 | 19.23 | 3.43 |
| Local level | | | |
| Site 1 | 6 | 21.5 | 1.64 |
| Site 2 | 11 | 20.8 | 2.18 |
| Site 3 | 12 | 20.5 | 3.47 |

Table 22. Analysis of variance of differences among administrative
groups on administrators' perceptions of obstacles to
integration.

| Source | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| Between Administrative Groups | 34.77 | 3 | 11.59 | 1.24 | .30 |
| Within Groups | 429.94 | 46 | 9.34 | | |

agreed, or disagreed with various aspects of integrated programmes. Item analysis conducted through Lertap computer programme indicates a positive correlation among the variables: skills, facilities and activities (see Table 23). Skills and facilities indicate a higher positive correlation than do skills and activities, while facilities are highly correlated with skills. There is internal consistency between the items.

Table 23. Correlations between skills, facilities and activities: Participants' Question-naire (n = 77).

| Variable | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 1. Skills | 1.00 | | | |
| 2. Facilities | .32* | 1.00 | | |
| 3. Activities | .19 | .50* | 1.00 | |
| 4. Total | .53 | .84 | .82 | 1.00 |

* Significant at $\alpha$ = .01.

Participants strongly agreed that the skills they learned would be useful in their daily activities. A summary of participants' responses are found in Appendix 11. A high percentage (45%) of participants indicated that said equipment and facilities used at the centres were not available in their homes. Fifty percent of participants felt that things should improve at the training centre; 29.9% were undecided. There was strong agreement among participants that they were acquiring knowledge and skills that would help them in their daily activities but that they did not have the necessary equipment in their homes. It appears that participants were

not sure of the role that the centres had regarding loan distribution and other agricultural inputs.

## Answering the Research Questions

This section focuses on the research questions. In order to answer the research questions several analyses were performed.

1.  **To what extent are administrators' perceptions of vertical integration correlated with their perceptions of horizontal integration?**

The answer to the above question was obtained by calculating the Product-Moment correlation between horizontal and vertical integration. Results of the analysis indicate that vertical integration is positively correlated with horizontal integration ($r = .49$)

2.  **How does the correlation between vertical and horizontal integration vary according to administrative level?**

In order to answer this question, the Product-Moment correlation on horizontal and vertical integration were performed. The results of the analysis are presented Table 24, according to administrative group.

Results indicate that there is higher positive correlation at the national level ($r = .63$), and for Site 1 at local level ($r = .63$), than at other administrative levels, with the provincial level showing the lowest positive correlation ($r = .35$). A score between 1 and 19 represented low score on perceptions on degree of vertical or horizontal integration while scores between 20 and 40 represented high score on perceptions on the degree of vertical or horizontal integration.

Table 24. Correlations of perceived degree of vertical and horizontal integration by administrative group.

| | Variable | $\bar{x}$ | SD | Corr. | P |
|---|---|---|---|---|---|
| National Level | Vertical | 26.42 | 5.30 | .63 | .0002* |
| | Horizontal | 25.00 | 5.66 | | |
| Provincial Level | Vertical | 22.93 | 5.98 | .35 | .02* |
| | Horizontal | 21.73 | 6.86 | | |
| District Level | Vertical | 22.47 | 5.47 | .39 | .03* |
| | Horizontal | 21.71 | 6.42 | | |
| Local Level | | | | | |
| Site 1 | Vertical | 19.66 | 6.02 | .63 | .08 |
| | Horizontal | 22.66 | 5.27 | | |
| Site 2 | Vertical | 22.90 | 6.54 | .54 | .04* |
| | Horizontal | 23.00 | 5.25 | | |
| Site 3 | Vertical | 21.33 | 8.51 | .54 | .03* |
| | Horizontal | 18.08 | 4.56 | | |

* Significant at $\alpha$ = .05.

3.  **To what extent do administrators of different administrative levels differ in their perceptions of the existence of vertical integration?**

In order to answer this question, one-way analysis of variance was performed on the variable vertical integration using the SPSSX computer programme in order to determine whether there were any differences between the means among different administrative levels. Table 25 presents the results of the analysis which indicate that there is a significant difference between the perceptions of vertical integration by administrators at different administrative levels. Administrators at the national level have a higher mean ($\bar{x}$ = 26.42) than those at any other level while the local level have the lowest mean ($\bar{x}$ = 21.58) (see Table 26).

4.  **To what extent do administrators from different adminstrative levels differ in their perceptions of the existence of horizontal integration?**

One-way analysis of variance was performed using the SPSSX computer programme to determine whether administrators from different administrative levels differed in their perceptions of the existence of horizontal integration. The results do not indicate that there is a significant difference between the four groups. Table 27 presents the results of the analysis as well as the means and standard deviations for each group.

The national level had a higher mean ($\bar{x}$ = 25.0) for horizontal integration when compared with the provincial and district levels ($\bar{x}$ = 21.7). The local level administrators scored lowest on horizontal integration (see Table 28).

Table 25. Analysis of variance of differences between administrative groups on vertical integration.

| Source | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| Between Administrative Groups | 356.95 | 3 | 118.98 | 3.20 | .02* |
| Within Groups | 3792.48 | 102 | 37.18 | | |

* Significant at $\alpha$ = .05.

Table 26. Means and SD of administrators' perceptions of the degree of vertical integration.

| Group | n | $\bar{x}$ | SD |
|---|---|---|---|
| National | 26 | 26.42 | 5.30 |
| Provincial | 30 | 22.93 | 5.98 |
| District | 21 | 22.47 | 5.47 |
| Local | 29 | 21.58 | 7.19 |

Table 27. Analysis of variance of differences between administrative groups on Administrators' perceptions of degree of horizontal integration.

| Source | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| Between Administrative Groups | 263.49 | 3 | 87.83 | 2.35 | .07 |
| Within Groups | 3800.84 | 102 | 37.26 | - | - |

Table 28. Means and SD of administrators' perceptions of degree of horizontal integration

| Group | n | $\bar{x}$ | SD |
|---|---|---|---|
| National | 26 | 24.00 | 5.66 |
| Provincial | 30 | 21.73 | 6.86 |
| District | 21 | 21.71 | 6.43 |
| Local | 29 | 20.71 | 5.37 |
| Within Groups Total | 106 | 22.30 | 6.10 |

5.  **To what extent do administrators from different administrative levels differ in their perceptions of the existence of integration?**

Section B of the Administrators' Questionnaire contained items that assessed administrators' opinions on the existence of various aspects of integration. The questionnaire had items on both vertical and horizontal integration. Analysis of variance was conducted to determine whether administrators from different administrative levels had significant differences in their opinions on the existence of integration in their programmes. Results of the analysis of variance show that administrators from different administrative levels did not differ significantly in their opinions on integration (see Table 29). The analysis indicated that the means at the national and provincial levels ($\bar{x}$ = 40.8 and and $\bar{x}$ = 40.3, respectively) were higher than those for the district level ($\bar{x}$ = 37.0), and for the cases ($\bar{x}$ = 38.5), but these differences were not significant (see Table 30).

6.  **To what extent do administrators from different adminstrative levels differ in their perceptions of implementation of integrated programmes?**

Analysis of variance was performed using SPSSX computer programme on Section C of the Administrators' Questionnaire. The results of the analysis are presented in Table 31. A score between 1 to 29 represented a low score while scores ranging between 30-50 represented high scores on perceptions on the implementation of integrated programmes. Table 32 displays the distribution of means and standard deviations on administrators opinions on implementation of integrated programmes. There are no significant differences in the opinions of administrators from different

Table 29. Analysis of variance of differences between groups on the degree of integration in programmes.

| Source | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| Between Administrative Groups | 157.73 | 3 | 52.57 | 1.58 | .19 |
| Within Groups | 3378.53 | 102 | 33.12 | – | – |

Table 30. Means and SD of administrators' opinions on the degree of integration in programmes.

| Group | n | $\bar{x}$ | SD |
|---|---|---|---|
| National | 26 | 40.84 | 5.00 |
| Provincial | 30 | 40.33 | 3.90 |
| District | 21 | 37.80 | 9.50 |
| Local | 29 | 38.48 | 4.13 |
| Grand Mean | 106 | 39.45 | 5.75 |

Table 31. Analysis of variance of differences among administrative groups on opinions on implementation.

| Source | SS | DF | MS | F | P |
|---|---|---|---|---|---|
| Between Adminstrative Groups | 240.76 | 3 | 80.25 | .91 | .43 |
| Within Groups | 6806.85 | 78 | 87.26 | - | - |

Table 32. Means and SD of administrators' opinions on implementation of integrated programmes.

| Group | n | $\bar{x}$ | SD |
|---|---|---|---|
| National | 17 | 39.11 | 8.06 |
| Provincial | 21 | 40.47 | 9.16 |
| District | 16 | 43.50 | 8.18 |
| Local | 28 | 38.92 | 10.68 |

administrative levels with respect to the implementation of integrated programmes.

The table indicates that not all administrators completed Section C of the Administrators' Questionnaire because it was not directly applicable to their work. At the national level, nine respondents did not complete Section C because they felt they were not actually involved in implementing integrated programmes. Nine at the provincial level did not complete the Section C of the questionnaire. Only one out of twenty-nine extension workers from the three training centres failed to complete Section C.

## Summary

This chapter presented results of this study. The first section outlined categories developed from interview data. Facilitating and hindering factors have been displayed according to each administrative level. The last section presented results of survey questionnaires that were administered to selected administrators at four administrative levels and to selected participants of integrated nonformal education programmes around three training centres. Chapter Six presents a discussion of the results of this study.

CHAPTER SIX

DISCUSSION OF RESULTS


Chapter Six discusses results of the study in light of the literature reviewed. The first section discusses results that emerged through interviews with administrators at different administrative levels. The second section presents a discussion of the results of the survey questionnaires administered to selected administrators at four administrative levels and to selected participants of integrated nonformal education programmes.

For the convenience of the reader the research questions of the study are again presented.

1. What factors are thought by administrators to facilitate implementation of integrated nonformal education programmes?

2. What factors are thought by administrators to hinder implementation of integrated nonformal education programmes?

3. What do administrators perceive to be the extent of integration in integrated nonformal education programmes?

    (a) To what extent do administrators at different administrative levels differ in their perceptions of the existence of "vertical integration"?

    (b) To what extent do administrators at different administrative levels differ in their perceptions of the existence of "horizontal integration"?

    (c) To what extent do administrators' perceptions of vertical integration correlate with administrators' perceptions on horizontal integration?

(d) How does this correlation between vertical and horizontal

integration differ according to administrative levels?

4. What skills do participants perceive to gain from integrated nonformal

education programmes?

## Perceived Facilitating and Hindering Factors

### Facilitating Factors

In reviewing research on implementation Fullan and Pomfret (1977)

identified four major determinants of successful implementation of an

innovation. These include: characteristics of the innovation itself; the

implementation strategies; main features of the unit adopting the innova-

tion; and characteristics of the macro sociopolitical framework within

which the innovation is nested. In this study, from a careful analysis of

the interrelationships of these determinants a hierarchy of successful

innovations can be profiled. Fullan and Pomfret (1977) argue that "parti-

cular determinants may be critical under one set of circumstances, while

others may be prominent under other conditions."

Innovations in developing countries have been central to national

development policies (Havelock and Huberman, 1978). Many theorists have

argued against the manner in which the third world has introduced innova-

tions. One group of theorists insists that innovations represent a power-

ful form of 'cultural imperialism' since they represent ideas borrowed from

the developed world (Carnoy, 1974). Another group stresses that the

problem of innovation failure in developing countries lies in the conserva-

tive nature of educational systems that resists change, which is revealed

in a lack of rigorous planning for educational change, and inexperienced

practitioners, who receive restricted training and in-service training.

Jennings-Wray (1985), from her study of the Integrated Science Project in

the Carribean, concluded that innovative ideas from the industrialized
countries can be used with success under certain conditions. These circum-
stances include the presence of government support; adequate financing;
sufficient time in which to operationalize the change effort, effective
dissemination strategies, and the provision of adequate grounding in
essential personnel and professional expertise.

This study focused on several factors perceived by administrators to
facilitate integrated nonformal education programmes. For administrators
at three administrative levels (national, provincial and district)
seminars/workshops and training facilities is a powerful facilitating
factor. Their discussions imply that through these practices they learn
most about changes being made within their departments and that they
"acquire new skills." One typical farm management officer said:

> Having attended a course at the Pan-African Institute in Kabwe,
> I gained new knowledge and skills in farm management which I
> shared with my friends at work.

The administrators' valuing of in-service training may be due to their
shallow pre-service preparation and the strong continuing pressures to gain
new skills in their sphere of operation. The answers of administrators in
this study suggest that this is so. This perception agrees with research
findings on nonformal education by Coombs et al. (1973; 1974) and Thompson
(1981). In-service training is one of the determinants of successful
implementation identified by Fullan (1979) and Jennings-Wray (1985).

