

"THE ADMINISTRATION OF AGRICULTURAL
DEVELOPMENT PROGRAMMES:
THE CASE OF KWALE DISTRICT - KENYA"

BY

MAINGI, D. WANJIRU (MISS)

UNIVERSITY OF NAIROBI
LIBRARY

A Thesis submitted in part fulfilment for a Degree
of Masters of Arts in the University of Nairobi.

1984

UNIVERSITY OF NAIROBI LIBRARY

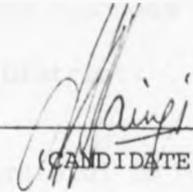


0100665 9

DECLARATION

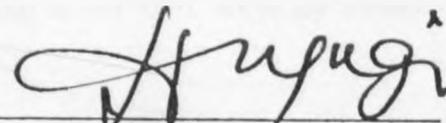
This thesis is my original work and has not been presented for a degree in any other University.

THIS THESIS HAS BEEN ACCEPTED FOR
THE DEGREE OF M.A. 1984
AND A COPY MAY BE LOANED IN THE
UNIVERSITY LIBRARY.



(CANDIDATE)

This thesis has been submitted for examination with my approval as a University Supervisor.



W. OUMA OYUGI (Ph.D)
SENIOR LECTURER
DEPARTMENT OF GOVERNMENT.

Date: 15/5/84

ACKNOWLEDGEMENT

The preparation of this thesis would have been almost impossible without the assistance and co-operation that I received from various individuals and institutions. I wish to thank them all and in particular Dr. Walter Ouma Oyugi who was my supervisor and without whose encouragement and support this thesis would probably have not appeared in its present form. It also gives me much pleasure to mention Mr. J.M. Muniu and Mr. and Mrs. Njaramba for their kindness and hospitality during my research in Kwale District.

I am also very grateful to Mr. and Mrs. Maingi (My parents) who first sponsored me for the course and the University of Nairobi for granting me a scholarship that enabled me to undertake this study. In addition, I cannot forget the officers in the Ministry of Agriculture in Kwale and the farmers I interviewed in the District. To them all, I am most grateful for their understanding and co-operation that made my research possible.

Special thanks go to Mrs. R.K. Osoro for her patience and hard work as she typed this thesis. May I finally thank all who assisted in any possible way during the research and writing of this thesis whom I cannot mention here individually.

TABLE OF CONTENTS

	<u>Page</u>
List of Abbreviations.....	i
Abstract.....	ii
Introduction.....	1
Choice of Kwale.....	10
Methodology.....	12
 <u>CHAPTER ONE</u>	
DEVELOPMENT ADMINISTRATION IN KENYA: AN OVERVIEW..	15
Development Administration As a Concept.....	15
Development Administration As a Movement.....	19
The Concept of Administration of Agricultural Development.....	21
Administration of Agricultural Development Programmes and Policies.....	24
The Agrarian Revolution of 1950s.....	26
The Swynnerton Plan of 1954	29
Post Independence Situation.....	33
Success And Failure of Agricultural Development Programmes: The Latter years of Independence (1970s)	35
Special Rural Development Programme.....	36
Integrated Agricultural Development Programme.....	42
Summary.....	46

<u>CHAPTER TWO</u>	<u>Page</u>
ORGANIZATIONS INVOLVED IN AGRICULTURAL DEVELOPMENT	47
Development.....	47
Boards and Corporations.....	53
Authority Structure And Decision-making.....	61
Decentralization For Agricultural Development.....	76
The Ndaywa Commission.....	78
Integrated Agricultural Development Programme.....	95
Summary.....	94
 <u>CHAPTER THREE</u>	
AGRICULTURAL EXTENSION SERVICES.....	95
Organizations Involved In Extension Services.....	90
Provision of Extension Services: Techniques of Distribution.....	102
Farm Visit.....	103
Demonstrations As A Technique of Distribution.....	115
Print And Broadcast Media.....	119
Print Media.....	179
Radio Broadcast.....	121
Other Organizational Problems: Role Ambiguity And Related Management Problems.....	122
Lack of Proper Link with Research Stations.....	129
Lack of Field Staff.....	133
Lack of Proper Training.....	136

	<u>Page</u>
Inservice Training.....	142
Training And Related Management Problems.....	144
Staff Motivation And Morale.....	146
Transportation.....	150
Summary.....	154

CHAPTER FOUR

MANAGEMENT OF AGRICULTURAL CREDIT SCHEMES.....	155
Need for Agricultural Credit.....	155
Institutional Framework For Agricultural Credit...	162
Agricultural Finance Corporation.....	162
Terms And Conditions.....	163
Management of AFC Loans.....	166
Political Influence on AFC Management.....	169
Agrarian Co-operatives.....	171
Terms And Conditions.....	172
Management of Co-operatives As Credit Institutions	180
Untrained Staff And Committee Members.....	180
Leadership Conflict And Management Issues.....	189
Political Influence on Co-operatives.....	193
Commercial Bank Lending.....	195
Summary.....	197

<u>CHAPTER FIVE</u>	<u>Page</u>
TACKLING THE PROBLEMS OF ARIDITY	198
Irrigation.....	200
Dams And Boreholes.....	206
Mulching.....	213
Afforestation.....	214
Soil Conservation.....	217
Summary.....	220

CHAPTER SIX

CONCLUSIONS: AN EVALUATION OF AGRICULTURAL DEVELOPMENT PROGRAMMES.....	221
Bibliography.....	249
Appendix "A" 1.....	
Appendix "A" 2.....	

TABLES AND FIGURES

TABLES

Table 1: The Distribution of Agricultural Extension Visits to Farmers.....	109
Table 2: The Distribution of Farm Visits to The Three Categories of Farmers.....	110
Table 3: Farmers Level of Education.....	120
Table 4: Distribution of Extension Agents To Farm Households In Kwale District.....	135

	<u>Pages</u>
Table 5: AFC Loans To Farmer 1980/81.....	165
Table 6: Showing Loan Defaulters 1980/81.....	186
Table 7: Credit Project Summary IADP Phase I 1979/80.....	188
Table 8: Showing The Amount of RDF Allocated For Dams In Kwale District 1979/83 Plan Period.....	207
Table 9: Showing The Completed And Uncompleted Dams Funded through RDF.....	208

FIGURES

Figure 1: Ministry of Agriculture: Department of Agriculture.....	51
Figure 2: Channels By which Junior Staff Receive Technical Information.....	141

LIST OF ABBREVIATIONS

AA	-	Agricultural Assisntants
AAO	-	Assistant Agricultural Officer
AI	-	Artificial Insemination
AEI	-	Authority to Incur Expenditure
AO	-	Agricultural Officer
DAO	-	District Agricultural Officer
DC	-	District Commissioner
DCO	-	District Crops Officer
DDC	-	District Development Committee
DDG	-	District Development Grants
DLDO	-	District Livestock Development Officer
DO	-	District Officer
FTC	-	Farmer Training Centre
IADP	-	Integrated Agricultural Development Programme
LAA	-	Locational Agricultural Assistants
LEO	-	Locational Extension Officer
JAA	-	Junior Agricultural Assistants
MOA	-	Ministry of Agriculture
MOCD	-	Ministry of CO-operative Development
MENR	-	Ministry of Environment and Natural Resources
PDA	-	Provincial Director of Agriculture
SRDP	-	Special Rual Development Programme
TA	-	Technical Assistant
TO	-	Technical Officer

ABSTRACT

The study focuses on the administration of agricultural development programmes in a marginal area of Kenya for Kwale District. It seeks to evaluate the various programmes that have been designed for the development of the area.

Developing the marginal areas has been a major concern of the government over the recent years. Lack of development in these areas can be traced back to the colonial era. Colonial development was both partial and discriminatory, favouring mostly the settler dominated areas which were within the high potential areas of the country. Early post-independence period development efforts were geared towards the former "African Reserves". From mid 70s and eighties, more attention has been directed to developing the marginal areas which have not previously benefited substantially from various programmes. The objective has been to reach the more neglected areas to boost their agricultural production and productivity in an attempt to raise the standards of living, create employment and improve the country's food production in order to be self-sufficient. The effectiveness of some of the major programmes that have been designed to achieve this objective are examined in this study.

(iii)

Decentralized development has been a major approach in development administration in Kenya since the decade of 1970. Decentralized planning and decision-making to the district level has not been very effective.

The district continues to rely on the centre for most of its decisions and resources which includes project identification. District plans are made with very limited grassroots influence. The District and sub-District Agricultural Committees for instance have no significant influence on project identification.

The farmer representation in these committees is inadequate for the small scale farmers who are expected to benefit from these projects. When projects are identified at district level, it is often carried out by the District Agricultural Officer and other specialists at district level with very limited consultation with agricultural officers at the level below, who infact are the frontline workers. Often, these district level officers do not have most of the information pertaining to the field where these projects are to be implemented. The results are that projects launched are often unrealistic and incompatible with the socio-economic environment of the bulk of the farmers.

Related to centralized planning, is the problem of centralized resource allocation. Meaningful planning also requires an integration with resources. Thus planning and budgeting should go together. However, as the situation stands, the district and even the province have very limited resources which they can control. Lack of integrated planning and budgeting has often led to unrealistic targets which are difficult to implement.

Extension services on the other hand aim at reaching smallholders. This again has not been effectively achieved. The link between research stations and extension services in the field is still very weak. There is still inadequate designation of programmes for the marginal areas. Inadequate and untrained staff capable of feeding research stations with information pertaining to the field continue to be a major problem. Integrated Agricultural Development Programme which is supposed to benefit the small scale farmers continue to benefit the progressive farmers. Poor staff-farmers ratio coupled with inadequate transport has also rendered farm visits ineffective channels of communication.

In terms of credit extension, the existing co-operatives are weak both in membership structure and management. Poor management has led to huge overhead costs and frequent cases of loan defaulting.

This has greatly undermined the relationship of these societies and the Co-operative Bank of Kenya, to an extent that the latter is not in a position to disburse more credit to the societies until the old debts are met. Leadership squabbles and favouritism have also helped to divert credit from those who actually need it to a few society leaders and their supporters. The problem of land registration and political influence on Agricultural Finance Corporation (AFC) lending has reduced the effectiveness of AFC as a lending institution. Thus agricultural credit, though important as working capital has not benefited the bulk of the farmers.

In tackling the problems of aridity, the strategies being followed receive inadequate support from the Ministry of Agriculture. They tend to be voluntary activities rather than vital elements of agricultural development. Lack of coordination among various departments concerned, has also contributed to the low participation by farmers. There has not been adequate pressure on the farmers from either of these departments. Restructuring and reorientation of the agricultural bureaucracy towards development would be a meaningful and effective approach towards development.

INTRODUCTION

Most of the developing countries that lack a mineral base are currently faced with the task of boosting their agricultural productivity. Kenya is no exception. With the increasing concern for improving the living conditions of the rural people and with the absence of an industrial sector in the rural areas, agriculture becomes the core of rural development. Eighty per cent of the population in the rural areas depend on agriculture for their livelihood. The need to improve agricultural productivity in order to meet these needs becomes almost an inevitable task.

Agriculture in Kenya, like in the other East African countries provides employment (paid and unpaid) for the majority of the people. This is more so in the case of unskilled (often wage) labour. A majority of the population entering the labour market cannot be absorbed by the industrial and public sectors. Agriculture provides an alternative source.

Kenya's economy on the other hand is wholly dependent on agriculture. Fifty per cent of the total foreign exchange earnings in terms of manufactured and raw material exports come from agriculture.¹

1. Republic of Kenya, Sessional Paper No. 4 of 1981 On National Food Policy (Nairobi, Government Printer) pp. 12.

In order to avoid deceleration in growth of National Gross Domestic Production with a consequent shortage of foreign exchange earnings, it is necessary to rapidly increase agricultural exports, the major contributor of foreign exchange earnings. To boost her exports, the government has a crucial role to play in the agricultural sector. Today agriculture commands the third position in terms of the government's expenditure, after education and roads.²

The agricultural sector has also provided the country with a strong base. To feed the rapidly expanding population with an annual growth rate of 4.0% there is need to boost the agricultural potential.³ With this population growth rate, the domestic demand for agricultural products has been estimated to be increasing at the rate of 4-5 per cent annually.⁴ With her meagre foreign exchange, the country cannot afford to embark on imported foodstuff, unless the climate proves extremely hazardous. It is for this reason that the government established a National Food Policy.

-
2. Republic of Kenya, Planning For Progress: Our Fourth Development Plan, A short version of Development Plan 1979/83, (Nairobi, Government Printer) 1979, pp. 25.
 3. Ibid, pp. 12
 4. Mburathi G.K. and Hannover W. "Handbook For Integrated Agricultural Development Programme" Ministry of Agriculture, 1978) pp. 46.

Sessional Paper No. 4 of 1981 on National Food Policy outlines strategies which the government is to utilize as guidelines towards food production with the aim of being self-sufficient.

Significance of Administration in Agricultural Development

Administration of agricultural development can also be seen in terms of management of agricultural programmes with the aim of bringing about desired change. Administration as a process taking place within an organizational framework can be seen in terms of planning, decision-making, delivery of goods, co-ordination and communication among departments, evaluation and feedback. The question then is, "To what extent are these administrative processes important in agricultural development. Do they influence agricultural development and if so, how?"

An examination of a few of these processes reveals that they influence the manner and the pace with which agricultural development is achieved. Planning for example is a crucial exercise in a country like Kenya with scarce resources and a lot of activities to be funded by these resources. Planning is concerned with the identification of resources priority setting and laying down strategies for achieving the set goals (seen in terms of priorities). In this case the goal is agricultural development.

The manner in which the plan is laid down (reflecting on the goals and means of achieving them) will influence the end results, which is development. It determines whether the strategies or means laid down will be appropriate in achieving the goals. If they are inappropriate, then it is difficult to achieve the goals. If the goals (targets) set are also unrealistic then they cannot be easily achieved. The level of planning be it national, provincial or district will also influence development process. Centralized planning often creates a situation of planning without adequate data. This affects the implementation of programmes at field level because some objectives and strategies may not be applicable to certain physical, social and economic environment. This slows down development.

Decision-making, like planning also influences agricultural development. The style of decision-making is crucial in influencing effectiveness in goal achievement. In a centralized system, reference to the centre for most of the decisions by the field creates a situation of work overload at the centre thus delaying actions on the inputs and release of outputs to the field.⁵ This in turn slows down the implementation of programmes.

5. Hall, R. Organization Structure And Process (Englewood Cliffs N.J. Prentice - Hall, 1972) pp. 204

When the field is at the receiving end, there is a possibility of some decisions being inapplicable to the field. This can lead to a situation where projects launched cannot be sustained, in that the people cannot identify with programmes that are not in keeping with their total environment or in this case the farmers' situation. Such projects do not then ensure sustained development which is the ideal development.

A high degree of formalization within an organization influences the degree to which an organization attains its goal.⁶ A high degree of formalization for example within the credit institutions delays loan approvals and prompt disbursement of loans to farmers. When loan application forms are to be approved in Nairobi, there is a tendency of the loans reaching the farmers after the planting season. Such funds are not of any benefits to the farmers, who may also be required to start loan repayments at the end of the season. In a situation like this the farmers may not be in a position to repay the loan. The whole exercise is rendered meaningless, and the output from farmers is affected.

6. Ibid, pp. 214.

A highly structured organization, like the Ministry of Agriculture requires a high degree of co-ordination if development is to take place effectively.⁷ If each department worked as an independent entity, then the organizational goal (i.e. agricultural change) cannot be achieved effectively. If for example the Departments of Extension and Man-power Development and that of Project Management and Evaluation acted independently then they would not contribute effectively to the achievements of the organizational goal. If agricultural change is to be effectively achieved, all the departments and even related departments outside the Ministry of Agriculture such as Department of Co-operatives should co-ordinate their activities towards that goal. This will be discussed at length in Chapter Two.

The above account clearly reveals the significance of administration in agricultural development. As a process oriented to the management of agricultural development, the manner in which it is managed will contribute to the degree to which the Ministry of Agriculture will foster development.

7. Victor Thompson "Bureaucracy And 'Modern World' in Administrative Science Quarterly Review Vol.24 No1 March 1979, PP.148-149

Problem Statement: Focus And Scope of study

The study attempts to assess the effectiveness of the agricultural bureaucracy in bringing about agricultural development. It seeks to assess the contribution of administration of agricultural programmes to the type of development now existing in the country in general and specifically in Kwale District. The hypothesis being measured in this case is based on the assumption that the nature of administration of agricultural development programmes is a factor that has contributed to the present lack of development in Kwale District. The official policy of the government over the recent years has been to foster development in the marginal areas (ASAL) which comprises eighty per cent of the country's total land, in order to ensure a balanced development and improve food production in attempt to being self-sufficient.⁸ Despite these policies and programmes the country is still characterized by regional inequalities. The marginal areas are still lagging behind in development. We are not however suggesting that they should be on equal footing with the high potential areas, but rather pointing out that their agricultural potentiality has not been exploited fully.

8. Republic of Kenya, Planning For Progress: Our Fourth Development Plan.

Op. Cit. pp 32-33.

Republic of Kenya, Sessional Paper No. 4 of 1981,
Op.Cit. pp.12.

Development is still lacking considering the resources available in these areas both in terms of land and labour. The question we are raising then is, the extent to which the administration of agricultural development programmes has been a factor in influencing this lack of development. To test this we shall utilize the following areas as important variables.

- i) The role of agricultural bureaucracy in development activities: In this section we shall focus on the effectiveness of the Ministry of Agriculture as an organization charged with the responsibility of bringing about change (Development) in the sector. A major area of concern will be the nature and style of decision-making and how this influences agricultural development. This incorporates field organization for development. We shall also examine what has been done to improve the style of decision-making.
- ii) Agricultural Extension Services: This will be a focus on the manner in which agricultural technology is made available to farmers. It will be a focus on the management aspects of Extension Services and how they have influenced the existing pattern of development.

- iii) Management of credit schemes: In this section, we shall focus on management issues involved in disbursement of agricultural credit. We shall focus on issues such as:- who gets the loans, on what terms and conditions, the problems involved in loan processing and the interaction between Agricultural Finance Corporation and Co-operatives with the Ministry of Agriculture and how this interaction influences the effectiveness of credit schemes on Agricultural Development.
- iv) Finally we shall examine the manner in which the eco-system has been improved to suit agricultural development. Since we are focusing on the marginal areas any improvements on the physical environment in a way of orienting it to agricultural productivity is important. We shall therefore examine the management of irrigation schemes, other methods of water conservation, soil conservation process, afforestation and how farmers have responded to these activities.

Choice of Kwale District

My choice of Kwale District was prompted by the fact that the District lies within the so called marginal areas which are the targets of the government's current development strategy. It is also a region with some agricultural potential which has not been exploited fully. This potentiality can be categorized as follows:- Within the ten-mile coastal strip, with annual rainfall amounts of 40-50 inches; an area suitable for such tree crops as coconuts (in the alluvial soils). The immediate interior with 35-40 inches of rain has a potential for citrus, mangoes, cashewnuts and horticultural crops. Finally the hinterland with low rainfall ranging between 20-30 inches has a potential for ranch development.⁹ The agricultural potentiality of the District can also be assessed from the fact that it was a Special Rural Development Programme (SRDP) area and now an Integrated Agricultural Development Programme (IADP) area.

9. Ministry of Agriculture, Kenya Farmer Official Journal of The Agricultural Society of Kenya. May 1982, No. 10 pp. 9

and

Republic of Kenya, District Development Plan, Kwale District (Nairobi, January, 1980) pp. 3-5

Added to the above factor, Kwale District is near a market centre (Mombasa and her hotel industry) for its agricultural commodities. The town can also serve as an export channel for any surplus. With the existing communication links (by sea, air and road) transportation of commodities to markets outside the District is possible. Thus, the District is characteristic of marginal land with a potential that could be tapped for development in terms of land, labour and market. Capital could be provided by the government the managerial effectiveness of which we shall discuss later.

METHODOLOGY

For data collection, three methods were used. Firstly, most of the data was obtained through interviews. This was both formal and informal. The formal interviews took the form of scheduled questionnaires, while discussions were used as complements. Interviewing has been accepted by various social scientists as an effective method of data collection in the rural areas.¹⁰ Direct interviews were more appropriate than say mailed questionnaires because of the high degree of illiteracy among the farming community. Most of the questions being technical, had to be explained and in most cases translated from English to Kiswahili which could not have been possible if they had been mailed. Two sets of questionnaires were utilized. There were two categories of respondents: farmers and officials from the Ministry of Agriculture and related Departments such as Department of Co-operatives. A sample of one hundred farmers was interviewed whereby a subsample of twenty five from each of the four divisions was randomly selected for interview. For the officials, interviews were confined to the District level and below (Divisional and Locational agricultural officers).

10. For a detailed account of various techniques of data collection see:- *Introductory Research Methodology, East African Application*, by Prewitt, K (Ed.) Occasional Paper No. 10 1974 (Nairobi, Institute of Development Studies (I.D.S.), University of Nairobi)

At the district level, all the officials in the Ministry of Agriculture were interviewed, as were heads of related institutions; namely the Ministries of Co-operative Development and Livestock Development, A.F.C. officials and the District Development Officer (D.D.O.). At the divisional locational levels at least two to three Technical Officers were interviewed in the former as well as two-to-three Technical Assistants (TAs) at locational level.

Secondly, I used secondary materials. This was obtained from government files, annual and monthly reports both at District and Divisional levels, District Development Plans, policy circulars, manuals and other relevant documents such as, "Sauti ya Kwale". This material was important for statistical data and evaluation.

Finally, observation was utilized. This involved the researcher attending various seminars where farmers were being briefed on farm activities. Those seminars were often conducted under trees. Various heads of departments conducted the seminars.

These included the District Extension Training Officer (D.E.T.O.), the District Co-operative Development Officer, the District Crop Officer (D.C.O.) Officers from the Ministry of Livestock Development and Technical Agents. The researcher also visited various demonstration plots set up by Technical Agents and by officers from the Department of Home Economics.

This provided us with concrete evidence about the strategies and techniques the extension agents are utilizing to complement what I obtained from the secondary information.

CHAPTER ONEDEVELOPMENT ADMINISTRATION IN KENYAAN OVERVIEW

This chapter is concerned with providing a brief historical account of development administration in Kenya. It goes as far back as the colonial period especially the period after World War II. This historical account provides us with an important background against which we can understand the existing development pattern and policies. Most of what exists today in terms of development has its roots in colonial agricultural development. In the latter part of the chapter, we shall assess the success and failure of agricultural development programmes in Kwale. Before we plunge into the analysis, let us examine the definition of some key concepts that are used in the study.

a) Development Administration As a Concept And a Movement

"Development Administration" is an elusive concept.

Various scholars have provided different definitions.

However, they agree on certain key concepts along which

we can build our own definition of the concept. To

define it more meaningfully, we need to isolate the two

words. We shall first focus on "Development" and then

"Administration." The term "development" has widely

been used to explain change. It is change from a lower

quality state to a better more desired one.

Scholars of Public Administration such as Riggs and Pai Panandiker refer to development as "desired change" or "planned change" respectively.¹¹ J.D. Montgomery defines development in the context of administration as:-

Change that is desired and influenced by governmental organs.¹²

Development cannot then be defined effectively without attributing value judgements. It should be viewed as an evaluative concept, that is synonymous to desired change or improvement.

Administration on the other hand can be defined as the organizational directed process necessary for bringing about change. To use Panandiker's words, administration within the context of development refers to:-

the structure, organization and organizational behaviour necessary for the implementation of schemes and programmes of socio-economic and political change undertaken by the government.¹³

-
11. Pai Panandiker, "Development Administration: An Approach", In Raphaeli, N (Ed.) Readings In Comparative Public Administration (Boston, Allyn And Bacon, 1969) pp. 200.
 12. Montgomery, J.D. in J.D. Montgomery And Siffins, W. (Ed.) Approaches To Development Politics And Administration (McGraw Hill, New York 1966) pp. 259
 13. Pai Panandiker, "Development Administration: An Approach," Op. Cit. pp. 208

panandiker was writing on the Indian case, but it applies to all developing countries as well, where development administration exists. The organization offers the ideal framework (structure and personnel) within which the process of administration can effectively take place. Administration then involves the activities of the personnel and that of the departments within the organization that is oriented to the achievement of the goal of the given organization. In our case, the goal is development.

When we take development administration to refer to the participation of government organs in bringing about changes, we can also view this participation in two ways: direct and indirect. Direct participation will involve initiation and aiding various programmes designed to assist the people to improve their standards of living. In the agricultural sector for example, government's participation of this nature may take the form of launching projects such as soil conservation projects, irrigation projects, cattle dips or sponsor vaccination campaigns for cattle against diseases.

The government may also influence development activities indirectly. This is often seen in community development whereby the local leadership is used to bring about change in the rural areas. In the case of agricultural development, local leadership is important in providing local support to extension services. It can be utilized for distribution of farm inputs and knowledge.

Finally, the government can use ideology to determine the direction of change, or even as an instrument of mobilization for development. Ideology will determine what policies and strategies the government will embark on. The ideology of a country for example may be used to change the laws pertaining to land ownership in a manner that the government will achieve the intended goals. An example of such ideologically influenced change can be seen in a change from communal ownership of land to individual land ownership (under capitalist system) so as to increase the individual's commitment to development. In such a situation whereby the individual is the sole producer on his farm, his initiative becomes an important factor of development. As an instrument of mobilization, ideology can be used to influence people's attitudes and behaviour reorienting them to development activities. In Tanzania for example socialism as defined in the Arusha Declaration is used as an instrument for mobilizing people towards development. The philosophy of self reliance is the principal element in Tanzania's Socialism.¹⁴ This philosophy aims at tapping all available internal resources, land, labour and capital for development activities.

14. Nyerere, J.K. Arusha Declaration: Answers To Questions (Dar-es-Salaam, Government Printer 1967) pp. 9.

The participation of all able bodies in development activities is therefore sought. Montgomery has summed up these three modes of governmental participation in development as Programme (Direct) - Action (Indirect) - Ideology.¹⁵

b) Development Administration As A Movement

Development Administration is a movement of the Third World countries. It has its origin in the field of comparative Politics and Administration. The movement is a post War Phenomenon, but one that gained momentum during the decades of 1960 and 1970, when the newly independent states began to lay down strategies for development which the colonial government did not provide.¹⁶ The New States were concerned with establishing an administrative infrastructure that was conducive to development needs. Development Administration was therefore a reaction by the independent states to the aftermath of colonial development. Agricultural Administration is a major component of development administration. It is our main concern in this study.

15. Montgomery, J.D. in Approaches to Development Politics And Administration, Op. Cit. pp. 261.

16. Oyugi, W.O. "Bureaucracy And Rural Development", in Indian Journal of Public Administration.
(1980 Vol. XXVI No. 2 at pp. 418-419)

Development during the colonial regime was not a priority. The colonizers' main objective was to generate raw materials for the industries back "Home" by exploiting the cheap African resources with cheap African labour.¹⁷ Any development that might have taken place then, be it the establishment of social amenities (Schools and Health Centres) or infrastructural development (road and railways or the bureaucracy) were designed to facilitate the exploitation of resources in the interests of Metropolitan Britain.¹⁸ The establishment of the railway line linking the Kenya Highlands (former White Highlands) with the port of Mombasa was to facilitate exportation of agricultural commodities to Europe. In the agricultural sector, the introduction of cash crops in the earlier parts of the century was geared to meeting the requirements of Britain and not to benefit the African population. This is reflected even by the manner in which the crops were grown. Before the Agrarian Revolution of 1950 cash crop farming was exclusively practised by Europeans while Africans provided cheap labour.¹⁹ The colonial Bureaucracy both in terms of structure and personnel recruitment was oriented to the same objective that of promoting the interests of Britain.

17. Walter Rodney How Europe Underdeveloped Africa (Dar-es-Salaam Tanzania Publishing House, 1972) Chp. 6.

18. Ibid chapter 6

19. Meyer J. Maitha, Senga W.M., (Eds) Agricultural Development in Kenya, An Economic Assessment. (Nairobi, Oxford University Press, 1976) pp. 146

With independence the Kenya began to lay down strategies for development in all sectors. The bureaucracy was constantly reviewed and ways designed to reorient it to development needs of the country. The Ndegwa Commission of inquiry provides evidence for attempts in reviewing the bureaucracy with an aim of making it a meaningful instrument of development.²⁰ It gives suggestions on lines along which the bureaucracy could be reformed. Thus, the movement of Development Administration, which we have said gained momentum after independence was the answer to this partial, discriminatory and inadequate development practiced by the colonial government.

c) THE CONCEPT OF ADMINISTRATION OF AGRICULTURAL DEVELOPMENT

We defined "Development Administration as an organizational directed process necessary for bringing about desired change. "Administration of agricultural development", can be taken to refer to the organizational directed process necessary for effecting desired change in the agricultural sector.

²⁰. Republic of Kenya, Public Service Structure And Remuneration Commission of Inquiry, Chairman, Ndegwa D.N. (Nairobi, Government Printer, 1971) pp. 40-41.

Development in this case is seen in terms of the effectiveness of the Ministry of Agriculture in providing a strong base for foreign exchange earnings, providing employment for a majority of the people entering the labour market and providing a strong base (in attempt to being self sufficient). This can be summed up as productivity or agricultural development.

When we talk of administration of agricultural development we are taking the Ministry of Agriculture as an organization with an internal structure (Departments and Personnel) engaged in activities that are geared towards the achievement of an objective: that of improving agricultural productivity. The Ministry of Agriculture (M.O.A.) also performs these functions within an environment consisting of other organizations that have direct or indirect influence on it. We shall therefore treat it as an open system. Being such a system, it is subject to inter-organizational influence especially from departments such as that of Co-operative Development, the Ministry of Livestock Development and Ministry of Water Development etc. and also from statutory Boards and Corporations and Private firms. The political and economic environments are also crucial in influencing its effectiveness in goal achievement. The political environment will determine most of the policies, while the economic environment will determine the availability of resources.

Administration of agricultural development focuses on such questions as:-

What is the government doing to increase the farmers' access to credit facilities?

How effective are these measures in promoting agricultural development?

What is the government doing to extension services. Are they reaching the farmers uniformly?

How effective is the management of extension services in promoting agricultural development?

What programmes has the government launched to improve the livestock industry? How effective are they? etc.

