THE KADUNA STATE AGRICULTURAL DEVELOPMENT PROJECT AND RURAL TRANSFORMATION: (A CASE STUDY OF MAIGANA ZONE) 1993 – 1998

BY

LAWAL SANUSI MOHAMMAD

July 2002

TITLE PAGE

THE KADUNA STATE AGRICULTURAL DEVELOPMENT PROJECT AND RURAL TRANSFORMATION:
(A CASE STUDY OF MAIGANA ZONE) 1993 – 1998

BY

LAWAL SANUSI MOHAMMAD

A Thesis Submitted To The Post Graduate School, Ahmadu Bello University, Zaria In Partial Fulfillment Of The Requirement For The Degree Of Master Of Public Administration

July 2002

CERTIFICATION

This thesis entitled: The Kaduna State Agricultural Development Project and Rural Transformation: (A Case Study of Maigana Zone) 1993 – 1998, meets the regulations governing the award of the degree of Master of Public Administration of Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation**.**

_____ _____

DR. K. E. OBAITAN
Chairman Supervisory Committee **Date**

_____ _____

DR. A.A ANYEBE
Member Supervisory Committee **Date**

_____ _____

ALH. IBRAHIM ADAMU
Head of Department **Date**

_____ _____

PROF. S. B. OJO
Dean, Post Graduate School **Date**

DECLARATION

I, Lawal, Sanusi Mohammed, hereby declare that, this thesis is written by me and only me. And it was not copied from past research work. Also I declare that both published and unpublished articles directly used in this thesis are appropriately acknowledged.

DEDICATION

This work is dedicated to the memory of my Late Father Alhaji Muhammadu Tunau Ikara, May Allah grant him Aljanah Firdausi, and to my wife Asiya I. Ladan and also my loving children, Nana Aminah, (Amma) Muhammad Amin, Muhammad Sani and Muhammadu Mustapha.

ACKNOWLEDGEMENT

This work materialized as a result of the assistance and encouragement I received from so my people. I would have loved to express my gratitude to all through this avenue, but for space which is limited. However, mentioning the names of some particular people is necessary all the same.

May I therefore start by expressing my deep and sincere thanks and gratitude to my able supervisor Dr, (Prince) Kola Obaitan of the department of public Administration, who give me unlimited support and encouragement through out the period of this work. No doubt, without his patience, tireless efforts to meticulously go through every part of this work over and over again, this work would have taken more years before seeing the light of day, special thanks to the entire members of staff Department of Public Administration ABU, Zaria.

My gratitude also goes to my Late father Alh. Muhammad Tunau Ikara who made sure I go to school, I say thank you dad. To my mother Hajiya Aminah and my step mums Hajiya Ladi and Hajiya Dije, I'm deeply grateful. To my wife Asiya and our four lovely children who stood by me during the trying moments of my life, I say thank you and I appreciates the gesture.

In the same light I wish to thank my brothers and sisters for their untiring support and encouragement during the period of this study. To my friends both far and near whose names could not be mentioned, I'm highly grateful. Special greeting goes to my colleagues in the department of Political Science and Defence Studies NDA, Kaduna, for offering me various forms of assistance and for working with me cordially.

My gratitude would not be complete without an expression of appreciation to the officers of Maigana Zone of the KADP and the farming house holds whose responses forms the primary data without which this study wouldn't have been possible.

My profound gratitude must go to the Academy Provost, Professor S.U. Abdullahi, mni; who is more or less my mentor, thank you Sir. And finally, my gratitude goes to Mrs Helen of PSDS for typing this work and making a good job of it. All said, while I remain indebted to all those who have contributed in various ways in making this work possible, I claim full responsibility for all errors and mistakes that might appear in it.

ABSTRACT

This study on the Kaduna State Agricultural Development project and Rural Transformation (A Case Study of Maigana Zone) is an attempt to examine whether the rural development policies provide an avenue to bridge the gap between the rural and urban areas of this country. Also, it tries to find out whether there is nothing positive about the ADP's to warrant government continued patronage.

For the purpose of this study both primary and secondary data were collected. The farming households residing within the zone provide the primary data, while the secondary data was obtained from, official documents, written records and past researches. The data obtained were analysed using simple statistics (frequencies and percentages) that were summarized in figures and tables.

Results from the study shows that, the Maigana zone of the KADP did well in raising the level of agricultural productivity within the zone during the period covered by the research i.e. (1993 – 98) through the injection of modern farming inputs such as fertilizers, improved seedlings, feticide and also through the provision of social infrastructures such as roads, earth dams, bore holes, and so forth.

Based on the conclusion of this study, it is recommended that, programmes should be based on a comprehensive socio-economic

study of the community to ensure that programmes are at equilibrium with the nature of that society. Also non-agricultural occupations such as pottery, weaving, blacksmithing e.t.c., should be made part of the programmes of the project. This it was discovered would provide farmers another means of livelihood during the dry season.

Again, it is recommended that, rural development programmes should be planned at the regional level within the context of the national development plan. This it was felt, would facilitate the achievement of integrating the rural and urban sectors. But the success of this approach depends on the willingness of the governments to accept the idea of planning.

Finally further research on the impact of the ADP's on rural transformation is important so as to bridge the gaps left behind by this study. This would provide new in sight into the usefulness or otherwise of the ADP's in the country in general.

ABBREVIATIONS

1.	A.B.U.	Ahmadu Bello University
2.	A.D.P.	Agricultural Development Project
3.	F.A.C.U.	Federal Agricultural Coordinating Unit.
4.	K.A.D.P.	Kaduna State Agricultural Development Project
5.	M.A.D.P.	Maigana Agricultural Development Project
6.	G.D.P.	Gross Domestic Product.
7.	F.A.D.P.	Funtua Agricultural Development Project
8.	H.Y.V.	High Yielding Variety
9.	F.D.R.D.	Federal Department Of Rural Development
10.	G.E.	Grain Equivalent
11.	I.B.R.D.	International Bank For Reconstruction and Development
12.	G.N.P.	Gross National Product
13.	I.M.F.	International Monetary Fund.
14.	U.N.	United Nations
15.	U.S.A.	United State of America
16.	A.D.P.E.C.	Agricultural Development Project Executive Committee
17.	F.D.A.	Federal Department of Agriculture

18.	A.P.M.E.U.	Agricultural Projects Monitoring and Evaluation Unit
19.	A.D.P.M.U.	Agricultural Development Project Management Unit
20.	A.R.	Appraisal Unit
21.	F.A.S.C.OM.	Farmers Supply Company
22.	C.F.A	Cooperative Financing Agency
23.	K.S.I.R.D.P.	Kaduna State Integrated Rural Development Project
24.	N.P.N.	National Party Of Nigeria
25.	K.M	Kilometer

TABLE OF CONTENT

	Pages
Cover Page……	i
Title Page……	ii
Certification……	iii
Declaration……	iv
Dedication……	v
Acknowledgment……	vi
Abstract……	viii
Abbreviations……	x
Table of Contents……	xii
List of Tables and Figures……	xvi

CHAPTER ONE

1.0 Introduction……

1.1 Background to the study……

1.2 Statement of the problem……

1.3 Aims of the Study……

1.4 Scope and Limitation of the Study……

1.6 Significance of the Study……

1.7 Methodology of the Study……

1.7.1. Sources of Data……

1.7.2 Population and Sample size……

1.7.3 Data Analysis……

1.8 Plan of the theses……

1.9 Definition of Major Terms……..

Endnotes……

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAME WORK

2.1 Introduction……..

2.2 Concept of Development…….

2.3 Concept of Agricultural Development……

2.4 Concept of Rural Transformation……

2.5 Case studies on ADPs……

2.6 Theoretical Frame work……

2.6.1 Historical Background of the Theory…….

2.6.2 Why Modernisation Theory……

Endnotes……

CHAPTER THREE

KADUNA STATE AGRICULTURAL DEVELOPMENT PROJECT

(KADP) HISTORICAL BACKGROUND AND STRUCTURE

3.1 Introduction……

3.2 Goals and objectives of KADP……..

3.3 The Structure of KADP……

3.3.1 The Control System……

3.3.2 Zonal Implementation……

3.4 History of Maigana Zone……..

3.5 Organisational Structure of Maigana Zone…….

3.6 The climate and soil characterization of the zone …….

3.6.1 Socio-Economic Features of the Zone……

Endnotes……

CHAPTER FOUR

DATA ANALYSIS

4.1 Introduction……

4.2 Test of Hypothesis one: The impact of the feeder road, earth Dam schemes and other infrastructures introduced by the Project on Rural Economy……

4.3 Test of Hypothesis Two: There is no relationship between an improved rural economy and the activities of the project…….

4.4. Test of Hypothesis Three: The cooperative farming system Introduced by the project does not improve farmers capital base…….

Endnotes……

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction……

5.2 Summary……

5.3 Conclusion……

5.4 Recommendations……

5.4.1 Recommendation One:……..

5.4.2 Recommendation Two:……

5.4.3 Recommendation Three……..

5.4.4 Recommendation Four……..

5.4.5 Recommendation Five……

5.4.6 Recommendation Six……..

5.4.7 Recommendation Seven……..

Endnotes……..

Bibliography……

Appendix (1)……

LIST OF TABLE AND FIGURES **PAGE**

Table 1.1 Sample Sizes Of Respondents……

Table 3.1 Organisational Chart Of Maigana Zone……

Table 4.1 Geographical Spread Of The Respondents……

Table 4.2 Household Sizes Of The Respondents……..

Table 4.3 Land Holding Pattern Of Respondents……

Table 4.4 Respondents View On Whether They Are Aware of The Existence of KADP…….

Table 4.5 Respondents View On Whether They Are Benefiting From Any Of The Agricultural Inputs Provided By The Project……

Table 4.6 Respondent View On Whether They Are Engaged On Dry-Season Farming Introduced By The KADP…….

Table 4.7 Respondents View On Why They Don't Engage On Dry Season Farming……

Table 4.8 Number Of Roads Constructed By The Project…….

Table 4.9 Opinion Of Those Whose Villages Have Benefited From The Rural Road Scheme Of The KADP……

Table 4.10 Respondents View On The Impact Of The Roads Constructed On The Rural Economy…….

Table 4.11 Respondents View On Whether Their Villages Have Benefited From The Water Supply Scheme Of The KADP……

Table 4.12 Respondents Opinion On The Impact Of The Water Supply Scheme On Their Community……

Table 4.13 Respondents View On Whether There Is Any Increase In The Farm Output Since Coming Into Contact With The KADP……

Table 4.14 Opinion Of Respondents On What Input They Patronize……

Table 4.15 Respondents View On How They Get Their Farming Inputs……..

Table 4.16 Opinion, Of Farmers On Whether KADP Is Making Any Significant Contribution To Their Improve Income……

Table 4.17 Respondent View On Whether Their Income Has Improved In Recent Times……

Table 4.18 Opinion Of Respondents On Regularity Of Visits By Extension Agents To Farms……..

Table 4.19 Opinion Given By Extension Agents To Farmers……

Table 4.20 Response Why The Answer To Question 4.19 Is Negative……

Table 4.21 Respondents View On What Constitutes A Major Problem To Them……

Table 4.22 Respondents View On How They Secure Loans……

Table 4.23 The Level Of Participation Of Farmers In Co-Operative Farming System……

Table 4.24 Opinion Of Respondents On Who Leads Their Co-Operative Society……

Table 4.25 Response On The Question On How Many Ox-Plough Implement A House Hold Possess……..

Table 4.26 Respondents Opinion On How The Acquire Their Ox-Plough Implements……

Table 4.27 Opinion Of Respondents On What Contribution their Membership of a co-operative society made on their income……

Table 4.28 Respondents View On What Areas The KADP Did So Well…….

SELECTED BIBLIOGRAPHY

A. Published Books

Adelma, E. Theories of Economic Growth and Development Oxford University Press, London, 1976.

Alkali, R.A The World Bank and Nigeria; Cornucopia or Pandora's Box? Baraka Press, Kaduna, 1997.

Akin, M. The Development Process: spatial perspective, Hutchinson University Press, U.K, 1974.

Dunmoye, R.A "Agriculture and Economic Growth: With special Reference to Developing Countries" In Okello, O. (ed) The Nigerian Alternatives, A.B.U. Press, Zaria, 1987.

Frank, A.G. The Development of Under development" In Rhodes, I.R. (ed). Imperialism and Under development, monthly Review press.

Hollander, S. The Economics of Adam Smith, University of Toronto Press, 1973.

Hill, P. Rural Hausa: A village and a setting, Cambridge press, U.K. 1972.

Idachaba, F.S. Concepts and strategies of Integrated Rural Development: Lessons From Nigeria's Food policy. University of Ibadan Press, 1986.

Jhingan, M.L. The Economic Development and planning, Vikas publishing House, India 1980.\

Long, N. Introduction to sociology of Rural Development, Tavistock publication, London, 1977.

Lury, D. A. Monitoring and Evaluating Agricultural and Rural Development Programmes, John Hopkins University publication, Baltimore, 1983.

Lele, U. The Design of Rural Development, Baltimore and John Hopkins University Press 1975.

Moore, W.E. Social Change, Prentice Hall Inc, New Jersey, U.S.A., 1963.

Musa, A.B. Struggle for social and Economic Change, NNPC, Zaria, 1982.

Mauder, H. Agricultural Extension: A Reference Manual, F.A.O., Rome, 1972.

Mosher, A.T. Thinking about Rural Development Agricultural Development, Inc, 1976.

Nwosu, E.J. "Rural Development as a Factor in National Development" In Amucheazi, E.C. (ed) Readings in Social Sciences: Issues In National Development, Fourth Dimensions publishers, Enugu, 1980.

Olatubonsun, D. Nigeria's Neglected Rural Majority, Oxford University Press Ibadan 1975.

Obibiaku, L.O. Agricultural Extension as a strategy for Agricultural Transformation, University of Nigeria Press, Nsukka, 1983.

Rondelli, D.A. Planning Development Project, Dowden Hutchinson and Ross Inc New York, 1977.

Riggs, F.W. "The idea of Development Administration" In Wiedner, E. (ed) Development Administration In Development Countries. Oxford University Press, London, 1976.

Rodney, W. How Europe Underdeveloped Africa, Tanzania publishing House Dare slam, 1976

Rostow, W.W. Stages of Economic Growth: A non Communist Manifestoes, Cambridge University press, London, 1980.

Sarjat, A. Rural Development: Learning from China, Macmillan, Hong Kong, 1980.

Smelser, N.Z. Social Change In Industrial Revolution, Rutledge and Keg an Paul, New York, 1959.