At the local level, however, administrators ranked seminars/workshops
fourth level as a factor facilitating successful implementation of
integrated nonformal education programmes. It appears that administrators
at the higher administrative levels have more access to seminars/workshops

and training facilities than administrators at the local level. Yet it is the administrators at local level who need more training so as to keep abreast with any policy changes that are constantly being made.

The concept of integration assumes that administrators of various departments and agencies will coordinate their efforts in offering non-formal education programmes to rural communities (Maimbo, 1982). Coordination as an aspect of horizontal integration is discussed by Coombs (1980) and Cole (1982) as a strong feature of successful implementation of integrated nonformal education programs. In this study all four levels of administrators ranked coordination as the second highest facilitating factor. Horizontal integration requires a constant interaction between administrators across government departments and non-governmental organizations (Coles, 1982). This multi-sectoral approach leads to gain for each department or agency. Indeed as one administrator said:

> Since youth extension is not seen as a priority, I hardly tour youth projects taking place in the province. The few that I have visited, I have relied on transport from church organizations.

Advocates of integrated nonformal education programmes assume that the multi-sectoral approach of programmes leads to more efficient use of resources by virtue of its holistic effects (Coombs, 1980; Coles, 1982; Evans, 1981). The major argument for integrated nonformal education programmes focuses on the limited resources in most developing countries whose economies will continue to decline (Lynch and Wiggins, 1987).

Financial support is one determinant of successful implementation as identified by Fullan (1979) and Jennings-Wray (1985). In this research, administrators at all levels ranked financial support third as a facilitating factor. Although financial support ranked third as a facilitating

factor, not all administrators from all departments identified it as such.
Financial support ranked high among administrators of departments (e.g.
Agriculture and Marketing and Cooperatives) who have external funding for
their programmes, which have to meet high accountability standards. As in
many developing countries, in Zambia unstable funding ranks high as a
hindering factor at all administrative levels. One administrator in the
Ministry of Agriculture said:

> Since Zambia is undergoing economic recession, financial
> assistance from outside reassures us of the continuation of
> integrated programmes.

Results of this research are consistent with earlier research findings by
Coombs et al. (1973, 1974) and Thompson (1981). Their studies on nonformal
education indicated a lack of commitment to rural development by govern-
ments of developing countries. In nearly all the countries surveyed, the
allocation of resources in the national development plans indicated
agricultural and rural development had a low priority.

Related to financial support is resource support. Resource support is
influential in determining the success of implementation (Fullan and
Pomfret, 1977). The availability of resources like transport and inputs
(materials, seeds, and equipment) were identified as facilitating factors
in this research. Although administrators at all administrative levels
identified availability of transport as a facilitating factor, only 38.8%
of administrators at national level identified it as one, compared to 79.5%
and 66.6% at provincial and district levels respectively. This may be
explained by the fact that national level administrators are not expected
to travel long distances to the provinces, whereas their counterparts at
other administrative levels are expected to tour districts and training

centres regularly. To these administrators, transport is an important issue. The Department of Community Development emerged as the department most lacking in transport, materials and other inputs. One Community District Development assistant said:

> Transport is a major handicap for us to tour various Community Development activities to see what our friends in the field are doing. When we travel, we always rely on our friends from the Department of Agriculture.

Lack of adequate inputs, as well, emerged as a hindering factor at lower administrative levels. One literacy officer at the local level said:

> For a long time now, we have been unable to record programmes for the people. We have also been unable to conduct radio listening groups as we have done in the past due to lack of batteries for radios.

The Community Development provincial offices are situated at Katete, 70 kilometres away from Chipata where other provincial and district offices are. This administrative arrangement may explain the difficulties which district officers in Community Development face.

Literature pinpoints administrative support as one of the determinants of successful implementation (Fullan, 1979; Jennings-Wrays, 1985). In this study, communication between national, provincial, district and local levels (vertical integration) was identified as a facilitating factor. One respondent indicated that:

> Regular meetings are held every month between administrators at the headquarters (Ministry of Agriculture and Water Development) and all provincial coodinators for IRDP.

Although vertical integration ranked high as a facilitating factor among both national and provincial levels, it was ranked very low at district and local levels. This may be attributed to the fact that the communication

between local and district and national level administrators has to pass

through the provincial level. This administrative channel very often leads

to delays in getting replies for authorization and delays in releasing

funds for recurrent expenditures and loans for farmers. One extension

worker lamented that:

> We cannot teach farmers that during this month of January,
> apply fertilizer, or plant this brand of seed when they are
> unable to obtain these inputs [in time].

Fullan and Pomfret (1977) identified characteristics of the macro

sociopolitical unit as one determinant of successful implementation. They

observe that large-scale programmes proposed by political agents in power

have several features that increase the possibility of adoption but

decrease the likelihood of effective implementation. However, results of

some other implementation studies have shown that programmes succeed when

they are supported by a ministry or department of government (Havelock and

Huberman, 1978; Jennings-Wray, 1985).

In Zambia, Integrated Rural Development Programmes (IRDP) were

sponsored at the national level through the Ministry of Agriculture and

Water Development. During the period of implementation of IRDP the

Decentralization Act (1981) was enacted. Administrators at all levels

identified introduction of the Decentralization Act as a facilitating

factor to implementing integrated nonformal education programmes. Zambian

administrators, especially those at lower administrative levels, may see it

as a positive factor because it provides more power in decision-making at

provincial and district levels. Though the Act gives more power at

district level, no administrators at this level identified the Decentrali-

zation Act as a facilitating factor. They did not project themselves as

adequately skilled to participate in planning projects that affect their districts. Indeed, it has already been observed by Kanduza et al. (1985) that implementation of the Decentralization Act required district administrators to possess basic planning skills, which many administrators seemed to lack. Although the Decentralization Act gives more power to district and local level administrators, implementation of the Act has disrupted the way things used to be. Prior to implementation of the Act, inputs (fertilizers, seeds, equipment) were directly given to each department by the IRDP office. This process has been changed. The consequence of the change is that certain activities of some departments, such as Community Development have been disrupted. This may explain why district level administrators do not see implementation of the Act as a facilitating factor. One Community Development officer said:

> The women still meet every Thursday, but they do not do much.
> We do try to use local materials for doing crafts work, but
> women want to do more as they used to. Materials are very
> expensive for women to buy. There are no seeds to plant in
> their demonstration plots.

In order for an innovation to be successful, it should be implemented through taking into account other changes taking place in the sociopolitical system (Jennings-Wray, 1985). Related to the macro sociopolitical factors is the new training and visit system identified as a facilitating factor. The new training and visit system permits administrators and extension workers to meet more farmers than they did before. One administrator said:

> The new system of training and visit is a good system. Every
> Friday is a field day. All officers visit one block every week.
> Then, they visit another block the following week. This ensures
> that the extension worker working in the field provides
> information on his extension activities each day of the week

which wasn't the case before. During those days an extension worker visited as many farmers as he wanted and was not required to account for his movements.

The new system is viewed as a facilitating factor, because it provides accountability for the extension workers, and because it provides contact with more farmers than the residential courses held at training centres do.

## Hindering Factors

Several categories of hindering factors emerged from interviews conducted at the four administrative levels. Hindering factors identified in this study are similar to problems spotlighted in other research studies on nonformal education (Sheffield and Diejomaoh, 1972; Coombs et al., 1973; Callaway, 1973; 1974; 1980; Loveridge 1979; Thompson, 1981). In this research, inadequate skilled personnel ranked as the highest hindering factor at three administrative levels (national, provincial and district). Earlier studies on nonformal education programmes identified inadequate skilled personnel as one of the problems in rural communities. Thompson (1981) summarized the situation in most developing countries:

> The efficiency of even the more enlightened extension services depended upon a number of factors of which the number and quality of the field workers was the most crucial. In Kenya and Zambia extension staff came to number approximately one to every 1000 farm holdings, a proportion recommended as a minimum by the United Nations Food and Agriculture Organization but one which obviously made it impossible for them to meet the majority of their clientele on a regular and individual basis. Yet even this figure compares favourably with the situation of most developing African countries: Malawi with one worker for every 7800 holdings; Senegal with one for every 2000 families and Mali with one for every 8500 families.(p. 230-231)

The small number of extension workers results in the extension message reaching a very small group of the target population who may in fact ignore the message. One extension worker lamented:

> Most of the time we visit villages, we do not see any changes in the way things are done. What we teach at the centre does not seem to have much impact when they go back home.

The number of extension workers is so small that their presence is sometimes not felt or, at times, their message is ignored. The morale of the extension worker is often very low. In order to be accepted by the community, an extension worker may at times step down and live like one of them, therefore failing in duties to change people's attitudes. The scarcity of extension workers is exacerbated by the inadequate pre-service training and the lack of in-service training facilities.

Other studies on nonformal education have indicated that the lack of services, transport in particular, in rural areas makes the work of extension workers very difficult (Ahmed, 1975; Green, 1975; Loveridge, 1979; Thompson, 1981). Administrators and extension workers in this study ranked inadequate transport as the second highest ranking hindering factor. Most extension workers are expected to travel long distances to supervise farmers or to organize literacy classes. One Community Development worker said:

> Before, we were given a bicycle to use to supervise farmers. That is not the case any more. This means that we cannot visit those farmers who are far from the centres now.

Resource support is one of the determinants of implementation (Fullan and Pomfret, 1977; Havelock and Huberman, 1977). In this research Zambian administrators and extension workers identified lack of adequate agricultural inputs, materials and equipment and unstable funding as some of the

factors that hinder implementation of integrated nonformal education programmes. These problems of lack of resource support have been examined by previous research on nonformal education (Sheffield and Diejomaoh, 1972; Coombs and Ahmed, 1974).

Evaluation and monitoring of integrated nonformal education programmes has been identified as lacking in many research studies on nonformal education (Sheffield and Diejomaoh, 1972; Coombs and Ahmed, 1974; Thompson, 1981). Evaluation is one of the determinants of successful implementation of an innovation as identified by Fullan and Pomfret (1977). In this study, lack of evaluation and monitoring ranked second as a hindering factor at national level but ranked quite low at lower administrative levels. The differences in the ranking may be attributed to the fact that administrators at national level have been exposed to ideas on evaluation and monitoring and are interested in monitoring what is actually happening in the field through a variety of means including, for example, monthly reports from officers in the field. Evaluation data is important for making comparisons with other nations, as well as for bilateral relations with industrialized countries and international funding agencies (Woldring, 1984). Although administrators and extension workers at lower administrative levels seem to be burdened with a lot of paper work to report to superiors, their administrative reporting does not, on the surface, appear to provide rigorous and complex evaluation data. Extension workers in Zambia and elsewhere in Africa have been trained to communicate information rather than to assess needs of local communities (Thompson, 1981). In the case of IRDP, it appears that research is usually conducted by the funding agency sponsoring the programme, and does not involve extension workers and bring outside experts from the University of Zambia or elsewhere.

This may be attributed to the fact that although IRDP utilizes a multi-sectoral approach, no statutory national body has been established to monitor nonformal education activities organized by government departments and other agencies. An attempt has been made to establish a national body to coordinate the activities of IRDP. It is known as the Inter-Institutional National Policy Steering Committee and was instituted in May 1984 (Ministry of Agriculture and Water Development, 1984). The National Steering Committee was designed to coordinate planning activities of all donor agencies and the National Commission for Development Planning with leadership from the Planning Division of the Ministry of Agriculture and Water Development. The Provincial Coordination Steering Committees and the Monthly District Coordination Committees evolved out of the same principle of strengthening coordination between departments and donor agencies at local level and improving communication from the local level to the national level within departments. The effectiveness of these Steering Committees is yet to be seen.

Advocates of integrated nonformal education programmes assume that when nonformal activities are integrated, large groups of rural communities, normally left out by other educational programmes, will be reached (Coombs, 1980; Coles, 1982). In this study, apathy among participants was identified as the second highest ranking factor by administrators and extension staff at local level. It may be that the number of extension workers in these communities, as discussed earlier, is too small to make a difference. One extension worker lamented:

> Although we train participants in improved rural structures and
> other skills in appropriate technology, our participants alone
> are unable to influence change in the villages.

Indeed, the time given to farmers to change their practices seems too short. It may be that rural households need more time to change their old ways. With more time, rural households would learn more from training programmes. With a little patience and a realistic time line, one may hear comments as this one by another extension worker:

> I feel very happy when I see that farmers have changed the way they take care of their animals, especially during the rainy season.

## Perceptions on Existence of Integration

The literature on nonformal education indicates that integration at all administrative levels is a necessary condition for state-sponsored nonformal educational activities to realize programme goals (Coombs, 1974, 1980, 1985; Coles, 1982). Both Coombs (1980) and Coles (1982) advocate vertical and horizontal integration of nonformal education programmes. The study of the Integrated Rural Development Programmes (IRDP) focused on the implementation of state-sponsored integrated nonformal education programmes in the Eastern Province of Zambia. IRDP, introduced as an innovative project, was designed to enhance rural development in selected rural areas of Zambia.