Thus administration of agricultural development is geared to questions of "what" and "how" the Ministry of Agriculture and related departments are performing to improve agricultural productivity.

iii.) Administration of Agricultural Development
Programmes and Policies: The Colonial Situation

As we mentioned earlier in this chapter, the development of the New States cannot be tackled effectively without bringing the colonial situation into focus. Development policies and programmes of today have been greatly influenced by those of the colonial period. Commenting on the same issue; Gertzel has the following to say:-

But full independence did not mean a complete break with the past. The manner in which Kenya has tackled the problems of independence and set out to create a new political order has, to a considerable degree been dictated by circumstances and institutions inherited from the past. The pattern of political and governmental activity since independence is better understood if considered not only against the perspective of post independence requirements and capabilities but also in terms of the legacies bequeathed the country by the colonial period.²¹

What Gertzel is saying in the above quotation is that the approach and strategies towards development in the post independent Kenya has been influenced by circumstances and institutions that existed during the colonial period.

21. Gertzel, C.J. The Politics of Independent Kenya, 1963-68 (Northwestern University Press, Evanston 1970) pp.1

A brief historical account of agricultural development from the colonial period to post independence era will enable us to understand how the past has influenced the present.

Arrival of The British in Kenya

At the turn of the century, when the British colonizers arrived in Kenya, the first move was to settle down in the colony. They started acquiring land from the Africans in the most fertile regions of the country. The then "White Highlands" were created under the "Reserve Policy."²² These Africans, from whom the land was taken were pushed to the lesser potential areas or lived as squatters on the European farms so long as they provided free labour. After acquiring land the settlers then started cash crop farming and livestock keeping. This was exclusively a European activity. The Africans were still considered incapable of growing either cash crops or keeping grade cattle. Much of what the colony produced was for the industries back home. During the decade of 1940 the Europeans constituted 0.2 per cent of the total population, owned 1/4 of the cultivatable land and produced 4/5 of the agricultural exports.²³

22. Walter Rodney, How Europe Underdeveloped Africa, Op.Cit., Chapter 6.

23. Walter Oyugi "The Administration of Rural Development In a Kenyan Sub-District: A case Study of The Interaction Between Kenyan Bureaucracy And Technical Assistance Personnel" (Ph.D. Thesis 1973, University of Nairobi) pp. 6.

As the main producers of agricultural commodities for Britain the policies and efforts of the colonial government were geared to promoting settler agriculture. Thus credit, roads, railways and extension services were all geared to facilitating settler agriculture. As a result of this, European agriculture continued to modernize, while African agriculture continued to be largely traditional. The latter also suffered inadequate labour supply as the Africans were forced by circumstances (e.g. payment of hut tax) and by the colonial policy of forced labour to work on European farms. It is in a similar context that Walter Rodney explains colonialism in Africa as:-

Development of Europe at the same time that Africa was underdeveloped.²⁴

He further explains that it meant the production of commodities from African resources by cheap African labour and following the products in markets outside Africa.²⁵ Development was therefore partial and discriminatory.

The Agrarian Revolution of 1950s

Changes in policies geared to development of the African reserves can be traced to the period after the Depression of 1930 but more so after World War II.

24. Rodney, W. How Europe Underdeveloped Africa,
Op. Cit. Chapter 6.

25. Ibid. Chapter 6.

After the war, Britain, like most of the other colonizers, was faced with the problem of settling repatriated soldiers and that of the prisoners of war who had to be fed. With these problems, increased attention was to be paid to developing the so called "African Reserves." A ten year development plan was formulated. Hence the 1946-57 development plan.²⁶ During the plan period restriction on cash crop production by Africans was lifted and some Africans were allowed the exercise so long as they met certain conditions (e.g. education, suitable land on terms of fertility and acreage required for crop spacing). By 1951, 8,208 Africans were growing coffee.²⁷

With the "Reserve Policy", the so called "African Reserves" suffered overpopulation. This led to poor farming methods such as overgrazing and hence soil erosion. Soil erosion became a major problem for the colonial government. Thus one of the strategies laid down in the plan was an investigation into possible suitable land to which surplus population could be moved and could farm under strictly controlled conditions. Settlement schemes such as Shimba Hills in Kwale and Makweni in Machakos were started. These were ALDEV (African Land Development schemes). By 1953 there were such schemes throughout the colony.²⁸

26. Heyer, J., Maitha, Senga, W.M. (Eds.) Agricultural Development In Kenya, An Economic Assesment, Op. Cit., pp. 144-146.

27. Gertzel, C.J. Politics of Independent Kenya 1963-68
Op.Cit. pp. 34.

28. Kenya Colony And Protectorate, African Land Development In Kenya
(Nairobi, Government Printer) 1955, 11. 2.

There was also an attempt by the colonial government to extend innovations to the "African Reserves". However, most of this was rendered useless by the economic situation of the African farmers. Few could adopt these innovations. The plan however succeeded in opening up chances for a few Africans into the cash economy.

With the introduction of cash crop farming within the African community, the system also gave way to a stratification system among the African farmers. Often it was the rich progressive Africans who could meet the conditions mentioned earlier in the section for cash crop farming. These farmers continued to receive assistance from the government in terms of extension and credit though not on equal footing with the Whites. The discriminatory policies then transcended the boundaries of Black/White relationship to that of progressive Blacks and non-progressives. Thus the progressive bias technique in distributing agricultural benefits is a colonially created phenomenon. It gave rise to inequalities among different categories of farmers.

Cash crop farming and dairy farming among the African and European areas was confined to the high potential areas, such as Central and Rift Valley Provinces. This meant that development would also be confined to these areas.

The argument we are advancing here is that, what was later to become major areas of concern in post independence agricultural development was created by colonial development policies and programmes. The evils of inequalities between the progressives and non-progressives and that of regions of different levels of potentiality have roots in colonial development policies.

The Swynnerton Plan

Swynnerton Plan was part of the ten years development plan discussed above. It was launched in 1954, eight years after the ten year plan had been in operation. Implementation of this plan was to be based on the experience of the ten year plan. It was financed by the British government with a grant of pounds 5 million.²⁹ Self-financing was emphasised under the plan. ALDEV and Agricultural Betterment funds also played a key role in financing African farmers. Like the ten-year-plan, Swynnerton plan was also concerned with accelerated development of African Agriculture. Its major objective was to:-

Raise the productivity of African lands, its human and stock carrying capacity, the income and standards of living of the people and at the same time affecting in substantial increase in the resources and economy of the colony.³⁰

29. Gertzel, C.J. Politics of Independent Kenya, 1963-68,
Op.Cit. pp. 34

30. Colony and Protectorate of Kenya, A Plan To Intesify African Agriculture In Kenya (Government Printer, 1955) pp. 1.

The plan divided African lands into four categories based on their potentiality and expected economic contributions, along which development funds would be invested. The areas with greater potentiality received high priority. The four categories were:-

1) Those lands which were suitable for balanced mixed farming, more or less intensively with greater or less in cash crops or livestock. These received the highest priority because the returns were expected to be high.

2) Swampy areas where swamp reclamation and irrigation were possible. They could be used for mixed farming. These areas were to receive greater attention, though not like the above category.

3) Semi arid and arid areas. These covered 2/3 of the country (colony during the plan period). They were to be considered only for food production and livestock keeping with controlled numbers to reduce chances of soil erosion. They were to be given third priority.

4) Areas and projects requiring special treatment. These were areas along the coast that produced tree crops. They were to receive fourth priority.³¹

The above categorization and development investments clearly shows a concern for those areas that could contribute to the production of export commodities: the high potential area.

31. Ibid. pp. 3

Thus the plan like its predecessor helped to accentuate regional inequalities.

Another major area of concern under the plan was that of land tenure. The plan emphasized land consolidation and registration as a development strategy. According to the plan, with land registration, it was believed that the African farmers would have security for loans to improve the farms. The individual land ownership would also increase commitment by the African farmers to agricultural production on his unit. The plan thus states:-

He must be provided with such security of tenure through an indefeasible title to encourage him to invest his labour and profits into the development of his farm and will enable him to offer it as security against such financial credits as he may wish to secure from such sources as may be open to him.³²

Consolidation on the other hand was vital for improved farming methods.

The Swynnerton Plan succeeded in expanding African production of export crops and its increased emphasis on mixed farming in the "African Reserves" (categories 1 and 2 above) resulted in considerable growth of livestock production. African coffee for example doubled by the end of 1958 while pyrethrum (introduced in the same decade) increased 4 1/2 times.³³

32. Ibid. pp. 9

33. Colony And Protectorate Of Kenya "Ministry of Agriculture, Animal Husbandry And Water Resources Three Year Report 1958-1960 (Government Printer) pp. 1.

In the arid and semi arid areas livestock industry also expanded under the aid of land development Board (Non-Scheduled), and District Agricultural Committees. The two played a great role in co-ordinating activities of the schemes. Land consolidation and registration was also taken up by a majority of the African farmers in the cash crops areas especially in Kiambu and Nyeri Districts.³⁴

From the above analysis, we can say that the Swynnerton Plan succeeded mainly in expanding cash crop production to the African community, but did little to improve the welfare of the majority of the African farmers especially the small holders. Like the policies and programmes prior to it, it continued to emphasize cash crop farming. The only difference was the inclusion of more Africans into the exercise. Cash crop production greatly alienated those areas which were not conducive to the exercise, mainly the marginal areas of the country. It also alienated a majority of the African farmers who could not meet the requirements for growing cash crops. The latter were mainly small scale farmers.³⁴ The plan therefore helped to stratify the African farming community. The two levels of inequalities discussed earlier continued and were accentuated by the plan to be inherited later by the independent government. The African areas were still largely underdeveloped.

³⁴ Ibid, pp 1.

The Post Independence Situation

The early years of Independence were geared to political reconstruction. In the agricultural sector the government devoted its efforts to land Transfer. The former "Scheduled Areas" (settler dominated areas) were to be made available to the African farmers. Loans and grants from U.K. through Land Bank were made available to farmers to purchase the one million acres of former "Scheduled Areas". Most of the large plantations were to be left intact. The rest of the land was divided up into small holdings for settling the landless. By June 1965, 24,000 small holders owned land in these areas.³⁵

Although land transfer was important, it is not itself a development activity. However, the return of land to the indigenous people was aimed at winning popular support for the new government. This was a political objective. After land transfer, the government's next major step was to give some attention to the development of the former African areas. The Sessional Paper No. 10 of 1965 on African Socialism And Its Application to Planning In Kenya, was formulated to provide guidelines towards development.³⁵ It states the lines the government is to pursue in development activities.

35. Republic of Kenya, Development Plan 1966/70 Op. Cit., (Nairobi, Government Printer) pp. 128

36. Republic of Kenya, Sessional Paper No. 10 of 1965 on African Socialism And Its Application To Planning In Kenya. (Nairobi Government Printer) pp. 10.

The Paper called for development in these areas. A sum of pounds 13,759,000 was earmarked for their development.³⁷ Development in these areas was necessary because:-

- i) Over 80 per cent of the total population lived in these areas.
- ii) Great potentiality in terms of land and labour lay in these areas.
- iii) There was need to create employment for those who could not be absorbed in the urban industrial sector.³⁸

Land registration and consolidation, under the New Government continued to be emphasized. With title deeds farmers could acquire loans from either the Agricultural Finance Corporation (AFC) or Commercial Banks.

With the concern to establish a strong economic base and agriculture being the backbone of the economy, more attention was paid to cash crop production than to general farming activities. Thus concern for small scale coffee and tea production was encouraged. This meant development of cash crop areas and underdevelopment of non-cash crop areas (low potential areas). The problem of regional inequalities created as far back as during the colonial era continued under the independent government.

37. Republic of Kenya, Development Plan 1966-70 .
Op.Cit. pp. 128

38. Ibid pp. 129.

Land registration which had been started in the high potential areas under the colonial regime continued. Farmers in these areas had higher chances of gaining access to agricultural credit than those in the low potential areas. They continued to develop at a high pace than those in the low potential areas.

iii) Success And Failure of Agricultural Development Programmes since 1970

So far, we have mentioned that the decade of 1960 was geared to the expansion of cash crop production. A major evil created during this exercise was that the cash crop growing areas were much ahead in development than the non-cash crop areas. The decade of 1970 reflects on these evils. Thus, the 1974/78 Development Plan states:-

During the Plan period, agricultural development strategy will be aimed at achieving a well balanced pattern of development involving all areas of the country.⁴⁰

40. Republic of Kenya, Development Plan 1974/78
(Nairobi Government Printer)
pp. 198, paragraph 10.6.

The following are some of the programmes launched during the decades of 1960s and 1970s to effect a balanced pattern of development.

a) Special Rural Development Programmes (SRDP)

The Special Rural Development Programme was not a major development programme but an experimental one. It was launched in 1966. Its primary objective was to experiment with various strategies for accelerated rural development which could be replicated in other areas of similar ecological conditions. These strategies varied from place to place depending on the ecological conditions. The programme was launched in six administrative divisions spread throughout the Republic. In the field of agriculture it aimed at increasing agricultural production and productivity which would then help in solving the problems of youth unemployment and raise the standards of living.⁴¹ It also aimed at generating active participation in planning and execution of programmes. The reference of agricultural sector in the selected areas is discussed.

41. An overall Evaluation of The Special Rural Development Programme, Occasional Paper No. 8 1972, Institute of Development Studies (IDS) University of Nairobi, Chapter 1 pp. 13.

In terms of strategies to be experimented with, the Mbere pilot scheme set out to try cotton blocks. The objective of the scheme was to increase cotton output and reduce unemployment. The following were the strategies to be tested:-

- a) Carry out agronomic research trials to obtain information on suitable crops for the area.
- b) Develop cotton blocks that were centrally administered, locally managed and using hired labour on rented land for demonstration.
- c) Improve extension coupled with training and demonstration effects from cotton blocks.

Evaluation on the scheme showed that farmers did not adopt cotton growing. The demonstrations had stressed tractor-ploughing, fertilizers and spraying. In the first place, cotton growing was near to impossible in an area characterized by low and erratic rainfall. There was a high risk of crop failure. According to the results from this evaluation, there was paucity of information at the time of planning⁴² about the agronomic performance of crops best suited to Mbere's different ecological zones.⁴² The planners also had inadequate information about the socio-economic conditions of the farming community.

42. Ibid pp 27

A cost benefit evaluation should have halted the project prior to initial implementation, as would have the seeking of opinion from the local people on their willingness to part with their land or to participate in the cotton blocks.⁴³ Thus, local involvement in identifying the project would have reduced the chances of unsuccessful implementation. The results were that farmers continued growing the traditional crops such as sorghum and millet and paid less attention to the cotton blocks.

In Vihiga, the objective of the scheme was to influence widespread adoption of hybrid maize and release land for other use. The strategies being tested were:- the provision of credit secured by the crop and to be repaid in cash to purchase material inputs (though not hired labour) in quantities appropriate to attain recommended application rates, and intensive extension. The results from the evaluation project showed that the loans were poorly repaid and the project bore no relationship with resource availability of Vihiga.⁴⁴

For Te'u SRDP, the objective was to increase the adoption of hybrid maize to the less progressive farmers. They were to experiment with extensive extension services which incorporated farmer training at Farmers' Training Centres, (FTCs) and credit extension for practice on half-acre trial plots.

43. Loc cit.

44. Ibid pp. 29

The evaluation of the Tetu maize project showed that despite the absence of extension follow-ups, the adoption of hybrid maize still increased. Diffusion was three additional farmers influenced per each participant of (Farmers' Training Courses. Extension follow-up experiments did not succeed, in that extension agents still had problems in communication.⁴⁵

The Kwale SRDP on the other hand aimed at experimenting with development of nurseries for the expansion of tree crops. Kwale being an area of strong cultural values, the SRDP aimed at generating widespread public support for and involvement in projects. Thus, experimenting with indigenous crops in the area was expected to receive widespread approval. Towards this end, projects like the Mtwapa-tree crop nurseries, the coconut rehabilitation centre at Matuga and the Ramisi Sugarcane expansion were arrived at. Another SRDP project in Kwale was the Mbamba livestock industry, whereby they were to experiment with credit extension for the purchase of cattle to expand on the livestock industry.

45. Ibid pp. 30

The Kwale SRDP projects suffered a host of problems. The SRDP projects existed in isolation and were poorly integrated with other projects from which they could benefit in terms of technical information. The Mtwapa nurseries for example did not benefit from the extension services in the area, nor other SRDP projects such as the agricultural centres whereby technical information could be obtained. The Mbamba project whereby farmers were given loans to purchase cattle, did not go as planned. The area suffers acute water shortage, a problem that planners seemed to have no knowledge about prior to the launching of the project. When farmers got the loans, they started rearing goats and growing simsim which could resist the draught conditions. This problem might not have arisen if a pre-planning research had been carried out in the area, or if the local people (leadership) had been involved in planning.

The SRDP schemes in general also suffered control from donor countries. The SRDP evaluation results in Kwale revealed that the expatriates and the local officers often held conflicting ideas which led to delays in decision-making.⁴⁶

46. "Second Overall Evaluation of Special Rural Development Programme Institute of Development Studies. (IDS) University of Nairobi, Occasional Paper No. 12. 1975, Chapter 19 pp. 7.

The priorities the expatriates set often differed from those set by the project committees. Donor countries also controlled financial matters to an extent that projects were not implemented in time.⁴⁷ The cotton experiment in Macalder Division of Migori Kihancha SRDP area had not been implemented by the time of evaluation in 1974, because Authority to Incur Expenditure (AIE) was issued late in July that year.⁴⁵ By that time, much of the land and labour meant to be used for cotton production had been devoted to subsistence crops. The target for 1974 was 600 hectares of cotton but only 228 were planted. SRDP had allocated K.Shs. 30,000 to the project, but because of the delayed AIE only K.Shs. 5,000 had been disbursed by co-operatives. About K.Shs. 10,000 was in the Bank and K.Shs. 15,000 used to purchase nets for the local fishermen.⁴⁸ Delegation of fiscal responsibilities to the recipient of the grant (the scheme) might have ensured effective co-ordination and integration of planning and budgeting and might also have helped in avoiding the failure to commit the funds as originally planned.

Judging from the above analysis, the experiment with SRDP projects was not very successful, largely because of poor understanding of SRDP principles of research, planning, implementation, evaluation and replication. Some of these stages were ignored.

47. Second Overall Evaluation of Special Rural Development Programme Chapter 4 pp. 8.

48. Loc. cit.

Adequate agronomic research was vital for the success of all pilot schemes. However, the evaluation by IDS revealed that it was not always carried out properly which resulted in poor take-off of the project or total diversion of resource from the intended purpose. This was the case with the Mbamba livestock industry in Kwale or the Macalder cotton in Migori Kihancha SRDP area. Project committees which were the forum for local participation were rarely utilized, thus suppressing a lot of important information about the local conditions. This information was useful for effective planning. However, experience with SRDP would be useful in future development programmes. The lessons learnt from SRDP for instance influenced the principles of Integrated Agricultural Development Programme.

b) Integrated Agricultural Development Programme (IADP)

Of importance to our study is the Integrated Agricultural Development Programme. This was introduced in 1976, but the implementation period was 1978-84.⁴⁷ AIDP can be seen as a brainchild of SRDP. It was largely based on the experience of the SRDP. The sponsors of this programme are World Bank and the Kenya Government.⁴⁹ The programme is now in its second phase.

49. Mburathi, G.K. and Hannover, K. "Handbook For Integrated Agricultural Development", Ministry of Agriculture, 1978, pp. 46

What does IADP mean? The programme refers to the "whole farm approach." The Ministry of Agriculture (M.O.A.) has evolved from the single crop approach to a "whole farm approach". Extension services have originally been emphasized as the only way through which farmers can improve their productivity by adopting modern farming methods. IADP goes a step further to incorporate other exogenous factors besides internal factors that influence the rate at which economic efficiency can be achieved. Farmers' activities cannot be considered in isolation from infrastructural, institutional and incentive regulatory system such as pricing. IADP thus moves the analysis of technical production packages to the centre of the whole decision-making process. The procedures are based on the premise that the M.O.A.'s attention and resources should be concentrated on innovations in agricultural production techniques that are economically attractive to farmers. The Ministry has therefore shifted its old emphasis on increasing biological yields towards new concern with improving the profitability of small farming.⁵⁰

50. Oyugi, W.O. and Leonard, D.K. "The Role of The District. In Agricultural Planning, Budgeting" An Evaluation of Ministry Procedures And the Management of Mannual". A Report To the Ministry of Agriculture (University of California Berkeley) 1981. pp. 15

Under IADP it was thought that the government would be able to influence development from the grassroots. Research done by Oyugi and Leonard in the eight IADP districts spread throughout the Republic reveals that in some districts, right from the inception of the programme the officers at the headquarters have been determining project components.⁵¹ They even determine the cash crops and food crops to be grown. The district's role has merely been that of assessing crop production and failure and identifying the number of participating farmers. The district level staff do not play meaningful role in decision-making. Oyugi-Leonard Research reveals that the participation of field agents in decision-making depends so much on the person of the District Agricultural Officer (DAO).⁵² In their research, Oyugi and Leonard had found that in most of the districts (despite the important role played by Technical Officers (TOs) and Technical Assistants (TAs) in effecting development projects in the field, they were rarely consulted by the District Agricultural Officer (DAO) in identifying projects.⁵³ IADP therefore, like the Special Rural Development Programme (SRDP), has failed to decentralize planning to field level. Planning has not therefore been able to include as much local knowledge about perceived needs and available resources as possible to ensure effective and sustained development.

51. Ibid 11. 15

52. Ibid pp. 16

53. Ibid pp. 17-18

A majority of the field agents did not even understand the meaning of IADP. To most of them, it was just another credit programme.

The programme has also suffered lack of adequate data for the analysis of technical packages. This data is important in assessing the feasibility of any technical package. This can be attributed to the failure of involving the junior staff in the planning exercise. As Oyugi and Leonard report observes, Technical Officers (TOs) and Technical Assistants (TAs) are frequently asked to provide data on specific crops without being informed about the purpose of that information. Misunderstanding the motive of the request, some of them submit inflated and often distorted information which does not reflect the actual happening at the farm level.⁵⁴

In the context of IADP the idea of the District as the centre of activity for planning purposes has been misinterpreted. While it was thought that planning at district level would involve the lower level units as well, research has shown the contrary. All planning was concentrated at district level. Those at divisional level and below implemented and gave reports on projects they had no part in determining.

54. Ibid pp. 20-23

S U M M A R Y

The colonial situation was characterized by partial and discriminatory development. Efforts to eradicate this and install a more balanced pattern of development has not been very successful. Various factors have been attributed to this failure. They range from political reasons to administrative and social ones.

CHAPTER TWOTHE ROLE OF AGRICULTURAL BUREAUCRACYIN AGRICULTURAL DEVELOPMENTFormal Structures Involved In Agricultural Development

In this Chapter, we shall examine the structure and style of decision-making and its impact on agricultural development. The first part of the chapter will take the form of a brief account of the structures involved in agricultural development. The second part will be an attempt to explore into the nature and style of decision-making in the Ministry of Agriculture and its impact on development. Finally we shall examine field organization for development: that is, decentralization for agricultural development.

Agricultural development in Kenya is not an activity of a single organization. In the Introduction, we mentioned that the Ministry of Agriculture is an open system, interacting with other organizations which influence its performance. These range from government Ministries to Boards and Corporations and private firms dealing with agricultural inputs. In the first part of this chapter we shall consider the role of the Ministry of Agriculture (M.O.A.) Boards and Corporations and touch briefly on the role of Provincial Administration and private firms.

The present Ministerial arrangement and responsibilities cannot be understood clearly without referring to the colonial legacies that gave rise to it. For a long time, the Ministry of Agriculture's established tradition in planned development has been that major decision-making including choice of development projects in the field are the prerogatives of the centre.¹ The Ministry has thus emerged as one of the most complex and functionally differentiated in the government machinery. Until 1979, the Ministry of Agriculture incorporated the Department of Crops and Livestock Development. With increasing concern of the government to develop the rangelands in an attempt to boost the livestock industry, the two departments were split into two: the Ministries of Agriculture and that of Livestock Development. The two Ministries have their representatives at the centre and in the field.

Today, the Ministry of Agriculture comprises two major departments; the department of Agriculture and department of Research. The department of Agriculture is more relevant to us in this chapter because it encompasses the decision-making hierarchy as well. The first major reorganization of the Ministry in the post independence period took place in 1969.

1. Trapman, C. Change In Administrative Structures, A case Study of Kenya Agricultural Development. (London Overseas Development Int. Ltd., 1973 pp. 15

The structures dealing with administration were separated from those responsible for technical services.² The configuration at the headquarters is however not usually reflected in the field, where, for a long time heads of administrative areas have functioned as generalists of some sort.³ Thus at the Provincial level the Provincial Director of Agriculture (PDA) has been responsible for everything. The same has also been the case with the District Agricultural Officer (DAO) and Assistant Agricultural Officers (AAOs) at their respective areas of jurisdiction. In the last decade, the Ministry has been appointing specialists and posting them to provincial and district levels to be incharge of technical services under the PDA and DAO as the case may be.⁴ This is shown in Figure One. These appointments have not helped to ease the problem of concentration of power at the centre. They have been made with a functional structure which still emphasizes the authority of the centre more often than not.

The involvement of the Ministry of Agriculture in agricultural development is paramount as reflected by its performance of various functions.

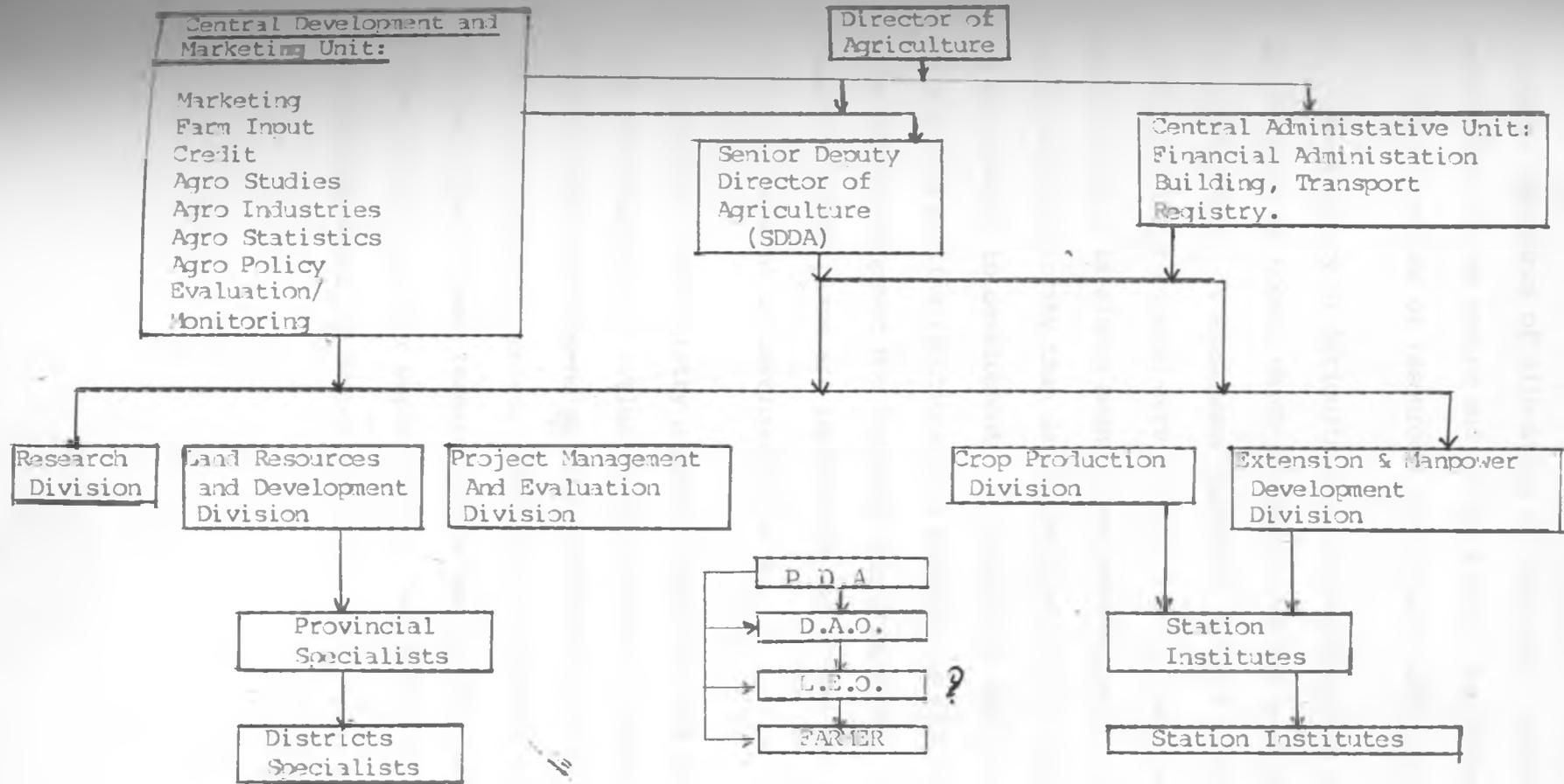
-
2. Ibid pp. 16
 3. Oyugi, W.O. and Leonard, D.K. "The Role of the District In Agricultural Programming and Budgeting...." Op.Cit. pp.7-8
 4. Loc. cit.

These range from planning down to implementation, evaluation and feedback on programmes. Planning involves decision-making at macro and micro levels and setting of strategies.

Important to agricultural development and closely related to planning is budgeting. This is a vital exercise carried out by the Ministry before and after obtaining its share from the country's estimated expenditure on all areas of development. Budgeting is viewed as a process of systematically relating the expenditure of funds to the accomplishment of planned objectives. Budgeting and planning are crucial for the success of any development. Successful development depends on successful formulation of the two.⁵ Both planning and budgeting have to be realistic. In planning, a good plan is one that reflects the totality of the environment in which it is to be implemented. The targets set should be compatible or in keeping with most of the conditions of the area. Good budgeting on the other hand has to do with the preparation of budgetary proposals that stand the chance of being accepted by critical decision-makers in the budgetary process.⁶

5. Ibid pp. 38

6. Ibid pp. 39-41



Adopted From M.O.A. Documentary Unit.

It takes cognizance of allocation of resources. Budgeting occurs both at the centre and in the field. The difference is in terms of volume of resources and projects being financed.

The Ministry of Agriculture is also involved in the day-to-day delivery of goods, which is often referred to as routine Administration. It encompasses paperwork as well as giving advice and other related services to farmers. Routine Administration is also a means towards development, but when given higher priority than development activities themselves, is detrimental to development. It becomes an end in itself. Besides its routine functions, the Ministry is also endowed with skilled manpower who implement the programmes. The manner in which plans are implemented may or may not contribute to the attainment of development goals.

Finally, the Ministry plays an important role in providing data for research and evaluation of projects. Research and project evaluation depend on data generated at field level where programmes are implemented. Usually it is the field agents who act as a link between research bodies and project evaluation teams. They, in other words, provide the centre with feedback information about the happenings in the field.