Soala, E.O. "Agricultural Communication In Nigeria Non-literate Farmer", In Nwureli, O.E. (ed) Communications of Human needs In Nigeria. Blind Beggars Press, New York, 1988.

Wu, C.Y. "The Nature of Modern Development", In Wiedner, E.N. (ed) Development of under developed Countries, Oxford University press, London, 1976.

Williams S.K.T. Rural Development In Nigeria, University of Ife press, 1978.

Wilber, C.K. The Political Economy of Development and Under development, Random House New York, 1973.

Wesis, C. Evaluative Research: Method of Assessing programme Effectiveness, prentice Hall, New York, 1972.

Williams, G. What disequilibrium? People land and food in Nigeria, in Francis Gendrea etaal les spectures de malhus, ORSTONI – ENCEDPED, Paris, 1991.

- - World Development Report, Oxford University press, 1990.

JOURNALS/ ARTICLES AND REPORTS

Arua, E.O. "Improving Rural Development Administration in Nigera" Applied Science Publication Vol. 5. 1978.

Ebong, I.J "Nigerian Social objectives and Rural sector", In Rural Development in Nigeria. Conference of Economic society, Ibadan, 1973.

Famoriyo, S. "Rural Development Revisited" In Rural Under development in Nigeria 1900 – 1980.Political science seminar Vol II, 1985.

F.A.O. "Integrated rural Development an introduction" (Rome, 1978).

FDRD, "A Decade of ADP'S in Nigeria" Ten years of progress" (Lagos, 1986).

Okoh, J. "World Bank – Aided project and Rural Development in Nigeria – a critical Analysis," In political science Journal Vol III No., 1980.

- Encyclopedia of science and Technology, (Macmillan press, London, 1974).

. The World Bank, State ADP loan 2436 UNI) WB publication (Washington DC, 1989).

KADP, Quarterly Report (September – December 1996).

KADP, Annual Report (1998)

KADP, Kaduna/Katsina ADP (Re-Designed Kaduna ADP Loan)
- Proposed Amendments to the loan and project Agreement, (WB Washington DC 1986)

KADP, KADP, Objectives and Achievements, (1990)

KADP, Annual Report (1997)

Ollawa, P.E. "Approaches to the study of Development and Underdevelopment: A critical overview" paper presented at the Annual conference of the Nigerian Political science Association," (N0 9, p.9)

Opio Odongo, J.A. The inertia of Rural Development in Hausa land: An explication of a structural incongruence Hypotheses, presented at Rural Development seminar, (Bagauda lake Hotel Kano 1980).

OgunFowara, O. "Income and Employment potentials of credit and Technology in peasant farming" Nigerian Rural Development study (vol 9, 1890)

Okello, O. "Participation and food policy 1975 – 80," Paper presented at the Conference on Rural Hausa society, (Kano 1980)

Ogundana,B. "Transport constraints on Rural Development in Nigeria," Conference on Economic Society. (Ibadan, 1972).

Wallace, T. "Agricultural projects and Land" Conference on change in Rural Hausa Society, (Kano, 1980)

World Bank "Appraisal Report of KADP" (WB Report No 2436 Uni, 1997),

See New Nigeria (August, 8, 1985).

UNPUBLISHED THESIS/PROJECTS

Kura, A.A FADP: A strategy for Rural Development: With special Reference to Kaduna State, Diploma project University of Reading. U.K. 1981.

Kunwai, N. The political Economy of Rural Development; A case study of the FADP in Bakori District M.Sc Thesis A.B.U. Zaria 1980.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Before Nigeria became an exporter of crude oil in the early1970's, the rural sector of the nations economy was the main foreign exchange earner. The country earns the bulk of its foreign exchange from the sale of agricultural products. This notwithstanding, the rural sector of the nations economy has over the years been neglected by various governments in terms of the provision of basic social amenities and physical economic infrastructures.

This period is commonly referred to as the oil boom era. The increased affluence emanating thereafter resulted in an unprecedented migration of youths from the rural areas to the urban centers, leaving behind, the children, old men and women whose farm labour input could no longer sustain the production of food to feed the nation. In response to the resulting food shortages, government resulted to massive food importation, thus, draining the nations scarce foreign exchange earnings.

In realization of the need to make the nation self-sufficient in local food production, and the need to change the trend successive administration in the country have necessarily adopted and operated many approaches to rural and agricultural transformation programmes.

Precisely, it was in the third National Development plan of 1975 – 1980 that the Federal Government started to emphasize the setting up of programmes that would benefit the rural populace.[1] The Federal Government with the assistance of the World Bank Commissioned three pilot Agricultural Development Projects (ADP) in 1975 at Funtua, Gombe and Gusau.[2] The main objective of these projects was to ensure increased agricultural productivity and the general improvement of the living standard of the rural dwellers. To date the federal Government has extended these ADP's to cover the whole federation. One of these is the Kaduna Agricultural Development Project (KADP).

The interest in the topic could be traced to the prevailing concern for rural transformation as manifested in development of most developing nations the world over. Most of these developing nations have of recent shifted their development emphasis from developing their urban sector to the development of the rural areas. This is reflected by the huge increase in the number of rural development programmes being undertaken by national governments with the assistance of external donors.[3]

This emergent concern for rural development is not only of interest to the policy makers of the developing nations. Scholars, students of development administration have similarly of recent shown interest and a number of studies have been undertaken aimed at evolving workable rural

development strategy that would serve as a lasting solution to the problem of our rural population.

1.2 Statement Of The Problem

Nigeria's need for Agricultural Development has been considered to be one of the most important aspect of its economic growth. This arises in the face of steadily increasing population, dwindling external reserves and the global uncertainty about the future of oil, the nations major foreign exchange earner. The causes of agricultural failures in Nigeria and the prospects of solution have been subject of debate among policy makers and development economist. Yet the problem have persisted. But this is not to say that the possibility of eliminating the causes of failures does not exist.

Development in Africa means essentially the improvement of Agricultural, Physical and social development of rural areas which contain not only the over-whelming majority of the population, but the most ill fed, ill-housed sector of the African continent. The above view assumes that, rural areas have roles to play in the nations efforts towards national development.

Accordingly, solar buttressed the above position when he said;

Products of rural areas in Nigeria boost

Export earnings; it constitutes a vast

Consumer market for industrial goods;
Political independence became more
meaningful when backed by self-sufficiency
in food production and in a nation with
embarrassingly high unemployment statistics;
a growing sense of job insecurity in both
private and public sector, an improved rural
economy can serve as a disincentive for rural
migration. In recognisation of these roles,
*rapid rural development and modernizat*ion *are*
now gaining the attention of governments. [4]

In light of the above, ADP's are seen by some scholars as instruments for sustained economic growth and development not only to the rural sector but also on the whole country. That is why most African nations adopted them in order to improve and transform their rural sector.

Olatunbosun has observed that:

The large gap between potential economic
Opportunities and realized development in
the rural sector is explained by the motivation of these who control the allocation of national resources and those who misallocate these resources thereby causing under utilization, non –use and mis-use of natural, human and material resources.

> It will appear that the greatest obstacle to successful rural development in Nigeria can be traced to the character of the political leadership that is not committed to rural transformation and the absence of a rural development ideology.[5]

The above view have clearly shown that rural areas of the country re not only neglected but are also exploited by the urban centers via policy making institutions. This neglect is achieved mainly through the utilization of resources produced by the rural sector for the benefit of the urban sector.

Another factor which tries to explain the poor performance of the rural sector cannot be unconnected to the problem of 'Rural Poverty', which Nurkse explained using two angles: Namely: The demand and supply angles. From the supply angle, he argued that poverty will emanate when small capacity to save results in low level of real in come which will lead to low productivity.[6] Low productivity in this sense will result to low capital formation which is a pre-condition of small capacity to save and invest. Thus the sequence continues until there is a break even.

On the demand angle he argued that, poverty will result when the inducement to invest is low because of low purchasing power which has resulted from low per capital income, a condition that is dictated by low productivity and poor capital formation.[7] All these move in a vicious and chronic cycle that perpetuate and consolidate poverty.

The apparent consequence of this development as noted earlier is the desire of the rural youths to migrate to the urban sector in search of a better standard of living.

The study recognized that, even though many agricultural and rural transformation programmes have been considered and conceived since independence very little has been achieved in this area of rural transformation. To this end it has been noted that, in spite of the concern being shown by different governments both federal and states in this country the rural areas have remained virtually undeveloped. This argument on rural under development was statistically illustrated by Nwosu when he said:

> Studies have shown that the benefit of government expenditures on education, health, water supply, industries and roads in Nigeria are concentrated almost exclusively in urban centers. Substantially less than 30 percent of total government expenditure is designed for the benefit of rural communities who make up more than 70 percent of the population ……. And of the N1,560 million planned public investment, only N280 million or 18 percent was directed on indirect in vestment in the rural area during the 1970 –74 plan period. [8]

The above position have shown that, rural areas in this country are often exploited and neglected which resulted in their being undeveloped. Therefore the main thrust of this study is to examine the impact of Kaduna Agricultural Development Project (KADP) MADP on the rural transformation effort.

In view of previous attempts did the KADP succeeded in their rural transformation mission? Have we at last found the best approach to rural development? If not what are the various handicaps the KADP is facing in the process? And what suggestions could be advanced for better performance?

1.3 Aims Of The Study

Based on the above problem identified, it is the general objectives of this study to:

- Investigate the extent to which rural poverty constitute the main reason why the rural areas of this country are undeveloped.
- Find out whether there is nothing positive about the ADP's to warrant government continued patronage .
- Examine to what extent does the rural development policies Provide an avenue to bridge the gap between the rural and urban areas of the country.

- Examine the relationship between the cooperative farming system introduced by the project and the improvement of the rural economy.
- Finally, the out come of this study should provide answers to some critical questions, the answers should be related to: continue or discontinue such a project; improve its practices; to add or drop specific programme; and to accept or reject (the) programme approach or theory altogether.

1.4 Hypotheses Of The Study

In view of the above stated aims, the following hypotheses were tested thus:-

- The feeder roads and earth dams scheme introduced by the project does not have significant impact on the rural economy.
- There is no relationship between an improved rural economy and the activities of the project.
- The cooperative farming system introduced by the project does not improve the farmers capital base.

Scope And Limitations Of The Study

Various programes aimed at enhancing the development of the Rural sector of the country have been conceived since independence. This study is not aimed at examining the impact of the KADP on rural transformation on a state wide level; but the study is narrowed down to one of the four zones of the project the MADP. And it will cover the period between 1993-1998. This is because the information required can only be adequately obtained within the scope specified. Therefore, restrictions are placed on the generalizations of the results within these limits.

Limitations: The limitations of the scope of this investigation to only one zone is due largely to limited resources, time and material resources available to the investigator. Also, as expected in a research of this nature, some important documents that are tagged top secret were made inaccessible. These and some others are the limitations encountered in the course of conducting this research.

1.6 Significance Of The Study

The justification of the study lies in ones ability to lay bare [given available evidence and reliable data].the real impact of the ADP on the target population. The out come of the investigation should provide the proof that will justify (or not) the government continued patronage of such a project on one hand, legitimize (or otherwise) the society continued support for such a project now or in the future.

Shedding more light on the significance of such a study, Wesis argued that its out come should answer some basic questions that will be of interest to policy makers. The answers should be related to the following:

"…… to continue or discontinue such a project; to improve its practices or procedures; to add or drop specific programme; and to accept or reject (the) programme approach or theory".[9]

Furthermore, the research in this area is significant in that, the finding would bring to light issues that might be of interest not only to the administrators of the MADP of the KADP, but also to some extent the administrators of similar agencies nation-wide.

Finally, studies carried out in this area so far were mainly on the activities of the earlier pilot projects such as the Funtua Agricultural Development Project (FADP) Gusau Agricultural Development Project (GADP) and the Ayangba Agricultural Development project (AADP) to mention just a few. But with this study on one of the oldest state wide schemes it is hoped that its findings would be of immense academic and practical value to the KADP in particular and the country in general.

1.7 Methodology Of The Study

When the problem has been formally stated, the researcher's task is to set forth some idea of what direction the investigation should take. Starting out to collect data is much the same. It must be done in an organized way. Therefore in determining the impact of the MADP on rural transformation two types of data collection technique was used in order to collect and analyse data.

1.7.1 Sources Of Data

Primary Data

For the purpose of this investigation both the questionnaire and face to face interview technique for the collection of primary data to test the research hypotheses was made use of. The people interviewed in the course of this study includes some principal officers of the KADP and MADP whose duties have a bearing on the research problem.

The questionnaire method of data collection constituted the major source of compiling the primary data in this study. The relevance of this method in data gathering is indisputable, especially in an area where there is low literacy level among the farming households sampled.

Secondary data:

This type of data was relied upon to arrive at the pre-project out-put, income level, farm size and other information during the research scope. The major source of those information were; the KADP quarterly reports on the project as complied by the coordinating unit i.e the Federal Agricultural coordinating unit (FACU) and project Monitoring and Evaluating unit (PMEU), while, some independent research reports contributed some of the data used in this study.

1.7.2 Population And Sample Size

Sampling is "the procedure by which we take any part of the population or universe as a representative of the whole".[10] In undertaking a research of this nature where the population is large sampling is of the outmost importance. Therefore, a stratified quota sampling technique was adopted.

First, the whole population under study was divided into four operational strata out of the eight local government areas in the zone. For convenience purpose from each of the local governments one district was chosen from which a further choice of the two villages was made. Even though, the choice of our sample may appear two small, it should be noted that the choice itself is based on a logical consideration of the nature of the farming population of the zone which exhibits a high degree of cultural homogeneity. This homogenous nature makes a relatively small sample size of 200 respondents representative of the views of the 310,000 farming families of the zone.

For the purpose of fairness and as a further testimony to the homogeneity of our area of study, each local government was allowed an equal number of 50 respondents that cut across various age group and farm size. 50 respondents for each local government brought our total to 200 respondents.

TABLE 1.1 Samples Size of Respondents

Development District	Number of Villages Sampled	No of selects Respondents
Soba	2	50
Zaria	2	50
Ikara	2	50
Giwa	2	50
4	**8**	**200**

Source: Personal Survey 2001

1.7.3 Data Analysis

One need to emphasis here that the quality of data collected is assumed to be suitable for deducing reasonable deductions, based on certain premises. These premises are; that more than a sizable number of respondents in the sample were involved in the project activities in the project areas. Participation in these areas is assumed to mean input purchase, benefit from extension services and adoption of new farming methods. And, an appreciable percentage of the respondents have farming as their main occupation.

