A PERFORMANCE EVALUATION OF THE RURAL DEVELOPMENT PROGRAMME OF THE BAUCHI STATE INTEGRATED RURAL DEVELOPMENT AUTHORITY (BASIRDA) IN EASTERN ZONE OF BAUCHI STATE.

By

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DECLARATION

I hereby declare that this thesis is a record of my own research work. It has not been presented in any previous application for a higher degree. All quotations are indicated and the sources of information are specifically acknowledged by means of references.

Signature

11/2/94.
Date

CERTIFICATION

This thesis A Performance Evaluation of the Rural Development Programme of the Bauchi State Integrated Rural Development Authority in Eastern Zone of Bauchi State by Othniel Mintang Yila meets the regulations governing the award of the degree of Masters of Science Degree in Rural Development, Postgraduate School, Ahmadu Bello University, and is hereby approved for its contribution to knowledge and literary presentation.

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DEDICATION

To my parents
Mr. Yila Akawu Mintang Seu
Mrs. Lalitam Joanna Yila Mintang
For the Love and UNDERSTANDING.

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I wish to express my gratitude to my supervisors Drs. V.A. Kolawole, and D.O. Ogbonna for their critical reviews and suggestions which helped me immensely in shaping of this study. I would also like to thank Dr. J.A. Ariyo for seeing me through during much part of the coursework period.

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- Othniel Mintang Yila

ABSTRACT

Rural Development has been pushed to the top agenda in Nigeria's national development drive. The generala aim has been to raise the standard of living of the rural people. The enthusiasm which prevailed during the pursuit of this policy goal has led to the establishment of many institutions at the different levels of government all of which are expected to collectively achieve the rural development goal. However, little has been achieved through these institutions which have so far failed to achieve the aspirations of the target people, hence the rural areas have remained neglected and their inhabitants worse off.

The search for an appropriate solution to the problems of rural neglect led the Col. Chris Garuba administration to set up the Bauchi State Integrated Rural Development Authority (BASIRDA) in March 1986 to pursue a more vigorous and meaningful development of the rural areas of Bauchi State.

This study evaluates the rural development programme of the Authority, particularly in the area, of infrastructural provision of rural feeder roads, rural water supply and electricity in the Eastern Zone of Bauchi State. The methodological approach was to take Eastern Zone as a micro-region, to form a conceptual

basis of examining BASIRDA activities in the State The purpose of this evaluation was to assess how much of the aspirations of the target people had been achieved through BASIRDA infrastructure provision, and if not much has been achieved to identify the constraints responsible for the poor achievement.

Analysis of data from the survey revealed that the daily yield of water from most of the boreholes instituted by BASIRDA is inadequate, mainly due to the drying up of most of them, hence the inconveniences encountered by the people in their daily search for and use of water; in trekking longer distances and in the use of other sources of water which are less hygenic than the boreholes. In view of these results, it is concluded that the borehole water supply projects in the study area falls short of its desired objectives

On the feeder roads, except for the poor state of some, the programme was found to have brought about strong spatial interaction and integration. Electricity was found to be making significant contributions to the social and economic life of the people of Hashidu and Gona villages the only villages provided with electricity in the zone by BASIRDA.

In conclusion the study recommends how constraints to effective rural development, found from the assessment of BASIRDA provided infrastructures may be achieved.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Introduction

In Less Developed Countries (LDC) inequality in various ramifications exist between the rural and urban centres, and the rural areas have come to be at the receiving end. To exacerbate this trend is the type of development policies adopted in these countries which are urban-focused to the disadvantage of the rural areas which harbour an overwhelming majority of the people. In Nigeria, according to Olayide et. al. (1985); Alao (1987); Olukesi (1987); over 70 per cent of the country's population live in the rural areas, and over 95 percent of the people living in the urban centres have rural roots (Alao, op. cit.).