The effectiveness of the feedback mechanism will be discussed in detail later in the chapter.

Boards And Corporations

These are parastatal bodies whose differences occur in both their institutions and functions. Each Board or Corporation specializes in a particular activity. Some of the Boards are:-

Cereals and Produce Marketing Board

Pyrethrum Board of Kenya

Kenya Tea Development Authority (KTDA)

Cotton Lint and Seed Marketing Board

The Sisal Board of Kenya

Coffee Board of Kenya

National Irrigation Board.

The functions of these boards range from regulatory to developmental and marketing functions. The Coffee Board of Kenya for example is mainly a regulatory body, laying down the by-laws governing the quality and production of coffee. Such by-laws are oriented to production efficiency. Examples of such by-laws include the by-laws that govern crop (coffee) spacing, depth of the holes and areas to be grown in terms of topography and soil conditions. The Board also organizes for the marketing of coffee.

The National Irrigation Board (NIB) can be cited as an example of a board whose functions are developmental in nature. The main objective of the Board is to administer large scale irrigation schemes like the Mwea scheme in Central Province, Pekerra in Rift Valley Province, Ahero in Nyanza, Bunyala in Western Province and Hola in Coast Province. During the 1974/78 plan period, 6,800 hectares were directly under National Irrigation Board.⁶ During the 1979/83 plan period, 64,000 hectares will be considered for irrigation.⁷

The Cereal and Produce Board on the other hand is an example of boards whose main function is that of marketing. Its purpose is to buy cereals from farmers and then sell it to millers and other consumers. The Kenya Tea Development Authority is a multi-purpose Board responsible for regulatory, developmental in that it assists farmers especially small scale farmers by extending credit to them and also extension services.⁸ The involvement of Boards in agricultural development thus stems from the functions they perform.

-
6. Republic of Kenya, Development Plan 1974/78 (Nairobi Government Printer, 1974) pp. 221
 7. Republic of Kenya, Planning for Progress: Our Fourth Development Plan (Nairobi, Government Printer 1979) pp. 36
 8. Trapman, C. Change In Administrative, Structures, A Case Study of Kenya's Agricultural Development, pp. 25

Corporations, like Boards play a major role in agricultural development. While some Boards perform a multiplicity of functions, Corporations can be seen mainly as development oriented. The two most important ones are the Agricultural Development Corporation (ADC) and the Agricultural Finance Corporation (AFC). They are major channels of agricultural credit. However, Agricultural Development Corporation is also concerned with improved agricultural products. It runs several hybrid seed production farms and accomodates pedigree herds of cattle, sheep and goats for national interest.⁹ As a credit institution, during the current plan period ADC loans totalling Kenya pounds 590,000 will be disbursed to farmers.¹⁰

Agricultural Finance Corporation (AFC) is primarily a credit institution. It is especially important in providing long term loans of between ten to fifteen years to large scale farmers. It specializes in large scale loans to large scale farmers though small scale loans are also being channelled through AFC on a limited scale. They are effectively channelled through co-operatives. Agricultural Finance Corporation is especially important in providing land purchase and land development loans for 10-15 years.

9. Ibid pp. 27

10. Republic of Kenya, Development Plan 1979/83 (Part I and II)
Op. Cit. pp. 31.

During the 1974/78 plan period, loans totalling Kenya pounds 5,004,000 were to be disbursed by AFC to farmers for land purchase and land development.¹¹ During the 1979/83 plan period loans totalling Kenya pounds 20,139,000 were earmarked for similar purposes.¹²

AFC also plays a significant role in range development. It is the only credit institution that extends loans to ranchers to purchase stock or for general improvement of the ranches. The AFC administers both long term as well as medium and short term loans. During the current plan period, Kenya pounds 801,000 will be utilized in developing range areas.¹³

The corporations therefore plan a significant role in agricultural development in extending credit to farmers. Agricultural credit as we shall observe later in the study is crucial for agricultural development especially when it reaches those who actually need it and are prepared to invest it in agriculture.

Finally, the role of Provincial Administration in agricultural development cannot be overlooked. Provincial Administration plays a key role in rural development of which agriculture is the core.

-
11. Republic of Kenya, Development Plan 1974/78. Op.Cit. pp. 206.
 12. Republic of Kenya, Development Plan 1979/83. Op.Cit. pp. 31.
 13. Loc cit.

Under the Special Rural Development Programme (SRDP), the task of overall co-ordination fell on the Provincial Administration. In consultation with the Ministry of Finance and Planning, the Provincial Administration designated a District Officer (DO) to be incharge of the coordination of the programmes in areas where it was being tried.¹⁶ Because of the coordinating nature of his work, he became known as Area Coordinator. The area coordinators were active in getting local agricultural staff to carry out their responsibilities under the SRDP.

Provincial Administration has been since 1964/65 identified with mobilization of people for local development through self help activities. Without the keen participation by the Provincial Administration in this regard, a lot that has been achieved in that field might not have been possibly achieved. As an instrument of mobilization, the role of Provincial Administration is reflected in barazas. Apart from passing government policies to the people, Provincial Administrators also call on the people to engage in development activities. Of late, a major call by these Officers has been that of planting more trees to conserve both soil and water. This is directly related to agriculture.

16. Oyugi, W.O., and Leonard, D.K. "The Role of The District In Agricultural Programming and Budgeting....." Op.Cit. pp. 9.

However, the role of barazas as instruments of mobilization has not always been positive. This will be discussed at greater length later in the chapter.

Provincial Administration also acts as a supportive tool. By virtue of the power and authority it commands in the rural areas, Provincial Administration is able to back most of the development activities. The success of extension services if any largely depends on the support it receives from the Provincial Administration. When for example the District Officer (DO) and the chiefs make cattle dipping a compulsory exercise, then they are supporting agricultural development activities. Observing the same, Alila maintains that Provincial Administration co-operates with technical field officers in the management of the process of development in the rural areas.¹⁷

The position of private firms is also a common feature in agricultural development. The firms that deal in agricultural inputs such as fertilizers and chemicals, have been working closely with the Ministry of Agriculture for their own ends and those of the Ministry in general. They are especially important in transmitting agricultural technology to farmers by organizing field demonstrations.

17. Alila, P.O. "The Role of Public Bureaucracy In Agricultural Development In Kisumu District Western Kenya," (Ph.D. thesis 1980, University of Indiana) pp. 240-242.

They are also vital in agricultural research. Fertilizer companies have been carrying out research on suitability of different fertilizers on different types of soils. Welcome Kenya Limited on the other hand has been active in research into animal diseases and producing appropriate drugs and vaccines for treatment and prevention.¹⁸ They have their research station at Kabete.

Within the private sector, the role of Commercial Banks in extending credit to farmers cannot be overlooked. However, Commercial Bank lending to farmers has not played a very significant role since very few farmers have benefited from the scheme. Less than one per cent of the farming community are reached by Commercial Bank loans.* Total lending to farmers by these banks increased by 7.8 per cent in 1981 from Kenya pounds 102 million to Kenya pounds 110 million.*

18. Republic of Kenya, "Report of The Agricultural Education Commission," Chairman Weir, J.R. (Nairobi, Government Printer, 1967) pp. 193.

* See - Nairobi Times, June 28, 1982 pp. 15.

* Loc Cit.

b) Authority Structure And Decision-Making

The structure of authority and decision-making has drawn considerable attention of most students of development studies. However, there is still more to be said about it. To tackle the problem of authority structure and decision-making and its impact on agricultural development, the structure of the colonial bureaucracy provides an important background. The colonial heritage has shaped the present day bureaucracy considerably. The need to reflect on the bureaucracy stems from its importance in planning, allocation of resources and implementation. The authority structure then reflects on the relationship between the centre and the field in terms of planning, budgeting (resource allocation) and implementation.

Writing on "Bureaucracy And Nation Building In The New States" Dube comes up with various structural characteristics of the colonial bureaucracy that are inherent in the present day bureaucracies.¹⁹

- 1) Bureaucracy constituted a special subcultural segment - the high prestige strata of the society. Bureaucracy had a class bias and it tended to have a stratification of its own; its upper crust functioned as a privileged class.

¹⁹. Dube, S.C. "Bureaucracy And National Building In Transitional Societies," in Raphaeli, N. (Ed.) Reading In Comparative Public Administration (Allyn & Bacon Inc. Boston) 1967, pp. 211-215.

- 2) It existed in the twilight zone of cultures. Partly traditional and partly modern, it could and did not in fact choose from the elements of both. It maintained dual identification and was characterized by a dual ambivalence.
- 3) Bureaucratic positions carried vast powers which made them additionally attractive and important. Normally the role and status of functionaries at different levels were defined but in actual practice the system of expectation and obligation between them tended to be different rather than specific. Bureaucracy enjoyed free exercise of power.
- 4) Administration was concerned with collection of land revenue and with maintenance of law and order..... subject matter specialists of Welfare and National Building Departments were relegated to secondary positions and functions under the guidance and control of the generalist.
- 5) Bureaucracy was carefully trained in formal administrative procedure and routine. Stereotypes in this sphere were well developed and were scrupulously observed.
- 6) In the limited framework of its functions and set procedures bureaucracy found a self-contained system. It resented and resisted innovations.²⁰

20. Ibid pp 213

Observing the same state, Jon Morris refers to it as a "hybrid" one.²¹ The bureaucracy exists in a traditional setting that greatly influences its performance while at the same time it enjoys western values. The traditional values refer to nepotism and interpersonal relationships as opposed to western ideal model of impersonal relationships. Riggs has characterized societies with such bureaucracies as "prismatic societies" and to their bureaucracies as the "Sala model."²²

21. Morris, J.R. Administrative Authority And the Problem Of Effective Agricultural Administration In East Africa in African Review Vol. 2 No. 1, June 1972, pp. 105.
22. Riggs, F.W. Administration In Developing Countries (Houghton Mifflin, Boston, 1964) pp. 60-76.

What did these characteristics mean on the eve of independence? The majority of them were inherited and continued to be drawbacks in development. There have been very limited structural changes since independence. Efforts to reorient the structure to development activities has by and large been unsuccessful. We shall examine the impact of these characteristics on agricultural development in the succeeding pages.

A major characteristic of the bureaucracy inherited by Kenya and other newly independent states is the centralized administrative system.²³ This means that planning and most decision-making is the prerogative of the centre. The role of the field is merely to implement plans and programmes centrally determined.

When considering the structure of decision-making we cannot hasten to use Jon Morris "tree" metaphor as opposed to the Weberian scheme.²⁴ In his "tree metaphor", Jon Morris describes the bureaucracy as characterized by a broad strong centre that narrows down to field level.

23. Gertzel, C.J. "Administrative Reform In Kenya And Zambia, in Rweyanamu, H.A. Ed. Op.Cit. pp. 185.

24. Moris, J.R. Administrative Authority And The Problem of Effective Agricultural Administration In East Africa, Op. Cit. pp. 108.

Jon Moris describes the bureaucracy as characterised by a broad strong centre that narrows down to field level. The broadness of the centre is characteristic of the various departments and institutions serving at the headquarters (Nairobi), the configuration of which is not represented in the field. We observed this in Figure 1. This structure reinforces the "tree" metaphor. The figure (chart) clearly shows the broad departmentalization at the centre which are poorly represented at field level. It shows that various bodies concerned with policy formulation such as the Central Administrative Unit, Central Development and Marketing Unit, Project Management And Evaluation Division and Extension and Manpower Development Division are poorly represented even at Provincial level. The Provincial Director of Agriculture serves as a generalist of some sort, with only a handful of specialists assisting him.

Apart from the Ministry of Agriculture having most of its departments in Nairobi, other institutions (such as AFC and the CBK) serving the Ministry also have their headquarters and most of their activities centred in Nairobi. The existence of a strong centre, in terms of personnel (knowledge) and resources leaves a weak and deprived field which is not often conducive to development. We shall examine the reasons later.

In the Introduction, we mentioned that planning is an important component of administration of agricultural development. In a centralized system like that of the Ministry of Agriculture, planning is the sole responsibility of the centre, while the field is at the receiving end. With centralized planning there is limited or no consultation with field agents such as Agricultural Officers (AO) and Agricultural Assistants who often have knowledge on the farmers' perceived needs (since they work closely with the farmers) and their total environment (the socio-economic and the physical environment). When this information is suppressed by centralized planning, the resulting plans are often inflated, unrealistic and incompatible with the environmental conditions. Such plans are difficult to implement and to guarantee sustained development. In most cases, such plans do not reflect the farmers perceived needs and the latter do not support them.

Observing the impact of non-involvement of the junior officers in the Ministry of Agriculture in project identification under IADP, Oyugi and Leonard found that it contributed partly to the unrealistic targets arrived at by planners at district level.²⁶

From our field survey, out of the 60 AOs, AAOs and JAAs eighty per cent of them we interviewed from the Ministry of Agriculture and related departments stated that the majority of the farmers in the District did not regard the programmes launched by the government as "ours". To them, such programmes were 'foreign' ideologies being imposed on them. This could be attributed partly to their social values and also to what they considered to be their own priorities. The centralized nature of project identification contributed partly to the suppression of this vital information.

During a discussion with the District Livestock Development Officer (DLDO) in Kwale, the latter remarked that there were funds voted by the government for the expansion of pigs, bee-keeping and poultry (the latter under National Poultry Development Programme) in the arid and semi-arid areas.

26. Oyugi, W.O. and Leonard, D.K. "The Role Of The District In Agricultural Programming And Budgeting," Op.Cit. pp. 16.

The plan was ideal for such regions as the three consume very little water. But it had not taken into account the social setting of the area. Out of the 100 farmers interviewed, 83 per cent were Muslim, 17 per cent Christians. Therefore pig-keeping in such an area was not a viable project considering that Muslims do not eat pork. According to District Livestock Development Officer (DLDO) only two farmers in the district reared pigs. For the bee industry, a major constraint on the programme was that bee hives were prepared at Thika. To transport them to Kwale was very expensive. When a cost benefit analysis was done, they found the exercise to be of limited economic value. Since planning was done at the National level, the planners had limited knowledge of the total environment of some of the ASAL areas. Observing a similar situation, Chambers maintains that centralized planning means planning without implementation and often implementation without planning.²⁷

In terms of decision-making, the field has very limited authority in discharging their duties even as regards implementation of programmes.

27. Chambers, R. Managing Rural Development, (Uppsala, The Scandinavian Institute of African Studies, 1974) pp. 76-80.

They often refer to the centre for most of the information, resources and clearance to carry out certain activities. The structure of decision-making is such that there is only one source of legitimacy: one's superiors. Victor Thompson refers to such organizational structures as "monocratic structures".²⁸ The structure is so rigid that it does not allow for conflict and creativity. Such a structure discourages innovations and field agents are expected to operate in accordance with rules and guidance of their superiors. As Chitere observes, centralization of decision-making to top men stifles initiative and creativity of field staff and results in organizational rigidity.²⁹ The organization becomes incapable of continually and flexibly adjusting to changing internal and external environment. Thus, if field agents find that a particular package is incompatible with the totality of the field, they have no discretion to alter it. The answer is always, "We are working under directives from above" or "the boss said so." The implementation of such a package is either delayed or wrongfully implemented.

28. Thompson Victor, Bureaucracy And Innovation, Op.Cit. pp.

29. Chitere, P.O. "Decentralization of Decision-Making Process, For The Improvement of Crop Improvement Programme In Kakamega District, Kenya". (Ph.D. Thesis, University of Nairobi, 1980) pp. 26.

When a system is so centralized, the problem of work overload is predominant.³⁰ The consequences are delay in releasing information which in turn delays implementation of programmes. In a country like Kenya, where rural postal, telephone and road transport are still underdeveloped in many areas, reference to the centre becomes too expensive. "Expense" here is measured in terms of time wasted or the time lag between decision-making at the centre and implementation at field level. As Nyerere states, reference to the centre often leads to a situation whereby the field agents

write and write, sometimes five times and
hear nothing, yet it is impossible to visit
Dar-es-Salaam from a place like Sumbawanga or
Morogoro without permission they cannot get.³¹

Maddick similarly notes that centralization leads to waste of energies and time of field staff in struggles with headquarters for money, stores, permits and minute modification of programmes, a fact which leads to delays and reduces enthusiasm of field staff and recipient of programmes.³²

30. Hall Richard, Organization, Structure And Process. Engle-wood Cliffs, N.J. Prentice Hall, 1972) pp. 204.

31. Nyerere, J.K. Decentralization (Government Printer, Dar-es-Saalam, 1972) pp. 2.

32. Maddick, H. Democracy, Decentralization And Development, (Asia Publishing House, London, 1963) pp. 44-47.

This in turn increases the cost of running the organization.

Centralized decision-making strongly enhances routine administration. The increased correspondence between the field and the centre takes up more time than development activities. When the field has to refer to the centre for almost everything, much time is spent in writing and answering correspondence on both ends. Thus, paperwork takes up more time than actual field work. Egbert De Vries writing on Administration of Development Programmes notes that bureaucracies are often concerned with the day to day handling of paperwork which is itself anti-developmental.³³ Dube also observes that the present day bureaucracies are often engaged in office paperwork which reduces the amount of time spent in actual fieldwork.³⁴

During the researcher's stay in Kwale between the months of February and March 1982, the District Agricultural Officer (DAO) and the District Extension Training Officer (DETO) whose positions are such that they should be in the field most of the time, could stay for up to two weeks without visiting the field to see how the junior officers were performing.

33. De Vries, E. "Administration of Development Programmes: Administrative Management For Development. (IAS UNESCO, 1977) pp. 43.

34. Dube, S.C. "Bureaucracy And Nation Building" in N. Raphaeli (Ed.) Readings Comparative Public Administration. Op.Cit. pp. 213.

They relied on reports and correspondence sent to them from the divisions. These reports as we shall examine later in the study did not always reflect the actual happenings in the field.

In Kenya, resource allocation like planning and decision-making is also the prerogative of the centre. Financial control in Kenya starts from the Treasury. Funds are released at the beginning of the financial year. If any other programmes crop up within the course of that year they are ignored or postponed until the following year when further allocations are made.

At the field level, the District Agricultural Officer (DAO) has to refer to the Provincial head-quarters for resources be it fuel, inputs for demonstration and any other activity. The release of such resources is not always made promptly. This in turn means that programmes are not also implemented in time. A demonstration plot the researcher visited in Kinango had pineapples that were being attacked by ants. The Agricultural Officer (AO) in charge of the Division had written to the District Crops Officer requesting for some insecticides.

The latter had not taken action for over a period of three weeks. When the AO later rang the Crops Officer, the latter said that they had not received any of the inputs they had applied for from the Provincial headquarters. The irony of the whole thing was that the plot was a demonstration one.

Although resources control at the centre is sometimes a development hazard, in a dependent economy like ours, the centre feels compelled to carry out all allocations in case of misappropriation at field level. The centre feels that the field agents are not competent enough to handle financial matters. This becomes more of a concern when a donor country is involved. In their research on some IADP districts, Oyugi and Leonard found that lack of adequate delegation of budgeting matter to the district level was partly influenced by lack of confidence on the field by the centre on handling financial matters.³⁵ Worse still, these funds had been donated partly by the World Bank.

35. Oyugi, W.O. and Leonard, D.K. "The Role Of The District In Agricultural Programming And Budgeting," Op.Cit pp. 26.

Finally, within formal organizational structures like the Ministry of Agriculture, the role of the evaluation and feedback is vital for the success of the organization in goal achievement. In 'monocratic' organizations like the M.O.A., communication is often one way. There is limited information from the field to the centre. In such a system, feedback is often suppressed. Feedback involves a reciprocal exchange of information between two or more interacting parties. It is essential for the successful implementation of programmes and control by higher echelons of management. It is from feedback that the centre is able to monitor the activities of the field. Feedback is also important as a potential input for further decision-making.

The only feedback that seems to exist from the field to the centre is the quarterly, monthly and annual reports. These are documents which are not necessarily studied by superiors but taken as fulfilment of that particular requirement: that one has submitted his monthly report.

It is more of a routine requirement than a useful device in providing the centre or the superiors with adequate data about the happenings in the field. Some of these reports are often "colourful" and distorted, mentioning only the alleged successful events in the field and ignoring most of the failures.

Meaningful evaluation of projects cannot be properly done by relying on such information. By withholding information about the unsuccessful activities, the Ministry is thus denied the opportunity to take whatever corrective measures that are necessary. It will continue with the same mistakes thus being ineffective in goal achievement.

In their research, Oyugi and Leonard found that despite the heavy weight attributed to the evaluation of economic attractiveness of technical packages under IADP, field agents still lacked adequate data.³⁶ Some information that reflected bad yields in a package was often considered irrelevant for the valuation of the technical package and yet the information was important in analysing the gross margin of a technical package.

Project reports, which do not necessarily have to be timely, but oriented to giving progressive information on projects, have been advocated as opposed to these timely reports which attempt to incorporate as many field activities as possible.³⁷

36. Ibid pp. 10-11

The latter attempt to cover a little of everything in the field which leaves out a lot of information that could be useful in evaluating the success of the projects. Commenting on the availability of project data in the field, the District Crops Officer in Kwale said that field agents often lacked accumulated data to send to the district headquarters because they often wait until around the end of the month before beginning to compile their monthly reports. He further mentioned that the contents in these reports often overlap.

The above analysis clearly reveals that in a system that is so centralized development is often difficult to achieve. The structure of decision-making being so rigid suppresses creativity and local knowledge in influencing project identification and development. The result is that projects arrived at do not always reflect the peoples perceived needs and their total environment. Such projects often lack total support such that they become ends in themselves.

37. De Vries "Administration Of Development Programmes And Projects," Administrative Management For Development, Op.Cit. pp. 43-44.

Decentralization for Agricultural Development

With a centralized system, decentralization for development becomes an important structural remedy. Decentralization is advocated by those who find faults in centralization. We have already examined flaws of centralization. Decentralization can either be political or administrative. Political decentralization is also referred to as devolution, while administrative decentralization is referred to as deconcentration of the centre. Devolution can therefore be seen as secession of power by the central government to a territorial assembly to make decisions on behalf of the central government. To use Smith's words, devolution refers to a situation in which

Authority to make decision in some sphere of public policy are delegated by law to sub-national territorial assemblies.³⁸

Decentralization refers to:-

the delegation of authority to make administrative decisions on behalf of the central administration³⁹ to public servants working in the field.³⁹

³⁸. Smith, B.C. Field Administration: An Aspect of Decentralization (Routledge And Kegan Paul Ltd, London 1967) PP. 1.

³⁹. Loc. Cit.

Decentralization rather than devolution suits our case because we are dealing with decentralization for development, whereby the centre still monitors the activities of the field. In this section, we shall examine the various programmes that the government has launched to decentralize the agricultural bureaucracy in the attempt to making it a more meaningful instrument of development.

Decentralized development has been regarded as ideal in that it incorporates local resources both manpower and labour into development activities. Observing a similar case, Collins maintains:-

Decentralization is necessary in the under developed countries where government with minimal human, financial and hence organizational resources are faced with certain environmental problems. The size of the countries creates problems of physical communication and regional diversity produces a variety of local conditions. Thus New Nations where governments have limited administrative and political capability, where central government authorities are already overburdened and lack information, there is no alternative to decentralization.⁴⁰

40. Collins, P. "Workings On Tanzania's RDF in (Ed) Rweyanamu, H.A., Nation Buidling In Tanzania (East African Publishing House Dar-es-Salaam, 1970) pp. 147.

From the above quotation, we can deduce that decentralization will be influenced by the vastness of the country, poor communication system and overload at the centre.

Decentralization will reduce the intensity of these problems. In support of decentralization, Nyerere maintains:-

Thus it has gradually become obvious that in order to make a reality of our policies of socialism and self-reliance, the planning and control of development in this country must be exercised at local level to a much greater extent than at present. Our Nation is too large for our people at the centre in Dar-es-Salaam to understand local problems or to sense their urgency.⁴¹

Programmes that have been launched by the government in an attempt to decentralize development take on an historical sequence.

The Ndegwa Commission

In 1971, the Ndegwa Commission recommended decentralization of development to the district level.⁴²

41. Nyerere, J.K. Decentralization, Op.Cit. pp. 1.
42. Republic of Kenya, Commission of Inquiry, Chairman Ndegwa, D.N. Op.Cit. pp. 40.

Along with this it also recommended the appointment of District Planning Officer (DPO) as well as District Development Officer (DDO) to provide the necessary leadership at that level. The District Planning Officer would co-ordinate all matters to do with planning while the District Development Officer would co-ordinate the implementation of programmes. District planning became operational from 1974-75 fiscal year.

Prior to the Ndegwa Commission was the Special Rural Development Programme (SRDP) mentioned earlier in the study. Its major objective was that of testing various strategies for accelerating rural development. Experience from SRDP became pertinent to future District Planning. District Planning aimed at identifying and defining local projects for all governmental departments. The forums for this were District Development Committees (DDCs) where all departments would sit.

Since the policy of District Planning became operational in 1974/75 fiscal year, two generations of District plans have been produced covering 1974/78 and 1979/83 plan periods. The official policy regarding District plans was that they should reflect the peoples needs. It was felt that district planning would ensure planning with adequate local data since it would incorporate the local people in the planning process.

It would then be a plan oriented to solving the problems of the local people which in turn make development more meaningful and liable to gaining local support.

Although all this was ideal evaluation of the district plans produced during the two generations reveal that they are extracts of National plans except that sectoral components of the plans are district specific.⁴³ Each sector has projections and proposals that cover the same time period as the National plans. Observing the same, Njage Nthiga maintains that District plans reflect heavily the National Plans, while District Development Committees continue to be controlled from the centre.⁴⁴ Like the Local Councils they continue to lose power to the centre.

Important to agricultural development and closely related to the District Development Committees are the District Agricultural Committees (DACs). They are represented at District level and below as Sub-District Agricultural Committees. Their connection with District Development Committees stem from participation in Rural Development Funds. District Agricultural Committees are important forums for identifying projects proposals to be funded through RDF.

43. Oyugi, W.O. and Leonard, D.K. 'The Role of The District Agricultural Programming And Budgeting...'" Op.Cit. pp. 18.

44. Nthiga, N. "The Management of Rural Development Funds in Kenya " Op.Cit. pp. 46.

Under District Agricultural Committees farmers representative influence project identification. They are supposed to be the farmers "voice" on their perceived needs. Project proposals made by District Agricultural Committees are then submitted to the District Development Committee members for approval and funding, through RDF. In Kwale District, there were four major such projects under RDF:-

- a) Nguluku - Kigueni soil conservation project - KShs. - 116,000
- b) Kikomani Pineapple and banana bulking plot - KShs. - 38,000
- c) Majimboni citrus nursery - KShs. - 64,000
- d) Kinango bulking plot for sorghum - KShs. - 21,000.45

As a means of decentralizing agricultural development, the District Agricultural Committees have not been very effective. They have not been adequate sources of information on farmers perceived needs. This can be attributed partly to poor farmer representation. Farmers' representatives are often the local elites who are seen as the ideal leaders. They are often the progressive farmers whose needs and interests cannot be similar to those of the mass of small scale farmers. The degree to which they can adequately voice the needs of the small scale farmers is very limited.

They are likely to view problems from their own perceived needs which is not that of small scale farmers. They are likely to represent the interests of their group - the local elites - instead of those of the small scale farmers. A similar observation is made by Trapman that District Agricultural Committees are not true farmer representatives. They represent a small section of the farming community: the progressives.⁴⁶ As such, projects launched become of limited utility to the majority of the people. The whole exercise distorts the official purpose regarding the committees, a clear case of goal displacement.

In Kwale District, out of the ten farmer representatives at the District Agricultural Committees, four were also councillors in their respective places. The rest were notable progressive farmers. Commenting on the choice of these representatives, the District Agricultural Officer (DAO) said that they have to choose people who know something about farming and have also shown it practically. The Sub-District Agricultural Committees at the level below were almost non-existent. Project proposals were often made by DAC. The latter felt that they knew what the farmers required. Thus projects were imposed from above which had no influence from the local people.

46. Trapman, C. Change In Administrative Structures: A Case of Kenya's Agricultural Development. Op.Cit. pp.23

When local leaders are key figures in these committees, the Committees are often liable to political interference. They sometimes are used as political platforms to generate support. Projects are proposed with an aim of generating political support for these leaders which is not necessarily in keeping with the people's perceived needs.

Other problems influencing the effectiveness of District Agricultural Committees are those of irregular meetings and non-participation by farmers. Acknowledging this, the Provincial Director of Agriculture (PDA) in his annual circular for 1979 to all districts - District Agricultural Officers (DAOs) in the Coast Province requested them to raise the number of committee meetings from twice a year to quarterly.* He also pointed out that non-participation of farmers was reducing the effectiveness of these committees in influencing project identification. Irregular meetings of these committees on one hand means that these channels through which farmers can influence development are being under-utilized. On the other hand, non-contribution by farmers clearly distorts the official objective of such forums. Nthiga, focusing on District Development Committees attributed the ineffectiveness of these committees partly to irregular holding of meetings.⁴⁷

* Files On District Agricultural Committee at DAO's Office, Kwale.

47. Nthiga, N. :The Management of Rural Development Funds in Kenya.."
Op.Cit. pp. 46

The official goal of the government to tap local knowledge and resources for development through these channels has to a certain extent been blocked by continued control of these forums by the local leadership and poor farmer representation. The local people have played a very limited role in influencing project identification.

Integrated Agricultural Development Programme (IADP)

We have already examined a brief account of the IADP, its objective and period of implementation and to some extent its achievements. In this section, we shall analyse as a decentralization measure. The question is, "To what extent has it been an alternative means of decentralization?" Like its predecessors, Integrated Agricultural Development programme focuses on the farm as the unit for development. Under IADP, the district is supposed to play a key role in project identification, budgeting and evaluation of technical packages.

As regards project identification, findings by Oyugi and Leonard in eight IADP districts show that even district level staff do not play a major role in the exercise. Usually, project components are centrally determined.⁴⁸ The role of the district has been merely one of assessing crop performance and identifying the number of participating farmers and in cases of crop substitution.

48. Oyugi, W.O. and Leonard, D.K. "The Role of The District In Agricultural Programming And Budgeting". Op.Cit. pp. 13-16.

They also found that the degree to which the officers below the district level were consulted in project identification was very limited and depended so much on the feelings of the DAO. In most of the districts, they found that Technical Officers (TOs) and Technical Assistants (TAs) were rarely consulted. Projects were thus imposed on field agents from the district level.