In view of the type and nature of raw data obtained from our data collection technique, the statistical approach was adopted in analyzing the data such as calculations of percentages and frequencies and the presentation of such data in figures and tabular form. This method is used in measuring and assessing the impact of the KADP in their rural transformation mission.

1.8 Plan Of The Thesis

The thesis is divided into five chapters. The first chapter is the introduction and deals with the statement of the problem and aims of the study. It also covers the hypotheses to be tested, methodology of the research, justification of the study and also the definition of major terms. The second chapter is review of related literature in the bid to appreciate and also gain from already existing literature on similar problem. It consists the theoretical frame work of the study which was located within the available theories of agricultural development.

The third chapter is a historical analysis of the KADP so as to trace the specific events that led to its emergence in 1985, its management and the way its activities are implemented. The fourth chapter provides the core of the theses when the data collected during the course of the study is analysed in order to assess the impact of the ADP on rural transformation. The last chapter dwell on the summary and conclusions of the study,

recommendations are also put forward in respect of adopting the ADP's as a tool for agricultural and rural development in Nigeria.

1.9 **Definition Of Major Terms**

(i) **Rural Transformation:**

The term that needs to be clearly defined is rural transformation. The term is used in this study as being synonymous with rural development. And it was defined as; "the outcome of a series of qualitative changes occurring among a given rural population whose converging effects indicate in time arise in the standard of living and favourable changes in the way of the life of the concerned people"[11]

From another angle, Okoh J. defined the term as:

The development of rural occupations
(by increasing agricultural productivity as well
as improving other rural occupations thereby
increasing the per capita income) and developing
his level of awareness through education ensuring
his full participation in his affairs and improving
his standard of living by the provision of the
basic social amenities (viz, health services,
education, good roads, water supply housing,

agricultural inputs, etc).[12]

In a nutshell, rural, transformation simply implies, increasing agricultural productivity and thus raising the income and standard of living of the rural dwellers.

(ii) **Agricultural Development Project**

(ADP) A.D.P. is defined as,

"… a trend in the technologies and organization that increasingly brings all present and potential farm land into its most effective use with increasing agricultural production per farm worker".[13]

(iii) **Programme:**

The term programme is defined as "a plan of intended proceedings".[14] But for the purpose of this study the term is considered as a plan of things to be implemented, a programme to be implemented usually broken into specific projects.

(iv) **Project**

Rondelli. defined the term as:

A scheme or undertaking, which provides channels for public and private investments, pre-channel unused or under-employed resources into productive use and offer, extended opportunities for entrepreneurship.[15]

For our study the term project is used to mean the deliberate design channel of implementing policy objectives and targets.

(v) **Impact**

Another term that needs definition is impact. The term means "a method of measuring final and total result, taking into consideration cover and overt effects.[16]

ENDNOTES

1. B.D. Sule: The impact of Ayangba Agricultural Development Project on Rural Development in Igalaland, Unpublished M.P.A. Theses, Ahmadu Bello University, Zaria (1982). P. 30

2. Ibid:

3. U. Lele: The Design of Rural Development, Baltimore and John Hopkins University Press, (1975) P.6

4. E.O. Soola: "Agricultural Communication in Nigeria - Non-literate farmer" In O. E. Nwureli (ed) Communications of Human Needs in Nigeria. Blind Beggars Press, New York, (1986) P.78.

5. D. Olatunbosun: Nigeria's Neglected Rural Majority, Oxford University Press, Ibadan, (1975) P.57.

6. C.K. Wilber: The Political Economy of Development and underdevelopment Random House, New York, (1973) P.225.

7. Ibid, P. 225:

8. E.J. Nwosu: "Rural Development as a factor in National Development" In Amucheazi, E.C. (Ed) Readings in social Sciences : Issues in National Development, h Dimensions publishers, Enugu (1980) P.IO5.

9. C. Wesis, Evaluative Research: Method of Assessing Programme Effectiveness. Prentice Hall, New York, (1972) P.12

10. Ibid P.41

11. United Nations; Integrated Approach to rural Development in Africa (1971), p.17

12. J. Okoh, "World Bank – aided project and Rural Development in Nigeria – A Critical Analysis" In Political Science Journal, Vol.3 No1 (1980) p.31.

13. A.T. Mosher, Thinking About Rural Development, New York Agricultural Development Inc, (1976) p.11.

14. Ibid, P.5

15. D.A. Rondelli Planning Development Projects Dow den Hutchinson and Ross inc, NY (1977) p.1.

16. D.J. Casey, and D.A. Lury, Monitoring and Evaluating Agricultural and Rural Development Programmes, John Hopkins University Publication Baltimore (1982), p.3.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter is divided into two. The first part is the literature review. Which is intended to discuss the position of various writers and documents that will form the basis of our study. Literature to be looked at include those on the concept of Development, Agriculture, Rural Transformation and work of various scholars on the role of Agricultural development Projects (ADP's). The next part seeks to establish and examine the theoretical framework that would form the basis of the entire research.

2.2 Concept Of Development

Development is a wide and a multi faceted concept. It has been growing in scope and substance since the beginning of civilisation. So development is a complex phenomenon comprising so many dimensions. People talk of economic development, social development, political development and so on.

In his view Walter Rodney sees development in human societies "as a many sided process, development at individual level means an increase in skills and capacity for greater freedom, creativity, self discipline, responsibility and material well being".[1] He calls those aspects personal development which are tied with the state or society as a whole.

He also views development from the economic position when he said:

> A society develops economically as its members increase jointly their capacity for dealing with the environment, which is dependent upon the extent to which they put that understanding into practice by devising tools (technology) and on the manner on which work is organized.[2]

Therefore, to Rodney, economic development is the "over all tendency towards increased production… the increase in quality and quantity of goods was associated with the change in the quality and character of the society."[3]. He further argued that, "development can not be seen purely on economic terms but rather as an over all process which is dependent upon the out come of man's effort to deal with his natural environment".[4]

Riggs on the other hand sees development as "increasing efficiency, reducing costs, and improving the machinery of production and of government" [5]. He also talks of justice, freedom, independence, equality, change or even revolution. He goes on to say that:

> Development involves the ability to choose whether or not increase out-puts, whether or not to raise the level of per capita income or to direct energies to other goals to the more equitable distribution of what is available,

to as the tics or spiritual values of the

qualitatively different kind of out-put.[6]

Riggs position on development is quite similar to the position of Adelma. This is true because, he sees development as; the process by which an economy is transformed from one whose growth rate per capital income is small or negative to one in which significant self-sustained rate of increase per-capital income is a permanent long run feature.[7] This argument centered solely on growth model as the only indicator of development which is narrow when compared to the position of other writers.

Development and its measurement implied that certain basic things are met in any given society and at any given point in time. The position was best captured by Dudley seers when he said- that, "the questions to ask about a country's development are three.

- What has been happening to poverty?
- What has been happening to unemployment? And
- What has been happening to inequality? If all three of those have decline from high level, than beyond doubt this has been a period of development for the country concerned".[8]

From the above point, development can simply be said to be

the dynamic process of the movement of

all phenomena, from simple to more complex

levels, through the multidirectional conflicts

and unity of two element, viz, quantitative growth and qualitative change of the given Phenomena. At the level of society this must lead to imposed material welfare of the people in the society.[9]

This therefore shows that, development is the absence of poverty, unemployment and inequality in a society.

But Wu's idea of development is contrary to the above position. In that, he believes that, development is "a process of societal transformation from a traditional society to a modern one, and such transformation is also known as modernization".[10] So development is a multifaceted concept in all dimensions as it can be economic, social, political, moral e.t.c.

2.3 Concept of Agricultural Development

Agriculture has been described by the encyclopedia of science and technology as:

"The production of plants and animals useful to human beings, including cultivation of soil, management of livestock, to a variable extent, agriculture involves the preparation of plants and animal production for use by human beings".[11]

Smith, A. on the other hand is of the view that, the economic wed-being (and growth) of society is basically dependent on agriculture because:

Agriculture is of all arts the most beneficial

to society: and what ever tends to retards
Its improvement is extremely prejudicial
to the public interest. The produce of
agriculture is much greater than of any other…
what ever measures therefore discourages the
improvement of this art are extremely
prejudicial to the progress of opulence.[12]

The above view by smith, was not unconnected with the fact that, "the high percentage of agriculture's contribution to the British economy in 1763, before the advent of imperialism and capitalism is similar to what obtained in most developing countries now, where agriculture contribute more than forty percent of the Gross Domestic Product (GDP) in each country".[13]

From the fore going, agricultural development can be said to be, "a situation where a society can cater for all is its food supply and doesn't depend on any country for food resources to be brought in".[14]

Thus, agricultural development is the foundation upon which all others were built on.

Obibiaku, L.O argued that, "agricultural development entails the acquisition and use of skills, attitudes, values and knowledge gained from research that brings about increased yield to the farmer which. …Increases his welfare as well as his adoption of improved seedlings"[15]

This therefore shows that, agricultural development implies, the improvement of agricultural potentials of a nation as well as other resources, human and material, in order to enhance the people's socio-economic status. This is predicated on the fact that agriculture have been recognized as an important sector in the Nigerian economy.[16]

For agricultural development, agricultural extension was regarded as an important task in various agricultural development functions. It was promoted through, visits, demonstrations, model farms and field days. Through home economics women have also been brought to acquire useful techniques in the management of their home and through young farmers club, the young have been trained to love agriculture and to promote it. Agricultural extension brings together theories and practices of agricultural development.[17]

Agricultural development has also been viewed to involve "agricultural expansion where more land is brought under production". [18] Another view of agricultural development is in the form of increased production per hectare of cropland. This involves changes in production capacity of land and change in crop and livestock practices".[19] It may also be considered as "being synonymous to agricultural transformation, which is a situation where changes and improvement in agricultural production occurs in such a way that will allow workers to shift from agriculture to other economic activities".[20]

The implication of the above positions is that, the most relevant concepts of agricultural development to Nigerian case are:

> Increasing out-put per hectare of land and per worker by appropriate change in form of out-puts and products; and agricultural expansion by increasing more land into cultivation through the use of improved technology. These may be considered effective, when we look at the fact, that out of seventy-eight percent of the agricultural land in Nigeria, only about thirty-eight percent is utilized for production.[21]

2.4 **Rural Transformation**

Development in the third world is essentially about rural development, but development is not synonymous with rural development. The use of the term rural as a geographical entity is just for analytical purpose. A rural area is part and parcel of the nation as a whole. Rural development is not a distinct phenomena of its own. The development of a country cannot be measured only from the urban sector. Rural development is the most logical means of developing a country.

There is no consensus as to what rural transformation means. To some people rural development is the same with agricultural development,

that, agriculture is the dominant occupation of the rural populace. This is because the lives of the rural dwellers are centered around agriculture, so to them it is how to raise productivity in agriculture. While others conceive the process of rural development as "Involving efforts made to increase the level of per capital income in the rural areas and also increasing the standard of living of the rural population in general".[22] Most of the programmes of rural development' in Nigeria are in fact associated with the achievement of these twin objectives.

According to the United Nations Economic Commission for Africa (UNECA) which has been in the fore front in the projection of this concept,

> Rural development should be viewed in an integrated milieu, calling for a set of policies and projects so designed and coordinated that it will raise and sustain the standard of living of the rural population as a whole.
>
> …… as a concept, rural development should be analysed both from the stand point of increased production…… and from the stand point of social advancement arising from a higher level of income and consumption, and the satisfaction of human needs above the basic.[23]

The above explains that the human factor is the most important factor in rural development. But Uma Lele a renowned economist perceives rural transformation to mean "improving the living condition of the mass of the income population residing in the rural areas and making the process of their development self-sustaining".[24]

Her position above raised three major issues, which are central to rural transformation viz:

(i) improving the living standard of the rural dwellers,

(ii) the process should be self sustaining and,

(iii) educating the rural dwellers on how they improve their social well-being and the process should be continuous.

While Nwosu is of the opinion that, governments initiates rural transformation programmes because, "the growth of the national economy and its inherent strength… are bound to be dependent to a very large extent on governments performance on the rural sector".[25]

Contributing on the same idea Arua argued that, "the aim of government in taking to (rural) development activities is to build a semi subsistence economy into a developed independent economy". [26] A through examination of those statements indicated that, they are aimed at justifying the need to incorporate rural economies into the national scheme of things. Their arguments were based on the assumption that, rural oriented programmes are necessary because; the rural sector makes its contribution

to the Nigeria economy through the provision of agricultural labor force as well as non-agricultural employment through occupations such as cloth weaving, trading, blacksmittery, provision of raw materials for the growing industries e. t. c.

It is in view of these statements that, liberal writers proposed huge capital investments so as to resuscitate the rural economy. This model of procuring rural development is capitalist in nature and has no doubt gain grounds in Nigeria, especially when one view the level of world bank capital investment in ADP's in the country. This position has no doubt prompted profound criticisms from the socialist – inclined writers, who objected to the notion put forward by the liberals that, "rural oriented programmes have saviors inclinations".

Idachaba, is of the view that, the reason why government participate in rural transformation programmes is "more of a response to the needs of the urban political economy than the response to the yearning of the rural people".[27] He said that the level of the government response to rural poverty and problem indicates the seriousness to which the problem have affected the urban political economy.

The above position is shared with Umalele, as she is of the opinion that:

> Most programes particularly rural transformation programmes failed because of lack of consideration

> of the socio-economic and institutional environment in which the programmes were to be implemented. Accordingly, programmes were rarely designed with a view to anticipate the effects of socio-political factors in response to intervention.[28]

Agreeing with Lele's position Mabogunje remarked that, rural transformation should include;

A broad based re-organisation and mobilization of the rural dwellers so as to enhance their capacity to cope effectively with their daily needs…. And the changes consequent upon this.[29]

Mabogunje's position on rural development is correct, this is because the central issues in rural development is, or should be, the development of the rural person both economically (increasing agricultural productivity and hence per capita income) and socio-culturally (increasing the level of awareness of rural dwellers, encouraging full participation in their affairs and increasing the standard of living of the rural population).

2.5 **Case Studies On ADP**

Another area that is dealt with extensively in this review is the out-come of the performances of ADP's in their rural transformation mission. For this reason the work of Wallace Tina, deserve a mention.

In her study on the impact of the ADPs on the farmers relationship to land, she have this say,

"…….where credit, extension advice, technology are concentrated on the wealthier, influential farmers. It is not surprising that land is changing hands and the mass of the people are either unable to participate or are being forced off the project land altogether". 30

Tina's position is useful in examining the performance of the ADPs on rural transformation. It is self-defeating for a project established supposedly towards raising the living standard of the rural dwellers, but at the same time concentrating its activities on the large-scale farmers. Through her finding, we can assume that the project have failed in their rural development target.