### Vertical Integration

Results of the Administrators' Questionnaire indicate that administrators at national levels scored higher on the perceived degree of vertical integration. Scores ranging between 1 to 19 reflected a low score of perceived vertical integration while scores ranging between 20 to 40 reflected high scores of perceived vertical integration. National level administra-

tors scored $\bar{x} = 26.4$, a figure higher than other administrative levels. On the other hand, scores at all administrative levels indicate a high degree of perceived vertical integration. Results of the one way analysis of variance, performed in order to determine whether the mean scores of different administrative levels were significantly different, showed that there was a significant difference between the means ($p < .02$).

Results of this analysis seem to suggest that the general trend is a high degree of perceived vertical integration, with national level administrators scoring higher than other administrative levels. The reason why national level administrators had higher scores on the perceived existence of vertical integration may be due to these reasons. Firstly, national level administrators are involved in planning with international agencies, and therefore are more exposed to ideas about integration than administrators at the lower administrative levels, especially local level administrators who are merely told what to implement. Secondly, because national level administrators are involved in the most senior policy formulation, they may feel the highest responsibility to make things work. Lastly, national level administrators are far removed from local level administrators and may actually believe that everything is working even if it is not. The generally high scores among all administrative levels seem to suggest that there exists a perceived high degree of vertical integration among administrators of all levels.

## Horizontal Integration

Results of this research indicate that administrators at all levels scored high on the perceived degree of horizontal integration. Scores

ranging between 1 to 19 reflected low perceived degree of horizontal

integration while scores between 20 to 40 reflected a high perceived degree

of horizontal integration. Although administrators' scores on the perceived

degree of horizontal integration are high at all administrative levels,

national levels scores ($\bar{x}$ = 25.0) are higher than other levels ($\bar{x}$ = 21.73

at province level; $\bar{x}$ = 21.71 at district; $\bar{x}$ = 20.71 at local level).

Results of the one-way analysis of variance on horizontal integration to

determine whether the means of different administrative levels were

different indicate that there were no significant differences between the

means. The high scores of national level administrators on the perceived

degree of horizontal integration may be explained by the fact that national

level administrators have the keenest understanding of the value of coordi-

nation in planning nonformal education programmes (SIDA, 1983). At the

same time, the high scores may not mean that all four departments plan

programmes together, but with one other department or funding agency. It

appears that administrators perceive a high degree of horizontal integra-

tion to exist in integrated nonformal education programmes even though the

integration may only involve one other department or agency.

The high scores on the perceived degree of both vertical and horizon-

tal integration seem to support the literature on nonformal education

(Coombs, 1980; Coles, 1982). The literature suggests that an ideally

integrated system would be characterized by a constant free flow of

communication between levels within the same administrative department

(vertical integration) and constant interaction between departments and

non-governmental agencies at each administrative level.

The answer to the question of whether there is a correlation between

administrators' perceptions on the existence of vertical and horizontal

integration indicates that the national level has the highest positive

correlation between perceptions on the existence of vertical and horizontal

integration (r = .63), while the provincial and district levels have the

lowest positive correlations (r = .35) and (r = .39) respectively. The

results may be explained by the fact that administrators at the national

level feel that they are part of the policy making, whereas administrators

at provincial and district levels, though they may participate in planning

committees, live far away from where the national decision-making process

takes place. National level administrators have been exposed to ideas

about integration through dealings with international organizations and

funding agencies. Through such exposure, they may believe that there

exists a high degree of integration in the nonformal programmes.

The high positive correlations between vertical and horizontal

integration at all administrative levels further confirms the assertions

made in the nonformal education literature (Coles, 1982; Evans, 1981). The

literature asserts that outcomes of integrated nonformal education

programmes would benefit rural communities in acquiring new knowledge,

skills and attitudes useful in people's daily activities. Results of this

study and other research (Coombs et al., 1974) indicate that in several

government departments the number of extension workers to the number of

rural households is small. The small number of extension workers makes

their work difficult in their attempt to reach a large number of rural

household.

Earlier surveys conducted by Sheffield and Diejomaoh (1972) and Coombs

and Ahmed (1974) indicated that there was a maldistribution of educational

opportunities for rural people. Evidence revealed that those who were most

deprived of formal education were similarly most deprived of educational

opportunity through nonformal education. The findings also indicated that

the participation of girls and women in nonformal education programmes was

very low. Although women actively participate in farming, marketing of

crops, and other farm management functions, they have been overlooked. In

traditional African societies, women have the responsibilities of caring

for children, for the sick and for the elderly. These responsibilities,

including other household chores, may leave little time to participate in

nonformal education activities. Results of this research are congruent

with other research findings on nonformal education. The low percentage of

female extension staff affects the delivery of nonformal education

activities for women. Other surveys have indicated that there is lack of

adequate personnel in extension programmes (Coombs, 1974; Thompson, 1981).

The low figures of female extension staff reduces the chances for women's

participation even further.

In this study, the number of female officers employed in government

departments may influence the number of women who participate in integrated

nonformal education programmes. The demographic data indicate that very

few women are employed at provincial, district and local levels in partici-

pating departments of this study, and yet each department has a Women's

Section for executing specific functions to rural women. At provincial

level, one female extension officer was expected to cover all six districts

in the province, which covers an area of over 12,000 square kilometres.

The same story goes for the district level. Training centres at times had

one female extension officer and in some situations, such as at Site 1,

they had none. This staffing situation has some of the following effects:

(a) Programme activities designed specifically for women, never really reach the target population. This phenomenon has been documented through IRDP annual reports (1981, 1982). At Kalichero and Kalunga training centres, where farmers' training courses were offered, of the total attendance, 33.31% were men, 15.29% were women and 54.4% were school children and members of the Young Farmers Club.

(b) Since the majority of extension staff are male, the running of women's clubs is often under the supervision of male extension workers. Some women may be prevented from attending these clubs by their husbands because instructors are men. Male instructors may not understand needs of female participants.

Some have argued against conducting separate courses for women (Sjostrom, 1984). They advocate that there is a need for mobile practical field courses with the same agricultural focus for women and men. But problems do exist in the African traditional societies where roles of women are clearly prescribed. Although the idea of offering practical field courses for both sexes seems to be a good one, results of such a strategy may continue to indicate a low participation of women farmers. In a survey of women's participation in the Lima programme, Chilibvumbo and Kanyangwa (1985) observed that women traditionally own a separate plot from the household field to grow crops of their choice. So, the Lima programme - a plot for the woman - is not in conflict with traditional values. Women get extension services and advice for this plot but not for the household plot. The female extension officer distributes loans to women's groups for

agricultural inputs for the plot. In the case of the Lima, traditional values have been maintained (Chilibvumbo and Kanyangwa, 1985).

A purposive sample of the seventy-seven participants interviewed seemed to believe that they gained much from training programmes at the centres. Although many women are represented among those interviewed, this does not reflect the true picture of those who participate in training programmes (usually men). The women interviewed had come to the training centres for specific meetings concerning credit facilities specifically for women. They were a convenient group to interview: many women came. But an equal number of men came to these meetings. At these meetings more men spoke and the women merely listened on. This pattern is customary.

Many women seem to believe that activities at the centres can become better. For example, they expressed concern on the repayment of seasonal loans which they are required to pay back within one year. Many are not able to. Many were apathetic because even when they had applied for loans, they had never been successful.

Many participants generally believe that from the Farm Training Centres and Health Centres they gained many skills which they practise in their homes. They agreed, too, that in some instances, they do not have the kind of equipment used in demonstrations. In some cases they said that what was being taught was not what they really wanted to learn. One old man in a literacy class said:

> I do not just want to learn how to read and write Nyanja (the local language) I would like to learn how to read and write English.

It may be that in developing countries learners are rarely consulted on what they want to learn (Coles, 1982).

**Summary**

This chapter has presented a discussion of the results of the study.
Facilitating and hindering factors differ at different administrative
levels. In this study, shortage of skilled personnel was identified as a
hindering factor. It has also been identified in other research surveys
(Coombs, 1974; Thompson, 1981). The limited number of extension workers
limits the number of people that are reached.

Results seem to suggest that administrators at national level perceive
a higher degree of both vertical and horizontal integration to exist than
do the administrators at other administrative levels. This may be due
partly to the fact that administrators at national level feel most keenly
that they are part of the policy making process, and partly due to the fact
that they are so far removed from the provinces, they believe a high degree
of integration to exists whether or not that is actually the case. Results
of the study indicate that there is a positive correlation between vertical
and horizontal integration. The results seem to validate what the litera-
ture says on integrated nonformal education (Coombs et al., 1973; 1974;
1980; Sheffield and Diejomaoh, 1972).

From this study, it is difficult to know who really benefits from
these integrated programmes. Results of the interviews indicate that
participants feel that they learn many skills which are useful in their
daily lives. But many participants seemed to possess feelings of helpless-
ness, believing that nothing can change the way things are, especially as
related to their economic situation. Results indicate that although they
learnt many skills, they often could not afford the equipment and materials
required to increase their agricultural output. But what may be important

is whether the extension message has reached its audience. The small number of extension staff, whether in Agriculture, Community Development, or Nutrition limits the number of participants in integrated programmes.

The next chapter presents summary and conclusions drawn from this study. It will highlight recommendations for practice, for theory, and for further research.

CHAPTER SEVEN

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS


This chapter gives a brief summary of the purposes and findings of the study as well as some implications of these findings. The first section provides a summary of the purposes of the study, methods utilized and the major findings, and discusses main conclusions and implications. The next section offers areas of further research arising from the study. Finally, recommendations for practice, for theory and for further research are provided.


### Summary

**The Purposes of the Study**

The purposes of the study were (see p. 14):

(1) to identify factors thought by administrators to facilitate or hinder the implementation of integrated nonformal education programmes;

(2) to establish the relative influence of each factor, and

(3) to determine the perceived degree of integration from the perspective of four administrative levels: (national, provincial, district and local).

(4) to determine skills and knowledge acquired from integrated nonformal education programmes through the perceptions of participants.


**Methods of Data Collection**

The case study was the primary method utilized in this research. Interviews conducted with selected administrators at each of the four

administrative levels utilized the critical incident technique to identify

specific events thought to illustrate facilitating or hindering factors.

Administrators working at four different administrative levels completed

the Administrators' Questionnaire (see Appendix 1) which solicited their

perceptions of the degree of horizontal and vertical integration and the

factors thought to facilitate and hinder implementation of integrated

nonformal education programmes in Zambia. Administrators at district and

local level responded to a separate survey questionnaire, the Local Level

Questionnaire, which focused on degree of integration and obstacles to

integrated nonformal education programmes. Interviews were also conducted

with selected programme participants in order to determine outcomes of

integrated nonformal education programmes.

**Perceived Facilitating and Hindering Factors**

Administrators at all four administrative levels identified seminars/

workshops and training facilities and coordination with other departments

and agencies as the highest ranking facilitating factors. Financial

support was identified as the next highest ranking factor. The new

training and visit system and support for decentralization ranked lowest as

facilitating factors. Other factors were ranked differently across

administrative levels. Details of facilitating and hindering factors are

presented in Tables 9 and 10.

Inadequate skills was ranked highest as a hindering factor at three

administrative levels (national, provincial and district), while it was

ranked sixth by administrators and extension workers at local level.

Inadequate transport was the second highest ranking hindering factor.

Administrators in this study ranked inadequate agricultural inputs,
materials, equipment and unstable funding as some of the factors that
hinder implementation of integrated nonformal education programmes.
Administrators at all four levels ranked as the lowest hindering factors
apathy among participants and lack of monitoring and evaluation.

## Responses to Administrators' Questionnaire

Results of the study indicate that administrators at all levels
perceive a high degree of both vertical and horizontal integration to exist
in integrated nonformal education programmes. Scores between 1 to 19
reflected a perceived low degree of integration while scores between 20 to
40 reflected a perceived high degree of integration. Although results
suggest that administrators perceive a high degree of integration to exist
in integrated nonformal education programmes, scores for national level
administrators are much higher than scores at other levels. Results of the
one-way analysis of variance on vertical integration show that there was a
significant difference (p <.02) between the means of different administra-
tive groups. Results of the one-way analysis of variance on horizontal
integration indicate that there were no significant differences between
means. Details of results of the analysis of Administrators' Questionnaire
are presented in Tables 24 - 32. Administrators' perceptions on vertical
and horizontal integration are positively and significantly correlated at
all administrative levels.

## Responses to Local Level Questionnaire

Results indicate that administrators and extension workers believe
that the integrated nonformal education programmes meet the learning needs

of rural communities. Administrators at district and local levels perceived a high degree of integration to exist in nonformal education programmes. The major obstacles identified in the implementation of integrated nonformal education programmes are: lack of facilities and equipment at the three training centres, and communication difficulties with higher administrative levels.