From our research survey, we found that in matters regarding IADP, the District Agricultural Officer consulted with the District Crop Officer and a few Agricultural Officers (AOs) whom he felt were competent enough. These AOs were not more than three. Lack of participation by the junior officers who are the frontline workers means that a lot of important information on the farmers' needs and environment are not taken into account in project identification. The result is that projects launched do not always reflect the farmers needs to an extent that they may not be economically viable to the farmer contrary to the official goal of IADP.⁴⁹ Thus, under IADP, development decisions have not been adequately decentralized to district level. The latter is still a creature of the centre. There is still a problem of the level at which involvement in project identification should occur.

49. Ibid pp. 15-16.

The present situation shows that the official policy of IADP of including local knowledge in project identification through the involvement of district staff and those below has been misinterpreted. Development continues to be initiated from above.

Decentralization of budgeting activities has not also met with success. Ideally, budgeting should be integrated with project proposals (planning) if development is to be effective. When the two processes take place at the same level then development projects are not likely to fail because of inadequate resource allocation, in that planners plan with the knowledge of the amount of resources available. In terms of finances, such plans are realistic.

Like planning discussed above, budgeting has also continued to be a monopoly of the centre. As has been the tradition, the district has to refer to the Provincial headquarters for almost all resources. The province does not also control adequate resources and has to refer to the Treasury.⁵⁰ We saw a similar case with the Kinango demonstration plot.

50. De Vries, E. "Administrative of Development Programmes And Projects," Op.Cit. pp. 44.

The DAOs have currently been requested to operate on an incremental approach to budgetary formulation with regard to recurrent expenditure estimates, which they are not always sure of.⁵¹ They often fall into the habit of making high bids to ensure that at least a particular level of funding is met. The DAOs therefore are not able to integrate project proposals and resources with the result that some projects planned are not implemented for lack of resources. As Egbert De Vries observes, so long as financial matters are centrally controlled, the district and other political sub-units will have no meaningful role to play in planning-budgeting process.⁵²

51. Oyugi, W.O. and Leonard, D.K. "The Role Of The District In Agricultural Programming And Budgeting...." Op.Cit. pp. 30.
52. De Vries, E. "Administration Of Development Programmes And Projects," Op.Cit. pp. 44.

The Decade of 1980s: The District Focus For Rural Development

The development strategy adopted during the 1980s does not differ so much from that of the 1970s. The major difference lies in the emphasis on certain aspects, as outlined below which now make the district a stronger unit for rural development. It is based on the principle of ministries and districts having complementary responsibilities.⁵³ This, it is hoped will reduce the ministerial autonomy in development as identified earlier in the study.⁵³

The strategy, like its predecessor emphasized the involvement of the local people in the planning and implementation of programmes. The District Development Committees (DDC) remain the forums for approving and designing projects that reflect what the people have identified as their needs and priorities. The DDCs are also responsible for the coordination of these plans with other relevant bodies - particularly the ministries.⁵⁵

A major difference between the current development strategy and the previous ones is that it seeks to decentralize both planning and budgeting to the district level.

53. Republic of Kenya, Office of the President, "District Focus For Rural Development", (Nairobi, Government Printer, 1983 pp. 1

54. Loc. cit.

55. Ibid. pp.2.

By incorporating the two, it is hoped that a more meaningful development will be achieved. Under this strategy, ministries will prepare their budgets indicating project activities and funding for each district.

They will then communicate to the district, guidelines and budget ceilings for programme activities to be funded in future. From this information the DDCs will prepare operational work programmes.

Under decentralized budgeting process, financial control will be the responsibility of the District Accountant working closely with the A.I.E. holder(s) of each ministry represented in the district. The A.I.E. holder will decide when funds are to be used for project expenditures, and ascertaining the A.I.E. has not been overspent will authorize release of the money through the District Treasury.⁵⁶ At the end of each month, the District Accountant will prepare a statement for each A.I.E. showing the amount of funds utilized and the remaining amount.

Incorporated also in this decentralized budgeting is the revitalization and strengthening of District Tender Boards.⁵⁷

56. Ibid, pp. 3

57. Loc. Cit.

To facilitate implementation for rural development projects, the procedures for obtaining supplies will be made possible and easier through the District Tender Boards which could not previously approve tenders of upto KShs. 40,000 without referring to ministerial tender boards will now adjudicate tenders for supplies and services of upto KShs. 50,000 and tenders for construction for upto KShs. 2,000,000 (2 million).⁵⁸ It is hoped that this will reduce the unnecessary delays in release of funds caused by referral to the Province or the National Headquarters. It will in turn ensure rapid implementation of programmes.

Finally, the strategy also lays emphasis on availing component personnel at the district level.⁵⁹

58. Loc. Cit.

59. Ibid, pp.4

Professional and technical officers now performing largely administrative tasks at provincial headquarters will be re-assigned duties to the district where they can perform essential development functions. Centralization of skilled manpower at the Provincial and National level as we observed earlier in the chapter has been a major drawback in development. In the past, the implementation of programmes including project identification has been left to semi-skilled personnel.

The above strategy is ideal for our rural development. However it carries the assumption that the DDC members will be true representatives of the majority of our rural poor. It assumes that by including more of the social informal leadership structure (i.e. non-governmental organizations) within the DDC it offers a wider cross-section of the district and thus the projects they approve will have strong local support. This should not blind us to the fact that these representatives as it has happened in the past are the progressives, whose needs and priorities as we have already mentioned are not those of the majority poor. Progressive here refers to those farmers who have money, a bit of modern farm knowledge and are change oriented. The question of representation then is worth considering under the new strategy.

By availing qualified personnel at the action level, care should be taken not to under utilize these people. They should be given assignments that are worth their professions. If this is overlooked, we may end up in a situation whereby they are demoralized. This of course is anti-developmental. Other facilities that help boosting people's morale such as housing should also be made available at the field level.

SUMMARY

Efforts to decentralize our development activities has not been very successful. In an attempt to tap local initiative in the planning and implementation of programmes has been met by such drawbacks as poor representation. This has often resulted in projects that are not beneficial to all in the rural areas and especially the small scale farmers. This is then reflected in the rate of development which is decelerated.

rate of development which is decelerated.

The 1983 district focus for Rural Development Programme aims at arresting some of these programmes. However, much as it is an improvement of past programmes, the same problems identified in this chapter should not be overlooked. If this is taken into account, then our rate of development would be greatly improved.

CHAPTER THREE

AGRICULTURAL EXTENSION SERVICES

Organization Involved In Extension Services

This chapter attempts to analyse the role and effectiveness of extension services in improving agricultural productivity. We shall focus on agricultural extension activities as taking place within an organizational frame-work with a task environment of other departments within the Ministry of Agriculture (M.O.A.) and related departments outside the Ministry of Agriculture that influence its performance. The relationship between the Department of extension services and these other departments (its task environment) is that of input-output exchange. Extension services in Kenya have developed as an arm of the Ministry of Agriculture charged with the responsibility of promoting agricultural development by spreading the use of modern farming techniques.

Extension service is seen as a link between research stations and farmers. Agricultural extension thus incorporates the transmission of information from research stations to farmers. Agricultural extension can therefore be seen in terms of persuasive communication of information produced by research stations to farmers. Communication is not only from research stations to farmers. There is also communication from farmers to research stations, although limited in most of the East African countries.

It involves a form of feedback, informing research stations on problems affecting farmers.¹ Through extension services, farmers are advised on improved farming activities. Thus, extension services are also referred to as advisory services.² Their ultimate goal is to improve agricultural productivity by extending information to farmers on agricultural technology.

Agricultural extension is central to improved agricultural production. Sessional Paper No. 4 of 1981 On National Food Policy which we mentioned in chapter 1 as an important document in governing agricultural production indicates that for Kenya to achieve self sufficiency in maize by 1989, production will have to grow by 4.9 per cent per annum.³

-
1. Oyugi, W.O. and Leonard, D.K. (Eds) "The Role of The District In Agricultural Planning and Budgeting: An Evaluation of Ministry Procedures And The Management Manual." A Report To The Ministry of Agriculture (University of California Berkeley) 1981, pp. 15.
 2. De Vries, J. Agricultural Extension And The Development of Ujamaa Villages In Tanzania: Towards a Dialogical Model" (University of Wisconsin, Ph.D. Thesis 1975) pp. 8.
 3. Republic of Kenya, Sessional Paper No. 4 of 1981 On National Food Policy. (Nairobi Government Printer) pp. 1.

If food supplies are to keep pace with the rate of population growth, the paper goes on to state, harvests will have to increase

by an average of at least 4 per cent a year over the long term.

Agricultural production in Kenya depends on small farm production.⁴ Thus, small farm production makes more intensive demands on the Nation's public organization infrastructure than do large farms. We saw in chapter 1 how small farm production has over the last two decades contributed to the country's cash crop production. All the institutions that support the Nation's agricultural production will have to operate with maximum efficiency if these remain central in food productions and cash crop production. Agricultural extension is one of the several services that are critical to the task ahead. In this chapter, the effectiveness of agricultural extension is measured against the official policies and standards set for it as contained mainly in the National and District Plans and National Food policy.

4. Ibid, pp. 1.

The key actors in agricultural extension are the extension agents. The burden of improving agricultural productivity lies on the lower cadre in the Ministry of Agriculture. The list below shows their level of education and the approximate number of each cadre in the Ministry of Agriculture.

- 1) Agricultural Officers (AO) with a University degree in agriculture (3%).
- 2) Assistant Agricultural Officers (AAO) with a diploma from an Agricultural college such as Egerton (7%).
- 3) Agricultural Assistants (AA) with a two year certificate of agriculture (30%).
- 4) Junior Agricultural Assistants (JAAs) with no formal agricultural training but has attended short term courses of 1-6 months at the local Farmer Training Centres (FTCs) and occasional seminars.⁵

The ten per cent who constitute the top two cadres supervise the paraprofessionals.

5. Leonard, D.K. Reaching The Peasant Farmer Organization Theory And Practice In Kenya (University of Chicago Press, 1977) pp. 11

In the Ministry of Livestock Development, the real farmer contacts are the Animal Health Assistants (AHAs) trained at either Animal Health & Industry Training Institute (A.H.I.T.I.) or other Agricultural Colleges and Junior Animal Health Assistants (JAHAs) an equivalent of J.A.A. in the Ministry of Agriculture.

The task of agricultural extension agents as we defined it earlier, is to encourage farmers to adopt modern farming methods. In carrying out this task, various methods are used. These include:-

- a) Farm visits through which extension agents explain technical matters to farmers.
- b) Demonstrations - Farmers can see agricultural inputs at work.
- c) Group extensions used to reach as many farmers as possible within a short time.
- d) Mass media - also used for broader coverage of farmers.
- e) Barazas - used as mobilization instruments.

The effectiveness of these methods will be discussed at greater length later in the chapter.

As an arm of the Ministry of Agriculture, extension services are represented at Provincial level down to farm level.

At Provincial level, extension services are represented by various specialists who are directly under the Provincial Director of Agriculture (PDA) while at District-level there are also specialists serving under the District Agricultural Officer (DAO). The structure is clearly presented in figure 1 pp. 51. At divisional level we have Technical Officers (TOs) who, since recently have become specialists because of their level of training. The Junior Technical Assistants (JTAs) operate at sub-locational level and are the real farmers contacts.

Agricultural extension in Kenya is also provided by statutory Boards. These often carry out their own research and then transmit the findings to farmers. They may do so through government extension agents or through their own staff in the field. Kenya Tea Development Authority (KTDA) for example offers a whole range of technical information to tea growers that is outside what the government extension agents provide. The Board has employed its own staff in the field to provide extension services to small holder tea producers. The Cotton, Lint and Seed Marketing Board often uses extension agents from the Ministry to disseminate information to farmers.

Private firms, as we mentioned in the previous chapter also play important roles in providing technical information to farmers. They are especially important in organizing field demonstrations which are both persuasive and technically visible thus rendering them more effective than their visits or

Twiga Chemicals, Wellcome (K) Limited and Kenya Farmers Association (KFA) are important examples of firms that offer extension services. They also sponsor radio programmes such as "Maisha Ya Mkulima," sponsored by Wellcome (K) Limited and is on air every Thursday at 10.30 a.m. on National Service. Farmers send questions to the Officers in-charge in the company and the answers are broadcast over the radio during the above named programme. Other farmers also benefit from the answers.

Finally, the role of Provincial Administration in disseminating agricultural information to farmers cannot be overlooked. In chapter Two we mentioned that Provincial Administration acts as an instrument of mobilization (through barazas) and also supports most of the agricultural extension programmes. A majority of the farmers who are not visited by extension agents obtain information about farming by attending barazas. Provincial Administration backs agricultural extension services by declaring them as compulsory and deal with those who do not follow the recommended practices.

The Department of Home Economics, also within the Ministry of Agriculture, has a crucial role in agricultural extension. It operates through women groups. It is mainly concerned with family welfare and especially nutrition. The women are taught how to tend vegetable plots, rear rabbits and keep poultry. These activities are directly related to agriculture and geared to improved food production and nutrition requirements of the community. The department can then be seen as extending agricultural information to farmers and also encouraging them to produce better and wide varieties of foods under proper crop husbandry.

Provision of Extension Services: Techniques of Distribution

Extension services in Kenya have received considerable scholarly attention. Studies conducted after decade of 1960 reveal a hybrid nature of assessment and attributes the achievements that have been made in agricultural development to the effectiveness of extension services. Although there are those who argue that extension services have made considerable contribution to agricultural development, there are others who have identified flaws in the nature of distribution of these services and shown how they have partly contributed to the rural inequalities mentioned in chapter one.

Studies conducted during the said decade for example, show that extension services have played a crucial role in promoting hybrid maize in the country or what is referred to as the "green revolution" in maize. Studies done by John Gerhart's (1975) show that 35 per cent of small farmers first learned about hybrid maize from a government extension agent while forty five per cent more heard of hybrid maize from neighbours and friends who had adopted it (who had been taught by extension agents).⁶ Other studies reveal the positive contribution of extension services to the promotion of small-holder tea production especially after 1960. The well organized and disciplined work of Kenya Tea Development Authority has placed Kenya well above other tea producing countries such as India, Java or Sri Lanka.⁷ More general assessments have found the picture less bright though.

6. Gerharts, J.D. "The Diffusion of Hybrid Maize In Western Kenya" (Princeton, N.J., Ph.D. Thesis, Princeton University, 1974) pp. 239.
7. Etherington, D.M. An Econometric Analysis of Smallholder Tea Production In Kenya, (Nairobi, East African Literature Bureau, 1973) pp. 24-32.

Hopcraft study (1974) reveals that despite the farm visits conducted by extension agents, increased production of hybrid maize is directly correlated with the use of other purchased inputs such as fertilizers.⁸

Alongside with farm visits, Hopcraft study reveals that demonstrations produced better results than farm visits. Demonstrations tended to increase the productivity with which the farmer used his own resources, increased the farmer's use of innovative inputs and increased the rationality with which those inputs were used. Hopcraft found demonstrations valuable for a wide range of farm conditions since they taught farming techniques in addition to persuading farmers to adopt them.⁹ Farm visits on the other hand helped to persuade producers to purchase farm inputs, but did little to show how to apply them on the farm.

Hopcraft's study points to the futility of barazas as a technique of communication when measured against the two discussed above. The study also casts doubts on the benefits of Farmers Training Centres (FTCs).¹⁰

8. Hopcraft, P. "Human Resources and Technical Skills In Agricultural Development: An Economic Evaluation of Education In Investments In Kenya Small Farm Sector (Unpublished Ph.D. Thesis, Stanford University, 1974) pp.46-47

9. Ibid pp. 218.

10. Ibid pp. 224.

FTC courses are generally associated with higher levels of technology and purchased inputs but not necessarily with increased productivity. FTCs were thus of little benefit for widely grown crops but were helpful for teaching technologies that are a radical break with existing practice.

The Hopcraft study though old, provides a good economic assessment on the impact of extension services on agricultural development. It also throws light on the effectiveness or lack of effectiveness of demonstrations, farm visits and barazas. Hopcraft's study indicates that extension can improve productivity if it is done properly but the benefits are by no means automatic.

Other studies done on extension services are geared to assessing the manner of distribution and its impact on agricultural development. Leonard (1974) found that extension agents spent most of their farm visits time with progressive farmers who were only 10 per cent of the farming community. He attributed this unequal distribution of extension benefits to inadequate methodology such as the progressive farmer strategy and social factors such as the manner of interaction of extension agents with the progressive that in turn have consequences on extension services.¹¹

11. Leonard, D.K. Reaching The Peasant Farmer, Op.Cit. 173.

Similar views have been shared by Phillip Mbithi. In his studies in arid and semi-arid areas, he found that 40 per cent of the farmers have the threshold of farm knowledge. Extension agents would do little or nothing to improve it. However, the 60 per cent who need the agents attention are rarely visited.¹² This reinforces the findings of other studies in the high-potential areas that extension agents spend too little time with the poorer of the farming community who need them.¹³

Other studies on the nature of distribution of extension services have been done by Alila. Like Mbithi, Leonard and Ashcroft, Alila maintains that extension services are often made available to the local notables.¹⁴ This helped to create a patron-client relationship that has in turn helped in strengthening rural stratification. Unlike Leonard or Alila, Chitere found extension to be contributing positively to improved agricultural productivity.¹⁵

-
12. Mbithi, P.M., Rural Sociology And Rural Development EALB 1974, pp. 56-57.
13. Ascroft, J. Roling, N. and Chege, F. "Extension And The Forgotten Farmer": First Report of A Field Experiment, Institute Of Development Studies, (IDS) University of Nairobi, 1973.
14. Alila, P.O. "The Role of Public Bureaucracy In Agricultural Development In Kisumu District Western Kenya," Op.Cit. pp.48
15. Chitere, P.O. "Decentralization of Decision-Making Process: Its Application For The Improvement Of Crop Improvement Programmes In Kakamega," Op.Cit. pp.24.

He found extension agents to be doing more work than Leonard had observed earlier in the same areas. However, Chitere deals largely with the centralized mode of decision-making and its impact on agricultural development.

The above evaluation done on extension services show that they have a potentially positive role in promoting agricultural productivity if properly applied. The studies therefore show that there is still a lot to be done to orient extension work to agricultural development. In this chapter, we shall assess the effectiveness of extension services in Kwale District, against the official standards and policies set for it.

The effectiveness of an organization in goal achievement cannot be clearly understood without focusing on the manner in which goods and services are distributed. Agricultural extension is no exception. The official policy of the government is to try and reach most of the small scale farmers through extension services.¹⁶ Thus the progressive farmer approach, as observed earlier in this section has received a host of criticisms. This stems from the importance given to farm visits in extension services.

16. Republic of Kenya, Development Plan 1979/83, Op.Cit. pp.210.

Farm Visit

The progressive farmer strategy has roots in the colonial period. Under the Swynnerton Plan, goods and services were to be concentrated on the progressive farmers. The emerging African progressive farmers received more attention than the less well to do. Two theories are advanced in support of the strategy: the diffusion of innovation and the economic growth theory. The two theories will be tested in the Kwale case.

Although the official policy of the government has been to do away with the strategy, the current practice in the field by extension agents shows the contrary. Extension agents continue to follow the strategy. There are various explanations ranging from social to economic to targetary system and idiosyncratic factors. From the sample of one hundred farmers we interviewed in Kwale District, we categorized them into three: progressives, middle progressives and non-progressives or non-innovative. We defined progressive farmers as those who had title deeds, grew cash crops such as bixa, cashewnuts, coconuts on a large scale, extensive horticultural or citrus fruits and had adopted some farm mechanization or hired some.

The middle progressives, we defined as those who grew one or two cash crops, used or hired labour and hired farm mechanization.

The last category of non-innovative as those who produced only for subsistence. The tables below show the frequencies of farm visits among the two categories of farmers.

TABLE 1

The Distribution of Agricultural Extension Visits to Farmers In Kwale District - Figures show Number of Farmers

Division	Once a Month	Once per Season (2) Seasons	Once a Year	Less than Once a Year	Total
Kinango	16%	8%	8%	68%	100%
Kubo	16%	4%	8%	72%	100%
Matuga	34%	10%	18%	38%	100%
Msamweni	40%	12%	12%	36%	100%
Total	26.5%	8.5%	11.5%	53.5%	100%

Source: Field Data Sample Size-100

TABLE 2The Distribution of Farm Visits to the Three Categories of Farmers

Category of Farmers	Once a Month	Once per Season	Once a Year	Less than Once a Year	Total
Progressives	18%	6%	5%	4%	33%
Middle Progressives	6%	3%	9%	6%	24%
Non-Innovative	2%	4%	8%	29%	43%
Total	26%	13%	22%	39%	100%

Source: Field Data

Sample Size - 100

From the above two tables, we can deduce that the progressive farmers receive more attention from extension agents than do the middle progressives and the non-innovative farmers. Added to this factor, there are certain exogenous factors that could have influenced these responses. Those with sugarcane often receive agricultural officers who examine the cane so as to recommend it for market in the Ramisi Sugar factory. The farmers could not have differentiated them clearly from actual extension agents. Those areas fall in Msambweni Division. However, the figures still indicate that more visits are paid to progressive farmers at the expense of the poorer farmers who actually need the service.

Earlier in the chapter, we mentioned that although Integrated Agricultural Development Programme (IADP) is officially meant for small scale farmers, those who are often selected to participate in the programme are the progressives whom extension agents know well. Thus as participants in IADP, the progressive farmers had better chances of gaining access to extension services because the agents are concerned that, they the farmers as beneficiaries of the various credit schemes should be helped so that they may be able to repay the loan.

As a strategy, the progressive farmer approach is supported by the two theories we mentioned earlier. When these theories are tested in the case of Kwale District, they do not always give positive results. The diffusion of innovation theory which takes into account an informal communication of agricultural information between farmers is not within the farming community. Kwale District is no exception as also indicated in Tables 1 and 2.

Information passing through various channels is subject to distortion and loss of links. While informal communication between farmers may be present, the amount (how much) and quality is also important to the adoption process. It has direct influence on what and how the farmer who finally receives it adopts and sustains it.

studies done by Sinha in India show that farmers who first learned about an innovation from extension agents passed only 28 per cent of what they learned to other farmers.¹⁷ As first learners they also missed a lot from what they were taught. Those who got the information second hand from neighbours learned 14 per cent of the total points released by the Ministry of Agriculture. The information lacking could be the deciding factor on whether to adopt it or not. Such information is then useless to the recipient. Leonard, in his research in Western province of Kenya found that the Luhyas were not keen in disclosing to their fellow men the actual economic benefits of a given package. For example they cannot disclose the actual yields received from the adoption of a particular package.

In our field survey some Technical Officers (TOs) and Technical Assistants (TAs) informed us that they had passed word to farmers in the drier interior to use palm leaves to conserve moisture in the soil. Farmers were expected to lay palm leaves on the bottom of trees (cashewnuts, coconuts, bixa, mangoes and citrus) in order to conserve moisture since irrigation is near to impossible in some areas.

¹⁷ Cited in Hopcraft, "Human Resources And Technical Skills In Agricultural Development" Op.Cit. pp. 146

The farmers who received the information from Technical Officers and Technical Assistants and from Provincial Administration passed

word to the rest that palm leaves should be laid on the bottom of all coconut trees. This left out the other trees from the exercise contrary to the official policy. The Technical Officers were then to rectify this during the seminars that followed. This shows how information passing through various points in the organization hierarchy is often distorted and affects the effectiveness in achieving the desired goal.

Informal communication of this nature is also liable to social communication barriers. The diffusion of innovation theory assumes free interaction between progressives and non-progressives. Studies on social groups even within an organizational framework show that people of similar socio-economic background tend to interact more than those of different socio-economic background.¹⁸ This barrier affects the degree to which progressive farmer strategy or diffusion of innovation theory can be effective in our rural communities.

Social barriers become more of a problem in areas of diverse ethnic groupings. In Kwale District, the parts of Kubo Division bordering Kinango Division are inhabited by both Durumas and Kambas.

18. Mbithi, P.M. Rural Sociology And Rural Development Op.Cit. pp.37.

The Kambas are more advanced agriculturally and educationally than the Durumas. The former have adopted new farming methods more than the Durumas. However, the two tribes do not easily interact. The Kambas believe that if a Duruma walked into his farm, he would bewitch not only the farm but the women of the household. Thus the Durumas are shut out of the Kamba community by such social beliefs. The latter being more receptive to change than the Durumas cannot then be expected to transmit agricultural information as the theory of diffusion of innovation would have us believe.

The economic theory on the other hand justifies "Betting with the strong". The logic behind the theory casts no doubts on its utility. However, when we consider the other goals of improved agricultural productivity, such as alleviation of poverty, income redistribution and creation of employment we cannot afford to concentrate on the progressives because they are more receptive to change, have capital and education to grasp new ideas, and are of greater economic benefit. The above stated goals are tied with the goals of rural development.

We have already stated that the engine of agricultural development

in Kenya is the small farmer. The population of small farmers is 10.5 million or 77% of the total population.¹⁹

19. Mburathi, G.K. and Hannover, W. "Handbook For Integrated Agricultural Development Programme," Ministry of Agriculture, 1978, pp. 46-48.

If extension services, as one of the primary factors of improved agricultural productivity is not made available to them, we would not be reaching the goal of improved rural welfare of which agriculture is the core.

In Kwale District, the majority of farmers are small scale farmers operating on subsistence level. Concentration on progressive farmers has helped to intensify rural stratification. The small scale farmers have not been adequately reached by IADP. Although the district might reach its crop production targets, still the welfare of the majority will be uncatered for.

Demonstration As A Technique of Distribution

Demonstrations in extension services may take the form of plots tended by extension agents or the use of individual farms as model farms. Although we have treated farm visits, demonstrations and mass media seperately, in practice, they are used as complementaries of one another. With the host of criticisms on progressive-farmer strategy or the farm visit approach, the government has over the recent years insisted on demonstrations as a better approach to extension.²⁰ Earlier in the chapter, we saw how Hopcraft's study recommends demonstrations as a more favourable technique of reaching farmers as it both teaches and persuades them to adopt new technology.

20. Republic of Kenya, District Development Plan, Kwale District, 1979/83, op.Cit. pp. 26.

Although demonstrations offer a better coverage of farmers, the manner in which it is applied might be detrimental to the goal of the extension organization. Demonstrations assume free interaction among farmers. We have already observed the social barriers that impinge on this type of communication. Added to this communication barrier is the problem of perception. From our field survey, we noted that demonstrations held on the farms of the local elites (progressives) were often perceived as things of the rich. Most of the farmers saw no need for adopting whatever was being demonstrated because it was not for them. They never perceived those programmes as "ours". Twenty two per cent of our sample farmers had learnt and adopted some innovation from these demonstration plots.

Another drawback we observed about these demonstrations is that progressive farmers would request the District Agricultural Officer for inputs to turn their farms into demonstration plots. Often these farmers were not let down.. They would not be demonstration plots. They would shut out the other farmers either by non interaction (posing a communication barrier) or the latter would never perceive of such activities as being possible on their farms.

The means (demonstration) becomes an end in itself. The goal of reaching large numbers of the farming community is thus not achieved. Progressive farmers benefit from the inputs meant for demonstrations.

The above analysis should not be construed as implying that there are no benefits generated by the use of demonstration that have subsequent positive effects on extension services. Commenting on this, the District Crops Officer said that those who often copied what they saw on other people's farms often adopted the wrong recommendations. Thus demonstration could have no real effect on adoption process and when it does, there are chances of distortion in adopting recommendations to farm level conditions which is left to the farmers discretion. Studies done by Okai in Lango District of Uganda reflected similar findings.²¹ A group of small scale farmers learnt from a demonstration of farm that cotton yields were improved by spraying the crop four times. These farmers had less capital and therefore bought small amounts of the insecticide that was then divided among members of the extended family.

21. Okai, M., "The Adequacy of the Technical Base For Agricultural Extension in Uganda: The case of Lango District" (Makerere University College, Department of Agricultural Economics, 1966) pp.12.

The results were that whatever each farmer received was inadequate for the four times recommended for cotton spraying and was often not enough for a single spray. A small amount of the chemical was added to large quantities of water. This distorted the real meaning and aim of spraying. The demonstration farm did not meet the goal for which it was intended; that of teaching farmers good cotton husbandry.

Demonstrations on plots tended by Technical Officers (TOs) often generate the wrong perception by the farmers. These plots are nurtured carefully from seed to seed and protected when possible from the whims of nature, with no apparent regard for costs and likely returns.²² Some farmers we held discussions with tended to be skeptical about such demonstrations. They felt the inputs required could only be purchased by the government and then given to farmers. They felt that such requirements were too much for their pockets. The plots then, instead of being used to persuade farmers to adopt better farming methods become ends in themselves. These negative attitudes towards demonstration and the social barrier existing between farmers reduce the effectiveness of demonstrations in reaching a broader category of farmers.

22. Trapman, C. Administration Of Agricultural Development In Kenya Change in Agricultural Structure . . Op.Cit.pp.20

Print And Broadcast MediaPrint Media

The print media and radio broadcast are used to complement other extension methods. The two mediums are utilized by both government and private firms. The District Development Plan for 1979/83 claim that the radio and print media provide a broader coverage of farmers than say, farm visits.²³ However, these channels may not be as effective as the plan policy would have us believe. They both depend on a certain level of education. The languages often used are English and Kiswahili. A majority of our rural population are still illiterate or semi illiterate. Illiteracy then poses a communication barrier. Watts writing on agricultural services in Embu noted that very few farmers could read the agricultural paper "Ukulima wa Kisasa".²⁴ He found that 32 per cent of the farmers had no formal education while 31 per cent had eight years of education.

From our survey data, 51 per cent of the farmers had no formal education while 34 per cent were semi-literate with one to seven years of education and 15 per cent had secondary school education.

23. Republic of Kenya, District Development Plan 1979/83 Kwale District, pp. 24

24. Watts, E.R. "A Study of Agricultural Extension In Embu District of Kenya," in Conference Paper Collections (Makerere Institute of Social Science Research) January 1967, pp. 17.

The table below shows the distribution of the level of education in the four divisions.

TABLE 3
Showing Farmers' Level of Education

Division	Zero Education	Standard 1 to 7	Form 1 And above	Total
Kinango	80%	16%	4%	100%
Kubo	24%	48%	28%	100%
Natuga	68%	20%	12%	100%
Mwanbweni	32%	52%	16%	100%
Total	51%	34%	15%	100%

Source: Field Data Sample size 100

The high level of illiteracy among farmers renders the print media an effective tool. Only fifteen per cent of our sample farmers could read the District Paper "Sauti ya Kwale", which covers all development activities. The print media is therefore not a very effective means of reaching the farmers.