However, her findings are based on one factor variable: the agricultural development aspect of the ADP's. Though, one major objective of these projects is to increase agricultural out put, they however, provide some basic infrastructures and social services such as, bore holes, earth dams, feeder, roads, extension service e.t.c. The study failed to show how those other variables in a combined form contribute to rural transformation, which this study undertakes.

Another writer who undertakes a one-factor study of the ADP's was Ogundana, when he studied the role of transportation in rural development. To him, poor transportation constitutes a problem on rural transformation by "imposing serious penalties on the more isolated areas which are denied

profitable avenues of activity which could have been possible if there are better transport facilities".[31]

His argument suffered the same fate as that Wallace above, as he too neglected the role of other variable in rural development. The result of other studies on the performance of Funtua Agricultural Development Project (FADP) in the area of rural transformation is some what contradictory.

In his study Kungai saw the activities of the FADP as "mere continuation of the imperialist strategy of rural transformation". To him, the project was established primarily to, "open markets for machinery, fertilizers, experts etc for which there are no markets in Europe and America, as well as, to get the raw material they needed". [33]

The project to him is thus aimed at, consolidating the imperialist domination and oppression of the neocolonial people. It is for this reason that the FADP is not regarded as an institution established for the transformation of the rural areas. But on the contrary, the project enriched the local bourgeoisie and the middle class peasants thus further creating rural poverty.

While the study by Kura on the other hand saw the FADP as having achieved its rural transformation goal. He is of the view that;

> The standard of living of the people living around the project area has risen in comparison with the pre-project standards. He cited… the new activities in

> the area like erecting of modern buildings, Motor cars and trucks as some of the Indicators of rural change brought above by the project. [34]

In one of his studies on the ADPs Oculi is of the view that:

> The potential for the farmers within the project area to increase their income does exist. However the problem of inequality manifest itself when they are compared with farmers who are not within the project area……. Internal inequalities exist within the project area as the large scale farmers devote more of their land to the high income earning crops such as cotton, maize and tall guinea corn.[35]

Oculi's study is analytical in that, it did not only examine the increase in income but how the income increase resulted in inequality both within and outside the project area. The findings of this study is of importance to this research. Sharing similar opinion with oculi, Williams noted that, "the main achievements of the APD's were building of rural roads, small dams and the distribution of High yielding variety (HYV) maize seed and other inputs." [36] But in the process the projects also provided convenient avenue for the creation of absentees large-scale farmers. As Williams, noted that";

> Although their concern was to promote
> small holder agriculture, the ADP's contributed
> to the growth of large scale capitalist farmers.
> The most prominent are retired generals and …….
> Some of the most successful are rural
> based farmers traders.[37]

The above argument note with standing, in official terms it appears that, the ADP's have been a huge success. In 1986, ten years after the first pilot programmes were established, the World Bank celebrated the first decade of their involvement in agriculture in Nigeria in Kaduna with a lot of fan fare.

According to the Federal Department of Rural Development (FDRD) the ADP's in the country have succeeded in their rural transformation goal because; "against the background of their targets, achievements and effectiveness, the ADP's have eloquently depended their continued sponsorship in Nigeria". [38]

One evidence of this success; according to the FDRD was that; In the period 1980-85, a total of 81 million Grain Equivalent (GE) of crops were produced by farmers in the ADP's areas. In addition, the report noted that, in terms of infrastructure, the 12 ADP's in operation as at 1986 had built a total of 601 farm service centers (FSC), constructed 5494 kilometers (KMS)

of rural road (and have maintained 3755 km's), established 101 dams; 3632 boreholes; 1661 well; and have constructed 910 various type of buildings. [39]

Yet, despite the apparent success of the ADP's in raising grains production; infrastructural development and in fertilizer use, two things stands out more clearly. In the first place, the impact of the ADP's on agricultural production was less successful than was initially advertised. Infact, in 1988, two years after celebrating ten years of ADP's in Nigeria, the Federal Government issued an official report in which it concluded that,

> Nigeria agriculture, despite all the investments over the years, had failed to achieve the most elementary goals and expectation of the nation. These expectation included the role agriculture as a major contributor to the Gross Domestic product (GDP); the contribution of the sector as a source of food, employment and export earnings. [40]

This has been an effort made at reviewing relevant literatures of not only the role of agriculture in the development process, but also the findings of earlier studies on the role of the ADP's in rural transformation. What has come out clearly is that, rural poverty and problems of agricultural productivity, must be explained in terms of a holistic analysis, that

integrates productivity technical change and other economic phenomenon with social and political factors.

Further more, since a higher percentage of third world farmers are small holders, any policy must take cognizance of that fact to be successful. It most also be recognized that, the best strategy for promoting over all economic growth and rural transformation is to exploit the positive inter relations between agriculture and other economic sector; development policies must not be biased against the agricultural sector alone.

2.6 Theoretical Framework

Introduction

The main rationale for the presentation of materials is that of identifying and critically evaluating dominant theoretical approach that could serve as a guide or orient the researcher in his examination of the problem understudy. A theoretical framework offers ways of selecting, conceptualizing, categorizing and ordering data relating to certain kinds of analytical problem.

Theoretical approaches to the study of rural transformation have been formulated in response to specific types of questions and have themselves influences the ways in which the problems have been posed. In this study on the impact of the ADP' on Rural Transformation; the writer based on the literature review established and adopted the "Modernisation Theory" of social change as the theoretical framework that would serve as a guide.

2.6.1 Historical Background Of The Theory

The theory is usually refereed to as the bourgeois theory of social change. The theory is an American intellectual response to the cold war competition between the capitalist west and the socialist East for the ideological support of the newly independent nations. The Modernization theory as a theoretical approach dominated the literature of development and underdevelopment in the late 1950's and early 1960's.

The idea at development during this time was simply equated with economic growth. The belief then was that, development could be achieved by "simply raising the level of a nation Gross National Product (GNP)". [41] This theory got its inspiration from the belief that, the western European model provided the under developed countries with the best avenue for economic transformation. What is simply needed was to provide those countries with comparable historical data associated with the western European developmental process.

The strategy for achieving those objectives includes;
The importation of modern technology, opening
Up of the developing countries economies to direct
Foreign Investments or, where necessary, through
borrowing of additional capital from multi-lateral

institutions such as the International

Bank for Reconstruction and Development

(IBRD) or the World Bank.[43]

Historically, the modernization theory was seen as an off short of the structural functionalist school of thought, and could be traced to early works of sociologists such as Emile Durkheim, Ferdinand Tonnies and Talcott Parsons, which was later adopted by American political scientist, mainly people like David Easton and Gabriel Almond.

The Talcott Parsons pattern variables and David Easton's conversion Functions; later refined by Gabriel Almond established models of societies based on dual polarities or dichotomy that is modern versus traditional in which the variable of traditionalism are direct opposites of and antithesis to modernization.

It was later that, W.W. Rostow took it to greater heights when commissioned by the IBRD, that he develop his theory of Economic Growth and together with David Apter and Lucian Pye argued that "for the developing countries, modernization and development have to come through a 'trickle-down-effect". [44]

In Nigeria and the developing countries in general, the problems of underdevelopment were seen in terms of lack of capital, absence of industrial technology and ineffective or weak domestic institutions. Within his context, "Modernization of agriculture and of the entire social

organization of production in line with the development in western Europe are often seen as essential pre-conditions for the development in Africa".[35]

2.6.2 Why Modernization Theory?

According to Wilbert Moore, the concept of modernization denotes;

> a total transformation of a traditional or pre-modern society into…. One that is associated with social organization that characterizes the advanced'. Economically prosperous, and relatively politically stable nations of the western world.[46]

Such a view is based on the assumption that, one can describe the general features of both, traditional and modern or advanced societies and thus, treat development as transformation of the one type into the other. Of the various attempts at establishing a model to depict these process, Smelser's model which is based on the idea of structural differentiation is perhaps the most captive of them all.

To Smelser, "a developed economy and society is characterized as highly differentiated structure and an undeveloped one is relatively lacking in differentiation: hence, changes centered on the process of differentiation itself." [47]

Smelser's model is not concerned with isolating economic determinants, but rather with describing the social transformations that accompany economic development, which he sees taking place through:

> The modernization of technology leading to a change from simple traditionalized techniques to the application of scientific knowledge; the commercialization of agriculture which is characterized by the move from subsistence farming to commercial and the industrialization precess, which depicts the transition from the use of human and animal power to machine power; and lastly, urbanization, which is the movement from farm villages towards the growth of large urban centers.[48]

However, it was the partial success of the Marshal Aid given to War devastated countries of Europe by the United States of America (U.S.A.) that encourage leaders of developing countries of the third word to assume that, given monetary and technical assistance their countries would take off into self-sustaining growth and development.

Another reason why the modernization theory was adopted as a theoretical framework, has to do with the fact that;

> The modernization theorists have over the year

served not only in the established government of Europe but even the United Nations (UN) and it institutions especially the IBRD and International Monetary Fund (I.M.F.) as experts, advisors and policy makers.[49]

The nature and direction of the flow of aid have always been patterned along their interest.

Put within the contest of this study of rural transformation, the theoretical framework sees the problem of under development as mere absence of, modern inputs, trained manpower, technology, new values and ideas. Development in this case depends on the "transfer of skills and technology from the more modern sector, just as national development requires diffusion of technique and expertise from the advanced nations".[50] A number of developing nations have received this kind of assistance including Nigeria from the IBRD and I.M.F. in their efforts towards the development of their rural areas.

The modernization theory can be applied to this study using the economic growth model presented by Henry Burton. The model is expressed using the following equation.

Yt = F [Knj, Lt, Ttj, Rt, St] where:

Yt is the total out-put

Knj is the capital,

Lt is the quantity of labour,

Ttj is the technological Improvement overtime,

Rt is the land and other natural resources, while,

St is the social and cultural factor.

He referred to labour capital in the model as the, direct factors in the growth process, while other variables are the indirect or position factors that simply influence the behavior of the direct variable. [51] But in adding the social and cultural factors in his model, he made the model more comprehensive in explaining how the modernization theory can bring about development.

Burtons model was able to show us that, development can be attained if a nation can raise its GNP through the injection of variables such as, labor, land, capital, technology etc, in the production process.

The Modernization theory as a strategy for rural transformation has been under serious criticism from the underdevelopment school of thought, a theoretical approach having its roots in the works of Karl Marx. To this set of scholars, even if a nation obtained monetary and technical assistance and increase the level of its net national product it would still not be regarded as being truly developed.

They argued that, "the little economic growth attained aggravated more than ever before the problem of income in equalities within their societies". [52]

Furthermore, if looked at within the contest of the dependency theory, development cannot be achieved through a trickle – down effect. And this is because, underdevelopment itself is seen as a historical condition arising from the incorporation of the developing countries into the international capitalist system, first, through slavery, then colonialism and finally through neo-colonization.

Andre G. frank captured the above statement more eloquently when he states that:

> Underdevelopment is not due to the survival of archaic institutions and the existence of capital shortage in the regions that have remained isolated from the stream of world history on the contrary, underdevelopment was and still is generated by the very same historical process, which also generated economic development: the development of capitalism itself. [53]

Those criticisms leveled against the modernization theory not with standing it cannot be neglected totally. It is our view that, a through study of the Maigana zone of the KADP's experience in rural transformation within that theory would provide a new insight or framework in the search for a more realistic or workable rural transformation strategy.

END NOTES

1. W. Rodney, How Europe Underdevelopment Africa, Tanzania publishing House, Dareslam, (1972) p.2
2. Ibid p.10
3. Op. Cit p.10
4. Op. Cit P. 12
5. F.W. Riggs, "The Ideas of Development Administration": In E. Wiedner, (ed) Development Administration in Developing countries. Oxford University Press, London, (1976) p. 27.
6. Ibid p. 71
7. Adelma, I Theories of Economic Growth and Development, Oxford University Press, London, (1962) p.11.
8. See, A.Mabogunge, The Development Process: spatial perspective, Hutchinson University press, U.K. p. 35: see also, Dudley seers et.al (ed) Development in a Divided World, Pengium Books, London, (1971)
9. R.A. Alkali, The World Bank and Nigeria; cornucopia or Pandora's Box?. Baraka press, Kaduna, (1997) p.5
10. Wu, E.N. The Nature of Modern Development: In Weidner, (ed) Development in Developing countries, oxford University Press, London, (1976) p.271.
11. – Encyclopedia of science and Technology: Macmillan Press, London, (1974) P. 567
12. S. Hollander, Toronto The Economics of Adam Smith, University of Press, Toronto (1973) p. 96.

13. A. Dunmoye, (ed) (1987) "Agriculture and Economic Growth: with special Reference to Developing countries" In Okello, O. The Nigerian Alternatives, A.B.U. press Zaria p. 189

14. L.O. Obibiaku, Nsukka, Agricultural Extension as a strategy for Agricultural Transformation, University of Nigeria press, (1983) p. 10.

15. Ibid p.101

16. H. Mauder, Agricultural Extention : A reference Manual; F.A.O. Rome, (1972) p.4

17. Ibid p. 5

18. S.K.T. Williams press, Rural Development in Nigeria, University of Ife Ife (1978) p.44

19. Ibid p.45

20. F.A.O., Rome Integrated Rural development: An Introduction, (1978) p.4

21. Ibid P.4

22. S. Famoriyo. of Rural Development Revisited. Mimeo Department political science Ahmadu Bello University, Zaria, Nigeria,(1985) p. 51

23. Ibid p. 53

24. U. Lele, The Design of Rural Development : Lessons from Africa, TBCD Washington, D.C. (1975) p. 63.

25. M. Nwosu (ed) Issues in National Development: In Amucheazic Reading in social science, Fourth Dimension publishers, Enugu, (1978) p.84.

26. E.O. Arua — Improving rural Development Administration in Nigeria, Applied science Publication, London, vols, (1978) p.282.

27. F.S. Idachaba — Concepts and strategies of integrated Rural Development: Lessons from Nigerian Food Policy, Technical research programme, University of Ibadan, (1986)p. 28-29.

28. U. Lele — op-cit p. 63

29. A. Mabegunje — op.cit p.45

30. Wallace C.T. — "Agricultural projects and Land" conference on change in rural Hausa society, Kano,)1980) p. 12

31. B. Ogundana — "Transport Constraint on Rural Development in Nigeria", Conference on Economic Society, Ibadan, (1972) p.11

32. N. Kungwai — The political Economy of Rural Development: A case study of the F.A.D.P. in Bakori District, Unpublished M.Sc Thesis A.B.U. Zaria 1980.