**Responses to Participants' Questionnaire**

The Participants' Questionnaire was designed to determine outcomes of integration through the perceptions of participants of integrated programmes. Outcomes of integration related to: skills they learned from integrated nonformal education programmes; whether facilities at the three training centres were adequate; and whether the skills they learned at training centres were useful in their daily lives.

Responses to Participants' Questionnaire indicate that those who utilize services offered at training centres learn skills useful in their daily lives. Results also show that lack of materials and equipment hinder participants from utilizing new skills and knowledge learned at the training centres.

Results also suggest that the small number of administrators and extension workers inhibited participation of rural households as one travels further away from training centres.

## Limitations of the Study

The findings of this research are limited to administrators' perceptions of factors thought to facilitate or hinder implementation of integrated nonformal education programmes; and also to their perceptions of

the degree of integration itself in the Integrated Rural Development

Programme (IRDP). This study did not investigate the actual nature of

communication within and between departments examined: it relied on

administrators' perceptions. Their perceptions may indeed be but one form

of reality. Perceptions may change over time. Tajfel (1969) points out

that:

> the term 'perception' can be so stretched out that it could
> finally lead to a consideration of the social and cultural
> determinants of all knowledge about the [interviewee's] world
> (p. 319).

A limitation of the study lies in some of the methodological

procedures utilized. For instance, heads of government departments

selected the personnel who were to respond to the survey questionnaires as

well as those eventually interviewed. The researcher could instead have

randomly selected subjects. Because not all interviews were tape-recorded

the researcher's analyses relied on her field notes. The long distances

between national level administrators of senior standing and their sub-

ordinates made it difficult to spend more time in either places. Hence

more time was spent with administrators at provincial, district and local

levels than at the national headquarters.

Although every attempt was made to maintain confidentiality,

respondents may have reported what they felt the researcher wanted to hear.

This leaves open to question the degree of correspondence between how

subjects report their own experience and what an external measure might

report. Survey questionnaires are more intrusive, and generally require

more accommodation from subjects to fit their responses into those options

that the study allows. Yet, despite such difficulties in using them,

survey questionnaires such as those used in this research do lead to discovery of general human experience.

Much debate revolves around whether or not a single case study provides adequate evidence to acclaim contribution to knowledge. This study would have benefited from multiple case studies in Zambia or in similar countries for comparisons. Because IRDP was, in 1972, established in Zambia first in Chipata District, this research was conducted in this area. Its findings should be understood as having special implications for Chipata District, among administrators from participating departments. In as much as this study is limited to administrators' perceptions of facilitating and hindering factors; and to administrators' perceptions of the degree of integration, its findings may be of interest to other districts of Zambia, and to other countries (such as Botswana, Malawi, Kenya) of similar status which experiment with integrated nonformal education programmes.

## Conclusions

This section presents major conclusions drawn from the study. Implications of each conclusion are discussed as they relate to practice, to theory, and to further research.

1. Administrators' status in the administrative hierarchy affects their perceptions of facilitating and hindering factors.

Results of this research suggest that factors perceived as facilitating and hindering implementation of integrated nonformal education programmes rank differently according to administrative level. Since facilitating factors rank differently at each level, it is necessary to

reinforce facilitating factors identified at different administrative
levels so that administrators and extension workers are able to perform
their work better.

For example, at local level, the factor of reaching target population
is ranked higher than it is at other administrative levels. Here, one
observes that administrators and extension workers at training centres are
in a better position to tell whether the training programmes are reaching
the target population. Implications for administrative decisions at higher
levels may involve taking into account the facilitating factors perceived
by extension workers at lower level administrative officers, during
implementation.

While at national level, inadequate skilled personnel and lack of
training facilities rank as the highest hindering factor, they rank fourth
at the local level. It appears, then, that administrators at national
level are aware that there are few skilled personnel in the field, while
extension workers, though aware of the problem do not perceive the problem
as most pressing. The implication of this finding is that administrators
at national level may be able to arrange training programmes in the form of
seminars/workshops and short courses for junior staff at local level.

Lack of adequate inputs ranks highest as a hindering factor for
administrators at local level. It ranks only third at the other adminis-
trative levels. To the extension workers, inputs are an important aspect
of their day-to-day work.

The implication of this observation is that administrators at higher
administrative levels must listen to the needs of administrators and
extension staff who are in the field in order to lessen the burden of their

work. At different administrative levels, hindering factors identified at different administrative levels should be reduced in order to assist administrators and extension workers in their work.

2.   This study suggests that administrators' status in the administrative hierarchy affects their perceptions of the perceived degree of vertical and horizontal integration.

Administrators at national level perceive a higher degree of vertical and horizontal integration to exist in integrated programmes than do administrators of other administrative levels. The literature on nonformal education suggests that the existence of both vertical and horizontal integration between all administrative levels is a necessary requirement for effective implementation of nonformal education programmes in rural areas (Coombs, 1980, 1985; Coles, 1982; Dejene, 1980; Thompson, 1981).

The implication of these findings is that there is need to improve the communication between departments and within departments between the four administrative levels (national, provincial, district and local). Officers in the field very often feel alienated and have a low morale. They need regular communication from the national and provincial offices.

3.   Results of this research are consistent with the patterns set in the conceptual framework.

Nonformal education literature asserts that there is a close relation-ship between the existence of vertical and horizontal integration in integrated programmes (Coombs et al., 1973; Coles, 1982). Findings of this study indicate that the perceived degree of vertical integration is correlated with the perceived degree of horizontal integration. This finding is consistent with the pattern set in the conceptual framework.

The implication of this finding relates to the planning of integrated programmes. It is imperative during the planning stage, to create good communication channels among departments and agencies as well as within specific departments.

4. The small number of extension workers in the field affects the outcomes of integrated nonformal education programmes.

The literature on nonformal education asserts that when programmes are integrated vertically and horizontally at all administrative levels their outcomes would benefit participants of nonformal activities (Coombs et al. 1973, 1974, 1980; Coles, 1982). Results of this study suggest that there were very few extension workers in government departments in relation to the number of rural households. Based on the participants' responses, a large population of rural households is not reached by integrated nonformal education programmes. This has implications for the implementation of integrated programmes. A need exists to increase the number of extension workers in government departments working in the field as well as to improve their working conditions so that they are retained in rural areas.

## Recommendations

### Recommendations for Practice

One of the findings of the study indicates that administrators of different administrative levels differ in their scores on the perceived degree of integration, with administrators at national level having higher scores compared to other levels. This finding has implications for the practitioner who plans and introduces a new programme. Administrators at

national level get involved in planning, but rarely involve administrators at provincial, district and local levels. Administrators and extension workers at lower administrative levels only become involved during the implementation of integrated nonformal education programmes. In this situation, integrated programmes seem to have been introduced from the national level to specific provinces. If administrators at national level would listen to the views of administrators at lower levels they might gain awareness of the problems administrators at lower administrative levels face in carrying out their work. Involved from the beginning, administrators at lower levels would become aware of the goals and strategies for implementing integrated nonformal education programmes.

Results on administrators' perceptions on the degree of horizontal integration indicate that there is no significant difference in the perceptions of administrators at different administrative levels, although the national level does score the highest mean. If horizontal integration is considered an important element of integrated programmes, then communication between different departments may be improved through some structural changes in the various ministries which offer services to rural areas. Although administrators and extension workers try to coordinate their efforts in reaching rural populations, there are no regulations or guidelines in each ministry for such activities. Administrators and extension workers at district and local levels are answerable to administrators at provincial and national levels of their particular departments.

The following specific recommendations are made for implementing non-formal activities in rural Zambia.

1. In order to strengthen integration between departments and other
   agencies, the National Steering Committee established in 1984 should
   be a legislated body which should include officials from the Zambian
   Adult Education Advisory Board and officials from the Departments of
   Social Development and the Health Education Unit. The Committee
   should include all funding agencies and voluntary associations
   offering nonformal education activities in the country.

2. Hindering factors identified should be reduced at all administrative
   levels in order to facilitate implementation of integrated nonformal
   education programmes. It may be necessary to review the type of
   training programmes for administrators to ensure that administrators
   acquire skills relevant to their work.

3. Administrators at district level should be trained through short
   courses and seminars so that they are able to contribute in district
   committees, because lack of training facilities ranked as the most
   powerful hindering factor.

4. The three training centres should publicize their activities and
   facilities available to farmers, so that farmers know what goes on at
   training centres.

## Recommendations for Theory Building

Literature on nonformal education advocates an integrated approach to
development in order to improve the standard of living of those in rural
areas. A need exists to establish the efficacy of integrated approaches in
order to determine whether integrated nonformal education programmes are
more efficient than non-integrated nonformal education programmes. The
concept of integration as it relates to nonformal education has not yet
been very well developed and validated in the field.

In this study, administrators' perceptions of the degree of vertical integration were positively correlated with administrators' perceived degree of horizontal integration. These results support assertions made in the nonformal education literature (Coles, 1982; Evans, 1981). The integrated nonformal education programme which this study focused on shows a high degree of integration. The high correlations between vertical and horizontal integration may mean that administrators see integration as one type of communication. The definition of vertical integration stresses the constant free-flow of communication between the local and higher administrative levels. This study underlines the importance of the two-way process; both top-down and bottom-up in the communication flow that is central to the concept of vertical integration. In fact, at the local level for some participants the down-up component of vertical integration is of first importance.

The communication which underlies the concept horizontal integration may not always be complete as it is assumed in the literature on integrated programmes (Coles, 1982; Maimbo, 1984). Many respondents indicated that they usually coordinated their efforts with one other department or agency operating in the locality. It would be of theoretical value to explore in more detail the concept of integration as it relates to nonformal education.

The factors identified as facilitating and hindering implementation of integrated programmes are similar to the findings of other research surveys (Coombs, 1974; Thompson, 1981). The identification of these factors is an important starting point for someone interested in developing a theoretical model of factors that influence integration process.

**Recommendations for Further Research**

Several areas for further research have been identified:

1.  This study identified factors that facilitate and hinder implementa-
    tion of government sponsored nonformal programmes. Subsequent
    research ought to be conducted that focuses on factors that facilitate
    or hinder implementation of non-governmental organizations to deter-
    mine whether facilitating and hindering factors are similar to those
    identified in government-sponsored nonformal education programmes.

2.  Research on the impact of integrated nonformal education programmes on
    the rural communities is an exceedingly important area for further
    research. Several evaluation studies indicate conflicting results on
    the impact of these programmes (SIDA, 1983; Marawidze et al., 1982;
    Chilibvumbo and Kanyanja, 1985). This study did not focus on the
    impact of the programmes. But a systematic evaluation of the impact
    of integrated programmes in Zambia needs to be conducted.

3.  Results of this investigation suggest that facilitating and hindering
    factors rank differently at each administrative level. New research
    should centre on one administrative level in analyzing facilitating
    and hindering factors with selected participants would be useful so as
    to better understand these factors in relation to outcomes of
    integrated nonformal education programmes.

4.  The instruments used in this study have high internal consistency.
    These instruments were context-specific, especially so with reference
    to significant place names, names of programmes, and details of
    relationships between administrative levels. Subsequent studies

should utilize instruments that being more culture-free[3] will be relevant across different national contexts in the same or a comparable region.

5. This study assumes that innovations in nonformal education should be part of the national developmental goals. It is important to conduct investigations that question who should innovate and manage nonformal education. Should government or should non-governmental and voluntary organizations hold this responsibility? Nonformal education research on social movements such as trade unions, religious bodies and self-help organizations has rarely been done (Paulston and LeRoy, 1980). There is need for analysis on the differential impact of these educational innovations according to who does the sponsoring.

## Concluding Remarks

The literature on nonformal education insists that integration at all administrative levels is necessary for successful implementation of government-sponsored nonformal education (Evans, 1981; Thompson, 1981; Coles, 1982). This study of Integrated Nonformal Education (Systems) in Zambia has identified factors that facilitate as well as those that hinder implementation of the Integrated Rural Development Programme. Although this study suggests that a high degree of integration exists in these programmes, one may still question whether IRDP is realizing its goals. As a postscript we might consider this: are integrated nonformal education programmes desirable, or are they imposed on developing countries? Is it necessary to conduct integrated nonformal education programmes through

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[3] Boocock (1980) argues some of the pros and cons of culture-free tests. Sociology of education. Dallas: Houghton Muffin Company.

government departments when, in fact a large number of nonformal education activities are carried out by non-governmental organizations? Should private agencies be left to flourish on their own, or should they coordinate their activities with government departments? Does integration really ensure better utilization of resources? Since IRDP has been externally funded can they make a claim that they are effectively managing limited resources? Is it possible to conduct integrated nonformal education programmes in Zambia today without external funding? Is it realistic to expect local level administrators to coordinate their efforts at local level when they are answerable to their superiors at national level? Do Zambian policy makers at national level support an integrated approach or do they merely pay lip service to the system? Will the implementation of the Decentralization Act enhance IRDP activities and ensure increased local participation? A better understanding of these issues would strengthen IRDP activities in realizing its goals to reach rural communities.