Radio Broadcast

Radio broadcast, like the print media also poses a communication barrier, one created by the high level of illiteracy among farmers. Earlier in the chapter, we mentioned that radio programmes on agricultural matters are often sponsored by private firms. "Maisha ya Mkulima," sponsored by Wellcome (K) Limited is broadcast in Kiswahili. Although the language is supposed to be the National Language few people in the rural areas can understand it fully. There is also the technical aspect of agricultural information which might not find a vocabulary in Kiswahili. This has to be explained in English. The programme then becomes meaningful to those who can understand both languages. These are again a tiny fraction of the farming community. In our case it is only fifteen per cent of them.

Apart from the language barrier, the availability of radios in the rural areas is very limited. A majority of our farmers did not have radios and radio facilities for the have nots are lacking. The time when these programmes are on the air can also cause a barrier. Some programmes are on the air when farmers are in the field.²⁵

25. Mbithi, P.M. Rural Sociology And Rural Development Op.Cit. pp. 57

The programme, "Farmers' Corner" is on air on Tuesdays at 8.00 a.m. and Thursdays at 8.45 p.m. The organization of such programmes fails to take into account the farmers' working time. Such programmes get to the wrong people; often urban housewives. Radio broadcast then reaches a small number of the farming community.

Other Organizational Problems:

Role Ambiguity And Related Management Problems

Extension services in Kenya are influenced by the multiplicity of roles performed by extension agents. There is lack of specificity of duties among the lowest cadres in the Ministry of Agriculture. They are generalists of some sort. From our field survey, we found that extension agents were expected to carry out the following activities:-

- a) Selected farmers for IADP.
- b) Approve loan application forms.
- c) Inspect crops such as bixa, copra cashewnuts, and cotton at the Co-operative stores.
- d) Collect loan repayments.
- e) Attend to the seed bulking plots.
- f) Visit farmers.
- g) Collect statistics on crop production especially IADP technical packages.
- h) Write reports.
- i) Train farmers (Miscellaneous programmes).

The official role of extension agents is to link research stations with farmers by communicating agricultural findings. The above list shows that there are other duties that take up some of the agents' time. Most of their time is not devoted to teaching farmers. Tables 1 and 2 clearly show that 53 per cent of the farmers rarely received attention of extension agents. They went for more than a year without attention. This can be attributed partly to the many roles extension agents have to perform to an extent that they are unable to concentrate on their official duty. This multiplicity of roles compels them to concentrate on those farmers who have been selected for IADP or those who have taken loans from various schemes. 63 per cent of those who received regular extension attention (as shown in Table 1 in the columns of once a month and once per season) were either participating in IADP or had loans from Co-operatives or Agricultural Finance Corporation (AFC). In his research (1974) Leonard found that extension agents spent 20.3 per cent of their time on actual extension services while 20 per cent was spent on travelling and the rest 50.7 per cent on carrying out other functions.²⁶ Similar observation was made by James De Vries in his research on extension services in Tanzania.

5. Leonard, D.K. Reaching The Peasant Farmer.
Op.Cit. pp. 179

He found that extension agents performance of actual extension services was curtailed by their performance of other functions 27.

The impact of role ambiguity on effective goal achievement is that workers are likely to perform bits of this and that role so that no single function is properly performed. Role ambiguity can be explained in terms of lack of specialization in an organization whereby there is no clear division of labour. Specialization as Blau puts it promotes expertness among the personnel by narrowing the range of duties of jobs and enables the organization to hire employees on the basis of their technical qualifications.²⁸ With specialization then, each worker performs a specified task for which he has specialization.

When the role of extension agents is not clearly specified, the tendency is to concentrate on those activities that will be closely monitored by their superiors. In our research we found that extension agents devoted most of their time in visiting those who participated in IADP and writing reports on the progress and production of the technical packages.

-
27. James De Vries, "Agricultural Extension And The Development of Ujamaa Villages In Tanzania, Towards a dialogical Model," Op.Cit. pp. 100.
 28. Blau, P. On The Nature of Organizations, (New York, John Wiley And Sons, 1974) pp. 30.

Eleven out of the eighteen Technical Officers (TOs) and Technical Assistants (TAs) we interviewed informed us that they had to keep in close touch with these farmers because they could not predict when the District Agricultural Officer (DAO) would require any statistics on the progress of the programme. They also spent ample time on the bulking seed plots especially those funded by Rural Development Funds (RDF) and IADP such as the Kinango Sorghum bulking plot and the Matuga citrus nurseries respectively. Thus the poor farmers who need extension services more were deprived of it.

Specialization allows a higher degree of supervision. It provides the superiors with proper basis on which to assess the performance of their subordinates. Staff of all levels perform well only if they are skillfully managed given clear incentives and support facilities. If the duties of extension agents were narrowed down to teaching farmers, their performance would be easily assessed from either the number of farm visits, the number of "converts" or from the rate of adoption of innovations arising from their work. However, as the situation stands now, the performance of extension agents is assessed from the timely reports they submit which are often "colourful" and distorted. These reports often have no bearing on the actual happenings in the field. It is unlikely that extension agents will include in such reports what they have failed to do.

As Benor observes,

Extension agents generally do not have a detailed schedule of work. Where extension goals are set, they are often too unrealistic to achieve or too vague to check and bear little relevance to the local situation. Extension staff at the supervisory level frequently have neither the means nor inclination to check performance.²⁹

Lack of specialization in an organization also diminishes the chances of proper planning. It permits a higher degree of randomness in performance of duties. Extension agents in the field lack a clear plan of work. They operate on a month to month list of activities they think farmers are engaged in. Lack of coherent planning is a major drawback in extension services. From a Ministerial point of view, extension service is just one arm of the Ministry whose activities then have to be coordinated with those of the other Ministerial sub-units in order to achieve the Ministerial goal of agricultural development. Extension agents for example may be concentrating on seed bulking plots when cooperatives are disbursing loans to farmers at the start of the season. Under such circumstances, the activities of the two departments would be running parallel to one another instead of being coordinated into achieving the Ministerial goal as intended. Farmers need advice on how to plant at the beginning of the season.

²⁹. Benor, D. and Harrison, J.Q. (Eds) Agricultural Extension: The Training And Visit System. (World Bank, 1977) pp. 6.

During our research period (February-May, 1982) some Technical Assistants stationed in Matuga Division and Kubo Division who had left the Embu Institute for Agriculture were visited by their former supervisors at the Institute. They were requested to produce their work schedule. This they could not do because they operated on what they thought was best to do based on the activities of farmers. This randomness in discharge of duties becomes a drawback in supervision. The superiors cannot effectively supervise the work of their subordinates if they do not know what they are doing at a particular time.

Leonard, in his research in Western Kenya (1974) found that "Asava" one of the Technical Assistants he interviewed did not have any work programme but operated on a month by month list of activities he thought farmers would be engaged in from which he drew up his line of activities.³⁰ Randomness in discharging duties is not only a drawback in coordination of activities, but also blocks proper supervision.

Alongside with the element of role ambiguity, is the target system in extension services. Under IADP Phase 1 and II the target for Kwale was to reach 477 farmers.

30. Leonard, D.K. Reaching The Peasant Farmer, Op.Cit. pp. 12-14.

By the time of our research 447 farmers had been taught about the technical packages and were waiting for the loans to be disbursed by the Co-operatives so that they could start the work.* As students of Public Administration (or Development Administration) we should not be concerned only with whether the target was reached. We should also examine "how" it was reached.

IADP, as we mentioned in chapter 1 is a programme for small scale farmers. We have already observed that extension agents selected those farmers whom they felt were capable of carrying out the technical packages to the end. These were often the progressives or middle progressives as we defined them at the beginning. The official policy of the Integrated Agricultural Development Programme (IADP) is to reach more of the small scale farmers. However, the practice in the field reveals the contrary. IADP is benefiting mostly the large scale farmers who have shown that they are capable of farming. It is not then benefiting those who are supposed to benefit from it.

* Source: IADP Progress Report Files, DAOs Office, Kwale.

(ii) Lack of Proper Link with Research Stations

Effective extension services calls for a close link with research stations to ensure a continuous flow of information. Research stations are the sources of technical information that is subsequently communicated to farmers through the channels discussed earlier in the chapter. Effective communication should consist of a downward and upward communication. The downward flow consists of research findings to farmers. The upward flow, though limited in most developing countries consist of farm level information and feedback information on the impact of previous findings. It has been termed as "upstream farming approach".³¹

A major drawback in this link up is that most research stations are centralized within the high potential areas. This location of research stations is partly a product of colonial administration of agricultural programmes. There are however district based stations even in Kwale (Matuga DDC) but findings made by these stations cannot be communicated to farmers before they are actually approved by specialists at National research stations.

31. Leonard, D.K. Kimenye, D. et al "An Evaluation of The Project Components Needed To Improve The Performance of Extension Services." A Report To The Ministry of Agriculture, May 1982, pp. 30.

This delays implementation of such findings at farmer level, thus slowing down development.

The implication of this centralization of research institutions is that some areas like the Coast Province are poorly served and have to refer to these institutions outside for research findings. It is only recently that the Coast Research Institute was set up to look into the agronomic problems of the Province. However, it is still too young an organization to be fully effective.

Reference to research stations outside the district (National Research Stations) often results in a situation of workload at the centres. When so many problems have to be tackled by few research stations, delays in release of findings to the field is a common phenomenon. This in turn delays the solution to the problem at farm level and blocks agricultural improvement. Kwale District for example relies on Kitale maize research station for "Coast Composite" maize seeds suitable to the ecological conditions of the area. During the long rains in 1981, the district had not received the seeds early enough for farmers to plant. The latter had to rely on other types of maize seeds they could purchase at Kenya Farmers' Association (KFA) store in Mombasa.³²

32. Source - Progress Report, Ministry of Agriculture May 1982, pp. 3-4

These seeds were of course not suitable to the ecological conditions of the district and the yields would then be poor.

Extension agents operating under such conditions also have to rely on outdated information arising from delays in research and release of findings. This means that the Extension organization is not constantly adapting itself to changing environmental conditions; in this case technological environment. The District Crop Officer (DCO) and the Technical Officer (TO) at Matuga informed us that they had sent information and samples of beetles that were destroying mangoes before they ripen at Mtwapa research centre early last year (1981), but they had not received any findings from the station as to how and what they could use to finish the beetles. The farmers continued to use the traditional method of smearing the trees with used engine oil which was quite effective and was both tedious and expensive.

Centralized research facilities in the high potential areas of Central and Rift Valley Provinces has robbed off opportunities for other areas like Kwale District of adequate agronomic research. The district is served by a research centre; the Matuga District Development Centre (DDC) which caters for all development activities. It is also served by two poorly equipped and maintained livestock research stations at Shimba Hills and Diani.

The district depends for its research into tree crops diseases on Mtwapa where there is a plant pathologist. This means that research cannot be adequately oriented to solving the problems of that locality because the stations are multipurpose and serve other areas as well. On the other hand, research at National research stations is often overgeneralized (treating farming communities as homogenous) and unable to account for the diversity of ecological conditions effectively. The problem of adapting it to local needs becomes a problem of extension agents who are not always capable (skillfully) of doing so. Research conducted at this level becomes largely academic and unrelated to farmers' real problems.³³

We mentioned earlier in the section that upward communication flow is important as a basis for local level research. However, research by Leonard, Kimenye and Oyugi et al (1982) has shown that despite the efforts of Coast Agricultural Research to generate this local data for subsequent research, it is often blocked by the absence of trained personnel³⁴ at local level to initiate it.³⁴

-
33. Benor, D.Q. and Harrison, J.Q. Agricultural Extension: The Training and Visit System, Op.Cit. pp. 7-8.
34. Leonard, D.K., Kimenye, D., Oyugi W,O. et al, "An Evaluation of Project Components Needed to Improve the Performance of Agricultural Extension Services in Kenya," Op.Cit. pp. 33.

Our extension agents as we shall see later are inadequately trained. They cannot then be expected to make proper diagnosis of farm level problems and make demands on research officers. Upstream farming approach is almost absent and the link between research stations and farmers is very poor which in turn reduces the amount and quality (the degree to which it reflects the needs of farmers) of information reaching farmers. The research stations and extension services do not therefore coordinate their activities through adequate communication flows as they are supposed to affect extension services. More is still to be done to strengthen two-way communication flow between these institutions so that agricultural research can be oriented to solving farm level problems.

(iii) Lack of Adequate Field Staff

The effectiveness of an organization in goal achievement cannot be effectively tackled without paying attention to the nature of personnel structure. The number of persons in an organization is usually the determining factor of the nature of allocation of duties.³⁵

35. Hall, R., Organization Structure and Process, Op.Cit. pp. 114.

In a district as large as Kwale, with an estimated area of 8317 square kilometres* and with a scattered settlement pattern, the size of extension agents is worth considering if they are to serve the community effectively. Kenya is said to have a favourable extension agent farmer ratio.³⁶ However, when this is examined at district level, the results may not prove very favourable as the National ratio would have us believe.

The use of extension agents as channels of communication also denotes a reliance on farm visits. We mentioned earlier that farm visits is still widely used as a method of reaching farmers. The success of extension agents in reaching many farmers through visits will depend on their visit effort.³⁷ If the extension agents have to have more "converts", they have to visit as many farmers as possible. With the diverse geographical nature of most of the districts in the arid areas, and with the scattered farm household pattern, the size of field personnel is very important if they have to cover these households adequately.

* Estimate Files in DAO's Office Kwale.

36. Republic of Kenya, Development Plan 1979/83 Op.Cit. pp.240.

37. Leonard, D.K., Reaching the Peasant Farmer Op.Cit. pp. 36.

The Table below shows the extension agent farmer ratio of Kwale District and the geographical area they are expected to cover, plus the estimated number of farm households.

TABLE 4
Distribution of Extension Agents To Farm Households in Kwale District

Division	Total Divisional Area in Sq. Km.	Estimated No. Farm House holds	No. of A.A.Os (T.O.s)	No. of A.A.s (T.A.s)	No. of J.A.A.s	Ratio Extension Agents to Farmers
Kinango	4,579	5,875	2	8	5	1:391
Kubo	854	12,000	1	10	11	1:545
Matuga	322	19,000	1	6	6	1:1400
Msambweni	2,562	50,000	2	17	14	1:1400

Source: Information on Staff Available in the Estimate Files and D.A.O.s Annual Report for 1981.

From the above table, we can deduce that one extension agent covers an average of 600 farm households. The extension agent farmer ratio alone does not help to explain the actual problem of the size of personnel and effective extension services.

but when this ratio, high as it is, is coupled with other factors such as inadequate transport to cover the diverse geographical area with a scattered settlement pattern, especially Kinango division, and the amount of travelling required, then its lack of impact on extension services must be felt. The problem of inadequate transport system will be discussed later in the chapter. We should not also forget that extension agents perform a multiplicity of roles. All these inadequacies impinge on effective extension services. Where targets are set, the extension agents tend to concentrate on the few farmers they can reach. This means that a majority of the farmers are left out. We observed earlier, that usually it is the progressive farmers who are more receptive to change and have acquired loans that benefit from these services.

(iv) Lack of Proper Staff Training

The performance of any duty depends on the level of competence of the officers. The appointment of personnel into formal organizational structures is based on technical or education qualification ascertained through formal procedures such as examinations.³⁸

³⁸. Blau, P., On The Nature of Organizations, Op.Cit. pp. 31.

Pre-entry training in an organization is therefore vital if the staff are to carry out their duties efficiently. Background training equips the worker with the necessary tools of knowledge which becomes a frame of reference in decision-making and daily discharge of duties.

On reflecting on the importance of training in an organization, Herbert Simon maintains that training prepares an organizational member to reach satisfactory decisions without the need for constant referral to other sources.³⁹ It provides him with a frame of reference for his thinking and teaches him approved solutions and may indoctrinate him with the values in terms of which his decisions are to be made. Simon goes on to say that training has the greatest value in situations where exercise of formal authority through commands proves difficult due to the need for prompt action and yet where there is spatial dispersion of organization where the subject matter about which decisions are to be made is complex and cannot readily be summarized in rules and regulations.

39. Simon, H.A., "Decision-Making and Administrative Organization" in Merton R.K. (Ed.) Reader In Bureaucracy, (New York, The Free Press, 1952) pp. 193.

Preston Chitere also maintains that training permits greater deconcentration of authority into the very lowest levels of organizational hierarchy.⁴⁰ If the junior staff in an organization have adequate background training, then the tendency of the centre to centralize decision-making power is reduced.

The impact of training in agricultural development as a whole is that it increases the agricultural informedness of the organizational members; in this case the extension agents move from a traditional level to a modern and broad sphere of knowledge. The agents are indoctrinated into agricultural technological values. With proper background training extension agents will be in a position to offer alternatives at farm level operations. He is in other words able to adopt various technical packages to farm level conditions without referring to his superiors. Such an extension agent may for example advise farmers to use mulching instead of chemical fertilizers where farmers cannot afford. Thus the level of staff training is correlated with the rate of adoption of innovation.

40. Chitere, P. "Decentralization of Decision-Making Process: Its Application for the Improvement of Crop Improvement in Kakamega," Op.Cit. pp. 24-27

Training also determines the degree to which an extension agent is able to explain various packages to farmers. It determines the explanatory ability of the agent, as Leonard would put it.⁴¹ A well trained extension agent does not only know that spraying cotton four times is good but will also be able to explain why it is good to the farmers. His wide knowledge about agricultural technology equips him with the ability to explain it to farmers.

Finally as Chitere observes training permits a high degree of deconcentration.⁴² District level specialists or even Technical Officers at Divisional level will delegate authority to make decisions and carry them out independently, if the staff at the bottom of the hierarchy (JAAs) are competent enough. Without adequate training the centre will still carry out most of the decision making functions (planning and project identification while field agents (the A.A.s and J.A.A.s) just implement them. In chapter 2, we saw that this is what is happening in the field under Integrated Agricultural Development Programme.

41. Leonard, D.K. Reaching the Peasant Farmer. Op.Cit. oo. 157.

42. Chitere, P.O. "Decentralization or Decision-Making Process: Its Application for Improvement of Crop Improvement Programmes in Kakamega." Op.Cit. pp. 26.

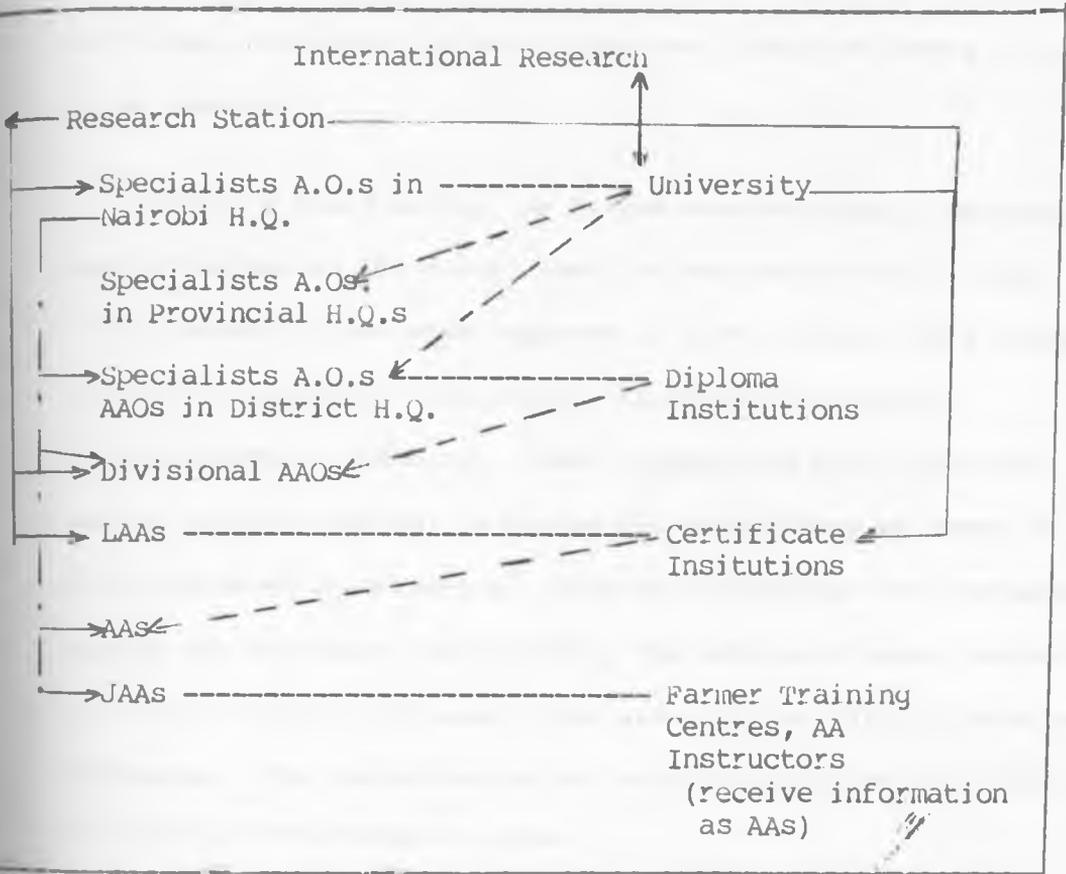
Extension agents, as we mentioned at the beginning of this chapter are poorly trained. The lowest two cadres who are the real farmer contacts have no formal agricultural education. In Kwale District (like other Districts in the country), we noticed that junior agricultural assistants were inadequately trained for technical matters like the ones they handled. The junior Agricultural Assistants we interviewed had attended courses of between 1-3 months at either Matuga D.D.C or Mtwapa. They depended mostly on the information passed to them by their superiors especially during seminars.

Junior extension agents in Kenya have no real direct contact with the sources of technical information, that is, the research stations. The only form of contact they have is through refresher courses, whereby specialists from Provincial level give lectures and from AAs and AOs. Provincial specialists may themselves have received information from a secondary source. Thus, these junior agents receive information from one or more hierarchical filters. We have already seen that information passing through various channels of an organization hierarchy or even various informal channels is subject to distortion and loss of various links (problems of recalling). Thus, information finally reaching the implementation state (farm-level) is inadequate for proper adoption. It may be even too inadequate for the farmers to see any benefits generated by its adoption.

The figure below shows the hierarchical channels of technical information from research stations or the Junior Agricultural Assistants (JAAs).

FIGURE 2

Channels by which Junior Agricultural Extension Staff Receive Technical Information



- Key
- Relatively routine channel of communication
 - - - - Refresher Courses
 - - - - Initial Training Course

Source: Adopted from Leonard, D.K., Reaching the Peasant Farmer Organization Theory And Practice (Chicago, Chicago University Press, 1977) P.P130

In Service Training

Important sources of information for the junior agricultural officers is the inservice or refresher courses. During these courses, technical matters are supposed to be simplified in a manner that those officers can absorb. Although these courses are ideal, the manner in which they are organized leaves a lot to be desired.

From our field survey, we learnt that in service courses were organized at Provincial level on very short notice such that specialists who were supposed to give lectures were often not fully prepared. This reduced their efficiency and effectiveness in teaching. These courses are also organized on the basis of topics. A course for example may be based on soil and water conservation. This will determine what extension agents are to attend the courses. The extension agents selected for such a course are those whose areas of jurisdiction need such knowledge. The course has to be inkeeping with the realities of the agents' jurisdiction area.

The implication of this selection is that not all agents get chances of attending in service courses. An agent may be unfortunate in that topics relevant to his jurisdiction area may not appear in the courses for a long time.

Under such conditions the respective agents go for years without refresher courses. The consequences of this on agricultural development are that such agents are bound to rely on outdated information and worse still may be unable to recall most of the things they had learnt in previous seminars or from courses at the local Farmers' Training Centres (as shown in figure 2). Such agents are not constantly being reoriented and adapted to changing technological environment and their level of competence is thus narrowed. His performance in the field then becomes poor.

In the district, out of the 18 Junior Agricultural Assistants (JAAs) we interviewed, eleven had not attended inservice courses over the last two years. Out of the other seven two of them had just left Matuga DDC for the six months course. Those who had actually attended inservice courses over the last two years were five. Most of these agents confessed that they attended seminars conducted by the District Extension Training Officer (DETO) and other district level specialists, on divisional basis. However, they expressed dissatisfaction about these courses because the specialists tried to cover as much as possible during a seminar which was too much for them to comprehend. The level of education of these agents also reduces their capacity to absorb most technical matters and especially when a curriculum is overloaded.

As Okai observed in the Ugandan case, some junior extension staff were no better than the farmers. When new practices are recommended they take an equal length of time with the local farmers in learning the practice, largely as a result of complexity.⁴³ The channels of junior agricultural officers' training are inadequately organized to serve most of the agents. This helps to keep their level of competence low, which partly contributes to poor extension services.

Training And Related Management Problems

Inadequate training poses some management problems. Most of our Junior Agricultural Assistants (JAAs) have to be closely supervised. Their superiors have to plan for them, organize and direct most of their activities. They therefore become a management burden. Added to this the degree of confidence to which decision-making could be delegated to them is blocked by their level of competence. It partly explains why for example District level - officers had to identify projects with minimal or no consultation with these agents under IADP.⁴⁴ The latter were only involved in providing statistics on crop production.

-
- ⁴³. Okai, M., "The Adequacy of The Technical Base for Agricultural Extension In Uganda." Op.Cit. pp. 14.
- ⁴⁴. Oyugi, W.O. and Leonard, D.K. "The Role of the District In Agricultural Planning and Budgeting." Op.Cit. pp. 18.

This helps to explain partly why centralization of decision-making has become the orientation of the Ministry which in turn leads to inadequate planning and implementation of programmes.

With inadequately trained staff, feedback is almost impossible. Such agents are often incapable of diagnosing farm level problems and make demands on research officers. Earlier in the chapter, we mentioned that a major drawback of Coast Agricultural Research efforts in generating farm-level data use it as the basis for research is that the field level personnel are not competent enough to initiate it. From our field survey, we observed that the only source of feedback from the field to district level is in the form of monthly and annual reports. We examined the inadequacy of these documents as ideal feedback mechanism in chapter two.

We can conclude from the above analysis that the inadequacy of formal agricultural training and in-service courses for our junior agricultural assistants who are really the frontline workers has posed the administrative problems discussed above. This has in turn reduced the effectiveness of extension services in promoting agricultural development.

Thus the Kwale District Plan for 1979/83 plan period states:-

The training of Junior Agricultural Assistants and other frontline extension staff to communicate good husbandry practices will be crucial to the achievement of agricultural development intentions.⁴⁵

Similarly, Sessional Paper No. 4 of 1981 on National Food Policy has the view that extension services are central to the objective of increased food production. Thus the paper maintains:-

Extension services will have to be strengthened through expansion of programmes for staff training and through dissemination of research station findings to extension officers and more effective demonstration of approved management schemes.⁴⁶

Staff Motivation And Morale

Staff motivation and morale can be explained in terms of job satisfaction. Fred Taylor and the Scientific Management School saw economic benefits as increasing the workers incentive to work and therefore his level of productivity.

45. Republic of Kenya, District Development Plan Kwale, (Nairobi, January 1980) pp. 20.

46. Republic of Kenya, Sessional Paper No. 4 of 1981 on National Food Policy, pp.31.

He therefore advocated piece-meal payments.⁴⁷ We shall approach the morale of extension staff from a similar perspective.

Junior Agricultural Assistants (JAAs) are the ones mostly hit by promotion problems in the Ministry hierarchy. They are officially subordinated staff and in the lowest civil service salary groups. There has been a lot of debate on abolishing the cadre. However, it still functions as the real contact with the farmer because of the inadequate flow of Agricultural Assistants from the Institutes of Agriculture. The Junior Agricultural Assistants lack the competitive formal education qualifications that would give them entry into Institutes of Agriculture. They are therefore stagnant as far as promotion is concerned.

Lack of merit promotions reduces their incentive to work. A Junior Agricultural Assistant (JAA) at Kibadanongo in Kinango Division during an informal discussion commented that even if they performed their level best, the Ministry never recognizes. They only work to earn their living.

47. Hicks, H.G. and Gullett, C.R. (Eds.) Organization Theory And Behaviour. (New York, Mcgraw-Hill 1975) pp. 214.

promotion on merit is possible up to the level of Agricultural Assistants (AAs), but the problem lies according to the same JAA on their close ties with the District Agricultural Officer (DAO) who will recommend them. Again the merit factor is displaced by the interpersonal relationships between the DAO and the JAAs.

For Agricultural Officers and Agricultural Assistants there are opportunities open to them for higher training. The Agricultural Assistants for example can join Egerton College for Diploma courses.⁴⁸

Frequent transfers also affect the morale of extension agents. The problem is not frequent among the Junior Agricultural Assistants (JAAs) but among the Assistant Agricultural Officers (AAOs) and the Agricultural Assistants. In the District, two AAOs, one in Kubo Division and the other from Msambweni Division have been in the division for four and three years respectively while most of the other AAOs, had been in their respective divisions for periods ranging between six months and two years.

48. Leonard, D.K. et al "An Evaluation of Project Components Needed To Improve The Performance of Agricultural Extension Services In Kenya." pp. 57

The impact of this on staff morale and subsequent output is that often, their families especially school going children have their programmes disrupted. Sometimes the agent is posted to an area where schools are a problem. He then perceives his office as the cause for his family's problem, which in turn affects his level of performance.

With frequent transfers an agent cannot also learn the problem of his area of jurisdiction and have enough time to help farmers in eliminating them before he is transferred. By the time he has learnt the problems and started laying out a plan of solution he is transferred to another area. This not only reduces the agents morale but also blocks local initiative in agricultural development, in that the knowledge the agent gains out of his working experience in the area on local problems, needs and realities is never used to influence project identification in the area. This contributes partly to the unrealistic targets often set that are often difficult to achieve and sustain. It also contributes to the lack of accumulated data (as observed in chapter two) which the District Crops Officer mentioned as a major drawback in helping the District level staff to know of the actual happenings in the field in an orderly way.

Finally the acute housing problems in the district reduces the workers morale. Some Divisions such as Kinango and Kubo are faced with acute housing problems. The offices built during the colonial period are too old and are badly in need of repair or replacement. Some government officers have to share houses. By the time of our research, the Assistant Agricultural Officer in Kubo Division had been sharing a house with an Officer from the Ministry of Water Development. Other officers were forced to look for houses in the open market, which did not exist. The problem becomes critical when members of Provincial Administration in their role as agents of the Central Government refuse to pay house allowances when an officer is living in quarters beneath the dignity of his station. The subsequent result is that such an officer has very little faith in the Ministry such that it is no longer a source of satisfaction but misery. His output is then affected.

Transportation

Shortages of transportation represent severe constraints on the current effectiveness of agricultural extension. Junior staff are unsupported and unsupervised because their seniors are unable to visit them because there is either no vehicle or petrol. Junior extension agents are on the other hand unable to visit many farmers because they rely on public transport.