33. Ibid — p.62

34. A.A. Kura — FADP: A strategy for rural Development: with special reference to Kaduna state, Diploma project, Reading University, United Kingdom, (1981) p.62

35. O. Okello — "Participation and food policy, 1985-80" Being paper presented at the conference on Rural Hausa society, Kano, (1980) p.5

36. G. Williams, — Op-cit, p.22

37. Ibid — p. 22

38. FDRD – progress, — A Decade of ADP's in Nigeria: Ten years of Lagos, Nigeria, (1986)

39. Ibid

40.	R.A. Alkali	Op-cit (1997) p.110
41.	A. Sarjat Macmillan	Rural Development : Learning From China Hong Kong. (1980) p.89.
42.	Ibid	p. 89.
43.	-	The World Development Report Oxford University press, U.S.A. (1990) p.1
44.	W.W. Rostow,	Stages of Economic Growth: A non Communist Manifestoes, Cambridge University Press, London, (1980) P. 42
45.	S.K.T. Williams,	Op-cit, p.45
46.	W.E. Moore, U.S.A.	Social Change, Prentice Hall inc., New Jersey, (1963) p.12
47.	N.J. Smelser, ledge	Social change in the industrial Revolution, Rout and Kegan Paul, U.S.A (1959)p. 52
48.	Ibid,	p. 52
49.	P.E. Ollawa, Linder paper the Nigerian Harcourt	"Approaches to the study of Development and development. A critical over-view "Being a presented at the Annual Conference of political science Association (No9) Port Nigeria, (1981) p.9.
50.	N. Long, Development, p.4	Introduction to the sociology of Rural Tavistock publication, London (1977)
51.	M.L. Jhigan,	The Economic Development and planning, (13th Edition) Vikas publishing House, PvT LTD, India (1980)p.195.
52.	A. Sarjat,	Op-cit, P.90

53. A.G. Frank, "The Development of Underdevelopment" In I.R. Rhodes (Ed) Imperialism and under development monthly review press, (1978) p.4-6.

CHAPTER THREE
KADUNA STATE AGRICULTURAL DEVELOPMENT PROJECT (KADP). HISTORICAL BACKGROUND AND STRUCTURE

3.1 Introduction

The apparent concern by government about the level at which agriculture declines led to the establishment of ADP's which was later expanded to cover the whole federation. The ADP's are organizations charged with the responsibility of improving agricultural production in order to bring about rural development.

The Nigerian second National Development plan (1970-74) says:

> The importance of administrative organization's in the development effort arises from two considerations; it is the basic unit responsible for coordinating, maintaining and evaluating the various activities of government and ensuring that they are in accord with political, social and economic objectives of the nation. Secondly, it serves as the primary executing agent for specific programmes and projects within the development plans.[1]

Against these backgrounds, ADP's first emerge in 1974, and were meant to improve agriculture and rural development. This is so because, it was in 1974 that the World Bank approved three loans for the establishment of pioneer pilot ADP's in Gombe, Gusau and funtua all in the Northern part

of the country.[2] The first project sited in Kaduna State was the Funtua Agricultural (FADP) in 1975. The apparent success of the FADP led to the formation of the KADP. In April 1977, a proposal for a state-wide ADP was prepared for Kaduna State (then Katsina and Kaduna), by the World Bank as part of the state-wide ADP's that were to take over from the enclave ADP's established earlier in Funtua, Gusau and Gombe.

However, because of disagreement between the World Bank and the Kaduna State Government over what the Bank refers to as "crucial issues" the proposal for the project could not become effective as was originally planned. On November 18, 1980, the government highlighted some of the areas of disagreement between the State Government and the World Bank.

According to the statement one area of contention was that:

> The Kaduna state Government was not happy over the way in which the KADP was handled by the Bank; that the project did not focus attention on, or deal with the fundamental problems of the peasant farmers in the state. Secondly, under the new proposal, the Government was concerned over the procedures for the recruitment, remuneration and control of the expatriate staff of the project more importantly, the Government

rejected the Bank's proposal for the recruitment of 45 foreign staff for the project, whose total remunerations would amount to N12.0 million annually.[3]

Accordingly, the Kaduna State Government Stated that it was "determined to have effective control of the project not only because it is wrong for a foreign agency like the World Bank to run such an important project in an independent country, but because the Government does not want some of the policies implemented in the Funtua Project to continue".[4]

Following the disagreement, the Kaduna State Government redesigned the project, renamed it Kaduna State Integrated Rural Development Project (KSIRDP) and went ahead to implement it without the world Bank loan.[5] But in 1981, Alhaji Abdulkadir B. Musa, then Governor of Kaduna State was impeached by the National party of Nigeria (NPN) dominated legislature, for his alleged refusal to compromise on a number of issues.[6]

In 1983, negotiations between the World Bank and the Kaduna State Government resumed and in December 1984, a loan agreement of N122. million was signed between the Bank and the state Government . On July 17, 1985, the loan for the KADP to run through to December 1989 became effective.

KADP covers an area of 4.4 million hectares (ha) of which 2.02 million ha (46 percent are under cultivation) of these 0.08 million ha are low laying fadama land. The state has an estimated population of 3.6 million out of which 603,300 farming families are spread over the entire state.[7]

Just as in other ADP's in the country, KADP is charged with the responsibility of increasing agricultural productivity, the incomes of the rural dwellers and to achieve a visible improvement in the standard of living of the farming and rural people. In order to achieve those effectively, the project has the following as its physical targets.

(i) Farm and crop development for 603,300 farming families; including extension services, livestock development and adaptive research and co-operative development. As for the co-operative development, it is meant to establish an independent co-operative financing Agency (CFA) at the state level to ensure supply of timely and adequate inputs and profitable marketing of farm produce on a co-operative level.

(ii) Fadama development for 42,000 farmers through irrigation.

(iii) Producing about 900,000 tree seedlings on a yearly basis for shelterbelts, wood lots and farm forestry.

(iv) Construction of approximately 400 kilometers (KM) of feeder roads, 28 small and medium size earth dams, 400 bore holes fitted

with pumps and 150 wells fitted with hand pumps for rural water supply.

(v) Rehabilitation of 300 kms of rural roads, and maintenance of another 300 kms of existing feeder roads

(vi) Construction of 3 Nos workshops, 1 Guest House at the headquarters and 90 Nos intermediate staff houses at the headquarters and the three zones.[8]

3.2 Goals And Objective Of KADP

The operational objectives adopted for the management of the KADP are as follows:

(i) Improved agricultural extension

(ii) Adoptive research and seed multiplication

(iii) Timely and adequate provision of inputs;

(iv) Construction of feeder roads for the convenience of farmers and the project.

(v) Farm planning and Management

(vi) Agricultural land planning, soil and water conservation

(vii) Establishment of effective staff and farmers training programmes.

(viii) Intensification of needed infrastructural facilities for the successful execution of the programmes.[9]

3.3 The Structure of KADP

The implementation of the KADP is the responsibility of the Kaduna State Government (KDSG) which in turn delegated this responsibility to the Agricultural Development Project Executive Committee (ADPEC), ADPEC is vested with the burden of determining the over all project policy. It formulates and co-ordinates the projects activities with those of associated state Ministries and Departments that are involved with the implementation of the project. The membership of the ADPEC is as follows;

- State Governor - Chairman
- Commissioner for Agric and Natural Resources – Deputy Chairman
- Commissioner for Finance and Economic Planning – Member
- Commissioner for Works and Transport - Member
- Commissioner for Justice and Attorney General – Member
- Head of federal Agriculture co-coordinating Unit (FACU) – Member
- Director Federal Department for rural Development (FDRD)- Member
- Director Federal Development Agency (FDA) – Member
- General Manager - Member
- Programme Manager KADP - Secretary

The ADPEC is responsible for the following functions:

(i) Review of project evaluation

(ii) Budgetary and financial control of the project including review and approval of management unit's annual work programme, budget and presentation to the state Government for final approval of project's budget.

(iii) Co-ordination of state and Federal project's related activities;

(iv) Approval; of project training policies and over seas training;

(v) Approval of contracts estimated to cost the equivalent of US$100,000.00 or more; finally.

(vi) The appointment of principle project staff.[9]

Next to the ADPEC in hierarchy of authority is the Agricultural Development Project Management Unit (ADPMU). This body is charged with the responsibility of the implementation of the policy formulated by the ADPEC. ADPMU is headed by the Programme Manager and ably assisted by all heads of KADP departments and each of the four zonal Managers who serve as members. This committee meets once on month.

As the Chief Executive of the project, the Project Manager is responsible for the day to day operation of the project. He is assisted by the heads of the various departments constituting the major line and staff structure that is different from the civil service.

The result oriented and time limit nature of the project allows management to avoid normal government operating nature. The monthly

meetings centers solely on the work programme, disciplinary cases, promotions, remunerations, policy, recruitments, and so on.

3.3.1 The Control System

The reason behind the control system is to make sure that events conform with outlined plans. That is the reason why certain objective were set up to serve as guide to the project through achieving it's desired goals.

The KADP has two types of control system. They are the internal and External control system. The external control is done by the Federal Government established institutions like the Agricultural Project Monitoring and Evaluation Unit (APMEU) which is based in Kaduna and the Federal Agricultural coordinating Unit (FACU) which is based in Ibadan.

Basically, APMEU cover both evaluative and monitoring studies of the projects. Evaluative and Monitoring duties are similar yet, they are quite distinct. Evaluation seeks to measure the effect of KADP on the target population by comprising the findings with the set objective enumerated in the Appraisal Report (AR). While Monitoring on the other hand is the reporting of the actual progress made by the project at various points in time during the development phase. It covers all aspects of the Life of the project.

In light of this evaluation officers from APMEU do not only carry out survey studies but collate the data collected by the project operational department. Distinctively, evaluation assesses the overall project effects

both target and spill over effects, and their impact while monitoring is an internal project activity which forms an important part of the activities of the project.

The main duty of the FACU as it relates to ADP's are; to monitor the ADP's in respect to their financial resources flow, physical achievements, provision of data would serve useful information for setting of future ADP's in relation with the world Bank, rural infrastructure.

3.3.2 Zonal Implementation

Maigana zone is one of the four zones that comprises the KADP. It is through the zones that actual implementation of the project activities are being carried out. Thus it was conceived and established to accelerate food and cash crop production for self –sufficiency and the provision of rural infrastructures so as to facilitates the establishment of small and medium scale agro allied, industries in the areas covered by the zone. All these considerably, are being done for the simple reason of raising the standard of living and economic well being of the rural dwellers that guarantee an effective check on rural urban migration of the rural workforce. Cash crop and food crop produced would attract and conserve the much needed foreign exchange for the national economy.

3.4 History of Maigana Zone

The Maigana Zone of the KADP was established in July 1985, it started with a staff strength of 505, and the pioneer zonal Director was Mallam Mukhtar Sambo. It then consisted of seven operational departments in order for it to achieve the organizational goals. It was made up of only four local Governments namely;

(i) Zaria,

(ii) Ikara,

(iii) Birnin Gwari and

(iv) Kaduna

But by 1990 it consisted of ten operational departments and is made up of the following local Governments:

(i) Makarfi,

(ii) Ikara

(iii) Kudan

(iv) Giwa

(v) Soba

(vi) Kudau

(vii) Zaria and

(viii) Sabon Gari Local Government Areas.

The Ten operational departments that make up the Maigana Zone, are as follows:

(i) Administration and personnel

(ii) Finance and supplies

(iii) Technical and Extension services

(iv) Engineering and rural Infrastructure

(v) Planning, Monitoring and Evaluation

(vi) Land planning and Development

(vii) Manpower Development and Training

(viii) Co-operative Financing Agency

(ix) Livestock Development

(x) Irrigation Services Development,

3.5 Organizational Structure of Maigana Zone

As already noted a zonal Director who is the chief executive officer of the Zone heads the Maigana zone. He is in turn assisted by the ten departmental heads. The Zonal Director and the departmental heads form the Zonal Management Committee (ZMC). This is the highest policy making body within the zone. It's the committee, which steers and ensures that the project is on the right path of achieving the goals and objectives for which the zone was established.

The departments that make up the Magaina Zone are organized as follows:

(i) Admin and Personnel Department:

A Deputy Director who is responsible to the zonal Director heads this department. The function of this department

is taking charge of daily functions and the over-all operations of the zone. This is achieved through weekly management committee meetings for decisions and implementation.

It operates on staff policies, It also performs secterial services. In effect, this department co-ordinates the activities of the project for the smooth running of the Zone.

(ii) Finance and Supplies Department:

The ADP is an autonomous self-accounting organization. At the zonal level therefore, it has a Finance and Supplies Department, which is headed by a Deputy Director. It under-take the following vital functions; to receive and disburse funds as well as to allocate funds for day today expenditure for the operation of all the departments. The department is also in custody and control of all zonal assets and liabilities.

It also collects revenue accruing from various sub-programmes or unit for all banks lodgments, it pays salaries and allowances to staff as well as settle bills of local purchases; It makes claims to world Bank and withdraw sums approve for expenditure and re-imbursements, it also maintains and up-date proper accounting system as required by world Bank standard and finally, it prepares the zone's annual budget estimates.

(iii) Technical and Extension Service Department:

This is the nerve center of the project because its agricultural extension operations deal directly with the farmers. It is also under a Deputy Director, whose duty is to receive and transfer research findings on modern farming technology and techniques, which is latter communicated to farmers through extension staff. This department embarks on adaptive research and experiments on new seeds from research institutions or centers.

The zonal research unit embarks upon the use of crop protection chemicals, insecticides, pesticides and crop storage. The department works on seed multiplication of improved seedlings and distribution to farmers in order to improve production. The department is charged with the responsibility of transferring general agricultural information to farmers at the grass root level.

(iv) Engineering and Rural Infrastructure Department:

This department is also under a Deputy Director whose duty is to construct roads, culverts, earth dams, boreholes, markets, staff quarters and so on. It is also responsible their maintain ace and renovations. There is also a mechanical

workshop and spare parts store to take care of the project's vehicles.

(v) Planning Monitoring and Evaluation Department:

This is also under a Deputy Director and it monitors the progress of each department, it assesses the project operations and impact on the farming population. It evaluates the projects achievements by comparing them with over-all targets and how, they measure with over all targeted objective. It also monitors market prices of agricultural commodities, it prepares report in respect of all sub programmes. The department also provides data on project's progress and offers advice.