Since IRDP was designed to reach the poorest rural households, its improved implementation could benefit the rural poor in Zambia's Chipata District. The poorest section of many rural communities are often left out of educational innovations (Coombs and Ahmed, 1974; Niehoff, 1979; Thompson, 1981). In writing about the Zambian peasantry Bwalya (1984) said:

> ... From the point of view of the peasant, the various programmes aimed at increasing his capacity for productive engagement have failed to reach him. To him, they are a deliberate camouflage to obscure his exploitation and consequent exclusion from sharing fairly in the available resources and benefits of the country (p. 74).

Particularly with reference then to the better adaptations of new nonformal education ventures in contexts that serve the poor, this study may well have offered some meaningful suggestions and insights.

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APPENDIX 1

ADMINISTRATORS' QUESTIONNAIRE

# APPENDIX 1

## ADMINISTRATORS' QUESTIONNAIRE

Please fill in the following information by **PRINTING** in the spaces given below.

Date: —————————————————————————————————————

Year of birth: ———————————————————————————

Sex: ————————————————————————————————————

Position held: ——————————————————————————

Highest education obtained (eg. Certificate, Diploma):
———————————————————————————————————————————

Number of years employed in extension: ————————————

SECTION A: The following statements are about what goes on in an extension department. Please indicate the extent to which each statement describes your department by putting a circle on one of the answers. If you think an item does not apply, **PLEASE** circle Not Applicable (N.A.) on the rating scale.

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| N.A. | Rarely occurs | Sometimes occurs | Often occurs | Very Often occurs |

1. There is a free flow of information from my office to my superiors.    0  1  2  3  4

2. I get a reply to correspondence to my superiors.    0  1  2  3  4

3. New policy guidelines are clearly communicated to administrators in the department.    0  1  2  3  4

4. Seminars are held to motivate workers in the department.    0  1  2  3  4

5. Supplies and equipment are readily available for use.    0  1  2  3  4

6. Administrators work together to prepare monthly and annual reports.    0  1  2  3  4

7. Regular staff meetings are held in the department for both senior and junior staff.    0  1  2  3  4

8. Field workers in the department have had formal training.    0  1  2  3  4

9. Committees plan rural development programmes.    0  1  2  3  4

10. Together different departments are involved in planning rural development programmes.    0  1  2  3  4

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| N.A. | Rarely occurs | Sometimes occurs | Often occurs | Very Often occurs |

11. Non-governmental organizations are
involved in planning committees.          0  1  2  3  4

12. Facilities and equipment from other
departments are at our disposal.          0  1  2  3  4

13. Programmes are run jointly with other
departments and non-govermental
organizations.                            0  1  2  3  4

14. The department works closely with local
self-help groups involved in
development projects.                      0  1  2  3  4

15. The department works closely with other
departments involved in development
projects.                                 0  1  2  3  4

16. Seminars are held in conjunction with
other departments involved in rural
development.                              0  1  2  3  4

17. The content of what is taught to adults
in rural areas is laid down from above
and is strictly followed.                 0  1  2  3  4

18. The content of what is taught to adults
reflects the local needs of particular
communities.                              0  1  2  3  4

19. A variety of nonformal methods (radio,
demonstrations, posters and
discussions) are used in teaching
adults.                                   0  1  2  3  4

20. Educational activities relate to
participants' daily activities.           0  1  2  3  4

**SECTION B:** The following statements are about how you view your department. Circle the answer that relates how you view your department.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly disagree | Disagree | Undecided | Agree | Strongly agree |

1. This department has a major role in offering services to the rural areas.　　1　2　3　4　5

2. The objectives of the programmes are clear to me.　　1　2　3　4　5

3. The department has a role in development efforts of the country.　　1　2　3　4　5

4. There are adequate facilities and equipment that can help me in my work.　　1　2　3　4　5

5. There is a good working atmosphere that promotes my work to be done well.　　1　2　3　4　5

6. There is a close relationship with other departments offering educational services to the rural areas.　　1　2　3　4　5

7. It is possible for me to use facilities from other departments.　　1　2　3　4　5

8. It is desirable for officers to work closely together when developing educational programmes for rural areas.　　1　2　3　4　5

9. It is important for field workers from different departments to coordinate their efforts in offering educational facilities to the rural areas.　　1　2　3　4　5

10. Field workers should be given enough freedom to modify educational programmes according to the needs of the local communities.　　1　2　3　4　5

**SECTION C:** The following are statements that relate to implementation of integrated programmes. Please circle your answer.

1.  In general what was your overall reaction to the way integrated rural development programmes were introduced?

    1. very negative
    2. somewhat negative
    3. neutral
    4. somewhat positive
    5. very positive

2.  After integrated programmes were introduced did you feel that you had a clear understanding of it?

    1. very unclear
    2. somewhat unclear
    3. not sure
    4. somewhat clear
    5. very clear

3.  At the time the programmes were introduced, how much importance did you feel the administration in Lusaka and Chipata gave to the Integrated Rural Development centres?

    1. none
    2. little
    3. moderate
    4. great
    5. extreme

4.  After the integrated programmes were introduced in the area, did you have any serious questions about their success?

    1. none
    2. little
    3. moderate
    4. great
    5. extreme

5.  How much effort would you say that you put into trying to implement integrated programmes?

    1. none
    2. little
    3. some
    4. considerable
    5. great

6.  How well did things work out as far as you were concerned?

    1. very poor
    2. poor
    3. no notable change
    4. quite well
    5. extremely well

7.  How much did administrators in Chipata or at the centre really try to help you overcome any of these problems?

    1. not sure
    2. none
    3. little
    4. some
    5. considerable

8.  To what extent did administrative officials block you in any way in your first attempts to carry out your work?

    1. not sure
    2. none
    3. little
    4. some
    5. considerable

9.  How much effort have you made in carrying out your work?

    1. not sure
    2. none
    3. little
    4. some
    5. considerable

10. How much effort are you making at the present time in carrying out your work towards implementing Integrated Rural Development Programmes?

    1. not sure
    2. none
    3. little
    4. some
    5. considerable

11. In regard to your overall reaction to the introduction of integrated programmes, what would you say your feelings are now?

    1. very negative
    2. somewhat negative
    3. ambivalent
    4. somewhat positive
    5. very positive

12. Are integrated rural development programmes serving the intended target groups?

    1. very poor
    2. poor
    3. no notable change
    4. quite well
    5. extremely well

APPENDIX 2


**THE CRITICAL INCIDENT INTERVIEW FORM**

# APPENDIX 2

## THE CRITICAL INCIDENT INTERVIEW FORM

### General Aim

We are making a study of rural development programmes. We would like to find out what things help or hinder your work. You are especially qualified to tell us about some of these factors, and that is why you have been selected for participation in this research.

Could you please repeat for me your understanding of this exercise (study).

### Summary

Some things that help are are communication between personnel in different departments and coordination with other agencies working in the area. I am going to ask you to recall incidents which happened to you or to your colleagues which were helpful in your work. Later, I will ask you questions about incidents that hindered your work.

### Sponsorship of the Study

The research being conducted is part of a doctoral study being undertaken by the investigator. It is fully supported by the University of British Columbia, the University of Zambia, and the International Research Development Centre.

### Purpose of the Study

We wish to find out in detail what behaviours are helpful at work and which behaviours are not helpful. We are especially interested in what kinds of behaviour among extension workers are helpful in their work. All interviews will be treated with confidentiality. Only the researcher will have access to the information you will give.

## Questions for Positive Incidents

1. Think back to a time when you or your friend did something that was very helpful to your work. What was it?

   _____

2. Could you describe the event in detail for me?

   _____

3. For how long did the incident go on?

   _____

4. What exactly happened that was so helpful?

   _____

5. Why do you think the event was so helpful?

   _____

6. To what extent was the event helpful in your work? How much would you say it helped your work?

   | 1 | 2 | 3 | 0 |
   |---|---|---|---|
   | Some | Considerable | Great | Not Know |

7. What action did you take?

   _____

8. How did your colleagues react to the event?

   _____

9. Was the incident also helpful to the work of your colleagues?

   _____

10. Can you recall any other helpful incidents?

   _____

## Questions for Negative Incidents

1. Can you recall when you or someone did something that you felt blocked you from doing your work. What was it?

   _____

2. Can you describe in detail what exactly happened?

   _____

3. Why do you think it blocked you from doing your work?

   _____

4. Was this event the greatest obstacle at the time?

   _____

5. If no, which other obstacles to your work did you have at that time?

   _____

6. Did the event block the work of colleagues at the centre? How did it block their work?

   _____

7. To what extent was the event an obstacle to your work? How much would you say it blocked your work?

   | 1 | 2 | 3 | 0 |
   |------|--------------|-------|----------|
   | Some | Considerable | Great | Not Know |

8. Was there any help or advice that you needed during the time the event occured?

   _____

9. Who provided the help or who in your opinion should have provided the help?

   _____

10. Can you recall any other incidents?

    _____

APPENDIX 3

**LOCAL   LEVEL   QUESTIONNAIRE**

# APPENDIX 3

## LOCAL LEVEL QUESTIONNAIRE

**Instructions:**
The following are statements about your work. Indicate
your response to each statment by circling the most
appropriate answer.

| 3 | 2 | 1 | 0 |
|---|---|---|---|
| Strongly Agree | Agree | DisAgree | Not Know |

1. Committees exist that coordinate integrated
   rural development programmes.                     3  2  1  0

2. Members of the committees represent
   different departments and organizations.          3  2  1  0

3. District Development Committees consider
   local peoples' demands.                           3  2  1  0

4. Ward Development Committees work closely
   with Integrated Rural Development Centres.        3  2  1  0

5. The party and church leaders are active in
   Development Committees.                            3  2  1  0

6. Integrated Rural Development Programmes
   consult the village committees about what
   their needs are.                                  3  2  1  0

7. I work closely with administrators and
   field workers from other departments.             3  2  1  0

8. Facilities and equipment are shared between
   departments and other organizations.              3  2  1  0

9. Seminars and other training activities are
   offered jointly with other departments.           3  2  1  0

10. Local people are consulted on what they
    want to learn.                                   3  2  1  0

|  | 3 | 2 | 1 | 0 |
|---|---|---|---|---|
|  | Strongly Agree | Agree | DisAgree | Not Know |

11. I plan training activities according to the needs of the community around the centre.   3  2  1  0

12. Many people around the community attend training programmes.   3  2  1  0

13. Women do not participate as often as men.   3  2  1  0

14. One of the obstacles I face in my work is lack of facilities and equipment at the centre.   3  2  1  0

15. It is not clear as to what I should be doing at the centre.   3  2  1  0

16. I do not get support from administrators at the centre.   3  2  1  0

17. The work at the centre is too much for me.   3  2  1  0

18. I would require additional training to do my job well.   3  2  1  0

19. One of the obstacles I experience in my work is the lack of quick response from administrators at high levels.   3  2  1  0

20. Another obstacle is the existing communication problems with adnministrators at the headquarters.   3  2  1  0

21. The bad roads and telephone system delay communication.   3  2  1  0

22. Obstacles that exist do not prevent me from doing my job.   3  2  1  0

23. There should be more cooperation between departments and organizations.   3  2  1  0

APPENDIX 4


PARTICIPANTS' QUESTIONNAIRE

# APPENDIX 4

## PARTICIPANTS' QUESTIONNAIRE

**Instructions:**

Below is a list of statements that relate to what you hope to learn from the training programme. Cirle the answer which you agree with.

|  3 | 2 | 1 | 0 |
|---|---|---|---|
| Strongly Agree | Agree | Disagree | Not Know |

1. I am learning a lot from this training programme.                        3  2  1  0

2. I hope to learn skills that will help me improve my farming skills.                3  2  1  0

3. I am learning skills that are helpful to improve my life in general.               3  2  1  0

4. The instructor's teaching style is helpful in enabling me to learn.               3  2  1  0

5. Because of the programme I learn more everyday.                              3  2  1  0

6. The facilities at the centre are adequate to help us to learn better.             3  2  1  0

7. The facilities that we use at the centre are available in my village.             3  2  1  0

8. Equipment that is used is available in my home.                            3  2  1  0

9. It would be useful for me to buy equipment from the centre to use in my home.        3  2  1  0

|  | 3 | 2 | 1 | 0 |
|---|---|---|---|---|
|  | Strongly Agree | Agree | Disagree | Not Know |

10. I will definitely be able to use the knowledge and skills I have learned at the centre.  3 2 1 0

11. There is needless duplication of learning activities from different instructors.  3 2 1 0

12. I am happy with the way we are being trained at the centre.  3 2 1 0

13. I would like things to improve at the centre.  3 2 1 0

14. The centre should help us in getting loans more easily than at the moment.  3 2 1 0

15. The skills we learn at the centre will help us to produce more crops.  3 2 1 0

**APPENDIX 5**

**CODING SHEET FOR ADMINISTRATORS' QUESTIONNAIRE**

# APPENDIX 5

## CODING SHEET FOR ADMINISTRATORS' QUESTIONNAIRE

ID = Columns 1-3    Group = Column 4    Questionnaire = Column 5

Age:    20-30 = 1          21-40 = 2              41-60 = 3
Column 6

Sex:    Male  = 1      Female = 2
Column 7

Educational Background:    Certificate = 1
Column 8                   Diploma     = 2
                           Degree(s)   = 3

Number of Years Employed:      1-10 = 1
Column 9                       11+ = 2

SECTION A = Columns 10-19 (vertical integration)

1. ☐ ☐ ☐ ☐ ☐

2. ☐ ☐ ☐ ☐ ☐

3. ☐ ☐ ☐ ☐ ☐

4. ☐ ☐ ☐ ☐ ☐

5. ☐ ☐ ☐ ☐ ☐

6. ☐ ☐ ☐ ☐ ☐

7. ☐ ☐ ☐ ☐ ☐

8. ☐ ☐ ☐ ☐ ☐

9. ☐ ☐ ☐ ☐ ☐

10. ☐ ☐ ☐ ☐ ☐

11.  20-29 horizontal integration.