Very few of these officers have bicycles. Government vehicles take long periods to be repaired because of the chain of procedure involved in getting such repairs done in private garages. The scarcity of vehicles and petrol leads to under utilization of technical officers and they become desk-bound officers while their work is in the field.

In Kwale District, we noted that there were two Land Rovers at District level available to seven Officers. The latter included such officers as the:- District Agricultural Officer (DAO), the District Crop Officer (DCO), the District Extension Training Officer (DETO), District Programme Coordinator (DPC), District Horticultural Officer, just to cite a few. These are people who are expected to visit the field as often as possible to supervise the extension agents. A major problem was scarcity of petrol which is chronic in the Ministry. The small amount rationed to the District was used when it was absolutely necessary, as for example when there are visitors to be shown around the District, when there are seminars going on in the four divisions and when there were things to be prepared in the field for the Mombasa show. Supervisory matters were given the least priority. This means that the officers devoted most of their working hours to non extension activities.

We saw in chapter two how routine administration blocks way for effective development administration. From routine administration, less could be known by District-level officers about the actual happenings in the field. The former relied on reports sent to them from the field which we said earlier are often inflated and distorted thus not reflecting the realities of the field. Such documents cannot provide adequate information upon which the performance of field agents can be assessed.

Fight!

At divisional level, the Assistant Agricultural Officers had a pick-up (one per Division) at their disposal. Again petrol was a major problem that forced these officers to wait for Agricultural Assistants to bring complaints to the office. The inability of the AAOs to make field visits because of chronic shortage of petrol thus deprives the Junior Agricultural Assistants of the close supervision they need in order to carry out their functions effectively. They are also deprived of any information they could acquire from their superiors. The latter are an important channel of technical information as we noticed earlier in the chapter. This in turn reduces their ability and effectiveness in disseminating information to farmers.

The Junior Agricultural Assistants (JAAs) often rely on public transport in their field operations. Few have been given bicycle-loans by the Ministry. We mentioned earlier that farm visits is still widely used as a method of reaching farmers. If these agents are to make an adequate number of farm visits the means of transport must be reliable. Public transport in Kwale is as rare as two buses a day to and from Kwale Headquarters. For example, the only areas that have access to reliable public transport are those on the major roads such as Mombasa Kwale or Mombasa Lunga Lunga road. When transport is so unreliable, farm visits become a problem. Extension agents will be forced to concentrate on a few farmers whom they can easily reach and are likely to adopt the package so that they can reach the target. The result is that extension services do not reach majority of the farmers contrary to the official policy of the government.

The National Food Policy views provision of additional transport facilities as an area of consideration in the programme for strengthening extension services for agricultural development.⁴⁹

49. Republic of Kenya, Sessional Paper No. 4 of 1981 on National Food Policy, Op.Cit. pp. 31.

S U M M A R Y

Extension services in Kenya still call for improvement if they have to be effective tools for improving agricultural productivity. As the operations stand now, benefits continue to flow to the local notables or progressives and has partly helped to strengthen rural inequalities. The small scale farmers who are the official targets of the government continue to suffer at the expense of the progressives. The channels of distributing these services be it extension agents or demonstrations, require a lot of improvement. The link between research stations and extension services and finally with the farmers has to be strengthened to allow a dual-communication flow so that research becomes meaningful to the farmers' environment. Finally facilities that would enhance increased staff motivation should be encouraged if agricultural extension is to be effective.

CHAPTER FOURMANAGEMENT OF AGRICULTURAL CREDIT SCHEMES

The overall concern of this chapter is to assess the efficiency and effectiveness of agricultural credit institutions and the impact this has on agricultural development in Kwale. We shall examine the manner in which agricultural credit is made available to farmers, how it is delivered to farmers, the terms and conditions of lending, who gets the loans and how this has partly been influenced by the management of these schemes.

Need for Agricultural Credit

Agricultural credit, like extension has been the subject of many studies in Kenya. The government and some scholars feel that credit is a constraint to agricultural development. Others, like Judith Heyer hold the contrary view, that it is not a constraint.¹ In a comprehensive survey of agricultural credit in Kenya done ten years after independence, she cautioned against it, having made the following observations:-

- i) That the repayment has been poor.
- ii) That credit is extended to those who are "able" to repay and not those who need it.
- iii) That other incentives such as improved commodity prices and extension education can be of value.

¹ Heyer, J. "Smallholder Credit In Kenya Agriculture" Working Paper No. 85, Institute of Development Studies (IDS) University of Nairobi, February 1973, pp. 12.

iv) That smallholders are handicapped in financial management.

Other scholars like Joseph Vasthoff argue that farm credit to smallholders is a catalyst for speeding up agriculture.² Absence of this service to farmers is a constraint on development. According to the results of his field survey credit extension had a positive impact on small farm incomes. Thus, he states:-

The results obtained in the survey of 108 sample farms show that the extension of credit to smallholders can improve farm income substantially. The increment to net incomes as a result of credit provided was calculated to be KShs. 206 per annum..... and the average net return on average invested capital was 26%.³

The socio-economic conditions of a majority of the farmers in Kwale District is such that an external source of finance would

contribute to more rapid development.

2. Vasthoff, J. Small Farm Credit And Development: Some Experience In East Africa - With Special Reference to Kenya, (Westforum Verlage, Munchen, 1968) pp. 10.

3. Ibid pp. 12.

As a marginal area, with most of the land under grass and bush, expansion of land use for agricultural purposes would require huge capital investment in ploughing (especially tractor-ploughing), purchase of inputs and hiring of labour. The present level of income among the farmers is too low to meet the above requirements. The district, as we have already examined lacks the major cash crops such as coffee, tea and pyrethrum that could provide a viable source of income. The only cash crops grown in the area are cashewnuts, coconuts, bixa, cotton, citrus and mangoes. The production of these crops, when examined at individual farm level is very low to ensure high capital returns that could be used for further investment. Thus, the 1979/83 District Development Plan States:

The Durumas own large herds of cattle while
the Digos own large holdings yet in both cases,
the productivity of the assets (capital) is very low.⁴

The capital generated from these agricultural activities is insufficient for further expansion.

Republic of Kenya, District Development Plan, Kwale 1979/83
(January 1980) pp. 10.

Observing a similar condition in other parts of the country, Wainaina has the following to say:-

Modernization of agriculture requires large infusion of credit to finance use of purchased inputs Because of the size of savings in traditional agriculture increased demand for working capital must largely come from increased supply of credit. Small farmers have meagre internal resources and therefore are most in need of credit for production.⁵

Kwale District, like most of the arid and semi arid areas did not enjoy the benefits of earlier European settlement and the forces of change that went with it. Such benefits as early formal education, trade and commercial agriculture that places like Central and Rift Valley Provinces enjoyed are reaching the district lately. Education for example is the key to white collar jobs. We saw in chapter three that 51 per cent of our sample farmers were illiterate, while 34 per cent could be said to be semi illiterate and 13 per cent literate. This is a clear indication that only a limited minority would be eligible for alternative occupations and therefore other sources of income.

Wainaina, J.N. "Some Aspects of Smallholder Credit In Githunguri - Kiambu," Dissertation Paper for LLB University of Nairobi, 1977, pp. 12-13.

From the same sample, we found that 76 per cent of the farmers had no other occupations apart from farming. Three per cent were local traders, two per cent teachers, ten per cent worked with various Ministries within the district as low rank officers, drivers and casual labourers and another three per cent were Assistant Chiefs. These figures indicate that as few as 24 per cent of the farmers had alternative sources of income from which they could finance their farm investments. However, while they could still remain in farming without credit, the degree to which their agricultural production would improve their standards of living and generate employment would be very minimal. These are goals agricultural production and productivity should be aiming at achieving.⁶ They would be operating at a very low level, mainly for subsistence which can be met by the family labour and resources. This would mean producing below the potential level of their land. In this case, full utilization of the available land would not be met. Agricultural credit would then help in financing that other unsatisfied agricultural investment which cannot be met by the farmers own resources so as to maximize agricultural production and productivity.

6. Republic of Kenya, Development Plan 1979/83, (Nairobi Government Printer, 1979) pp. 244.

The need for capital in the expansion of both agricultural and industrial sector in the district has been identified in the current District Development Plan. For the agricultural sector, the plan clearly states that:-

Agricultural credit will play a significant role in achieving the objectives of agricultural programmes in the district over the plan period.⁷

Sharing a similar view on a country wide basis, Abuki maintains that:-

With the sort of economic situation prevalent in this country, if rapid development has to be fostered for political and other reasons, loan funds are about the only alternative means to investment.⁸

Agricultural credit is therefore important if development is to take place at a faster rate and if the full potential of the available land is to be realized. However, it can only be a meaningful tool for agricultural development if it is channelled to the people who actually need it and willing to invest it in agriculture.

Republic of Kenya, District Plan 1979/83: Kwale
January, 1980) pp. 10.

Abuki, O., "How Credit Facilities have benefited Land" pp. 10
(Dissertation Paper for LLB Degree, University of Nairobi,
1977) pp. 8.

But as the situation stands, agricultural credit does not benefit the bulk of the farming community. It reaches a few of them and is not always invested in agriculture. Some of the major reasons are discussed below.

However, to mention here just briefly, in 1980/81 Agricultural Finance Corporation (AFC) loans reached sixty farmers in the district. This is 0.07 per cent of the total estimated farm households (86,875) in the district.* From our field survey, twenty five per cent of the farmers had received loans from Co-operatives. We did not limit them to any time period in their response on the latter. For agricultural credit to benefit the bulk of farmers and act as a catalyst in speeding up the rate of agricultural development, the management of the lending institutions should be better organized. Some of the management issues hindering the effectiveness of these institutions in agricultural development are discussed below. Before we plunge into the analysis let us first examine the institutions involved in agricultural lending.

* AFC files at DAOs Office Kwale and Estimate files DAOs Office Kwale.

Institutional Framework For Agricultural Credit

Provision of agricultural credit to farmers is undertaken by many organizations. Important in this study is the Agricultural Finance Co-orporation and the agrarian Co-operatives. The role of commercial banks in agricultural lending will also be examined briefly, though their impact in agricultural development in Kwale District is very limited. These lending institutions specialize in different types of loans, the difference of which is manifested in the amount, purpose of the loan and the terms of lending.

Agricultural Finance Corporation (AFC) Credit

Agricultural Finance Corporation (AFC) specializes mainly in large scale loans exceeding 15,000 shillings, though small scale loans of 5,000 shillings and above are also made available.⁹ AFC in Kwale district has especially been effective in loans to poultry farmers under the National Poultry Development Programme (NPDP) and short and medium term loans for miscellaneous farm development. It also extends loans for farm mechanization and for development of the livestock industry.

Republic of Kenya, Development Plan 1979/83, Op.Cit. pp. 244-245.

Terms and Conditions

Agricultural Finance Corporation requires a farmer to pledge his title deed as security for the loan. AFC is also keen to grant loans to farmers who have proved by their farming methods that they are keen in developing their farms. Thus, AFC does not support farm improvements which do not involve high expenditure and which can be carried out by the farmer himself, for instance bush clearing which is common in the district. Because of the risks involved in providing credit to smallholders, AFC loans continue to be channelled to farmers who do not only rely on farm income. It often gives priority to people with other occupations, such as civil servants.¹⁰ In case of loan defaulting the employer may be requested by AFC to assist in organizing for loan repayment.

The impact of these conditions on agricultural development, such as the pledge of title deeds is worth considering. Like most of the marginal areas in the country, Kwale district still lags behind in the processes of land adjudication and registration. In places like Central and Rift Valley Provinces, where land registration started in 1950s, (under the Swynnerton Plan) the process is nearing completion.

10. Von Pischkie, J.D. "Smallholder Agricultural Programmes And Performance In Kenya", Institute of Development Studies (IDS) University of Nairobi, Occasional Paper No. 48, Economics Department of the IBRD, 1974, pp. 100.

Kwale district is still in the early stages in the exercise.

From our field survey, 63 per cent of the farmers had no title deeds, 31 per cent had title deeds while six per cent had their farms surveyed and measured but had not received the title deeds. This shows that only 31 per cent were eligible for AFC loans, not considering other related requirements that they have to meet. The pledge of title deeds as security for loans thus alienates a majority of farmers. It indicates that AFC loans will not then benefit the bulk of the farming community.

Another requirement made by AFC during credit extension is that of an alternative occupation apart from farming. Our field data as analyzed earlier in the chapter showed that 76 per cent of the farmers had no other occupations apart from farming. Those who had viable occupations were as limited as 10 per cent. This, coupled with the problem of lack of title deeds blocks the chances for most of the farmers in obtaining loans from AFC. This partly explains why only 0.07 per cent of the farmers in the district obtained loans from AFC during 1980/81. The DAO cited the lack of title deeds as a drawback in credit extension to farmers.*

Source Ministry of Agriculture, Kwale District, Progress Report for September 1981, DAO's Office Kwale.

The table below shows the breakdown.

TABLE 5

AFC LOANS TO KWALE FARMERS 1980/81

Type of Loan	No. Farmers	Total K.Shs.
Miscellaneous Farm Development loans between (KShs. 5,000-20,000)	29	513,000
Poultry Development loans (Between KShs. 5,000-20,000)	21	246,000
Dairy loans (Between KShs. 5,000-18,000)	6	97,000
Land Development loans (Between KShs. 5,000-16,000)	4	48,000
Total	60	893,000

Source: AFC Loan Files 1979/80 and 1980/81 at DAO's Office Kwale

Another problem that is outside the AFC organization but has direct influence on its effectiveness in extending credit to farmers is that of poor organization of ranches in the district. AFC, is the major lending body that lays great emphasis on the development of ranches. The group ranches in the area are the ones mostly hit by organization problems. They are characterized by membership problems whereby members who are key political figures disagree.

Some members would like to benefit as individuals from these ranches. Some members would like for example to use the title deed to borrow money not for the development of the ranches but for their own individual use. When a concensus cannot be reached in such organizations, then their development is retarded. This, as the District Range Development Officer informed us helps to explain partly why group ranches such as the ones in Mwereni and Ndavaya regions have not yet expanded their livestock industry. AFC would not be willing to extend loans to ranchers who are not united for a common objective; that of developing the ranch. AFC then has only been significant in extending poultry development loans and loans for miscellaneous farm development. The percentage of farmers it is reaching, that is 0.07 per cent, shows that it is not benefiting the bulk of the farmers, the reasons of which can be attributed partly to its onerous requirements. Other reasons can be found within the management of these loans as discussed below.

Management of AFC Loans

Agricultural Finance Corporation relies on the Ministry of Agriculture for loan application completion by farmers and approvals at grassroot level. Loan application forms are purchased from the office of the Assistant Agricultural Officers or the Office of the District Agricultural Officer.

The Agricultural staff help the farmers in filling the forms. These forms are then submitted to the Sub-District Agricultural Committees for further screening. The approved forms are sent to the DAO for further scrutiny by the District Agricultural Committee and District Development Committee whereby the DAO and the District Commissioner sign the approved ones for further submission to the AFC branch manager. The latter has the prerogative of approving loans for up to KShs. 10,000 without referring to the headquarters in Nairobi. However, in most areas where AFC has not had great impact, application forms may be sent to Nairobi as a formality. Kwale district is no exception.

The impact of this process on agricultural development is that; firstly, farmers do not often understand the procedures involved in applying for the loans. They also fear these procedures, not to mention the fear of losing their land should they fail to repay the loan. 87 per cent of the farmers interviewed gave the complexity of these procedures as a reason for their not applying for AFC loans. 69 per cent gave the fear of forfeiting their land should they fail to pay as a reason for not taking up AFC loans. The consequences are that, would be applicants are blocked from pursuing the loans. As such, AFC becomes an institution of the few who can understand the procedures. These are often the educated who can fill the application forms and who can understand without any problems what is required of them.

They are also the people who can consult with the agricultural extension agents, since they are more or less in the same "social class" and can interact easily. We mentioned earlier that the educated farmers are as limited as fifteen per cent. Where such lengthy bureaucratic procedures are involved, farmers usually fall into apathy and thus do not benefit from the scheme.

Secondly, these procedures involve a high degree of formalization. Application forms pass through various channels before they can be finally approved and loans disbursed to farmers. With these formalities, delays are often likely to occur to an extent that loans reach the farmers after the planting season. Farmers then plant late. The results are crop failures or poor yields and limited capacity on the part of the farmer to repay the loan. Application forms stay for long periods at regional and District agricultural offices awaiting the respective agricultural committees to meet and approve them. We have already observed that the District Agricultural Committee in Kwale meets twice a year. This means that any loan application forms that are not filled before these meetings have to await the next period.

Thirdly, credit is just one factor of agricultural development. It interacts with other factors such as extension services and market system.

Farmers may for example wish to invest the loans when the prices for certain agricultural commodities are high. A delay in investment when they are favourable means a loss to the loanee.

In 1979/80 the prices of bixa and cashewnuts went up to five shillings a kilo. Farmers were enthusiastic to produce as much of the commodities as possible. They applied for loans from AFC and Co-operatives. These loans had not been released by the period of 1980/81 for which they were expected to be in operation. They were released later during the period. The prices of bixa had now gone down since the expected operation of the bixa-cashewnut industry at Tiwi had not yet started. Marketing of bixa has now become a problem in the district. The opportunities are not as favourable as they were during the 1979/80 period. Farmers who got the loans now will most probably not benefit from them.

Political Influences on AFC Management

Political pressure on credit institutions has become a common feature in both AFC and Co-operatives. This poses serious managerial problems.

Ministry of Agriculture Kwale District, Progress Report for Agricultural Development Programmes, September 1981.

Political pressure on these institutions promotes favouritism, corruption and suspension of the rules and regulations of the institutions. As Von Pischke has observed, lending decisions are no longer made in response to perceived agricultural opportunities or the credit worthiness of the farmer but on the basis of political influence.¹² These political figures interact with top level managers at district and main headquarters and need not be credit worthy in order to obtain a loan from AFC. The District Programme Coordinator informed us that there were some people in the district (local elites) and others from outside the district who were buying land in Kwale and who had been assisted by the local politicians to obtain loans from AFC especially farm development loans. Such people do not actually need credit; but since they are in a position of obtaining some, they take it for whatever farm improvement and use their own resources for other investments such as business. The factor of credit worthiness which should be among the major determinants of credit extension is not taken into account. The "need" or "credit worthiness" here is defined in terms of the farmer's need for an external source of resource to finance his farm investment which cannot be met from his own resources.

¹². Von Pischke, J.D., "Small holder Agricultural Programmes and Performance in Kenya," Op.Cit. pp. 97.

From the above analysis, it is clear that AFC has not really played a significant role in agricultural development in the area, firstly because of its requirement for title deeds. Secondly the procedures involved in loan application are too complex for most of the farmers. They evoke fear and apathy rather than participation. Finally the political influence on AFC's management helps to channel credit to a few favoured ones who do not actually need it, while it robs the bulk of the farmers who actually need it of the opportunity. AFC cannot then be regarded as performing effectively in agricultural development. It is not assisting through credit extension the bulk of the farmers to improve their agricultural production and productivity.

Agrarian Co-operatives

The Co-operative production scheme which was started with the aim of assisting small scale farmers to obtain short term loans for procuring farm inputs for increased agricultural production has been reinforced with three credit approaches namely:-

- (a) Small Scale Production Services Credit Project (SPSCP).
- (b) Integrated Agricultural Development Programmes (IADP).
- (c) Farm Input Supplies Scheme (FISS).

In the case of Kwale District, the Integrated Agricultural Development Programme loans are important. The programme was launched in 1976 but came into full swing in 1980. Under IADP short term loans are made to farmers through the co-operative societies.

Terms And Conditions

Like the rest of the East African countries, Co-operatives in Kenya have been regarded as the best channels for agricultural credit to small scale farmers because of their close link with farmers in transportation and marketing of their produce. Less administrative costs will be incurred in extending small scale loans to farmers than would be when channelled through Agricultural Finance Corporation.

Under Integrated Agricultural Development Programme (IADP) financial resources are made to Co-operative Bank of Kenya (CBK) in Nairobi by the donors; that is, World Bank and the Government of Kenya. These resources are then loaned to farmers. For Co-operatives to obtain loans from the Co-operative Bank of Kenya, they have to be members.

To participate in IADP, societies must meet certain minimum requirements.

- a) It must have a qualified Secretary/Manager (CSC or ABM 1).
- b) It should have permanent staff to assist in the credit scheme.
- c) It must have or should write up members and capital registers and agree on a system for collection of outstanding share capital.
- d) It should also keep up-to-date book records and accounts.
- e) Before the scheme is implemented a produce recording system must be implemented.
- f) Participating societies must accept credit recording for cash crops..... for periods not exceeding 30 days. Food crops to be paid for in cash on delivery.
- g) Be able to store farm inputs and to control the distribution of them to members according to the rules of the scheme.¹³

For farmers to participate in the programme they must fulfill the following minimum requirements.

- a) Should have received gross per capita real farm income in excess of KShs. 800 per month during the twelve months preceding the date of credit application.

11. "Operations Plan For Integrated Agricultural Development Programmes," Programme Management Unit, Ministry of Agriculture and Ministry of Cooperatives Development. pp.41.

- b) Have the potential to earn gross per capita real farm income in excess of KShs. 800 per annum.
- c) Have not received, other than under this project significant production credit from agricultural lending institutions, including cooperatives, or significant government-sponsored agricultural technical assistance.¹⁴

The smallholder selected will agree to several conditions in order to qualify for IADP.

- a) Attend a short course (four days) organized by a farmers Training Centre.
- b) Agree to plan an approved package of crops as established by the District Agricultural Committee and accept a loan package designed to supply inputs for it.
- c) Join a Cooperative society, agreeing to abide by its principles and rules of this scheme.
- d) Agree to abide by advice of MOA and MOCD technicians in the management of the crop and loan.
- e) Undertake to market loan-assisted produce through the Co-operative Union Society or other agency as designated by the Union of Society.

¹⁴. Ibid. pp. 3.

- f) The farmer shall have two loan guarantors who are members of the Co-operative Society.
- g) Undertake to market loan-assisted produce through his Co-operative Society.
- h) The farmer shall sign a loan application and agreement form which shall be scrutinized by his society's committee. If the application is approved by the committee, he shall sign a loan-package and the periods for which loan - contents shall be made available to him.
- i) The farmer shall undertake to repay the loan as he sells loan assisted produce agreed between him and his society. Any outstanding loan-balance shall be recovered from the security crop to cover the whole loan.
- j) The farmer should be acceptable to members of the society, hardworking and honest.
- k) The farmer should be an accepted owner of a piece of land that fits the package.¹⁵

¹⁵. Ibid pp.3. and 42.

A major difference between the requirements for co-operative loans under IADP and previous co-operative lending is the relaxation of the requirements that a farmer should have been a member of a co-operative for three years prior to the date of application. Under IADP, participants can become full society members by paying an entrance fee of KShs. 1-5 for joining the co-operative society and contributing to society's capital normally between 20-100 shillings. Participating farmers can also sign an agreement with co-operatives to be deducting share capital contributions from produce payments.¹⁶ This relaxation is of great potential to places like Kwale where most of the farmers are not members of the co-operative societies.

Despite this new system of co-operative lending, the co-operatives in the district are still very weak in terms of membership. In fact these societies have been dormant and were only revitalized under IADP. The Kwale Co-operative Union is still non-operative following its dissolution in 1977 as a result of mismanagement.¹⁷ Some of the major factors contributing to this mismanagement will be discussed in the latter part of the chapter.

¹⁶. Ibid pp.3.

¹⁷. Ministry of Co-operative Development, Annual Report 1977.

Very few farmers in the district see the need for co-operative societies. They have been marketing their produce through private agents especially through the National Cereal and Produce Board. Before IADP was launched, these societies did not have any means of transport or adequate storage facilities. Few farmers were members of the societies. The membership in the three societies by the time of our research was as follows:-

- a) Shimba Hills Co-operative Society - 470 farmers
- b) Kikoneni Co-operative Society - 427 farmers
- c) Kwale Co-operative Society - 120 farmers.¹⁸

When few farmers are members of the Co-operative societies, it means then that only a few can benefit from the scheme. When the above figures are examined against the estimated number of farm households in the district, it means that out of 86,875 farm households only 1,027 farm householdes which is 1.6 per cent can benefit from co-operative credit. According to the information contained in the District Co-operative Development Officers' membership files, not all society members are active.

¹⁸. Source: Co-operative Membership Files 1977-1982,
District Co-operative Development Office, Kwale.

The following were the figures for active membership. They have been termed as active because they have been selling their farm produce through the societies and have been involved in other society activities.

- a) Shimba Hills Co-operative Society - 235 farmers.
- b) Kikoneni Co-operative Society 24 farmers
- c) Kwale Co-operative Society - 120 farmers.*

A weak membership structure also undermines the societies economic viability in that they cannot have a strong economic base upon which they can operate, for instance, employing qualified personnel and meeting their expenses from their own resources. The 1979/83 District Development Plan states that societies lack capital and staying power because of their structural weakness.¹⁹ Observing the same on a wider context, Hyden has the following to say:

As in other African countries, Co-operative objectives have been hard to achieve in Kenya. It is only that the turnover target was not reached. Even more serious is that the co-operative is still far from self supporting.²⁰ It is this "self supporting" Hyden refers to in the above quotation that we are calling a viable economic base, which is partly undermined by insufficient membership in societies.

Co-operative Membership Files 1977-1982, District Co-operative Office, Kwale.

19. Republic of Kenya, District Development Plan 1979/83, Kwale pp.63

20. Hyden, G., Efficiency Versus In East African Co-operatives: A Study of Organizational Conflict (East African Literature Bureau, 1973) pp. 30.

Management of Co-operatives As Credit Institutions

i) Untrained Staff and Committee Members

15

A major problem facing the agrarian co-operatives in Kenya is that of incompetent staff and management committee members.

According to the Co-operatives Act, the committee members should have business experience and be creative.²¹ However, the reality is that committee members are recruited from the farming community and more from the information leadership structure. They are often the local leaders who are also leaders in other social organizations, formal or informal. They are not necessarily trained or experienced in business organizations.

As Hyden observes:-

People elected to the management Committee are not primarily chosen on the basis of criteria congenial to the emergencies of a creative leadership.....²²

Earlier in the chapter, we saw that 76 per cent of the farmers had no other occupation apart from farming. Two per cent were teachers, while three per cent were traders. These figures reveal an acute shortage of farmer-participation in formal organizations or business enterprises from which farmers can gain experience in business operations.

²¹. Co-operatives Act Chapter 3 1969.

²². Hyden, G. Efficiency Versus In East African Co-operatives: Study of Organizational Conflict. Op.Cit. pp. 32.

The societies spend more than they can generate. Farmers are then called upon to pay for societies' maintenance from their own resources. By the time of our research, the Kikoneni Co-operative Society was being faced with this problem. Farmers had even abandoned marketing their produce through the society. The society had no working capital and like the Union was about to collapse.

The committee members are also responsible for scrutinizing application forms. With such a level of competence, more time is spent on the exercise, while it delays further approval and disbursement of loans to farmers. Training as we saw in chapter 3 allows faster decision making in that the organizational member has a wealth of knowledge to fall back always. The District Co-operative Development Officer identified this as a major drawback in all the three co-operative societies which subsequently gave extension officers and the credit committee problems in trying to scrutinize these forms further. They usually found most of the grassroot work (scrutiny) undone.

In business circles, the Arabs along the Coast command the lions share. This non-participation in formal organizations greatly reduces the quality of local leadership from which co-operative committee members can be selected. The level of education as shown in Table 3 also influences the management potential of these members.

In an attempt to solve the problem of incompetent management structure, the government is currently insisting on Co-operative training for both committee members and co-operative staff.²³ However, the exercise is only effective for co-operative staff because committee members are often voted out after a year. They therefore have limited chance of obtaining training opportunities while in service. Thus, a set of new committee members are elected every year and the problem of incompetent leadership continues.

When the management sector is incompetent, cases of mismanagement and misappropriation are common. Untrained and inexperienced committee members in business organizations are incapable of making economically viable decisions which often lead to overhead costs, thus rendering societies economically weak.

²³. Republic of Kenya, Development Plan 1979/83
Op.Cit. pp. 311 and 315.

Co-operative staff on the other hand are not always trained personnel. When staff recruitment relies on the social environment then the level of competence cannot be guaranteed. Most of the clerks, managers and other occupants of the lower cadres are recruited from within the locality of the society partly because of the social interests involved and also the housing problem confronting most of the field staff in Kenya. Recruitment is not always based on specialization but on family and clan affiliations. The staff in these societies has little formal co-operative training. When given financial matters to handle, the situation becomes a desperate one. Society records are poorly kept and audit reports poorly and rarely done. The Kikoneni Co-operative Society had a case in May 1982 whereby a committee member and some clerks could not show any records on the Society's expenditure but the society had no funds and farmers had been called upon to pay the staff. The respective committee member then refused to turn up for meetings and the matter was handed over to the District Co-operative Development Officer to use his position and demand the records from that committee member.

The problem of incompetent co-operative staff and committee members has also been identified as a major drawback in the effectiveness of co-operative societies by the current district plan. It states:-

Societies are characterized by inefficient management which consequently leads to lack of vigilance, administrative negligence and lack of audit reports and follow up. Lack of trained/educated staff to carry out proper book keeping and auditory activities and give sound advice to committee members.²⁴

The tendency has been to concentrate skilled personnel at district and provincial headquarters while the primary societies are deprived. Similar observations in co-operative movement in Kenya have been made by Hyden. He states:-

Rural Co-operatives in Kenya bear no qualities which are regarded as conditions for efficient management in modern organizations.²⁵

On an East African level Widstrand observes:-

Co-operatives in the less developed parts of rural East Africa are characterized by weak economic base and the general lack of economic entrepreneurship of their leaders limit the effect of Co-operatives on the process of change.²⁶

24. Republic of Kenya District Development Plan 1979/83, Kwale Op.Cit. pp. 63-64.

25. Hyden, G. Efficiency Versus In East African Co-operatives: A Study of Organizational Conflict. Op.Cit. pp. 32.

26. Widstrand, C.G. Co-operatives And Rural Development in East Africa (Nairobi, E.A.L.B., 1975) pp. 14.

Co-operatives also suffer fraud and misappropriation of funds which largely reduces their effectiveness as viable institutions. The collection of loans repayments is entrusted to committee members and extension agents. The district has experienced cases whereby committee members have diverted loan repayments to their activities. According to the District Co-operative Development Officer's report on IADP loans for 1979/80, the Kikoneni Farmers Co-operative Society is the most seriously hit by this problem such that farmers in February 1982 called for a dissolution of the society.