(vi) Land Planning and Development:

This department is headed by a Deputy Director and is charged with the responsibility of farm planning and management activities. It takes care of soil conservation and land development activities. It also takes care of Fadama development and irrigation activities, it also establish shelter belt and forestation.

(vii) Manpower Development And Training:

This department is also under a Deputy Director who is responsible of overseeing Manpower development and Training. It develops, basic training facilities by procuring and developing

training equipment and materials. It also, organizes comprehensive training of extension staff and farmers on various new farming technique and the use of crop chemicals; the department also recruits and places staff, it provides staff accommodation, it provides public relations duties to promote the numerous project's activities for public alignment.

(viii) Co-operative Financing Agency:

This is a recent department that was established in 1990 and a Deputy Director heads it. The department is set up for co-operative activities. Rural farmers are encouraged to form co-operative societies which will assist them in attaining self-reliance as well as for improvement in modern mechanized farming.

The principle of unionism is inculcated in farmers so that they form a common front in protecting their interest. The co-operative society is to help them save weekly or monthly which will assist them to acquire loans or credits. The department also helps the societies own collective assets (Gandu Farms). The project help sponsor hard working societies secure agricultural loans from Agricultural Development Banks and Commercial Banks.

(ix) Irrigation Services Department:

This is also a new department that is under a Deputy Director and it emerges in 1990. It renders irrigation services like pump hiring and maintenance for "Fadama" farming. It also takes care of drilling tube wells and wash bores management schemes and the department provides advisory services to dry season farmers including the construction of irrigation pumps as well as Fadam land development (leveling, ploughing and harrowing) for the production of wheat and vegetable crops.

(x) Livestock Department:

This department takes care of livestock activities such as, cattle breeding, farmer's work bulls' development, and sheep and poultry development. This department takes care of cross breeding in order to produce improved breeds for sale to farmers as their foundation stock, veterinary services is also undertaken under the Training and visit (T and V) system to livestock farmers who are mainly mixed farmers. In this light. The department's duty is to maintain monitor and ensure livestock development messages are effectively relied to farmers by extension agents"

3.6. **The Climate And Soil Characterisation Of The Zone**

The project area (Maigana Zone) covers almost 1/3 percent of all the rural area of Kaduna State. The topography of the area is dominated by a gently rolling land raising to an avenge of 853 meters in its highest point. Most of the area is underlined by crystalline rocks at the basement covered by a thin discontinuous layer of granite ranging in depth from 15 to 50 meters.

Soils are generally light in texture with a medium low PH, and have limited reserve of plant nutrients, particularly, nitrogen and prosperous. Organic carbon levels are low and deficiencies in micro-nutrients especially boron are common.

Average rainfall ranges from 935 millimeters to 1054 millimeters and starts from May through September. Rainfall is generally governed by the movement of the inter tropical convergence zone; therefore, there are sometimes two major rainfall peaks; the first, accruing in July and the second in August. In other times when the time for lesser rainfall between the peaks is pronounced, this can have adverse effects on crops. The dry season starts from October to March and is marked by the hot dry Northern easterly harm tan winds.

Natural Vegetation is of savanna type especially the guinea savanna. The zone though not highly cultivated (35 percent of arable land

is under cultivation) 11 is not free from other man made disasters like grazing and tree felling for fire-wood that continue to deplete it of its original vegetation cover of shrubs, grass and trees.

3.6.1 Socio Economic Features Of The Zone

The state population is estimated at 3.6 million, half of the population lives in rural areas of less than 1,500, people (15-20 percent) lives in urban areas of 20,000 people or more. On the stand point of KADP survey's the number of farm families is estimated at 603,300, out of which an estimated $^{1}/_{3}$ live in Maigana zone". 12

Previously all land belongs to the emirs but it is now owned by Kaduna State Government. Usufruct ring rights are held by individuals and may be transferred to family members. In practice land is sold and rented to outsiders. The land tenure decree of 1978 provides for local Governments to issue certificates of occupancy to farmers thereby enabling them to obtain official credits. This is a time consuming and costly practice, this is so because, it needs a costly survey of the land involved.

Manual cultivators representing 97 percent of the farming communities farm 92 percent of the land under use, while work oxen owners dominate the remaining 3 percent. Tractor owners constitute less than 1 percent of farmers and cultivate less than 1 percent of the land. Average holding size for those three types of farm are, 4.4, 12.0 and 60.0

hectares (ha) respectively. Farms are generally fragmented and field sizes vary significantly.

The average farming family consists of 5.3 persons. In this predominantly Muslim area women are not involved in field labour. The labour force is restricted to adult male and children assisting with light jobs. The family is the major source of farm work force and can carry out all works on a 3 ha farm. However, due to other activities in which family labour is engaged, transient labour is hired by some farmers at peak period. Surveys shows that 87 percent of labour is supplied by the family while 13 percent is hired.

The bulky agricultural production comes from manually cultivated rain fed lands and crops grown on residual moisture, irrigated fadama crops provide an important source of food and cash crop income during the season. Through out the zone intercropping is rampant. Sorghum, the most common crop, account for 32 percent of the cropped area with sorghum/cow peas, sorghum/Grand nuts and millet making up for about 12 percent and cotton some 5 percent of the cropped area. Others with sole and combination crops make up the remaining.

Out of the estimated 65, 000 ha of fadama land, about $^{1}/_{3}$ is cropped. The use of residual moisture dominates Fadama agriculture. Sorghum, maize, coco yam cassava are grown in the higher non flooding fadama areas, where they benefited from high water table and the relatively high

soil fertility. In wetter areas there is some move at water control, where sugar cane and dry land rice are planted with paddy rice in inundated areas.

Vegetables, mainly tomatoes, peppers, onions, carrots and cabbage are grown under shard of irrigation (tapping the aquifer of dry rivers and streams). Production from irrigation schemes, mainly tomatoes and wheat has been disappointing due to poor management and economic practices.

Cereals provide the main colorific intake in the zone in particular and the state in general. The major food crops are millet and sorghum groundnuts and cowpeas are the main source of vegetable protein, the latter along with onions, tomatoes and peppers being in considerable demand with traders from the southern part of the country. Production of root crops is limited. Most food crops meant for human consumption are processed using simple methods at or near the point of use.

ENDNOTES

1. - 2nd National Development Plan, 1970-74; Government printers, Lagos (1970) p.27
2. R.A Alkali, The World Bank and Nigeria : Cornucopia or Pandora box? Baraka press, Kaduna (1997) P.99.
3. A.B. Musa, Struggle For Social And Economic Change, NNPC, Zaria, (1982) p.45.
4. Ibid, P.45
5. R.A. Op. Cit p.56
6. - "Kaduna/Katsina ADP (re-designed Kaduna ADP Loan)" – Proposed Amendment to the loan and project Agreements, World Bank, Washington, D.C. June (1986) P.9.7 .
7. - "World Bank Appraisal Report of KADP" World Bank Report No 2436 UNI, (1997) p.1,
8. Ibid P.15
9. Op.cit. P. 17.
10. - Kaduna State Agriculture Development Project, "Objectives and Achievements" Kaduna ADP, (1990), P.10.
11. Ibid, p.11.

CHAPTER FOUR

DATA ANALYSIS

1.4 Introduction

The role of the KADP's in the development process of the rural societies forms the main theme of the working hypotheses of our study. And it tries to establish the role of the Federal Government, Kaduna State Government and the World Bank in the development of Agriculture in particular and rural development in general.

This chapter will dwell on the analysis of the achievement of the KADP or otherwise in terms of determining the level in which the project has tried to solve the problem for which it was established. Data obtained for the study have been presented in tabular form having calculated their percentages and frequencies. The total number of respondent was kept at two hundred (200) for good representation and fairness. Characteristics of sex, district, marital status, occupation and number of people in the household were given priority.

Table 4.1 below summarises the geographical spread of the respondents.

Table 4.1: **Geographical Spread Of The Respondents**

S/N	Local Govts	District	Villages	Respondents	Percentage
1.	ZARIA	WAJE	DEMBOU/DANKALI	50	25%
2.	SOBA	MAIGANA	AWAIWANKA YAKAWADA	50	25%
3	GIWA	KAYA	KAYAMALIKANCHI	50	25%
4.	IKARA	IKARA	K/KOGI	50	25%
TOTAL	4	4	8	200	100%

Source: Personal Survey 2001.

The sampling technique adopted came from the fact that, the area under study is relatively homogenous in nature in terms of land texture and climatic condition. Because of this, 200 respondents were seen as enough and representative of the whole farming families.

TABLE 4.2: **House Hold Size Of The Respondents**

Household size	Number	Percentage
1-4	35	17.5%
5– 10	60	17,5%
11 - 15	70	30.0%
Above 16	70	35.0%
Total	200	100%

Source, Personal Survey: 2001

The above table shows that 17.5 percent of those sampled have house hole size of 1.4 members and 17.5 percent have 5 – 10 members, while 11-15 have 30 percent, while, those with members above 16 in their house hold have 35 percent. This points to the fact that, house-holds are large when compared to their holding which is small as show on table 4.3 below.

Table 4.3: **Land Holding Pattern of Respondents**

S/N	Holding per Area	Number	Percentage
1.	1-4	80	40%
2.	5– 10	50	25%
3.	11 – 15	40	20%
4.	Above 16	30	15%
Total		**200**	**100%**

Source: Personal Survey: 2001

The above table shows that, 40 percent of those sampled held just 1-4 acres of land and 25 percent of our respondents own 5 – 10 acres of land, acres, while just 15

percent of our respondents are large scale farmers as they own above 16 acres of land upon which the cultivate their crops.

(Test of Hypotheses One):

The Hypothesis to be tested in this part of the study is: the feeder Roads and Earth Dam scheme introduced by the project does not have significant impact on the Rural Economy.

4.2: **<u>The Impact of the Feeder Roads Earth Dam Schemes and Other Infrastructures Introduced By the Project on the Rural Economy.</u>**

In this part of our study the Impact of the social Infrastructures provided by the project will be analysed based on the data collected. When we look at the components involved in rural development we would find out that they are "complex and varied, as they involve social structures, customary and transplanted laws, political, economic and social overhead capital, land tenure reforms and so on".[1] To isolate any of those components entails failure to achieve sustained and meaningful development of the rural areas.

To realize their established goals (of rural development) the KADP (Maigana zone) embarked on programmes that

includes, the development of essential components necessary for rural development in an integrated manner. The activities of the project therefore, includes various aspects of agriculture and rural infrastructural development, such as the construction of feeder roads, earth dams, fadama farming and provision of clean drinking water for both human and animal consumption with the goal of improving the living standard of the people living within the zone.

Table 4.4: Respondents View On Whether They Are Aware Of The Existence Of The KADP.

Response	No of Respondents	Percentage
Yes	160	80%
No	40	20%
Total	200	100%

Source: Personal Survey: 2001

The above table shows that 80 percent of over respondents are aware to the existence of the KADP while, just 20 percent of those asked says they are not aware of their existence.

Table 4.5 **Respondents View On Whether They Are Benefiting From Any Of The Agricultural Inputs Provided By The Project**

Response	No of Respondents	Percentage
Yes	165	82.5%
No	35	12.5%
Total	**200**	**100%**

Source: Personal Survey: 2001

The above responses on whether they are benefiting from any of the inputs provided by KADP shows that, 82.5 percent of those sampled have answered yes and are of the opinion that it had hepled in raising their agricultural out put, while, 17.5 percent responded on the negative.

The establishment of the KADP brings about the development of Fadama irrigation technique. A major part of the project is a projection to include irrigation or 'FADAMA' development to reach a target of 34,000 farmers. As a result of this, the KADP Maigana zone has introduced modern

irrigation techniques in the form of tube wells of different systems, wash bores and has embarked on the construction of earth dams.

By October, 1998 a total of 400 tube wells and 130 wash bores have been put in place in different parts of the fadama development areas of the project. Further more, the Farmers Supply Company (FASCOM) has distributed over 14,000 water-lifting pumps, while 4 earth dams at Saye, Malikanchi, Matari and Maigana have been completed in our research area.

Table 4.6: **Respondents View On Whether They Are Engaged On Dry- Season Farming Introduced By The KADP .**

Response		**Percentage**
Yes	90	45%
No	110	55%
Total	200	100%

Source: Personal Survey: 2001

Response to the question which wants to know how many have taken to dry-season farming introduced by KADP in Magana zone shows that, 45

percent of our respondents answered yes while 55 percent answered on the negative.

And when asked to give reason why they don't engage on the dry season farming 30 percent of those asked said the in-puts used are very expensive, and 40 percent of those sampled cite non-availability of Fadama land as the reason why, they don't partake in dry-season farming and 20 percent says they engage in other activity while just 10 percent of over respondents didn't give any reason why they don't take part in dry season farming. Table 4.7 below give a summary of our findings.

Table 4.7: Respondents View On Why They Don't Engage On Dry season Farming.

Response	No of Respondents	Percentage
Inputs Expensive	60	30%
Non-Availability of Fadama Land	80	40%
Engaged on Other Activities	40	20%
Others	20	10%
Total		100%

Source; personal Survey: 2001

Due to the introduction of a highly advanced irrigation technology it is now possible for large hectares of land to be put under cultivation. This to a large extent has brought about significant increase in the volume of crops being cultivated under the Fadama development programme. In that

farmers under the scheme have now embarked on transporting part of their out-put to other markets especially those in the southern part of the country in order to get good price for their products.

Impact Of Feeder Roads On The Rural Economy

Road construction is one of the key elements of rural development. For without a good network of roads, farmers could not be able to transport their produce to markets. They could also not obtain the farming in-put necessary for good produce, nor could extension workers move more easily and freely in order to teach farmers the art of farming.

KADP Maigana zone have constructed a considerable amount of Feeder roads, as a result many villages and hamlets were open up and linked with major towns and markets within the zone. Table 4.8 below gives a break down of roads constructed by the Maigana zone of the KADP between 1993 – 1998.

Table 4.8

S/N	From	To	Kilometers
1.	Kako	K/Gaya and Fadama	25
2.	Turawa	Makwanin Lemu	10
3.	Wanka – Awai	Richi fa	20
4.	Malikanchi	Ikara	14
5.	Hayin Magina	Ikara	10
6.	Hayin Ojo	Sabon Gari	18
7.	Maigana	Galadimawa	10
8.	Gazara	Makarfi	15
9.	Kaya	Yakawada	12
10.	Iruga	Wuciciri	11
11.	Turawa	Makwanin Lemu	08
			153

Source: KADP Quarterly Report: 1998

In view of the above, the feeder roads scheme of the KADP (Maigana Zone) has eased the problem of transportation thereby making it possible for increased economic activities and social interaction among the different communities living within the zone. This is because while responding on whether their villages have benefited from the rural roads scheme of the KADP (Maigana Zone) 72.5 percent of the respondents stated that, their

villages have benefited from those roads programme, while just 27.5 percent of the respondents are of the opinion that their villages are yet to benefit from the rural roads, as shown on table 4.9 below.