12. ☐ ☐ ☐ ☐ ☐

13. ☐ ☐ ☐ ☐ ☐

14. ☐ ☐ ☐ ☐ ☐

15. ☐ ☐ ☐ ☐ ☐

16. ☐ ☐ ☐ ☐ ☐

17. ☐ ☐ ☐ ☐ ☐

18. ☐ ☐ ☐ ☐ ☐

19. ☐ ☐ ☐ ☐ ☐

20. ☐ ☐ ☐ ☐ ☐

SECTION B = Columns 30-39

1. ☐ ☐ ☐ ☐ ☐

2. ☐ ☐ ☐ ☐ ☐

3. ☐ ☐ ☐ ☐ ☐

4. ☐ ☐ ☐ ☐ ☐

5. ☐ ☐ ☐ ☐ ☐

6. ☐ ☐ ☐ ☐ ☐

7. ☐ ☐ ☐ ☐ ☐

8. ☐ ☐ ☐ ☐ ☐

9. ☐ ☐ ☐ ☐ ☐

10. ☐ ☐ ☐ ☐ ☐

SECTION C = Columns 40-51 (opinions on implementation)

1. ☐ ☐ ☐ ☐ ☐

2. ☐ ☐ ☐ ☐ ☐

3. ☐ ☐ ☐ ☐ ☐

4. ☐ ☐ ☐ ☐ ☐

5. ☐ ☐ ☐ ☐ ☐

6. ☐ ☐ ☐ ☐ ☐

7. ☐ ☐ ☐ ☐ ☐

8. ☐ ☐ ☐ ☐ ☐

9. ☐ ☐ ☐ ☐ ☐

10. ☐ ☐ ☐ ☐ ☐

11. ☐ ☐ ☐ ☐ ☐

12. ☐ ☐ ☐ ☐ ☐

**APPENDIX 6**

**CODING SHEET FOR LOCAL LEVEL QUESTIONNAIRE**

# APPENDIX 6

## CODING SHEET FOR LOCAL LEVEL QUESTIONNAIRE

ID = Columns 1-3     Group = Column 4

Questionnaire = Column 5
Age:   20-30 = 1          31-40 = 2          41-60 = 3

Sex:   Male  = 1     Female = 2
Column 7

Educational Background:     Certificate = 1
Column 8                    Diploma     = 2
                            Degree(s)   = 3

Number of Years Employed:     1-10 = 1
Column 9                       11+ = 2

Columns 10-32 administrators' opinions on integration.

1.  [____]    [____]    [____]    [____]

2.  [____]    [____]    [____]    [____]

3.  [____]    [____]    [____]    [____]

4.  [____]    [____]    [____]    [____]

5.  [____]    [____]    [____]    [____]

6.  [____]    [____]    [____]    [____]

7.  [____]    [____]    [____]    [____]

8.  [____]    [____]    [____]    [____]

9. ☐ ☐ ☐ ☐

10. ☐ ☐ ☐ ☐

11. ☐ ☐ ☐ ☐

12. ☐ ☐ ☐ ☐

13. ☐ ☐ ☐ ☐

14. ☐ ☐ ☐ ☐

15. ☐ ☐ ☐ ☐

16. ☐ ☐ ☐ ☐

17. ☐ ☐ ☐ ☐

18. ☐ ☐ ☐ ☐

19. ☐ ☐ ☐ ☐

20. ☐ ☐ ☐ ☐

21. ☐ ☐ ☐ ☐

22. ☐ ☐ ☐ ☐

23. ☐ ☐ ☐ ☐

APPENDIX 7

CODING SHEET FOR PARTICIPANTS' QUESTIONNAIRE

# APPENDIX 7

## CODING SHEET FOR PARTICIPANTS' QUESTIONNAIRE

ID = Columns 1-2      Group = Column 3

Age = Column 4        20-30 = 1
                      31-40 = 2
                      41 above = 3

<u>Sex:</u>   Male  = 1      Female = 2
<u>Column</u> 5

Columns 6-21 (Participants' opinions on programmes)

1.  [  ]   [  ]   [  ]   [  ]

2.  [  ]   [  ]   [  ]   [  ]

3.  [  ]   [  ]   [  ]   [  ]

4.  [  ]   [  ]   [  ]   [  ]

5.  [  ]   [  ]   [  ]   [  ]

6.  [  ]   [  ]   [  ]   [  ]

7.  [  ]   [  ]   [  ]   [  ]

8.  [  ]   [  ]   [  ]   [  ]

9.  [  ]   [  ]   [  ]   [  ]

10. [  ]   [  ]   [  ]   [  ]

11. [  ]   [  ]   [  ]   [  ]

12. □ □ □ □

13. □ □ □ □

14. □ □ □ □

15. □ □ □ □

# APPENDIX 8

**ADMINISTRATORS' LETTER OF RECRUITMENT AND CONSENT FORM**

Centre for Continuing Education
University of Zambia

Lusaka

January 13, 1986.

Head of Department
Department of

Dear Sir/Madam,

    Your department has been selected to participate in my study. The
study is part of my doctoral programme at the University of British
Columbia and is fully supported by the University of Zambia and the
International Development Research Centre.

    I am writing to ask your permission to allow personnel in your
department to fill in a questionnaire and to be interviewed. Interviews
will run for approximately forty-five minutes. Participation in the study
is voluntary. All responses will be kept strictly confidential.

    Enclosed are consent forms for administrators to fill in.

    Thank you for your cooperation.

Yours sincerely,

Elizabeth Mumba

STUDY:  A STUDY OF INTEGRATED NONFORMAL EDUCATION IN ZAMBIA

INVESTIGATOR:   Elizabeth Mumba

The Head of Department is aware of the study and has no objection to it being conducted.

YOUR PARTICIPATION IS VOLUNTARY AND YOU HAVE THE RIGHT TO WITHDRAW FROM THE STUDY AT ANY TIME.

From: _____        Date: _____

### Please check the appropriate items

____  YES, I AM WILLING TO PARTICIPATE IN YOUR RESEARCH.

____  NO, I AM UNWILLING TO PARTICIPATE IN YOUR RESEARCH.

Additional Comments: _____

_____

_____

Signature: _____

PLEASE RETURN THIS FORM TO YOUR HEAD OF DEPARTMENT.

Thank you.

APPENDIX 9

SUMMARY OF RESPONSES TO ADMINISTRATORS' QUESTIONNAIRE

| Item | 0<br>N.A. | 1<br>Rarely<br>Occurs | Response<br>2<br>Sometimes<br>Occurs | 3<br>Often<br>Occurs | 4<br>Very<br>Often<br>Occurs | Mean<br>Response | Rank | National<br>Mean | Provincial<br>Mean | District<br>Mean | Case<br>1<br>Mean | Case<br>2<br>Mean | Case<br>3<br>Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1. There is a free flow of information from my office to my superiors.** | | | | | | | | | | | | | |
| n | 3 | 8 | 15 | 42 | 38 | 2.98 | 1 | 3.31 | 3.06 | 2.90 | 2.83 | 3.00 | 2.25 |
| % | (2.8) | (7.5) | (14.2) | (39.6) | (35.8) | | | | | | | | |
| **2. I get a reply to correspondence to my superiors.** | | | | | | | | | | | | | |
| n | 6 | 19 | 20 | 33 | 28 | 2.54 | 3 | 3.15 | 2.63 | 2.38 | 2.16 | 2.54 | 1.50 |
| % | (5.7) | (17.9) | (18.9) | (31.1) | (26.4) | | | | | | | | |
| **3. New policy guidelines are clearly communicated to administrators in the department.** | | | | | | | | | | | | | |
| n | 9 | 13 | 21 | 41 | 22 | 2.50 | 4 | 2.73 | 2.63 | 2.57 | 2.16 | 2.27 | 2.00 |
| % | (8.5) | (12.3) | (19.8) | (38.7) | (20.8) | | | | | | | | |
| **4. Seminars are held to motivate workers in the department.** | | | | | | | | | | | | | |
| n | 6 | 25 | 30 | 31 | 14 | 2.20 | 7 | 2.31 | 2.03 | 2.23 | 1.16 | 2.54 | 2.58 |
| % | (5.7) | (23.6) | (28.3) | (29.2) | (13.2) | | | | | | | | |
| **5. Supplies and equipment are readily available for use.** | | | | | | | | | | | | | |
| n | 10 | 38 | 35 | 19 | 4 | 1.70 | 9 | 2.27 | 1.30 | 1.42 | 2.33 | 2.00 | 1.41 |
| % | (9.4) | (35.8) | (33.0) | (17.9) | (3.8) | | | | | | | | |
| **6. Administrators work together to prepare monthly and annual reports.** | | | | | | | | | | | | | |
| n | 8 | 23 | 19 | 29 | 27 | 2.41 | 5 | 2.34 | 2.36 | 2.52 | 2.50 | 2.81 | 2.08 |
| % | (7.5) | (21.7) | (17.9) | (27.4) | (25.5) | | | | | | | | |
| **7. Regular staff meetings are held in the department for both senior and junior staff.** | | | | | | | | | | | | | |
| n | 8 | 25 | 25 | 23 | 25 | 2.30 | 6 | 1.73 | 2.30 | 2.38 | 3.00 | 1.81 | 3.50 |
| % | (7.5) | (23.6) | (23.6) | (21.7) | (23.6) | | | | | | | | |
| **8. Field workers in the department have had formal training.** | | | | | | | | | | | | | |
| n | 3 | 10 | 21 | 28 | 43 | 2.95 | 2 | 3.30 | 2.96 | 3.00 | 2.00 | 3.18 | 2.33 |
| % | (2.8) | (9.4) | (19.8) | (26.4) | (40.6) | | | | | | | | |
| **9. Committees plan rural development programmes.** | | | | | | | | | | | | | |
| n | 27 | 27 | 16 | 25 | 11 | 1.67 | 10 | 2.61 | 1.70 | 1.09 | 0.90 | 1.18 | 1.75 |
| % | (25.5) | (25.5) | (15.1) | (23.6) | (10.4) | | | | | | | | |
| **10. Together different departments are involved in planning rural development programmes.** | | | | | | | | | | | | | |
| n | 16 | 19 | 29 | 30 | 12 | 2.02 | 8 | 2.65 | 1.93 | 1.95 | 1.16 | 1.54 | 1.91 |
| % | (15.1) | (17.9) | (27.4) | (28.3) | (11.3) | | | | | | | | |