Continued indebtedness of societies to Co-operative Bank of Kenya means loss of credibility of the societies to Co-operative Bank (CBK). The functional relationship of societies and the Co-operative Bank is affected to an extent that societies are no longer eligible for more loans. According to the Input Supply Officer and Programme Evaluation at the Ministry of Co-operative Development in Nairobi, the three societies in Kwale could not obtain more loans from the Co-operative Bank because they still had outstanding loans to repay. As a result, the officers explained, the IADP loans for phase II had still not been released several months later.

Co-operative Bank

These officials further explained that the Ministry of Co-operative Development and the Co-operative Bank were intending to allocate a quota to Kwale societies (to a number around twenty five) on the number of farmers to participate in IADP phase II because the societies were still unable to administer and supervise the use of these loans effectively.

There are serious cases of fraud and loan defaulting. Loans for IADP phase I were released despite the huge amounts the societies owed the Co-operative Bank. By the end of 1980/81 period, the following were the number of loan defaulters and the amount they owed the CBK.

TABLE 6
SHOWING LOAN DEFAULTERS 1980/81

Name of Society	No. Loan Defaulters	Amount in KShs.
Kikoneni Farmers Co-operative Society	93	61,314.40
Shimba Hills Co-operative Society	137	176,597.95
Kwale Co-operative Society	34	42,079.25
Total	264	279,991.60

Source: Project Management And Evaluation Division Annual Report 1981. D.A.O.'s Office Kwale.

In some of the above cases of defaulting some farmers refused to sell their produce through the co-operative societies. They could not then be held for repayments. Under IADP, the security for a loan is crop which should be sold through the co-operative society and from which loan recoveries can be made. Loan defaulting in the district has therefore reduced the effectiveness of co-operatives as credit institutions since they can no longer obtain loans from CBK until all repayments are met. The impact of this on agricultural development is that other farmers who may be wishing to participate in the programme cannot do so because they can no longer obtain working capital in terms of loans from the societies.

Delays in disbursement of loans can also be attributed to bottlenecks in donor institutions. IADP is sponsored by World Bank and the Kenya government. Despite the decision by CBK to release loans for IADP phase I to the three societies without the latter clearing their previous debts, these loans were still not being disbursed in time. After training 474 farmers between 1978 and 1979, the latter were anxiously waiting for loans which were not released until 1979/80.* The CBK did not receive the funds from the donors in time and could not therefore make any allocation.

Source: Project Management And Evaluation Division Annual Report 1981.

The following table shows the amounts made to societies during the 1979/80 period.

TABLE 7

CREDIT PROJECT SUMMARY IADP PHASE I (1979/80)

Society	Year	Loan Approved By CBK	Loan Released By CBK	Accrued Interest	Total	Released To Loanees	Interest Due to Loanees	Total	Repaid By Loanees	Repaid To CBK
Shimba Hills	1979/80	125,000	151,193	27,163	178,361	151,198	27,163	178,369	20,000	20,000
Kwale	1979/80	51,675	52,504	3,664	61,168	41,258	5,308	46,606	8,356	19,552
Kikoneni	1979/80	75,000	76,349	13,648	89,997	64,456	13,645	89,997	64,456	26,019
Total	-	251,675	280,051	49,475	329,526	268,805	46,119	493,325	92,812	65,581

Key: Figures in KShs.

Source: Republic of Kenya, Ministry of Agriculture, Kwale District. Project Management And Evaluation Division, Annual Report 1981.

The above table reveals that except for Shimba Hills Co-operative Society, the other two societies did not pay all the amount repaid by loanees to CBK. The Kwale Co-operative Society paid an additional amount of KShs. 11,206 on the KShs. 8,356 repaid by loanees during the 1979/80 period. The additional amount was intended to meet its previous debts with CBK. However, the society as the report further mentions, did not cover all the debts it owed the CBK. The amount is indicated in Table 6. The Kikoneni Co-operative Society on the other hand paid KShs. 38,437 less than the amount repaid by loanees. Its total debts with CBK as at the end of 1981 stood at KShs. 61,413.40. The break down is shown in Table 6. This continued indebtedness is an indication that society committee members and staff have not been efficient in their supervision of IADP loans or farmers did not sell their produce through the societies. As such the Co-operative Bank of Kenya has now withheld the loans for IADP phase II.

Leadership Conflict And Management Issues

The democractic control of co-operatives relies wholly on the social environment. Society memebers elect their own committee members. Their criteria for selection is not necessarily based on the level of competence of the candidate, but on what the members or electorate regard as ideal leadership.

Apart from leadership qualities, the society members' sectional interests influence the choice of committee members.

Co-operatives have become channels for competing interest groups to achieve their ends. Committee members are then elected partly on the grounds that they are capable of fighting for the interests of their respective groups. Group conflict in co-operatives leadership is a common feature.

The existence of vested interests among committee members gives rise to serious management problems. Each committee member is pulling in his own direction or seeking coalitions based on non-economic principles. The problem is that of struggle for power and control of society's resources. In the district, co-operative leadership squabbles are seriously felt in Shimba Hills Co-operative Society. The dominant ethnic groups are Kambas and Durumas plus a few Kikuyus and Digos. The Kambas have always fought to retain the leadership of the Society so as to secure their interests which they feel cannot be well served with any other tribe in the leadership. They have also formed coalitions with the Kikuyus there. The Durumas and the Digos feel alienated from the society to an extent that they even sell their produce to private agents.

In terms of credit extension, the committee members give higher priority to their electorate. In Kubo Division, the area served by the society, the Kambas and Kikuyus are more progressive agriculturally than both the Durumas or the Digos skewed credit extension and other co-operative benefits in favour of these two ethnic groups partly explain this situation. It has been further encouraged by extension agents who feel that the two constitute the hard-working set of farmers required to participate in the Integrated Agricultural Development programme. In fact of the sixteen farmers out of a total of 25 we interviewed in the division, who said they had received co-operative loans, twelve of 75 per cent were of the Kamba/Kikuyu origin, judging from the names.

The official goal of co-operative societies is to reach as many small scale farmers as possible through credit extension in order to improve their production, but not just a small group in the community.²⁷ However, in practice, it seems co-operative credit mainly reaches the leadership committee and its supporters.

As one farmer in Embu informed Nation reporters in a related matter,

It seemed the officials do not want other farmers to benefit from the loans.²⁸

Research findings by the same Nation group in most parts of the Republic revealed that there were various farm improvement loans available to farmers through co-operative societies.

Unfortunately, the findings revealed that only society leaders in most cases benefited and the loans never reached the small farmers.²⁹ What we have then is a situation of goal displacement whereby goals of co-operatives are subordinated to those of individuals and strong ethnic groups. This becomes a managerial problem in that the planned objectives are difficult to achieve and often this favouritism overrides the rules and regulations governing the operation of co-operatives, as a group tries to secure its own interests.

The other problem generated by the existence of vested interests in the co-operatives, is that of apathy from the non-favoured groups. In our case, the Durumas and Digos fail to exert influence on the society, thus enabling the two "powerful" ethnic groups to continue with the profiteering. It is this apathy and lack of support for societies that even increases chances of misappropriation and fraud in the societies.

Sunday Nation, Nairobi, May 23, 1982, pp. 16

Loc. Cit.

Political Influence On Co-operatives

Co-operative organizational efficiency and effectiveness is adversely affected by local political interference. Co-operatives are being used as political instrumentalities. In the district, co-operatives received pressure from the local councillors who have also dominated the District and Sub-District Agricultural Committees. Like the Kambas in Shimba Hills Co-operative Society, these councillors use co-operatives as channels through which they can gain support from the people. Loans are then channeled in a way that those who support these councillors also get the first priority with other farmers who have been selected on varying criteria. We are not suggesting that only the supporters of these councillors obtain loans from co-operatives, but are saying that they are often given great priority than other farmers who just meet the co-operative loan requirements.

During our research, an Assistant Agricultural Officer in Msambweni informed us that the Kikoneni Co-operative Society had been left to a few local councillors to manage. He explained how a farmer whom the locational Agricultural Assistant had given a report on as being unsuitable for IADP loan had gone through their councillor at Lunga Lunga who is a member of the District Agricultural Committee and obtained a loan under IADP Phase I.

The farmer had been one of those who had been labelled as inactive members of the society. When such political and inter-personal relations replaces the laid down rules and regulations governing the co-operative movement, then the latter become merely an instrument of regional, sectional and individual aggrandisement. Their official goal of reaching as many small-holders is displaced in the process. As such, we cannot then say that they are performing effectively.

The credit Committee established under IADP with the District Commissioner as its chairman and the District Agricultural Officer as its Secretary, has not been an object of political influence. In fact, National leaders do not make any substantial influence on the societies that would be worth mentioning. They have, however been key figures in AFC credit extension. The credit Committee relies mostly on the information it receives from extension agents and the Agricultural Committees. Any political influence is exerted by the councillors at society level or at the level of Sub-District Agriculture Committee.

Commercial Bank Lending

Commercial banks have had no significant impact on agricultural development in the district. There are various reasons for this. Kwale District is poorly served by commercial banks. The few who operate bank accounts have them in Mombasa. Others in the district are served by mobile units, with only Kenya Commercial Bank serving the region. Added to this is the onerous requirements for commercial bank lending. They require farmers to pledge their title deeds or mortgage property.³⁰ The two conditions cannot be met by the majority of farmers in the district. We have already mentioned that only 31 per cent of the farmers had title deeds. On the other hand the low income received by most farmers in the district cannot allow for the existence of property for example houses that can be mortgaged. Most of the farmers are subsistence farmers with 76 per cent having no other occupation.

From our field data two per cent of the farmers had obtained loans from commercial banks. They are large scale farmers who had acquired loans for farm mechanization. On National basis, the role of commercial banks in agricultural development is still very low.

Von Pischke, J.D. "Smallholder Agricultural Programmes And Performance In Kenya," Op.Ci.t pp. 116.

Total lending by commercial banks increased by 7.8 per cent in 1981 (Nationally) from pounds 102 million to pounds 110 million.³¹ However, this credit benefits as limited as eleven per cent of the farmers.³² The situation is more critical in areas like Kwale District where land registration is not complete and where farmers have no alternative property for mortgage.

Nairobi Times (Nairobi, June 28, 1982) pp. 15.

Republic of Kenya, Development Plan 1979/83, Op.Cit. pp.

S U M M A R Y

Although agricultural credit is a crucial factor of agricultural development in the district, it has not benefited the bulk of the farmers. This has partly to do with the onerous requirements of some lending institutions such as AFC and commercial banks and inefficiency in their management characterized by political interference and vested interests among the leaders. The latter has seriously affected the three co-operative societies. Those selected to participate in IADP are those known to committee members and extension agents. Problems of incompetent management committee members and staff has rendered the societies economically weak. Poor recording and auditing of co-operative books and serious overhead costs have become common features. Above all, lack of adequate supervision of loans leading to serious cases of loan defaulting and continued indebtedness of societies to CBK has reduced the lending capacity of the societies. CBK cannot release more loans to these societies until they clear their ~~pre~~vious debts.

CHAPTER FIVETACKLING THE PROBLEMS OF ARIDITY

While extension services and credit are vital factors in agricultural development, the physical environment commands greater priority than the two. It is the nature of the physical environment that will eventually determine the success of these other factors in fostering agricultural development. The area under study is within the arid and semi arid areas of the country. It is characterized by low and erratic rainfall with high temperatures ranging between 26-30 degrees centigrade and high evaporation rates.¹ The pattern of rainfall distribution is discussed in the Introduction. Based on these climatic considerations, 92 per cent of Kwale District has a low to very low potential for arable farming, hence range lands.² Thus irrigation, conservation of available water resources and utilization of valley bottoms are key elements in fighting the arid conditions of the area.

In tackling the problem of aridity, the Ministry of Agriculture works in conjunction with other Ministries such as the Ministry of Water Development and the Ministry of Environment and Natural Resources (M.E.N.R.). The Ministry of Agriculture makes proposals on required water resources and the Ministry of Water Development provides the technical component.

Republic of Kenya, District Development Plan 1979/83, Kwale,
January, 1980) pp.3.

Ibid pp. 9.

It is the responsibility of the Ministry of Water Development to carry out feasibility surveys and tests on the level of salinity in order to approve of its consumption. It is also through the same Ministry that the government provides subsidies in dam and bore-hole construction. In the arid and semi arid areas, a 40 per cent subsidy of the total cost in dam construction is given.³ The bore-hole subsidy takes up 75 per cent of the total construction.⁴ The aim of the government in these subsidies is to encourage local initiative in construction of individual bore-holes and dams in the arid and semi arid areas.

The Ministry of Environment and Natural Resources on the other hand plays a significant role in conserving water catchment areas. In an area like Kwale where surface water resources are few and unreliable, conservation of catchment areas and ground-water are important. The afforestation programmes under the Ministry of Environment and Natural Resources are therefore crucial in fighting aridity. Afforestation helps in conserving both water and soil.

Republic of Kenya, Development Plan 1979/83, (Nairobi, Government Printer 1979) pp. 492.

Ibid. pp. 493.

In the district, the Shimba Hills afforestation scheme whose major projects are protection Programmes and propagation through the establishment of nurseries plays a significant role in conserving water catchment areas. The other methods of fighting aridity are outside the jurisdiction of the Ministry of Environment and Natural Resources are discussed below.

Irrigation

A major solution to arid conditions is irrigation. Increase in population in the arid and semi arid areas and with the increasing registration of land renders traditional methods of agriculture almost impracticable. In the same context, Odingo states:-

The time has come when traditional methods to curb environmental problems are less effective as a result of increasing population pressure on this fragile ecology. Shifting cultivation is no longer a means of reducing low fertility nor is nomadic pastoralism very effective now as a result of individual land tenure system as opposed to communal ownership.⁵

Odingo, R.S. "Realities And Agricultural Development" (East African Academy Seminar on Bottlenecks of Development, University of Nairobi, March 1971) pp. 2.

There are also a series of hand-dug wells along the coast. The absence of large water reservoirs has greatly undermined the practice of large scale irrigation in the district. The problem of salinity especially towards the coast has also reduced widespread use of ground water.

Important in the district in terms of irrigation is the Vanga flush floods irrigation schemes and the Ramisi Sugar irrigation scheme. The latter is owned by the Ramisi Sugar Factory. The Vanga scheme has four units covering 700 hectares of land under rice which is consumed locally.⁹ In 1974/78 plan period, the scheme received pounds 960 from District Development Fund for the construction of a permanent water diversion. The scheme is financed mainly through District Development Grants. In this study, we are mainly concerned with the management of these schemes. Some of the major management issues are discussed below.

The Vanga irrigation schemes has over the recent years suffered poor management and maintainance, which has greatly reduced its production capacity.

Ibid. pp. 100.

Technical maintenance of the scheme relies on the personnel of the Ministry of Water Development and to a limited extent on the Ministry of Agriculture. Technical decision making is the responsibility of the Ministry of Water Development while the role of the Ministry of Agriculture is that of implementation. Poor maintenance of the scheme is manifested in huge areas which still lie underutilized because of poor control of the floods. Poor drainage has over the recent years been a major problem in the area.10

The problem of inadequate maintenance of the scheme is largely a factor of lack of skilled manpower. There is only one irrigation officer in the Division (Msambweni) who is in charge of all irrigation projects in the division. He has no personnel serving under him directly related to the irrigation. He works with agricultural extension officers who are not technically competent in irrigation works and who are already overburdened with work. They are not always available to assist in irrigation projects and such problems are often postponed. Postponement and delays in action means that the rains often start before any preparation work is done on the scheme. When they start the floods are then uncontrollable and therefore unfit for agricultural purposes.

10. Ministry of Agriculture "Progress Report on Agricultural Development Projects In Kwale District," September 1981, D.A.O.'s Office.

According to the 1981 annual report the floods along the scheme were not properly utilized because drainage channels had not been constructed.11 This problem could have been controlled if there were enough skilled personnel responsible for irrigation to provide full-time attention to the projects.

Since irrigation is also an activity involving more than one Ministry, the co-ordination of these Ministries is crucial if projects are to be successful. The Irrigation Officer informed us that this co-ordination is very weak. He mentioned that he sometimes wrote to the Ministry of Water Development at Kwale asking for technical assistance and they often took long before taking action. He was often told to wait until they can get transport from either the District Agricultural Officer or the Ministry of Water Development. On other occasions, he had been told that there were no officers around. In chapter three, we saw how transport and adequacy of field personnel are major problems in the field. The scheme relies on the rainy season and cases of delayed action means that, that season is wasted and agricultural production reduced.

1. Ministry of Agriculture, Kwale District, Annual Report 1981.

Commenting on the same issue during a meeting he held at Mombasa with the Presidential Commission on Unemployment, the Provincial Director of Agriculture (Coast) said that 250 hectares of irrigatable land in the district had been unutilized in the previous year (1981) because of poor flood control.¹²

Finally, the Vanga scheme which is funded by District Development Grants is faced by the problem of delayed release of funds. The District and Sub-District Agricultural Committees meet twice a year. During these meetings they make proposals and budgetary estimates of the amount of funds required in various projects. These proposals have to pass through the District Development Committee and then to the Provincial Planning Officer before they can finally reach Treasury and funds released. Proposals passed by the District Development Committees are not often disregarded or returned, but have to go through the Provincial Planning Officer and other stages at the Ministry of Economic Planning before an Authority to Incur Expenditure is released.

With this formalization, more time is taken up before funds can be released. The result is that the intended construction is delayed and the floods are wasted.

In the 1981 Annual Report, the District Agricultural Officer had pointed out that District Development Grants passed for 1979/80 were not released during that financial year which greatly affected the preparation of banks, to an extent that the expansion of rice cultivation on the scheme was curtailed.¹³ Had the funds been released in time, the construction would have been done before the rains set.

Dams And Boreholes

In rangelands, dams and boreholes are important in the ranches. Although the current National Plan encourages individual construction of dams and boreholes, the District plan lays stress on the redevelopment of the existing dams and boreholes especially those in the ranches.¹⁴ Most of these dams have silted up and their redevelopment would be less expensive than constructing new ones. Most of the dam construction, especially those in the ranches are funded through Rural Development Funds for the promotion of the livestock industry. There are however some dams that are funded through Rural Development Funds that are used for irrigation, for example, the Kinango Dam which is being used for irrigation by Nyali Estate.

• Ministry of Agriculture District Annual Report, 1981.

• Republic of Kenya, District Development Plan, 1979/83 Kwale,
Op.Cit. pp. 103-104.

during the current plan period: the following are the dams and amount of RDF allocated for the construction of each.

TABLE 8

THE AMOUNT OF RDF ALLOCATED FOR DAMS IN KWALE DISTRICT
DURING 1979/83 PLAN PERIOD

Name of the Dam	Amount in K.Shs.
Mwalupheda	70,000
Maphosa	60,000
Ndavaya	62,500
Kinangoni/Cheruka	62,500
Gulanze	62,500
Total	317,500

Source: Republic of Kenya, Kwale District Development Plan 1979/83 pp. 19.

The table in the next page shows those dams which have been constructed, completed and uncompleted ones also funded through RDF.

TABLE 9

THE COMPLETED AND UNCOMPLETED DAMS FUNDED THROUGH RDF

Name of Dam	Scheme	Total Allocation K.Shs.	Year	Remarks
Mbadzi Dam	DDG	20,000	1974/75	Completed
Bagoda Dam	DDG	12,000	1974/75	Not Completed
Kibondaongo Dam	DDG	30,000	1974/75	Not Completed
Kinango Dam	DDG	23,333.30	1974/75	Completed
Samburu Dam	DDG	2,000	1975/76	Completed
Mwabila Dam	DDG	30,000	1975/76	Completed
Mwakunde Dam	DDG	31,600	1975/76	Completed
Egu Dam	DDG	31,600	1975/76	Completed
Mkangombe Dam	DDG	30,000	1975/76	Completed
Kilibole Dam	DDG	30,000	1975/76	Completed
Hinterland Dam	RWP	19,000	1975/76	Under Constru ction
Total		259,533.30	.	

Source: Republic of Kenya, Kwale District Development Plan
1979/83, pp. 106-107.

Like the Vanga irrigation project, the dams financed through RDF face the problem of delayed release of funds. It is mainly caused by a delay in project costing which is done by officers from both the Ministry of Agriculture and the Ministry of Water Development. As the District Programme Co-ordinator informed us, these officers have limited financial knowledge and therefore take up more time than is necessary in doing the costings. Their attention is also demanded elsewhere; as extension or implementors of other projects. This affects the degree to which they would be efficient in project costing. Delayed costing results in delayed submission of proposals to Treasury, hence delayed release of funds. A similar observation has been made by Nthiga in his research in Meru, Murang'a and Machakos Districts where he found that delayed project costing was partly the result of inadequate financial knowledge of most of the field implementors and the amount of work they had.¹⁵

From our field survey, we observed that the Kibadaongo dam which was to be constructed during the 1974/78 plan period received KShs. 30,000 during the 1974/75 period. These funds were not enough for the completion of the dam.

¹⁵Nthiga, N., "The Management of Rural Development Funds In Kenya," Unpublished Thesis (University of Nairobi 1978) 11. 149.

proposals for supplementary funds were accepted by the District Development Committee, but the costing of the remaining work had not been completed by the time of our research.* The dam was supposed to be in operation by the end of 1974/78 plan period. This target was not met partly because of the above mentioned reasons. These delays in completion of the dams partly explains why most of them have silted up to an extent that the current District Plan now gives greater priority to their rehabilitation than new construction.¹⁶

Another problem retarding dam construction in the district is that of inadequate technical knowledge of the ground and surface water resources. According to the current District Plan, the hydrological mapping has not been updated.¹⁷ The only knowledge that seems to be there is that most of the district ground water is saline, but the level of salinity of various places is not yet adequately established. Thus, it is hoped over the current plan period that the feasibility survey covering the Uмба river for the construction of subsurface dams for irrigation will be extended to Mwachi river and other water surfaces as well.¹⁸

* Republic of Kenya, Kwale District Development Plan 1979/83
Op.Cit. pp. 103.

* Republic of Kenya, District Development Plan 1979/83 Kwale
Op.Cit. pp. 104

* Loc. Cit.

District Development Committee Files, D.A.O.'s Office, Kwale.

The above problem of inadequate hydrogeological conditions of different parts in the district can be attributed partly to lack of enough qualified personnel in the field to carry out such surveys. The district relies on personnel from Nairobi, Ministry of Water Development laboratories or the University of Nairobi. As we mentioned in chapter two, some departments are poorly represented at field level. The Ministerial representatives at the field are too weak, knowledgewise to carry out such surveys. They do not even have the equipment. Everything has to come from Nairobi. Some Officers from the same Ministry informed us that the success of the Tiwi borehole projects showed that those areas adjacent to Tiwi such as Ukunda should have ground water resources which can be exploited for irrigation and human consumption. They were waiting for the government to send some engineers from the headquarters (Nairobi) to come and carry out the surveys. This is a target that is hoped to be reached over the current plan period (1979/83) yet it had not yet been started.

From the above analysis, we may conclude that adequate availability of skilled personnel at field level would have reduced the present delay in fuller exploitation of groundwater for both agriculture and human consumption.

The field still stands rather a deprived area in terms of knowledge, the latter being concentrated at the centre.

Finally, the dam and bore-hole subsidies have not met with success in the district. These subsidies are built on the existing local initiative. In an area where the income of the bulk of the population is very low, such initiative is usually lacking. In the previous chapter, we saw that 76 per cent of the farmers are subsistence farmers with no other sources of income. Thus, working capital is a major drawback in development activities. 83 per cent of our sample farmers gave the lack of funds as a reason for not drilling their own bore-holes. 87 per cent also mentioned the problem of salinity while 77 per cent also mentioned the depth of water table as a reason. Thirteen per cent expressed none of the above reasons because they were either near a reliable stream, a government borehole or hand-dug wells. With no initial capital, the subsidies are of no real value to the farmers. Thus, only 3 per cent of the farmers had their own boreholes. The latter had obtained loans - some from local traders and some from commercial banks. They did not receive any government subsidy. They only had the approval of the Ministry of Water Development to construct and later to use the boreholes.

A complete shake up of the structure of the management committee would perhaps help in arresting the problem of management. This requires a replacement of the current committee members which is elected with more competent personnel. The latter could be recruited from the Co-operative College and institutions with relevant training requirements. Over the past plan-period, the government has emphasized the training of committee members as a means of strengthening the management of the societies. However, democratically-elected personnel, whose term of office expires after a year would not be worth training. Thus the nature of recruitment of the committee members is the major area that needs a change. With a change in recruitment as suggested above favouritism and leadership squabbles which now badevils the management of these societies would be minimized. A more rational distribution of credit would be achieved since representative - constituents relationship would be eradicated.

What we are stating in the above section is that agricultural credit and especially credit to small scale farmers is important not only to Kwale farmers but also to the majority of farmers in the country as a whole.

The District Crops Officer said that it had not been taken seriously by both staff and farmers in spite of having been recommended for the arid areas. Where farmers have been advised on it, there has not been any follow-ups.

Afforestation

Afforestation is vital in the conservation of water catchment areas. The scarcity of water resources has given rise to the current strategy of conservation in an attempt to reduce the aridity in the area.¹⁹ Afforestation helps in conserving both water and soil. It is a major activity in the Ministry of Environment and Natural Resources, although over the past two years, it has also become a common feature with the Provincial Administration under the Presidential soil and water conservation exercises. It is both a governmental and voluntary activity.

In the district, the Shimba Hills and Matuga tree nurseries feed the entire district with seedlings. According to the current District Plan, a target of 20,000 hectares of forest land has been set. A total of 2,600 forest seedlings were distributed to farmers by early 1981.²⁰ In slopy areas farmers have been advised to plant permanent tree crops along terraces and contours.

Loc. Cit.

Ministry of Agriculture, "Progress Report On Agricultural Development Projects In Kwale. September, 1981.

Despite the above strategies, afforestation has not been very successful in the district. Firstly, afforestation competes for land with other land use activities such as agriculture. Thus, indigenous forests cover 7 per cent of the total area, while gazetted forests cover 3.4 per cent of the area.²¹ Secondly, it competes with other uses of wood such as fuel and building material. The current District Plan states that educating the people on the importance of trees is a major problem in the district.²² There has been wanton destruction of forests over the recent years despite efforts by the M.E.N.R. to conserve them.

Afforestation in most of the country has been largely a voluntary activity. There is lack of adequate pressure on the farmers to plant and conserve trees especially on individual holdings. There is also inadequate backing of afforestation programmes by either the M.E.N.R. or the M.O.A.

11. Republic of Kenya, District Development Plan 1979/83 Kwale, Op.Cit pp. 33.

12. Ibid pp. 103

For instance, there is no follow up made by the Department of Forestry as to whether farmers issued with seedlings plant them or not. To a majority of farmers, afforestation and conservation of forests is applicable only to the gazetted areas. Very few farmers have the knowledge about trees even on individual holdings apart from provision of fuel and building material. The Plan has therefore called on adequate extension communication to farmers on the importance of trees.²³ The 1981 Annual Report also states that in preservation of soil and water, more emphasis was laid on planting permanent tree crops or forest trees along river banks. However, it continued to say that this was not properly adopted.²⁴ Kubo Division showed better results than the other divisions.

The role of Provincial Administration in communicating the message on afforestation is itself inadequate without extension follow-up. We mentioned in chapter two that the role of barazas as instruments of mobilization is inadequate for successful adoption of innovations. Barazas as such can be seen to be creating awareness but should not be relied upon entirely as channels of communication. Successful afforestation will require co-ordinated efforts of the two Ministries and the Provincial Administration.

• Loc. Cit.

• Ministry of Agriculture, Annual Report 1981 Kwale District, pp.9.

pressure from these organizations on farmers is also required if the programme is to succeed. So long as it continues to be a voluntary exercise, it will always be received with less commitments.

Soil Conservation

Like the afforestation programmes discussed above, soil conservation has been existing largely on voluntary basis. However, under the Integrated Agricultural Development Programme (IADP), some soil conservation projects in Msambweni and Kubo Divisions have been going on. There has been more success in Kubo Division than in Msambweni.²⁵ Other soil conservation projects in the district are financed through Ministerial funds and District Development Grants (DDG). By the end of 1981, 48,632 metres of cut-off drains had been dug under soil conservation project through Ministerial funds, 8,389 metres by District Development Grants and another 10,711 metres by farmers.²⁶ The main soil conservation project in the district is the Godono project in Matuga Division, financed by District Development Grants. During the current Plan period, KShs. 60,000 has been earmarked for the project.²⁷

²⁵. Ibid pp. 15.

²⁶. Loc. Cit.

²⁷. Republic of Kenya, District Development Plan, 1979/83 Kwale, Op.Cit. pp. 19.

Soil conservation in the district, as a voluntary activity receives low adoption by farmers. There is no real pressure exerted by the Ministry of Agriculture on farmers to practice it. Some Divisions like Kinango where IADP has not sponsored any programmes are still facing acute soil erosion problems as farmers continue to cultivate along valley bottoms while no measures are taken to contain potential soil erosion in the slopy areas. This problem can be attributed to failure of extension agents to advise farmers on the importance of soil conservation and lack of follow-ups to see that the exercise is being carried out. Educating farmers on the importance of soil conservation has almost been left entirely to Provincial Administration. The Ministry of Agriculture, through its extension agents had not provided adequate follow-up and support of these programmes. More attention in terms of soil conservation appeared to be concentrated on those projects that were sponsored by IADP and District Development Grants, because there were reports to be submitted to the Programme Evaluation Division on the progress of these projects.

For soil conservation to succeed, co-ordination of activities by Provincial Administration and the MOA has to be there. While Provincial Administration creates awareness among the farmers and mobilizes them to participate in the programme, the MOA should then provide the technical component, in terms of advice, follow-ups and support. Lack of this co-ordination has made soil conservation exercise largely a voluntary activity whereas according to the National and District Plan, it should be a major strategy in tackling the problems of the arid and semi arid areas.²⁸ The main strategy in the development of these areas is to conserve both soil and water resources for agricultural development.

28. Republic of Kenya, Development Plan 1979/83 Op.Cit pp. 210 and 253-154

Or

Republic of Kenya, District Development Plan 1979/83 Kwale, Op.Cit pp. 104

S U M M A R Y

The absence of large and reliable water reservoirs has greatly undermined the use of irrigation in the district. The available surface water is only used for small scale irrigation. The problem of salinity, although it has not been fully analysed has also reduced the degree to which ground water can be used as an alternative. However, in areas where salinity is not a problem, dams and boreholes have been drilled. This applies mainly to the ranches. With the two problems of unreliable water surfaces and salinity, the major strategy in developing these areas has been one of conservation of both soil and water resources for agriculture. These conservation programmes have not been very successful. There has not been adequate co-ordination by the institutions concerned. There has been mobilization without support. As such, the adoption of these programmes has been very poor assuming a voluntary trend, rather than being taken as essential means for agricultural development.