Opinion Of Those Whose Villages Have Benefited From The Rural Road Scheme Of The KADP.

Table 4.9

Response	No of Respondents	Percentage
Yes	145	72.5%
No	55	27.5%
Total	200	100%

Source: Personal Survey: 2001

And to buttress our view on the rural road programme, when asked what impact does those rural roads have to their improved economy 30 percent of those sampled have the opinion that, roads have led to the expansion of markets within the zone. In that, farmers now produce for commercial purpose not only for subsistence. And 40 percent of the respondents are of the view that, roads have open up villages that were hither to inaccessible therefore large amount of produce could now be moved to markets in towns and cities within a short time than before when primitive mode of transportation was used.

The road also made it easier for farmers to get in puts as well as extension advise since, the agents could now move more easily around the farming villages. And 20 percent are of the view that, roads have led to

increase in productivity because it allows for both human and material resources needed for agricultural production to reach their destination. While, just 10 percent of the respondents are of the view that, roads led to an increase in both the properties mentioned above and are seen as the bedrock of rural transformation.

Table 4.10: Below Give A Summary Of The Responses:

Respondents View On The Impact Of The Roads Constructed On The Rural Economy.

Table 4.10

Response	No of respondents	Percentage
Expansion of markets	60	30%
Ease Transport problems	80	40%
Increased productivity	40	20%
All the Above	20	10%
Total	200	100%

Source: Personal Survey: 2001

The remarkable performance of the KADP in the construction of feeder roads is handicapped by one main problem – that of the habit of maintenance of the already constructed roads. Most of these roads constructed above four years ago within the zone are now in very bad shape. The engineering department of the project, it was learnt by the researcher are doing their best to maintain those roads.

Another area the Maigiana zone of the KADP is taking active part in is, the provision of portable drinking water, for both human and animal consumption. This is due to the fact that, in adequate water supply poses a serious problem to effective and long lasting rural transformation programme. As adequate water supply to rural areas is indeed an important indices of development in any country as it relieves them from daily problem of getting water from wells and streams which in turns improves their sanitation and community health.

As part of its rural development efforts the Maigana zone of the KADP embarked on the provision of portable drinking water to the rural areas by way of substantial sinking of boreholes. The boreholes sunk so far according to the General Manager of the project as of January 1997 stands at 354 with hand pumps located throughout the zone.

In responding to one question on the questionnaire on whether their villages have benefited from the water supply scheme, 75 percent of those sampled stated that their village have benefited from the water supply scheme. While 25 percent of our respondents stated that, their villages did not benefited from the water supply programme. This is indeed a remarkable development. Table: 4.11 give a summary of the above position of our respondents.

Table 4.11

Respondents View On Whether Their Villages Benefited From The Water Supply Scheme Of The KADP.

Response	No of Respondents	Percentage
Yes	150	75%
No	50	25%
Total	**200**	**100%**

When asked about the impact of the water supply scheme on their communities, 40 percent of our respondents are of the opinion that, the water supply programme have reduce time- wastage in search of water, while 30 percent of those sampled stated that, this has reduce the incidence of water-borne diseases prevalent before within their community such as guinea-worm, dysentery, bilharzias e.t.c and 22.5 percent of our respondents are of the view that, the water supply scheme have contributed to increased agricultural productivity as they engage fully in their farms rather than searching for water. While the balance of 7.5 percent of our respondents are of the view that, the water supplies scheme brought about all the other indices. See table 4.12 below for more details.

Table 4.12 Respondents Opinion On The Impact Of The Water Supply Scheme On Their Community

Response	No of Respondents	Percentage
Reduction of Water Borne diseases	60	30%
Allows for Increased Agricultural productivity	45	22.5%
Eases Time Wastage in search of water	80	40.%
All the Above	15	7.5%
Total	200	100%

Source: Personal Survey: 2001

It is our firm believe based on our analysis that, the infrastructures developed by the KADP Maigana zone have profound positive impact on the economy of those communities within our area of study. The findings therefore dispute our first hypotheses, which states.

The Feeder roads and earth dams scheme introduced by the project does not have significant impact on rural economy.

Test of Hypothesis Two

The Hypothesis to be tested in this part of the research is: there is no relationship between an improved rural economy and the activities of the project.

4.3 Three Is No Relationship Between An Improved Rural Economy And The Activities Of The Project.

The major reason why the KADP was established was to boast agricultural productivity of the farming families of the state. In this part of our research, the relationship between an improved rural economy and the activities of the KADP on agricultural productivity within the zone under study will be analysed based on the raw data collected from the field.

The Maigana zone of the KADP is seen as an area of great agricultural potential within the state. But over the years, the agricultural production in the zone was below expectation. In that farmers in the zone have over the years been producing far below their capacity.

Several reasons were put forward to explain this low agricultural productivity. One major reason, which received the support of the 'modernisation' school, the theoretical base of our study, is the non-use of modern advanced agricultural inputs.

Therefore, our main pre-occupation here is to examine the various inputs being distributed by KADP in Maigana zone and test the impact of these farming inputs on the agricultural productivity of the zone. We will first examine the level at which the farmers have noticed any increase in their farm out put since coming into contact with the KADP.

Responding to a question on whether there is any increase in their farm out put since coming into contact with the KADP 75 percent of the respondents are of the opinion that there was improvement in crop out put since coming into contact with the KADP, while 25 percent of the respondents are of the opinion that there is no change in their agricultural productivity. See table 4.13 for more detail.

Table 4.12 **Respondents View On Whether There Is Any Increase In The Farm Out Put Since Coming Into Contact With The KADP:**

Response	No of Respondents	Percentage
Yes	150	75%
No	50	25%
Total	200	100%

Source: Personal Survey: 2001

As we have noted earlier, the KADP established the farmers supply company (FASCOM) which is responsible for the procurement and sale of modern farming inputs to the farmers, FASCOM, has procured and distributed large volume of farm inputs such as fertilizers, improved seeds, irrigation pumps, pesticides, machinery and so forth.

Among these farming out puts, the FASCOM, Maigana zone paid great attention to the procurement and supply of fertilizers, this is because the application of modern fertilizer is not a new phenomenon in this country. This is so, because most Nigerian farmers depend heavily on the application of this input since its introduction as far back as 1937. 5 Over the years, farmers have been convinced of its benefit thereby resulting in its massive patronage.

FASCOM, Maigana zone has since its inception procured over 110,000 tones of different types of fertilizers for sale to farmers and of this all the 110,000 tones was sold to the farmers in 1998. Nine farm service centers (FSCS) have been established to serve as selling points for the inputs within the zone.

The above position on the use of fertilizer in the Maigana zone of the KADP was buttressed based on the responses received from our respondents when asked which of the following inputs the respondents patronize. 17.5 percent of those sampled said, they patronize improved seedlings over other inputs, and a massive 70 percent of our respondents named fertilizers as the major input they patronize on a regular basis, while only 10 percent of the respondents patronizes irrigation pumps and a paltry 2.5 percent of those asked stated that, they don't patronize any of those inputs mentioned.

Table 4.14: **Opinion of Respondents on What Input They Patronise**

Response	No of Respondents	Percentage
Improved Seedlings	35	17.5%
Fertilizers	140	70%
Irrigation pumps	20	10%
Others	05	2.5%
Total	200	100%

Source: Personal Survey: 2001

The survey has found out that, there is significant increase in agricultural productivity in Maigana zone and is attributed to the modern in puts provided by the project. So when asked how and where they procure those farming inputs, 60 percent of our respondents stated that, they procure their input from the KADP and at subsidized rates, and 30 percent of our respondents said that, they get their input from middle men while just 5 percent stated that, they get their inputs from the co-operative societies organized by the project and the remaining 5 percent said that, they procure their farming inputs from other source. Table 4.14 below give a break down of the responses.

Table 4.15: **Respondents View On How They Get Their Farming Inputs**

Response	No of Respondents	Percentage
KADP	120	60%
Middle men	60	30%

Cooperative Society Others	10 10	5.0% 5.0%
Total	200	100%

Source: personal survey 2001

The research also found out that, even though there is a significant increase in their farm output, views differs on whether there is any significant change in the income level of the farming families of the zone between 1993-1998. The survey found out that, 91 percent of our respondents were firm in their believe that, there was an improvement in their income which they attributes to two factors. The first factor being the increased application of farming inputs injected by the project especially fertilizers and other inputs. And secondly and similarly related with the increased agricultural productivity is regular rainfall experienced within the zone in recent years. While only 9 percent of the respondents give a negative response. See table 4.16 below for more details.

Opinion Of Farmers On Whether KADP Is Making Any Significant Contribution To Their Improved Income

Table 4.16

Response	No of Respondents	Percentage
Yes No	182 18	91% 09%
Total	200	100%

Source: Personal Survey 2001

As for whether they noticed any improvement in their income in recent years i.e., 1993-1998, 84 percent of the respondents stated that, their general income have risen in recent years, while just 16 percent stated that nothing has changed in their income during this period. And they attributed this to low prices of farm produce especially during bumper harvest. Table 4.17 below gives more detail.

Table 4.17: **Respondents view on whether thief income has improved in recent times**

Table 4.17

Response	No of respondents	Percentage
Yes	168	84%
No	32	16%
Total	**200**	**100%**

Source: Personal Survey 2001:

Another major service that is being provided by the Maigana zone of the KADP it that of, Extension Services. The extension service unit of the Maigana zone is charged with the responsibility of educating the farmers on the uses and advantages of applying the modern farm inputs being supplied by the KADP.

Let us then examine the performance of the extension workers of the project. This is because, the acceptance and non-acceptance of these modern inputs by the farmers in the zone depends largely on the level of work done by these extension agents within the zone.

To really understand the level of performance of these agents a number of important questions were raised on that regard.

Responding to the question whether the extension agents visits their farm regularly, 79 percent of our respondents stated that, the visits by extension agents to give advise is on regular basis, while 21 percent held a negative view saying that, the visits are not regular. This view shows that, the zone has achieved a fairly high level of extension agents visits to farms on recent times.

Table 4.18: **Opinion Of Respondents On Regularity Of Visits By Extension Agents To Farms:**

Response	No of Respondents	Percentage
Yes	158	79%
No	42	21%
Total	200	100%

Source: Personal Survey 2001

Advice can always be given but to take it and for it to be useful is altogether something different. That is why, on the assessment of the advise given by the extension agents to farmers 78.5 percent of our respondents says that, the advice given is useful and practicable and 16.5 percent are of the opinion that, the advice is useful but not practicable because of it is very expensive in both monetary and man working hours needed. While, 5 percent stated that the advice is not useful at all. Table 4.19 gives a break down of the above position.

Opinion Of Respondents On The Quality Of Advice Given By Extension Agents To Farmers Quality Of Advice

Quality of Advice	No of Respondents	Percentage
Useful and Practicable	157	78.5%
Useful but not practicable	33	16.5%
Not Useful	10	05.0%

Total	200	100%

Source: Personal Survey 2001

When questioned on why their answer to the above question is negative, 75 percent of our respondents said that, the extension agents only visits rich large scale farmers and 12.5 percent are of the view that, the advice given is to technical to the farmers as most are not literate and follow traditional farming system, while 12-5 percent said they are not even aware of their existence. Table 4.20 below give details of the above position.

Table 4.20: **Response on Why Answer to the Question Above is Negative**

Response	No of Respondents	Percentage
Only Visits Large-Scale Farmers	150	75.00
Advice Too Technical	25	12.5
Not Aware Of Existence	25	12.5
Total	200	100

Source: Personal Survey 2001

Having examined and analysed the various functions of the Maigana zone of the KADP and the way and manner it has greatly assisted in raising the income of the rural dwellers we can now categorically reject our second hypothesis which states: There is no relationship between an improved rural economy and the activities of the project.

Test Of Hypothesis Three

The Hypothesis to be tested here would be the cooperative farming system introduced by the project does not improve the farmer's capital base.

4.4 The Cooperative Farming System Introduced By The Project Does Not Improve Farmers Capital Base.

In this part of our study the impact of the cooperative societies organized by the KADP would be analysed based on the data obtained. This would enable us to test our last hypothesis that says: The cooperative farming system introduced by the project does not improve farmers capital base.

The main form of agricultural organization in Maigana zone is the communally based one known in Hausa as "Gandu" system which is defined as, "a production and consumption unit with common farms and granaries comprised of a number of family members".[6]

Two types of Gandu systems exist. The first one is the paternal Gandu which is a, "mutual agreement between father and his married sons and their families under which, sons work in a subordinate position on their fathers farm in return for a variety of benefits including a share of food supplies".[7]

While the second one is the Fraternal Gandu in which on the death of the father "the farms passes to the sons and families for a limited time under the eldest son".8

As part of its rural and agricultural transformation programmes, the Maigana zone of the KADP initiated the cooperative farming system as an alternative to the Gandu system, which was considered as having serious problems. Other reasons for establishing the cooperative farming system is that, organization could be more effective for mobilizing and organizing the farming communities as well as, possibly providing the foundation for the integration of those communities into the frame –work of the project and its activities.[9]

It is also widely recognized that, cooperatives form an indispensable component of, and agents for rural and community development. Through collective organizations, cooperatives do serve as important base and plat forms for bringing up together relatively weak agricultural producers and peasants for the purposes of enhancing their individual capacities for their collective good. [10]

Under this system, extension agents of the KADP organize groups of twenty or more farmers into production units with large-holdings which they cultivates on a joint venture basis, aimed at promoting large –scale farming as against small-scale cultivation typical of the Gandu system.

Having outlined some of the features of the cooperative farming system we would now attempt to test our hypotheses, which states. The cooperative farming system introduced by the project does not improve farmers capital base.

Responding to a question on the questionnaire on what constitutes a major problem to the farmers in the zone; 20 percent of our respondents states that, it is very difficult for them to secure loans either from KADP, commercial bank or local creditors, and 12.5 percent of those asked are of the view that to get fertilizer is their major problem while 22.5 percent mentioned poor pricing policy as constituting a major problem to them. This is because they don't get a fair price for their products. Lastly, 45 percent of those sampled cite membership of a cooperative society as constituting their major problem.

Table 4.21 below summarises the above position.