| Item | 0 N.A. | 1 Rarely Occurs | 2 Sometimes Occurs | 3 Often Occurs | 4 Very Often Occurs | Mean Response | Rank | National Mean | Provincial Mean | District Mean | Case 1 Mean | Case 2 Mean | Case 3 Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11. Non-governmental organizations are involved in planning committees. | | | | | | | | | | | | | |
| n | 28 | 17 | 34 | 24 | 3 | 1.59 | 9 | 2.11 | 1.86 | 1.52 | 1.33 | 1.18 | 0.41 |
| % | (26.4) | (16.0) | (32.1) | (22.6) | (2.8) | | | | | | | | |
| 12. Facilities and equipment from other departments are at our disposal. | | | | | | | | | | | | | |
| n | 26 | 44 | 28 | 5 | 3 | 1.19 | 10 | 1.65 | 1.23 | 0.95 | 1.16 | 1.09 | 0.66 |
| % | (24.5) | (41.5) | (26.4) | (4.7) | (2.8) | | | | | | | | |
| 13. Programmes are run jointly with other departments and non-governmental organizations. | | | | | | | | | | | | | |
| n | 14 | 28 | 32 | 27 | 5 | 1.82 | 8 | 2.38 | 1.96 | 1.23 | 2.33 | 1.21 | 1.50 |
| % | (13.2) | (26.4) | (30.2) | (25.5) | (4.7) | | | | | | | | |
| 14. The department works closely with local self-help groups involved in development projects. | | | | | | | | | | | | | |
| n | 9 | 17 | 22 | 23 | 35 | 2.54 | 5 | 2.53 | 2.56 | 2.85 | 2.50 | 2.45 | 2.08 |
| % | (8.5) | (16.0) | (20.8) | (21.7) | (33.0) | | | | | | | | |
| 15. The department works closely with other departments involved in development projects. | | | | | | | | | | | | | |
| n | 3 | 10 | 26 | 35 | 32 | 2.78 | 2 | 3.19 | 2.56 | 2.81 | 2.83 | 3.36 | 1.83 |
| % | (2.8) | (9.4) | (24.5) | (33.0) | (30.2) | | | | | | | | |
| 16. Seminars are held in conjunction with other departments involved in rural development. | | | | | | | | | | | | | |
| n | 8 | 21 | 32 | 31 | 14 | 2.20 | 6 | 2.61 | 1.96 | 2.14 | 2.00 | 2.63 | 1.75 |
| % | (7.5) | (19.8) | (30.2) | (29.2) | (13.2) | | | | | | | | |
| 17. The content of what is taught to adults in rural areas is laid down from above and is strictly followed. | | | | | | | | | | | | | |
| n | 14 | 24 | 36 | 25 | 7 | 1.87 | 7 | 2.03 | 1.66 | 1.61 | 2.16 | 2.00 | 2.25 |
| % | (13.2) | (22.6) | (34.0) | (23.6) | (6.6) | | | | | | | | |
| 18. The content of what is taught to adults reflects the local needs of particular communities. | | | | | | | | | | | | | |
| n | 5 | 12 | 23 | 38 | 28 | 2.67 | 4 | 2.73 | 2.63 | 2.85 | 2.33 | 2.81 | 2.41 |
| % | (4.7) | (11.3) | (21.7) | (35.8) | (26.4) | | | | | | | | |
| 19. A variety of nonformal methods (radio, demonstrations, posters, and discussions) are used in teaching adults. | | | | | | | | | | | | | |
| n | 8 | 6 | 21 | 29 | 42 | 2.85 | 1 | 2.92 | 2.70 | 2.85 | 3.00 | 3.36 | 2.58 |
| % | (7.5) | (5.7) | (19.8) | (27.4) | (39.6) | | | | | | | | |
| 20. Educational activities relate to participants' daily activities. | | | | | | | | | | | | | |
| n | 7 | 7 | 25 | 35 | 32 | 2.73 | 3 | 2.80 | 2.56 | 2.85 | 3.00 | 2.81 | 2.58 |
| % | (6.6) | (6.6) | (23.6) | (33.0) | (30.2) | | | | | | | | |

Appendix 9, Section B: Administrator's Opinions on Integration

| Item | 0 N.A. | 1 Strongly Disagree | 2 Disagree | 3 Undecided | 4 Agree | 5 Strongly Agree | Mean Response | Rank | National Mean | Provincial Mean | District Mean | Case 1 Mean | Case 2 Mean | Case 3 Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1. This department has a major role in offering services to the rural areas.** | | | | | | | | | | | | | | |
| n | 3 | 1 | 1 | 0 | 15 | 86 | 4.65 | 2 | 4.50 | 4.86 | 4.10 | 4.83 | 4.90 | 4.90 |
| % | (2.8) | (0.9) | (0.9) | (0.0) | (14.2) | (81.1) | | | | | | | | |
| **2. The objectives of the programmes are clear to me.** | | | | | | | | | | | | | | |
| n | 4 | 1 | 2 | 1 | 41 | 57 | 4.31 | 6 | 4.26 | 4.43 | 4.19 | 4.83 | 4.18 | 4.16 |
| % | (3.8) | (0.9) | (1.9) | (0.9) | (38.7) | (53.8) | | | | | | | | |
| **3. The department has a role in development efforts of the country.** | | | | | | | | | | | | | | |
| n | 3 | 0 | 3 | 1 | 22 | 77 | 4.54 | 3 | 4.69 | 4.36 | 4.61 | 4.83 | 4.72 | 4.25 |
| % | (2.8) | (0.0) | (2.8) | (0.9) | (20.8) | (72.6) | | | | | | | | |
| **4. There are adequate facilities and equipment that can help me in my work.** | | | | | | | | | | | | | | |
| n | 2 | 13 | 50 | 11 | 26 | 4 | 2.54 | 10 | 2.76 | 2.40 | 2.61 | 2.16 | 2.36 | 2.66 |
| % | (1.9) | (12.3) | (47.2) | (10.4) | (24.5) | (3.8) | | | | | | | | |
| **5. There is a good working atmosphere that promotes my work to be done well.** | | | | | | | | | | | | | | |
| n | 1 | 10 | 21 | 13 | 50 | 11 | 3.26 | 8 | 3.53 | 3.30 | 3.33 | 3.33 | 3.00 | 2.66 |
| % | (0.9) | (9.4) | (19.8) | (12.3) | (47.2) | (10.4) | | | | | | | | |
| **6. There is a close relationship with other departments offering educational services to the rural areas.** | | | | | | | | | | | | | | |
| n | 4 | 2 | 18 | 15 | 54 | 13 | 3.43 | 7 | 3.92 | 3.60 | 3.09 | 3.00 | 3.72 | 2.50 |
| % | (3.8) | (1.9) | (17.0) | (14.2) | (50.9) | (12.3) | | | | | | | | |
| **7. It is possible for me to use facilities from other departments.** | | | | | | | | | | | | | | |
| n | 2 | 10 | 31 | 10 | 50 | 3 | 2.99 | 9 | 3.30 | 3.36 | 2.66 | 2.33 | 2.36 | 2.83 |
| % | (1.9) | (9.4) | (29.2) | (9.4) | (47.2) | (2.8) | | | | | | | | |
| **8. It is desireable for officers to work closely together when developing educational programmes for rural areas.** | | | | | | | | | | | | | | |
| n | 2 | 2 | 1 | 5 | 24 | 72 | 4.48 | 5 | 4.73 | 4.46 | 4.19 | 4.50 | 4.72 | 4.25 |
| % | (1.9) | (1.9) | (0.9) | (4.7) | (22.6) | (67.9) | | | | | | | | |

| Item | Response | | | | | | Mean Response | Rank | National Mean | Provincial Mean | District Mean | Case 1 Mean | Case 2 Mean | Case 3 Mean |
| | 0 N.A. | 1 Strongly Disagree | 2 Disagree | 3 Undecided | 4 Agree | 5 Strongly Agree | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9. It is important for field workers from different departments to coordinate their efforts in offering educational facilities to the rural areas. | | | | | | | | | | | | | | |
| n | 1 | 0 | 1 | 3 | 14 | 87 | 4.84 | 1 | 2.16 | 4.86 | 4.42 | 4.50 | 4.81 | 4.75 |
| % | (0.9) | (0.0) | (0.9) | (2.8) | (13.2) | (82.1) | | | | | | | | |
| 10. Field workers should be given enough freedom to modify educational programmes according to the needs of the local committees. | | | | | | | | | | | | | | |
| n | 1 | 0 | 3 | 3 | 29 | 69 | 4.44 | 4 | 2.65 | 4.66 | 4.47 | 4.66 | 4.63 | 4.33 |
| % | (0.9) | (0.0) | (2.8) | (2.8) | (27.4) | (65.1) | | | | | | | | |

| Item | Response | | | | | | Mean Response | Rank | National Mean | Provincial Mean | District Mean | Case 1 Mean | Case 2 Mean | Case 3 Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 N.A. | 1 Very Negative | 2 Somewhat Negative | 3 Neutral | 4 Somewhat Positive | 5 Very Positive | | | | | | | | |

**1. In general what is your overall reaction to the way integrated rural development programmes were introduced?**

| | 0 N.A. | 1 | 2 | 3 | 4 | 5 | Mean | Rank | Nat'l | Prov | Dist | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 0 | 3 | 9 | 18 | 29 | 23 | 3.73 | 3 | 3.82 | 3.47 | 3.62 | 3.80 | 3.95 | 4.41 |
| % | (0.0) | (2.8) | (8.5) | (17.0) | (27.4) | (21.7) | | | | | | | | |

| | 0 N.A. | 1 Very Unclear | 2 Somewhat Unclear | 3 Not Sure | 4 Somewhat Clear | 5 Very Clear | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**2. After integrated programmes were introduced did you feel you had a clear understanding of it?**

| | n | 1 | 5 | 11 | 13 | 30 | 22 | 3.61 | 5 | 3.52 | 3.52 | 3.87 | 3.40 | 3.09 | 4.08 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % | (0.9) | (4.7) | (10.4) | (12.3) | (28.3) | (20.8) | | | | | | | | | |

| | 0 N.A. | 1 None | 2 Little | 3 Moderate | 4 Great | 5 Extreme | |
|---|---|---|---|---|---|---|---|

**3. At the time the programmes were introduced, how much importance did you feel the administration in Lusaka and Chipata gave to the Integrated Rural Development centres?**

| | n | 3 | 4 | 8 | 32 | 29 | 6 | 3.19 | 8 | 3.41 | 3.28 | 3.56 | 1.80 | 2.72 | 3.25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % | (2.8) | (3.8) | (7.5) | (30.2) | (27.4) | (5.7) | | | | | | | | | |

**4. After the integrated programmes were introduced in the area, did you have any serious questions about their success?**

| | n | 4 | 12 | 12 | 20 | 28 | 6 | 2.90 | | 3.23 | 3.00 | 3.00 | 2.40 | 2.27 | 2.91 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % | (3.8) | (11.3) | (11.3) | (18.9) | (26.4) | (5.7) | | | | | | | | | |

| | 0 N.A. | 1 None | 2 Little | 3 Some | 4 Considerable | 5 Great | |
|---|---|---|---|---|---|---|---|

**5. How much effort would you say that you put into trying to implement integrated programmes?**

| | n | 5 | 9 | 6 | 9 | 37 | 15 | 3.34 | 6 | 2.88 | 3.61 | 4.00 | 2.60 | 2.81 | 3.50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % | (4.7) | (8.5) | (5.7) | (8.5) | (34.9) | (14.2) | | | | | | | | | |

| Item | 0 N.A. | 1 Very Poor | 2 Poor | 3 No Notable Change | 4 Quite Well | 5 Extremely Well | Mean Response | Rank | National Mean | Provincial Mean | District Mean | Case 1 Mean | Case 2 Mean | Case 3 Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **6. How well did things work out as far as you were concerned?** | | | | | | | | | | | | | | |
| n | 8 | 2 | 5 | 18 | 45 | 3 | 3.22 | 7 | 3.00 | 3.33 | 3.73 | 2.60 | 2.63 | 3.50 |
| % | (7.5) | (1.9) | (4.7) | (17.0) | (42.5) | (2.8) | | | | | | | | |

| | 0 N.A. | 1 Not Sure | 2 None | 3 Little | 4 Some | 5 Consid-erable |
|---|---|---|---|---|---|---|

**7. How much did administrators in Chipata or at the centre really try to help you overcome any of these problems?**

| Item | 0 N.A. | 1 | 2 | 3 | 4 | 5 | Mean Response | Rank | National Mean | Provincial Mean | District Mean | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 5 | 12 | 7 | 16 | 18 | 23 | 3.22 | 4 | 2.47 | 3.38 | 4.13 | 3.00 | 2.36 | 2.83 |
| % | (4.7) | (11.3) | (6.6) | (15.1) | (17.0) | (21.7) | | | | | | | | |

**8. To what extent did administrative officials block you in any way in your first attempts to carry out your work?**

| | 0 N.A. | 1 | 2 | 3 | 4 | 5 | Mean | | National | Provincial | District | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 7 | 11 | 23 | 20 | 13 | 7 | 2.51 | | 1.88 | 2.33 | 3.46 | 2.60 | 2.72 | 2.33 |
| % | (6.6) | (10.4) | (21.7) | (18.9) | (12.3) | (6.6) | | | | | | | | |

**9. How much effort have you made in carrying out your work?**

| | 0 N.A. | 1 | 2 | 3 | 4 | 5 | Mean | Rank | National | Provincial | District | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 3 | 1 | 3 | 3 | 22 | 49 | 4.30 | 1 | 3.58 | 4.57 | 4.80 | 3.40 | 4.45 | 4.50 |
| % | (2.8) | (0.9) | (2.8) | (2.8) | (20.8) | (46.2) | | | | | | | | |

**10. How much effort are you making at the present time in carrying out your work towards implementing Integrated Rural Development Programmes?**

| | 0 N.A. | 1 | 2 | 3 | 4 | 5 | Mean | Rank | National | Provincial | District | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 4 | 5 | 8 | 9 | 17 | 38 | 3.77 | 2 | 3.64 | 3.90 | 3.86 | 4.00 | 3.54 | 3.75 |
| % | (3.8) | (4.7) | (7.5) | (8.5) | (16.0) | (35.8) | | | | | | | | |

| | 0 N.A. | 1 Very Negative | 2 Somewhat Negative | 3 Ambivalent | 4 Somewhat Positive | 5 Very Positive |
|---|---|---|---|---|---|---|