CHAPTER SIXSUMMARY AND CONCLUSION: AN EVALUATION OF ADMINISTRATION
OF AGRICULTURAL DEVELOPMENT

In this study we set out to assess the degree to which the administration of agricultural programmes has been a factor influencing development or lack of development in Kwale District. In so doing, we have analysed various agricultural development programmes in an attempt to learn lessons of experience. An Assessment of the effectiveness of these programmes has been made against the policies as contained in the Development Plans and other policy circulars. We defined agricultural development as increased production and productivity.

Generally, agricultural production in Kwale District has increased over the recent years. With the adoption of modern methods of farming (although on a limited scale) and the expansion of land use activity. However, the rate of development and the level of productivity of the bulk of the farmers, when measured against the policies and programmes designed for their development is still inadequate. It is this lack of development that we are attributing partly to the ineffectual agricultural administration.

From the study, we observed that the policy of decentralized agricultural development in Kwale District as indeed in other parts of the country has not operated well in the planning process.

Local initiative, which is supposed to guide project identification is usually inadequately tapped. The membership structure of the District and Sub-District Agricultural Committees is such that the majority of the farmers, especially the small scale farmers are partly represented that their needs and priorities are hardly reflected in the identified projects. This explains partly why they perceive of such projects as "foreign". Such projects are of limited value to the farmers development. Poor farmer representation, as we mentioned in chapter two of the study is not a problem unique to Kwale District. It is a National problem as findings by other scholars have indicated. The 1983 decentralization policy aims at including more of the small scale farmers in the planning and implementation processes which has as shown above been previously dominated by the progressives. The aim is to produce projects that are beneficial to the majority of the rural poor. The results of this policy are yet to be observed.

From the study, we also identified that field officers had limited discretion in discharging their duties. District level specialists often referred to the Provincial Headquarters for clearance in almost every matter. Those at sub-district level also had to refer to the District Headquarters for clearance. The results of this were serious delays in implementation of programmes that in turn slowed down the rate of development.

The absence of proper delegation to the district level personnel and that below it once again is a national phenomenon. On page 68 of the study, we cited Chitere;s findings in Western province of Kenya whereby he observed that this style of decision making has contributed to the slow rate of development in the area. Oyugi and Leonard's findings on eight IADP districts, cited on page 84 of the study carry similar observations.

In conclusion therefore, we can say that despite the government's policy of decentralized development, there is still insufficient authority given to the operational staff in the MOA. There could be adequate delegation of responsibilities but the authority to carry them out is inadequate. The traditional control system inherited from the colonial regime still has an impact on development activities. The province and the National Headquarters not only monitor the activities of the district but also imposes a bureaucratic structure which acts against development.

Rational decentralization would perhaps provide an ideal structure for development. This means adequate decentralization of both responsibilities and authority to carry them out. Such a move would also be a motivation among the field level officers.

The initiative created would then be instrumental in improving planning and implementation of programmes. This will perhaps be achieved through the 1983 District Focus For Rural Development, as outlined in chapter two, if proper care is taken in assigning duties. If this is not given greater consideration, the move can have negative impact on the officers.

Meaningful decentralization on the other hand would require a technically sound personnel structure at the level to which it is to take place. This has also to be brought up under the District Focus For Rural Development. However, care should be taken not to train only those at the District level, while the actual implementors of the programme; the junior ranks are not trained. We have already mentioned in chapter 3 that they are poorly trained. Reorganization of the In-service training programmes would perhaps be easier to achieve than the pre-entry training ones. The latter would require an expansion of our agricultural training institutions thereby requiring more capital. This is a long term programme which cannot be achieved overnight.

Under extension services, we identified that channels of distribution were too inadequate to offer sufficient coverage of the farmers. They tended to favour the progressives at the expense of the small scale farmers. The poor staff to farmer ratio coupled with poor means of transportation reduced the effectiveness of the visit system. To reach the target set by the Ministry of Agriculture, extension agents often concentrated on the progressive farmers who are more receptive to change. This conclusion was arrived at by Leonard as cited on page 137 of the study, during his research in Western Province of Kenya. He found that more time is spent in travelling than on actual extension work.

When the distribution of extension services is thus skewed in favour of a small portion of the farming community, then the majority of the farmers are left out. They continue with traditional methods of farming. This gives poor returns. Since they are the majority, the rate of agricultural development inevitably slows down.

Alternative channels of communication have not yielded better results. The social environment of the extension organization imposes barriers on effective communication. The print and mass media can only benefit a tiny fraction of the farmers; those who are literate. Illiteracy has been a major constraint in effective communication in the country as a whole, as observed from the scholarly findings cited in chapter 3. A better alternative has been demonstrations. However, these have been subjected to social barriers which reduce the rate of adoption of whatever is demonstrated.

From the above findings, we can say that extension services are instrumental in agricultural development. However, for these services to bear real significant yields, extension programmes and channels of communication must be designed in a manner that they reflect the socio-economic environment of the target group, i.e. the small scale farmers. This will reduce the occurrence of such barriers as mentioned above.

The link between research stations and the farmers must also be properly established. Extension agents who provide this link should be in a position to diagnose farm level problems, feed this information to the research stations and provide feedback to farmers.

What we are suggesting here is that research stations should be concerned more with finding solutions to problems facing the farmers rather than concentrating more on generating new information that might not necessarily be of real use to the local farmers. The latter tends to be more academically oriented than action oriented. The above proposal, like the one before it requires adequate training of field agents. We have already mentioned that this personnel training would require large capital investment into agricultural institutions and would thus be a long term process. However, if achieved, it would be instrumental in generating feasible technology.

In terms of management of credit institutions, we identified that the technical - managerial and leadership squabbles present within the Co-operatives have had serious impact on the accessibility of credit by the majority of farmers. The Committee running these societies is made up of members who have not been adequately exposed to management procedures. These members, having been elected to these posts, are the representatives of their "constituents" whose interests must come first. Credit is then distributed in such a way that those people get first priority. These "constituents" are not always in need of capital for agricultural investment. This partly explains the high frequencies of loan defaulting in the District and the country at large because credit is being invested in non-profitable means.

A complete make up of the structure of the management committee would perhaps help in arresting the problem of mismanagement. This requires a replacement of the current committee members which is elected with more competent personnel. The latter could be recruited from the Co-operative College and other institutions with relevant training requirements. Over the current plan-period, the government has emphasized the training of committee members as a means of strengthening the management of the societies. However, democratically-elected personnel, whose term of office expires after a year would not be worth training. Thus the nature of recruitment of the committee members is the major area that needs a change. With a change in recruitment as suggested above favouritism and leadership spabbles which now bedevils the management of these societies would be minimized. A more rational distribution of credit would be achieved since representative - constituents relationship would be articulated.

What we are stating in the above section is that agricultural credit and especially credit to small scale farmers is important not only to Kule farmers but also to the majority of farmers in the country as a whole.

The findings of Wainaina and Abuki in other parts of the country, cited on papers 154 and 156 respectively confirm that the need for agricultural credit is nation-wide. Our findings show that despite the instrumental role it plays in accelerating the rate of agricultural development, it is not benefiting the bulk of the farmers as a result of the managerial problems summarized above. If then these problems were solved along the lines suggested above, then more of the small scale farmers would have access to credit facilities and improve on their farming activities. However, this is not to suggest that the mere acquisition of credit guarantees rapid agricultural development. Credit has to be combined with effective extension services and proper investment.

Under AFC lending, we identified that the latter has not yet had significant impact on smallholder agricultural development. The major drawback in AFC lending in Kwale District and the ASAL regions as a whole is that most of the farmers do not have title deeds. As we mentioned in chapter 1, these areas did not enjoy early European settlement and such benefits as land registration which areas like Central and Rift Valley enjoyed under the Swynnerton Plan.

The complexity and formalistic procedures involved in applying for AFC loans, coupled with the farmers' limited knowledge on borrowing and lending, has evoked fear and apathy among most farmers even those who have title deeds. This reduces the number of farmers who apply for AFC loans which in turn contributes to the low rate of development. We have already observed that credit is important in smallholder agricultural development. This high degree of formalization also causes delays in disbursement of credit. We should not forget that effective investment of capital (credit) depends on other factors such as favourable market or price system. When there are such delays and the farmers lose such chances, they often find it difficult to repay their loans. This contributes to the high frequency in loan defaulting. In conclusion therefore we can say that the smallholder need capital in form of credit for a more rapid development. This could be achieved through an administrative reform of the lending institutions along the lines suggested above. Extension agents would also play a vital role in creating awareness among the farmers on the lending procedures. This awareness would minimize the fear and apathy mentioned above. Coupled with this, land registration should be given more priority than is the case at present to enable more farmers to benefit from institutions that require title deeds.

Finally, under the solutions to the arid conditions, we found that the conservation of both soil and water suffer because they are left to the farmers to implement voluntarily. The Provincial Administration has played an important role in mobilizing farmers behind these programmes. However there has been very poor follow-up by the Ministry of Agriculture and the Ministry of Environment and Natural Resources. Very few programmes as shown by figures on page 208 of the study are started by farmers. Mobilization behind such activities becomes an end in itself rather than a means to favourable implementation of these programmes. This is reflected in the agricultural output especially when rainfall conditions are very unfavourable. We have cited the Vanga case extensively in chapter five, whereby water which could have been tapped for irrigation has been lost as a result of late construction of banks along the river.

Programmes initiated and funded by the Government on the other hand suffer inavailability of skilled manpower. The Ministry of Water Development which is concerned with irrigation programmes has concentrated its skilled manpower resources in Nairobi and at Provincial Headquarters. This is hoped to be arrested with the implementation of the District Focus For Rural Development Programme.

The programme among other things seeks to avail skilled personnel at the district level. Although this is ideal, care should be taken in sustaining the morale of these officers. We have mentioned in chapter two that adequate delegation of both responsibilities and authority and proper housing facilities would be important motivators. We have observed in the study that in the past, these factors have been overlooked and contributed to the low morale of the people especially those in the lower ranks.

The above programmes also suffer frequent delays in release of funds. This is mainly caused by the highly formalistic procedures involved in applying for RDF. Under the District Focus for Rural Development, decentralized budgetary process will help in reducing these unnecessary delays. However, in an attempt to incorporate both planning and budgeting at the action level, delays in submitting proposals might result to a delay in release of funds. Thus the two processes should be properly co-ordinated.

The above sectoral analysis reveals that the Ministry of Agriculture whose major objective is that of fostering agricultural development in the area has not been very successful. We have attributed this to the nature and style of administration.

By analysing the administrative system prevalent in some of the key departments in the Ministry, we find that administrative reform is necessary. Most of what we have suggested has been picked up by the District Focus for Rural Development. However, in as much as the programme is not totally a new phenomenon in our development policies, what we have identified in the study should be considered in this programme is to have an impact on the rate of development. We have for example observed that projects initiated under Integrated Agricultural Development Programme (IADP) received inadequate follow-up and often died after implementation. For a sustained development, constant reviewing of programmes is very important. This offers a basis for further planning.

Alongside with the administration of programmes we have mentioned that the socio-economic environment of the farmers is very important. The farmers form the nucleus for agricultural development. They should therefore be prepared to assimilate these programmes. They should be prepared, through adequate extension services to participate in the planning and implementation of programmes.

The farmers' economic environment should also be improved along the lines suggested in chapter four. The administration of credit institutions should be reoriented to serve the majority of the farmers.

Thus, what the study is stressing is that administrative constraints in most of the departments of the Ministry of Agriculture have been key factors in influencing the slow rate of development in the country. For this to be arrested, both the target group (small holder sectors) and the administrative system should be reoriented towards development.

APPENDIX "A.1"UNIVERSITY OF NAIROBIDEPARTMENT OF GOVERNMENTQuestionnaire on Agricultural Development In Kwale DistrictRespondents: FARMERS:Interviewer

- A. Bio Data
1. Name _____
 2. Sex Male _____ Female _____
 3. Division _____
 4. Location _____
 5. Occupation other than farming _____
 6. Level of Education _____
 7. Religion _____
 8. Farm Level Data
- Size of land _____
9. Is the land registered? Yes/No
 10. Is it an individual holding or owned by the extended Family Yes/No
 11. What are the major crops growing on the holding?
 12. Are there any crops grown for commercial purposes?
Yes/No If Yes, what are these crops?
 13. How much land is under subsistence farming?
 14. Do you use any other farming equipment other than the ordinary hoe (Jembe) or Panga? Yes/No.
 15. If Yes, to No. 14 which one?
 16. Do you hire any labour provided by the family alone? Yes/No.

17. Do you use any type of fertilizer or manure? Yes/No.

18. If the answer is No. Why?

19. How do you obtain your water?

(a) Self-dug-boreholes (i.e. personal borehole).

(b) Government constructed boreholes.

(c) Community borehole.

(d) Piped water.

(e) River.

20. Do you use water for irrigation? Yes/No.

21. If the answer is No, why?

22. Do you have any problems in constructing boreholes?

(a) Funds.

(b) Problem is water table (low water table).

(c) Labour.

(d) Problem of getting fresh water.

23. Are there any boreholes constructed by the government within your reach? Yes/No.

A. PART II Credit Facilities

24. Have you acquired any loans from any of the following?

(a) A.F.C.

(b) Co-operatives

(c) Commercial Bank

(d) Other sources

APPENDIX "A2"Questionnaire on Agricultural Development In Kwale DistrictIntroduction

Good Day! My name is Dorcas Maingi. I am M.A. Student in the Department of Government at the University of Nairobi. Currently I am in the District for the purpose of conducting research for my M.A. thesis which is in the Field of Development Administration. Specifically the topic for my research is:- "The Administration of Agricultural Development In Kenya: The Case Of Kwale District." I am interested in Livestock Development programmes as well.

The purpose of my being here this morning/afternoon is to kindly ask you if you could respond to some of the questions that I have on the subject as contained in the questionnaire that I have here with me. Your assistance will be highly appreciated.

Respondents: District Agricultural Officer
Agricultural Officers
Junior Agricultural Officers.

A. Bio Data

1. Name _____
2. Sex Male _____ Female _____
3. Division _____

4. Position in the Ministry _____

5. Length of Service _____

PART I B Authority Relationship Between Field and the Centre

6. As a person holding an important post in the ministry, how often do you communicate with the Division/District or Provincial Headquarters.

(a) Often

(b) Very Often

(c) Rarely

(d) Very rarely.

7. Are there any major decisions you can make without necessarily referring to the Division/District or Provincial Headquarters? Yes/No.

If the answer is Yes, give examples.

8. Do you have any problems in getting the required information from either the Divisional, District or Provincial Headquarters? Yes/No

If yes, what are some of these problems.

9. Apart from the monthly reports, do you submit any other reports to either the Division, District or Provincial Headquarters? Yes/No.
If yes what are some of these reports?
10. How often do farmers consult you for assistance on aspects they are not very sure about?
- (a) Often
 - (b) Very often
 - (c) Rarely
 - (d) Very rarely
 - (e) They do not.
11. What major problems do you experience in the field as you carry out your duties?
12. Are a majority of farmers in the District involved in Agricultural Development activities? Yes/No.
If yes, which ones are they?
13. What do a majority of these farmers feel about these activities?
- (a) That they are foreign ideas being imposed on them.
 - (b) That they are for their own benefit.
 - (c) That they have nothing to do with their own welfare.

14. Do the people identify with the existing agricultural development projects established by the government? Yes/No.
15. If No, what are some of the major reasons?
16. Do the people assist you in providing you with the necessary information about problems affecting them? Yes/No.
17. Do they contribute in terms of ideas on possible solutions to these problems? Yes/No.

C. Adoption Of Innovation

18. What category of farmers often feel the need for improving their present agricultural productivity?
 - (a) Progressive farmers.
 - (b) Small scale farmers growing crops for subsistence and cash crops on a limited scale.
 - (c) Small scale farmers operating on subsistence alone.
 - (d) All of these.
19. Are farmers keen in adopting new farming techniques? Yes/No. If the answer is No what are some of the factors influencing this low rate of adoption of innovation?

20. What are some of the social values affecting the rate of adoption of innovation in the District?
21. Is the level of education a factor that influences the adoption of innovation? Yes/No.
22. If the answer to No. 20 is Yes, state how?
23. Does the economic status of farmers influence their adoption of new ideas? Yes/No.

D. Land Registration and Consolidation

24. Has land registration and consolidation assumed great importance in the Division? Yes/No.
If the answer is No,. what are the factors contributing to that condition?
25. Do a majority of farmers in the Division possess title deeds?
26. Is land individualization an important phenomenon in the District? Yes/No.
27. Are there any ractors related to land ownership that influence the people's acceptability of modern farming methods?

28. Do a majority of farmers recognize the importance of possessing title deeds? Yes/No.

29. Do you find resistance among farmers in using their title deeds as security for loans? Yes/No.

If the answer is Yes, what are some of the reasons that the farmers give as to why they cannot use their title deeds as security for loans?

30. PART II

A. Resource Availability

1. As field agents, do you have any problems related to resource availability? Yes/No.

2. If the answer to No. 1 is Yes, what is the nature of some of these resources?

3. Are there any particular resources always available to the field officers that can be tapped whenever a problem arises, without referring to the centre?

(a) Adequate resources.

(b) Limited resources.

(c) Very limited.

(d) None at all.

4. Do you exhaust the resources available before the stipulated time?

(a) Not always.

(b) Always.

(c) Never.

B. Government's Role (Programmes)

5. What are some of the programmes that the government has launched to assist farmers in the Division in the field of agricultural development?

6. Do the farmers view these programmes as meaningful solutions to their problems? Yes/No.

7. Do they make use of these programmes?

(a) A majority do.

(b) Only a few of the farmers do

(c) Only the progressive farmers.

(d) None at all.

8. What are some of the problems experienced by the government when launching these programmes?

C. Extension Services

9. Do you have any extension services in your area?

Yes/No.

10. Do farmers have problems in gaining access to the extension services? Yes/No.

If the answer is Yes, what are some of these problems?

11. Do farmers find these services to be beneficial to them? Yes/No.

12. From the list below put a tick against any problem that a technical agent or change agent experiences in the field.

Lack of:-

(a) Adequate resources (in terms of funds).

(b) Adequate means of transport.

(c) Adequate information regarding most of the crops grown in the area.

(d) Adequate information regarding livestock.

(e) A language that a majority of the farmers can understand.

(f) Most of the ideas conflict with the people's social values.

(g) Inadequate resources among farmers to adopt some of the modern farming techniques.

(h) Farmers satisfaction with what they already know.

13. About how many farmers does an extension agent visit on a working day?

14. What are some of the things they advise farmers on?
15. Is the information or advice given to farmers put into practice? Yes/No.
16. What category of farmers are keen in adopting innovations?
 - (a) Progressives.
 - (b) Small scale farmers operating on subsistence and limited cash crops.
 - (c) Small scale farmers operating on subsistence alone.
 - (d) Livestock keepers.
17. Do change/technical agents visit all farmers uniformly? Yes/No.
18. If the answer is No what category of farmers receive greater attention?
 - (a) Progressives.
 - (b) Small scale farmers operating on both subsistence and limited cash crop farming.
 - (c) Small scale farmers growing crops for subsistence alone.
 - (d) Livestock keepers.

D. Credit Facilities

19. What credit schemes are available to the people in the District?
- (a) A.F.C.
 - (b) Co-operatives.
 - (c) Commercial.
 - (d) None.
20. Which of these is the most effective in extending credit facilities to farmers in the District?
- (a) A.F.C.
 - (b) Co-operatives.
 - (c) Commercial Banks.
 - (d) None.
 - (e) Other credit schemes (give examples).
21. Do a majority of farmers have knowledge about these credit scheme?/
- (a) Yes.
 - (b) A few do.
 - (c) None at all.
22. Put a tick against any of the factors listed below that might be affecting the degree to which farmers take up credit from the above named institutions.

- (a) Social values.
- (b) Level of education.
- (c) Lack of security (e.g. title deeds) for a loan.
- (d) Lack of adequate knowledge about credit facilities.
- (e) Fear of taking a loan.
- (f) All of these.
- (g) Any others (list them down).

23. Training Facilities For Farmers

24. Are there any farmers' training centres in the District?

Yes/No.

25. About how many farmers attend lessons in these institutions per year from your area of jurisdiction?

26. What are some of the things that farmers are taught in these institutions?

27. What criteria do you use when selecting farmers to these institutes?

- (a) Level of education.
- (b) Economic status.
- (c) Social status.
- (d) Scale of farming.

28. Do they practise what they are taught?

Yes/No.

F. Overlapping Roles

29. Apart from agricultural change agents what other agents touch on the field of agriculture in the field?

(a) Community Development agents.

(b) Community Nurses.

(c) Community welfare agents.

(d) All of these.

(e) Provincial administration.

30. Is their work contributive to your work?

If it is contributive, how?

BIBLIOGRAPHYBOOKS

1. Benor, D. and Harrison, J.Q. (Eds) Agricultural Extension: The Training and Visit System.
(World Bank, 1977) 55 p.
2. Blau, P. On The Nature of Organizations (New York, John Wiley and Sons, 1974) 358p.
3. Chambers, R., Managing Rural Development (Uppsala, The Scandinavian Institute of African Studies, 1974) 215p.
4. Chambers, R. Mwea: The Irrigation Rice Settlement In Kenya
(Weltforum, Verlag Miichen, 1973) 540p.
5. Collins, P., "Workings On Tanzania's RDF in (Ed)
Rweyemamu, H.A., National Building In Tanzania
(Dar-es-Salaam, East African Publishing House, 1970)
6. De Vries, E., "Administration of Development Programme And Projects: Some Major Issues," in Yves Chapel (Ed)
Administrative Management For Development (New York, United Nations (UNESCO), 1977) p 340.
7. Etherington, D.M., An Economic Analysis of Smallholder Tea Production In Kenya (Nairobi, East African Literature Bureau, 1973)pp. 109.p 217.
8. Gertzel, C.J. "Administrative Reform In Kenya and Zambia" in Rweyemamu (Ed) A Decade In Public Administration
(Dar-es-Salaam, East African Literature Bureau, 1968)
p 377.

9. Gertzel, C.J., The Politics of Independent Kenya 1963-68
(Northwestern University Press Evanston, 1970)p 180.
10. Hall, R., Organization Structure And Processes (Englewood Cliffs N.J. Prentice - Hall, 1972)p 354.
11. Heyer, J. Maitha, J., Senga, W.M., (Eds) Agricultural Development In Kenya: An Economic Assessment (Nairobi, Oxford University Press, 1976) p 371.
12. Hicks, H.G., and Gullet, C.R. (Eds) Organization Theory And Behaviour (New York, Mcgraw Hill, 1975)p 446.
13. Hyden, G., Efficiency Versus In East African Cooperatives: A Study of Organization Conflict (Nairobi, East African Literature Bureau, 1973)p 254.
14. Leonard, D.K., Reaching The Peasant Farmer: Organization Theory And Practice In Kenya (Chicago, Chicago University Press, 1977)p 297.
15. Maddick, H., Democaracy Decentralization And Development (London, Asia Publishing House, 1963)p 305.
16. Mbithi, P.M., Rural Sociology And Rural Development (Nairobi East African Literature Bureau, 1974) pp. 229.
17. Montgomery, J.D. and Siffins, W. (Eds), Approaches To Development Politics And Administration (McGraw Hill, New York, 1966)p 299.
18. Nyerere, J.K., Arusha Declaration: Answers To Questions (Dar-es-Salaam, Government Printer, 1967)p 12.
19. Nyerere, J.K., Decentralization, Dar-es-Salaam, Government Printer, 1972)p 12.

20. Raphaeli, N., Readings In Comparative Public Administration
(Botson Allyn And Bacon Inc. 1969)p 287.
21. Riggs, F.W., Administration In Developing Countries,
(Boston, Houghton Mifflin, 1964)p 477.
22. Rodney, W., How Europe Underdeveloped Africa
(Dar-es-Salaam, 1972)p 316.
23. Simon, H., "Decision Making And Administrative Organization"
in Merton, R.K. (Ed) Reader In Bureaucracy (New York,
The Free Press, 1952).
24. Smith, B.C. Field Administration: An Aspect Of
Decentralization (London, Rowtledge and Kegan, Ltd.,
1967)p 284.
25. Trapman, C., Change In Administration Structures: A Case
Study Of Kenya Agricultural Development Overseas
Development Institute Ltd., 1974)p 100.
26. Vasthoff, J., Small Farm Credit And Development Some
Experience In East Africa With Special Reference To
Kenya (Weltforum Verlage, Miichen, 1968)p 197.
27. Widstrand, C.G., Cooperatives And Rural Development In
East Africa (Nairobi, East African Literarure Bureau,
1975)p 254.

Articles

1. Leonard, D.K. "The Social Structure of The Agricultural
Extension Services In Western Province of Kenya," in
The African Review Journal of African Politics Develop-
ment And International Affairs, Vol. 2, No.2, 1972 at
pp. 323 -345.

10. Ministry of Agriculture, Kenya Farmers' Official Journal of The Agricultural Society of Kenya. No. 10, May 1982.
11. "Operations Plan For Integrated Agricultural Development Programmes," Programme Management Unit, Ministry of Agriculture and Ministry of Co-operative Development.
12. Republic of Kenya, Development Plan 1966-70 (Nairobi Government Printer, 1966).
13. Republic of Kenya, Development Plan 1970-74 (Nairobi Government Printer, 1970).
14. Republic of Kenya, Development Plan 1974-78 (Nairobi Government Printer, 1974).
15. Republic of Kenya, Development Plan 1979-83 (Nairobi Government Printer, 1979).
16. Republic of Kenya, Office of the President, District Focus for Rural Development, Nairobi Government Printer, 1983
17. Republic of Kenya, Planning For Progress: Our Fourth Development Plan: A Short Version of The Development Plan 1979/83 (Nairobi, Government Printer, 1980).
18. Republic of Kenya, District Development plan Kwale District, 1974/78 (Nairobi, 1974).
19. Republic of Kenya, Public Service Structure and Renumeration Commission of Inquiry, Chairman Ndegwa, D.N. (Nairobi, Government Printer, 1971).
20. Republic of Kenya, District Development plan Kwale District 1979/83 (Nairobi, 1980).

21. Republic of Kenya, Sessional Paper No.4 of 1981 on National Food Policy, (Nairobi, Government Printer, 1981).
22. Republic of Kenya, Sessional Paper No. 10 of 1965 on African Socialism and Its Application to Planning In Kenya (Nairobi, Government Printer, 1965).

Unpublished Papers

1. Ascroft, J., Rolings, N. and Chege, F., "Extension and The Forgotten Farmers," First Report of A Field Experiment Institute of Development Studies (IDS) University of Nairobi, 1973.
2. "An Overall Evaluation of Special Rural Development Programmes," Institute of Development Studies (IDS), University of Nairobi, Occasional Paper No. 8, 1972.
3. Heyer, J., "Smallholder Credit In Kenya Agriculture, Working Paper No. 85, Institute of Development Studies (IDS), University of Nairobi, February 1973.
4. Leonard, D.K., Kimenye, D., Oyugi, W.O. et al
"An Evaluation of Project Components Needed to Improve the Performance of Extension Services," A Report to the Ministry of Agriculture, May 1982.
5. Okai, M., "The Adequacy of The Technical Base for Agricultural Extension In Uganda: The Case of Lango District" (Makerere University College Department of Agricultural Economics, 1966).

6. Odingo, R.S., "Realities and Agricultural Development," East African Academy Seminar on Bottlenecks of Development, University of Nairobi, 1971.
7. Oyugi, W.O. and Leonard, D.K., "The Role of the District In Agricultural Planning and Budgeting," An Evaluation of Ministry Procedures and Management Manual, A Report to the Ministry of Agriculture (University of California, Berkley) 1981.
8. Prewitt, K., Introductory Research Methodology East African Application, Occasional Paper No. 10, Institute of Development Studies, University of Nairobi, 1974.
9. Schafer, R.B., "Improving Access to Public Services," Institute of Development Studies, Discussion Paper No. 23, Institute of Development Studies Sussex England.
10. Von Pischkie, J.D., "Smallholder Agricultural Programmes And Performance In Kenya," Institute of Development Studies (IDS), University of Nairobi, Occasional Paper No. 48, Economics Department of IBRD 1974.
11. Watts, R., "A Study of Agricultural Extension In Embu District of Kenya," in Conference Paper Collections (Makerere Institute of Social Science Research) January 1967.
12. Wijewardene, G.A., "Preliminary Report on Tribal Differentiation And Social Grouping on The Southern Kenyan Coast." In East African Institute of Social Science Research Conference Papers, Kampala, 1958.

DISSERTATIONS

1. Abuki, O., "How Credit Facilities Have Benefited Land," (Dissertation Paper For LLB Degree, University of Nairobi, 1977).
2. Alila, P.O., "The Role of Public Bureaucracy In Agricultural Development in Kisumu District Western Kenya," (Ph.D. Thesis, University of Indiana, 1980).
3. Chitere, P.O., "Decentralization of Decision Making Process, For The Improvement of Crop Improvement Programme In Kakamega District Kenya," (Ph.D. Thesis, University of Nairobi, 1980).
4. De Vries, KJ., "Agricultural Extension And The Development of Ujamaa Villages In Tanzania: Towards A Dialogical Model" (University of Wisconsin, Ph.D. Thesis 1975).
5. Hopcraft, P., "Human Resources And Technical Skills In Agricultural Development: An Economic Evaluation of Education In Investments In Kenya Small Farm Sector (Unpublished Ph.D. Thesis, Stanford University, 1974).
6. Nthiga, N., "The Management of Rural Development Funds In Kenya: A Case Study," (M.A. Thesis, University of Nairobi, 1976).

UNIVERSITY OF NAIROBI
LIBRARY

7. Oyugi, W.O., "The Administration of Rural Development In a Kenya Sub-District. A Case Study of The Interaction Between Kenya Bureaucracy AND Technical Assistance Personnel" (Ph.D. Thesis, University of Nairobi, 1973).
8. Wainaina, J.N., "Some Aspects of Smallholder Credit In Githunguri - Kiambu, Dissertation Paper For LLB Degree, University of Nairobi, 1977).

Newspapers

1. Daily Nation, Nairobi Daily, June 26, 1982.
Daily Nation, June 2, 1983.
2. Nairobi Times, Nairobi June 28, 1982.
3. Sunday Nation, Nairobi Daily, June 26, 1982.