Table 4.21**: Respondents View On What Constitutes A Major Problem To The Farmer.**

Response	No of Respondents	Percentage
Securing a Loan	40	20%
Securing Fertilizer	25	12.5%
Pricing policy	45	22.5%

Membership of cooperative society	90	45%
Total	200	100%

Source: Personal Survey 2001

On the question of what is the main source of credit to you (Table 4.22) 7.5 percent of those questioned named their main source of credit as the commercial banks, 12.5 percent named KADP as their own source of credit and 35 percent mentioned local creditors while 35 percent states they got their credits from their cooperative societies.

Table 4.22

Respondents View On How They Secure Loans

Respondents	No of Respondents	Percentage
Commercial bank	15	7.5%
KADP	25	12.5%
Local Creditors	90	35%
Co-operative societies	70	35%
Total	200	100%

Source: Personal Survey 2001.

Responding to the question on whether they are members of a cooperative society organized by the KADP 84 percent of our respondents are found to be members while just 16 percent are not members of a cooperative society. Table 4.23 below give a break down.

Table 4.23: **The Level Of Participation Of Farmers In Cooperative Farming System**

Level of Participation	**No of Respondents**	**Percent**
Yes	168	84%
No	32	16%
Total	200	100%

Source Personal Survey 2001:

The above data shows that, there is a high level of acceptance of the cooperative farming system within the zone among the farming families. Let us now focus our attention on the performance of those cooperatives and how they affects the capital those of the farmers within our scope.

When responding to the question on who heads the cooperative society 39.5 percent answered community leader, and 49 percent stated that, an elected official heads the society. While, just 11.5 percent give other figures in the society as leader of their cooperative society. Table 4.24 below summarises their responses:

Table 4.24: Opinion Of Respondents On Who Leads Their Cooperative Society

Response	**No of Respondents**	**Percentage**
Community Leader	79	39.5%
Elected official	98	49 %
Others	23	11.5%
Total	200	100%

On the question of how many ox-plough implement do a house hold posses majority of our respondent posses between 0 – 2 this can be seen in table 4.25 below.

Table 4.25: Response To The Question On How Many Ox-Plough Implement A House hold Posses

Response	No of respondents	Percentage
0 – 1	62	31%
1-3	68	34%
3-4	34	17%
More than 4	36	18%
Total	200	100%

Source: Personal Survey 2001

Responding to the question on how they acquire those implements in their possession. 22.5 percent of our respondents got their implements through inheritance from their Gandu farming system and 17.5 percent got their implements through the KADP as loans, while 60 percent acquire their implement through their membership of co-operative society.
Table 4.26 below provides a clear picture of the above position in percentages.

Table 4.26: **Respondents Opinion On How They Acquire Their Ox-Plough Implements**

Response	No of Responds	Percentage
Through Inheritance	45	22.5%
Through Loans from KADP	34	17.5%
Through Cooperative Society	120	60%
Total	200	100%

Source: Personal Survey

According to the 1997 progress report of the Maigana zone of the KADP a total of 176 cooperative farming groups have so far been established within the zone.11 The number of co-operative farming groups established within the zone so far, as well as the responses in table 4.24 above, showed the level of acceptance of the co-operative farming system among the population of our area of study.

Having thus far established that, the cooperative farming system was well accepted by the farmers in Maigana zone, we now turn our focus on the performance of these cooperatives in comparison with the level of productivity emanating from their being members of those societies or groups.

Responding to the question on what contribution (if any) did their membership of a cooperative society made to their income; 49 percent of those sampled (table 4.26) were of the view that, their farm out has increased significantly which in turn increases their capital base.

And 38.5 percent of our respondents are of the opinion that they now have better quality products and it increases their final farm produce. While, just 12.5 percent of the respondents are of the view that they have not seen any increase in either the volume or quality of their farm out put since joining the cooperatives.

Table 4.27: Opining Of Respondents On What Contribution Their Membership Of A Cooperative Society Made On Their Income

Response	No of Respondents	Percentage
Increases farm output	98	49%
Enhances productivity	77	38.5%
Others	25	12.5%
Total	200	100%

Source: personal Survey 2001

Finally, while responding to a general question asked on what area do your think the KADP are performing well 27.5 percent of our respondents are of the opinion that, one area that the KADP did very well has to do with the construction of feeder roads and provision of portable drinking water, and 22.5 percent are of the believe that, the KADP did well in their efforts towards organizing co-operative societies and 42.5 percent are of the opinion that, the KADP did so well in the area of distribution of farming inputs, but a small fraction of those questioned give a general pass mark to the KADP as they believed that they did so well in most of their major activities.

Table 4.28 below summerises the respondents view.

Respondents View On What Areas The KADP Did So Well

Response	No of respondents	Percent
Distribution of farming in puts	85	42.5%
Construction of social Infrastructures	55	27.5%
Organising co-operative societies	45	22.5%
Others	15	7.5%
Total	200	100%

Source: Personal Survey: 2001

Having established that, the cooperative farming system has generally gained acceptance among the farmers of the KADP (Maigana zone) and, our analysis of our raw data has shown that it has helped in raising their productivity. It is then correct if we reject our third hypothesis, which states: The cooperative farming system introduced by the project does not improve farmers capital base.

END NOTES

1. Famoriyo, science "Rural Development Revisited" In Rural Under development in Nigeria 1900 – 1980: political seminar, Vol II, A.B.U Zaria (1985) p. 53.
2. - I.B.R.D. Kaduna/Kastina ADP (Re-Designed Kaduna state ADP Loan 2436 UNI) WB publication, Washington DC (1989) p.7.
3. - 5. KADP Quarterly Reports. (September – December 1996). P.
4. - KADP Annual Report (1998), p.4

5. E.A. Saleko, Fertilizer use and Recommendations for Major field crops and Sample calculations of required fertilizer materials, Ibadan, (1984).

6. A. Opio Odongo, The inertia of Rural Development in Hausa land :An explication of a structu5ral incongruence hypotheses, paper presented at the Rural Development Seminar, Bagauda lake hotel Kano (1980) 9.5.

7. P. Hill, Rural Hausa: A village and a setting: Cambridge Press, UK (1972) p.38.

8. Ibid (p.42)

9. - KADP Annual Reports: (19890 p.8.

10. - cooperative (ed) (Principles And Arts Occasional (1997) P.65-67. R.A. Alkali, The rise and development of movement in Bauchi State: In Koroma at al community And Rural Development Case Studies In Nigeria) Faculty Of Paper No11 University Of Maiduguri,

11. Op cit (1997) p.4.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMANDATIONS

5.1 Introduction

A development strategy is the conscious direction of state policies and actions towards certain specific objectives. The attainments of these objectives are thought by those in power to bring out desired changes in the structure of society and economy. It seeks through conscious actions to affect fundamental changes in the structure of social relations. These relations are generated by the way men relate to each other in the process of production and exchange. The success of any development strategy, therefore is contingent upon the level to which it has achieved its objectives.

5.2 Summary

In this study, attempts have been made to examine Kaduna State Agricultural Development Project and rural transformation. Generally, the study was aimed at determining the extent to which the project has succeeded in raising the standard of the living conditions and income of the rural dwellers.

This study assumes that, the development of the rural areas of Kaduna State is a necessary responsibility of the

state Government. And that, rural development programme provides the avenue for bridging the gap between the rural and urban areas. From the onset of this study, attempt was made to highlight the role of the KADP in rural transformation programmes.

The agrarian crisis in the country in general and Kaduna State in particular were reviewed. It was found out that, the rural areas of this country are largely seen as sources of raw materials and food for the urban sector. This explains why all the rural development programmes are agriculturally based, i.e., encouraging farmers to produce more for both export and internal consumption.

This study also examined the extent to which the KADP in its role of rural development did manage to change the farming technique of the farmers within the zone. Through the injection of the much needed inputs. These inputs fertilizers, improved seedlings, pesticide and other social and economic infrastructures needed for a sustained rural development.

This study adopted and use the modernization theory of social change as its theoretical frame work upon which the whole study was built on. The data collected in this study

were largely obtained through the questionnaire method as well as consultation with a number of official documents and written records.

A sizable sample of 200 farming families were drawn using the stratified sampling technique. And the raw data obtained were coded and tabulated. Frequencies and percentages were used in analyzing and presenting the responses obtained.

The questionnaires were administered directly by the researcher because almost all the 200 respondents are not literate, therefore all 200 questionnaires were returned. And based on the data obtained conclusions were made and recommendations offered.

5.3 Conclusion:

It was discovered that, there appears to be wide spread agreement on the nature of Nigeria's rural development problem. It was shown that, the agricultural sector was characterized by very small production units the most prominent feature is one of small holders cultivating two or three acres each. Techniques of production are not advanced. There is little mechanization. The seeds are low yielding, the

use of fertilizers and pesticides not wide spread. Prices are low this reduces incentives to modernize.

The land tenure system encourages fragmentation; storage and marketing facilities are not adequate. Finally, social amenities are generally at a low level when compared with the urban sectors of the country.[1]

It is also the conclusion of this study that, there also appears to be a growing consensus on solutions that, "a combination of increased supply of credit and improved biological and chemical technologies is a measure which has high potential for increasing farm productivity, income and employment".[2] The above consensus brought about the establishment of ADP's through out the country.

The main conclusion from this study is that, most of the goals set up by the KADP (Maigana zone) were realized. This is because in their efforts towards boosting agricultural productivity, the MADP provides farmers with the necessary inputs such as improved seedlings, fertilizers, water pumps and pesticides at subsidized prices.

This study also noticed that, the MADP has succeeded in solving the problem of poor transportation associated with our rural areas. This is because, the project has constructed

hundred of kilometers of feeder roads linking the agricultural areas of the zone to the existing network and important markets. Those feeder roads constructed apart from reducing the hardship associated with the movement of agricultural products and inputs to and from the market also led to the expansion and development of new markets as well as brought about social interaction between the different communities residing within the zone.

This study also concludes that, the construction of earth dams and boreholes by the project is very important to the health and welfare of the farming families within the zone. This is because it was discovered that, the provision of clean drinking water is a vital indicator of development in any society. Even though, it was discovered that most of those infrastructure put in place by the MADP are not adequately looked after i.e. maintained. Yet, it was discovered that those social infrastructures did relived the farming households from their daily routine of looking for water from deep wells and thus allow them to engage in more productive chores.

On the importance of the co-operative farming system introduced by the project, it was discovered that much is yet to be achieved. Even though, the project did it best in urging

farmers to form cooperatives societies, the traditional farming system (Gandu farming system) remains predominant within the zone. Although a small percentage of those sampled are members of one cooperative movement or the other.

Therefore, based on the data obtained and analysed, it can be rightly concluded that; the Maigana zone of the KADP has indeed succeeded in its rural transformation mission. This is because it we are to equate growth with development as indicated in our theoretical framework then we can conclude that, it did succeed in that respect, i.e. rural transformation.

The above is based on the fact that, the project has significantly contributed towards an increase in agricultural productivity to the detriment of other non-agricultural occupations. This increase was achieved through the provision of and supply of modern farming inputs, construction of feeder roads as well as sinking of boreholes in villages and hamlets so as to provide good and clean drinking water for both human and animal consumption.

But as noted earlier, development is much more than just qualitative increase in agricultural and infrastructural facilities. It involves an increase in income as well as the

development of the rural peoples intellect for greater use and utilization.

Even though it was shown that, there was an increase in agricultural productivity within the zone it was discovered that, the increase in the level of income of the people leave much to be desired. Infact, in some cases the level of income slightly go down. This justifies the argument of growth without development. This further establishes the constant criticism leveled on the modernization theory as an approach to development.

This does not however mean that, the MADP has failed in its rural transformation mission. No, indeed it has not one hundred percent succeeded; it has however laid the basic structural pre-condition for a successful rural transformation strategy.

5.4 Recommendations

Based on our conclusions, the following recommendations are proposed for better performance of the ADP's in the future.

5.4.1 That, programs should be based on a comprehensive socio economic study of the community so as to ensure that

programmes designed are at equilibrium with the nature of that society.

5.4.2 It is also recommended that, in the future other non-agricultural occupations should be made part and parcel of the project programmes. This would enable the farmers to increase their income during the dry season, instead of them moving into the urban areas looking for jobs that are non-productive. This is because it was discovered that non-agricultural occupations such as pottery, weaving, blacksmithing, tailoring, cottage industries were neglected and emphasis placed on only agricultural occupations.

5.4.3 It is also recommended that, the much needed input such as fertilizers, improved seedlings and others should be made available to farmers before the beginning of the raining season. This would enable the farmers to plan ahead. This is because, it was found out that inputs always reach the farmers towards the end of the raining season when its is more or less unimportant.

5.4.4 It is recommended that, a maintenance culture should be developed so as to save those social infrastructures put in place by the project. And a special fund should be set aside specifically for maintenance only. And local Governments that

were suppose to take over those infrastructures should be made to take part in the planning and implementation stages of the project. This is because it was discovered that, most of those infrastructures were in a state of disrepair and need attention urgently or they will all go to waste.

5.4.5. It is also recommended that, the ADP's should not concentrate only on the technical aspect, but the interest of ordinary farmer who would be the major beneficiary of any planned change in agriculture should be taken into account in developing new farming technique. And people should not be treated as resources but users of resources and ends rather than means.

This is because, it was discovered that, as a result of the policies of the ADP's a very strong group of large-scale farmers emerge to exploit these policies. And if this trend continues there is going to be a social expulsion, when the landless and disinherited peasants would have been produced.[3]

5.4.6. This study also recommends that, an informational system to collect and widely disseminate information on crop prospectus, market, supplies, and prices should be implemented. This would help reduce price

uncertainty. Again, it is recommended that, facilities for storing large quantities of products should be made available. A system whereby farmers can store their products. When necessary, government could embark in buying, storing and selling of grains. This became necessary because it was discovered that, during bumper harvest farmers are forced to sell their products at very low prices because they lack adequate storing facilities. This tends to made farmers to loose interest to plant again in the next cropping period.

5.4.7. Finally, it is recommended that, rural development programmes should be planned at the regional level within the contest of the national development plan. This, it is felt, would facilitate the achievement of integrating the rural and urban sectors. But the success of this depends upon the willingness of the government to accept the idea of planning.

ENDNOTES

1. **I.J. Ebong, "Nigerian Social Objectives And Rural Sectors" In Rural Development In Nigeria, Being A Paper Presented At The Annual Conference Of The Nigerian Economics Society, Ibadan (1973) P.18**
2. **O. Ogunfowora, "Income and Employment Potentials Of Credit and Technology In Peasant Farming" In Nigerian Rural Development Study (NRDS) Memo, Ibadan, Vol 9. P.1-2.**
3. **- See New Nigerian News Paper; August 8, 1985, Kaduna.**