**11. In regard to your overall reaction to the introduction of integrated programmes, what would you say your feelings are now?**

| | 0 N.A. | 1 | 2 | 3 | 4 | 5 | Mean | Rank | National | Provincial | District | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 7 | 8 | 7 | 38 | 21 | 25 | 3.63 | 4 | 3.82 | 3.00 | 4.20 | 3.40 | 3.36 | 4.08 |
| % | (6.6) | (7.5) | (6.6) | (35.8) | (19.8) | (23.6) | | | | | | | | |

| Item | Response | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 N.A. | 1 Very Poor | 2 Poor | 3 No Notable Change | 4 Quite Well | 5 Extremely Well | Mean Response | Rank | National Mean | Provincial Mean | District Mean | Case 1 Mean | Case 2 Mean | Case 3 Mean |
| 12. Are integrated rural development programmes serving the intended target groups? | | | | | | | | | | | | | | |
| n | 10 | 3 | 2 | 25 | 34 | 7 | 3.12 | 9 | 3.82 | 3.04 | 3.20 | 2.20 | 3.27 | 2.41 |
| % | (9.4) | (2.8) | (1.9) | (23.6) | (32.1) | (6.6) | | | | | | | | |

APPENDIX 10

SUMMARY OF RESPONSES TO LOCAL LEVEL QUESTIONNAIRE

Appendix 10: Responses to Local Level Administrators' Opinions on Integration

| Item | Response 0 Not Know | 1 Disagree | 2 Agree | 3 Strongly Agree | Mean Response | District Mean | Case 1 Mean | Case 2 Mean | Case 3 Mean |
|---|---|---|---|---|---|---|---|---|---|
| 1. Committees exist that coordinate integrated rural development programmes. | | | | | 1.54 | 1.47 | 1.66 | 1.66 | 1.50 |
| n | 10 | 8 | 27 | 5 | | | | | |
| % | (20.0) | (16.0) | (54.0) | (10.0) | | | | | |
| 2. Members of the committee represent different departments and organizations. | | | | | 1.64 | 1.61 | 1.66 | 1.72 | 1.58 |
| n | 9 | 9 | 23 | 9 | | | | | |
| % | (18.0) | (18.0) | (46.0) | (18.0) | | | | | |
| 3. District Development Committees consider local peoples' demands. | | | | | 1.76 | 1.90 | 1.16 | 1.81 | 1.75 |
| n | 7 | 8 | 25 | 10 | | | | | |
| % | (14.0) | (16.0) | (50.0) | (20.0) | | | | | |
| 4. Ward Development Committees work closely with Integrated Rural Development Centres. | | | | | 1.58 | 1.57 | 1.33 | 2.00 | 1.33 |
| n | 7 | 13 | 24 | 6 | | | | | |
| % | (14.0) | (26.0) | (48.0) | (12.0) | | | | | |
| 5. The party and church leaders are active in Development Committees. | | | | | 1.78 | 2.00 | 1.16 | 1.81 | 1.66 |
| n | 7 | 6 | 28 | 9 | | | | | |
| % | (14.0) | (12.0) | (56.0) | (18.0) | | | | | |
| 6. Integrated Rural Development Programmes consult the village committees about what their needs are. | | | | | 1.60 | 1.81 | 1.00 | 1.90 | 1.25 |
| n | 8 | 15 | 16 | 11 | | | | | |
| % | (16.0) | (30.0) | (32.0) | (22.0) | | | | | |
| 7. I work closely with administrators and field workers from other departments. | | | | | 2.18 | 2.23 | 2.00 | 2.40 | 1.91 |
| n | 1 | 7 | 24 | 18 | | | | | |
| % | (2.0) | (14.0) | (48.0) | (36.0) | | | | | |
| 8. Participants and equipment are shared between departments and other organizations. | | | | | 1.64 | 1.66 | 1.66 | 1.90 | 1.58 |
| n | 3 | 17 | 25 | 5 | | | | | |
| % | (6.0) | (34.0) | (50.0) | (10.0) | | | | | |
| 9. Seminars and other training activities are offered jointly with other departments. | | | | | 1.78 | 1.81 | 1.83 | 2.00 | 1.50 |
| n | 1 | 19 | 20 | 10 | | | | | |
| % | (2.0) | (38.0) | (40.0) | (20.0) | | | | | |
| 10. Local people are consulted on what they want to learn. | | | | | 1.80 | 1.61 | 1.16 | 2.18 | 2.08 |
| n | 3 | 13 | 25 | 9 | | | | | |
| % | (6.0) | (26.0) | (50.0) | (18.0) | | | | | |

| Item | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|
| | **Response** | | | | | | | | |
| | 0 | 1 | 2 | 3 | | | | | |
| | Not<br>Know | Disagree | Agree | Strongly<br>Agree | Mean<br>Response | District<br>Mean | Case<br>1<br>Mean | Case<br>2<br>Mean | Case<br>3<br>Mean |

**11. I plan training activities according to the needs of the community around the centre.**

| | 0 | 1 | 2 | 3 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| n | 3 | 5 | 25 | 15 | 2.12 | 2.04 | 2.00 | 2.18 | 2.25 |
| % | (6.0) | (10.0) | (50.0) | (34.0) | | | | | |

**12. Many people around the community attend training programmes.**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| n | 1 | 12 | 25 | 12 | 1.96 | 1.85 | 1.66 | 2.36 | 1.91 |
| % | (2.0) | (24.0) | (50.0) | (24.0) | | | | | |

**13. Women do not participate as often as men.**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| n | 0 | 22 | 24 | 4 | 1.64 | 1.57 | 1.83 | 1.81 | 1.50 |
| % | (0.0) | (44.0) | (48.0) | (8.0) | | | | | |

**14. One of the obstacles I face in my work is lack of facilities and equipment at the centre.**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| n | 2 | 7 | 17 | 24 | 2.26 | 2.14 | 2.16 | 2.45 | 2.33 |
| % | (4.0) | (14.0) | (34.0) | (48.0) | | | | | |

**15. It is not clear as to what I should be doing at the centre.**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| n | 5 | 44 | 1 | 0 | 0.92 | 0.81 | 1.00 | 1.00 | 1.00 |
| % | (10.0) | (88.0) | (2.0) | (0.0) | | | | | |

**16. I do not get support from administrators at the centre.**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| n | 2 | 45 | 2 | 1 | 1.04 | 1.09 | 1.00 | 1.00 | 1.00 |
| % | (4.0) | (90.0) | (4.0) | (2.0) | | | | | |

**17. The work of the centre is too much for me.**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| n | 3 | 36 | 7 | 4 | 1.24 | 1.09 | 1.33 | 1.18 | 1.50 |
| % | (6.0) | (72.0) | (14.0) | (8.0) | | | | | |

**18. I would require additional training to do my job well.**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| n | 0 | 11 | 21 | 18 | 2.14 | 2.09 | 2.16 | 2.36 | 2.00 |
| % | (0.0) | (22.0) | (42.0) | (36.0) | | | | | |

**19. One of the obstacles I experience in my work is the lack of quick response from administrators at high levels.**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| n | 0 | 6 | 24 | 20 | 2.28 | 2.28 | 2.50 | 2.09 | 2.33 |
| % | (0.0) | (12.0) | (48.0) | (40.0) | | | | | |

**20. Another obstacle is the existing communications problems with administrators at the headquarters.**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| n | 3 | 11 | 19 | 17 | 2.00 | 1.85 | 2.33 | 1.81 | 2.25 |
| % | (6.0) | (22.0) | (38.0) | (34.0) | | | | | |

| Item | | Response | | | | Mean Response | District Mean | Case 1 Mean | Case 2 Mean | Case 3 Mean |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 Not Know | 1 Disagree | 2 Agree | 3 Strongly Agree | | | | | |
| 21. The bad roads and telephone system delay communication. | | | | | | | | | | |
| | n | 3 | 12 | 12 | 23 | 2.10 | 1.81 | 2.66 | 2.36 | 2.08 |
| | % | (6.0) | (24.0) | (24.0) | (46.0) | | | | | |
| 22. Obstacles that exist do not prevent me from doing my job. | | | | | | | | | | |
| | n | 0 | 15 | 31 | 4 | 1.78 | 1.76 | 1.83 | 1.90 | 1.66 |
| | % | (0.0) | (30.0) | (62.0) | (8.0) | | | | | |
| 23. There should be more cooperation between departments and organizations. | | | | | | | | | | |
| | n | 0 | 0 | 12 | 38 | 2.76 | 2.71 | 2.66 | 2.81 | 2.83 |
| | % | (0.0) | (0.0) | (24.0) | (76.0) | | | | | |

APPENDIX 11

**SUMMARY OF RESPONSES TO PARTICIPANTS' QUESTIONNAIRE**

APPENDIX 11: Summary of participants' responses on outcomes of integration.

| Item | Response | | | | |
|---|---|---|---|---|---|
| | 0<br>Not Know | 1<br>Disagree | 2<br>Agree | 3<br>Strongly<br>Agree | Mean<br>Response |

**1. I am learning a lot from this training programme.**

| | | | | | |
|---|---|---|---|---|---|
| n | 1 | 4 | 23 | 49 | 2.55 |
| % | (1.3) | (5.2) | (29.9) | (63.6) | |

**2. I hope to learn skills that will help me improve my farming skills.**

| | | | | | |
|---|---|---|---|---|---|
| n | 8 | 5 | 24 | 40 | 2.24 |
| % | (10.4) | (6.5) | (31.2) | (51.9) | |

**3. I am learning skills that are helpful to improve my life in general.**

| | | | | | |
|---|---|---|---|---|---|
| n | 4 | 8 | 15 | 50 | 2.44 |
| % | (5.2) | (10.4) | (19.5) | (64.9) | |

**4. The instructor's teaching style is helpful in enabling me to learn.**

| | | | | | |
|---|---|---|---|---|---|
| n | 3 | 6 | 32 | 36 | 2.31 |
| % | (3.9) | (7.8) | (41.6) | (46.8) | |

**5. Because of the programme I learn more every day.**

| | | | | | |
|---|---|---|---|---|---|
| n | 8 | 13 | 20 | 36 | 2.09 |
| % | (10.4) | (16.9) | (26.0) | (46.8) | |

**6. The facilities at the centre are adequate to help us to learn better.**

| | | | | | |
|---|---|---|---|---|---|
| n | 15 | 13 | 27 | 22 | 1.72 |
| % | (19.5) | (16.9) | (35.1) | (28.6) | |

**7. The facilities that we use at the centre are available in my village.**

| | | | | | |
|---|---|---|---|---|---|
| n | 16 | 36 | 12 | 13 | 1.28 |
| % | (20.8) | (46.8) | (15.6) | (16.9) | |

**8. Equipment that is used is available in my home.**

| | | | | | |
|---|---|---|---|---|---|
| n | 22 | 35 | 10 | 10 | 1.10 |
| % | (28.6) | (45.5) | (13.0) | (73.0) | |

**9. It would be useful for me to buy equipment from the centre to use in my home.**

| | | | | | |
|---|---|---|---|---|---|
| n | 20 | 7 | 28 | 22 | 1.67 |
| % | (26.0) | (9.1) | (36.4) | (28.6) | |

**10. I will definitely be able to use the knowledge and skills I have learned at the centre.**

| | | | | | |
|---|---|---|---|---|---|
| n | 10 | 3 | 7 | 57 | 2.44 |
| % | (13.0) | (3.9) | (9.1) | (74.0) | |

**11. There is needless duplication of learning activities from different instructors.**

| | | | | | |
|---|---|---|---|---|---|
| n | 28 | 11 | 7 | 31 | 1.53 |
| % | (36.4) | (14.3) | (9.1) | (40.3) | |

**12. I am happy with the way we are being trained at the centre.**

| | | | | | |
|---|---|---|---|---|---|
| n | 9 | 9 | 26 | 33 | 2.07 |
| % | (11.7) | (11.7) | (33.8) | (42.9) | |

**13. I would like things to improve at the centre.**

| | | | | | |
|---|---|---|---|---|---|
| n | 23 | 15 | 11 | 28 | 1.57 |
| % | (29.9) | (19.5) | (14.3) | (36.4) | |

**14. The centre should help us in getting loans more easily than at the moment.**

| | | | | | |
|---|---|---|---|---|---|
| n | 24 | 4 | 23 | 26 | 1.66 |
| % | (31.2) | (5.2) | (29.9) | (33.8) | |

**15. The skills we learn at the centre will help us to produce more crops.**

| | | | | | |
|---|---|---|---|---|---|
| n | 25 | 7 | 16 | 29 | 1.63 |
| % | (32.5) | (9.1) | (20.8) | (37.7) | |