Therefore for equity consideration there is a dire need to develop the rural areas which have been termed 'stagnant' (Anthonio, 1976), 'neglected' (Olatunbosun, 1975); while Ijere (1975), described them as the **'Other Nigerians'**. With this in mind most LDC's are faced with seemingly intractable problem of how to develop their rural areas. The importance of this task can be inferred from political leaders speeches and action. For example to demonstrate this commitment on the part of the present Nigerian government to the rural areas,

President Babangida emphasised in his 1986 budget speech to the nation that:

> Rural Development will move away from the past narrow sectoral pre-occupation with the generation of food, and fibres surpluses to overall formulation of a national rural development strategy, with emphasis on the alleviation of poverty and the enhancement of the quality of life.

In the light of the above, various approaches have been adopted to develop the rural areas. In Nigeria, there had been nothing less than ten different agricultural and rural development programmes in the country. These include National Accelerated Food Production Programme (NAFPP) (1973); Integrated Rural/Agricultural Development Programmes (ADP) (1974); River Basin and Rural Development Authorities (RBRDA) (1976); Nigeria Agricultural and Cooperative Bank (NACB) (1978); Operation Feed the Nation (OFN) (1978); the Green Revolution (1979); Directorate of Food, Roads and Rural Infrastructures (DFRRI) (1986); and of recent the National Land Development Authority, (NALDA) (1991). In spite of these being well conceived and all aimed at the complete transformation of the rural areas and coupled with sufficient funds received and expended on each of them, it is unfortunate that rural life has been showing no significant improvement (D'Silva and Raza, 1980; Tsado, 1987; Dunmoye, 1987; Kolawole, 1989; Lyam, 1990; Ariyo, 1991).

These past failures in agricultural and rural development, and if one can say the 'successes of some' informed the establishment of the Bauchi State Integrated Rural Development Authority by Edict No. 1 of 1986 on March 2nd, 1986. This represents a bold attempt by the Bauchi State Government to embark on a meaningful process of development because of the failure to incorporate the rural areas in which about 89.4% of its population live in order to have a balanced and equitable national development (BASIRDA, 1988 Diary); since it recognises that promoting development at the grass-root level produces self-sustaining independent, confident and proud rural population. Furthermore, this would necessarily reduce rural-urban migration and dependence, urban congestion, unemployment and often attendant consequences of crime and other vices, because healthy, happy and enlightened citizenry is undoubtedly a necessary condition for lasting peace and progress. Among the factors identified as holding back development and quality of life in the rural areas are water supply, electricity and lack of good roads (D'Silva and Raza, 1980; Ukoje, 1985; Adebayo, 1991; Adesina, 1991). The Authority has since its inception in 1986 been involved in the provision of these infrastructures and many others, alongside the mobilization of the rural populace in Bauchi State in order to bring about complete transformation of the rural areas through self-realization and self-

actualization. The importance of the participation of the rural populace through their mobilization as done by the authority in the provision of infrastructure can be inferred for example from IDRC (1990) report:

> "Even if they have funds and personnel to cover hardware and installation cost, infrastructural programmes rarely succeed without local participation and support. The end users of the technology must be involved from the outset."

This study is therefore undertaken to determine the extent to which BASIRDA has gone in the provision of basic physical infrastructures namely water supply, Feeder Roads and Electricity in the Eastern zone of Bauchi State, and also to appraise the impact of these infrastructures on the target population; the rural dwellers in Eastern zone.

1.2 Statement of the Problem

The problem of rural underdevelopment and regional disparities in the level of development have been of great concern to the different levels of government in Nigeria. This concern led to the initiation of a number of rural development programmes, amongst which are the River Basin and Rural Development Authorities (RBDA's), the Agricultural and Rural Development Programmes (ADP's) and recently, the Directorate of Food, Roads and Rural Infrastructures (DFRRI).

These programmes notwithstanding, the rural areas have not experienced much improvements over the past decades (Ukoje, 1985; Salau, 1986; Tsado, 1987; Dunmoye, 1987; Kolawole, 1989; Lyam, 1990; Adebayo, 1991; Adesina, 1991). While resources may not permit an evaluation of the effectiveness on a national scale, it should be possible to learn some useful lessons from specific policies and programmes in determining future directions.

One commonly employed approach to the evaluation of such programmes is the Institutional evaluation carried out by the monitoring units of such programmes. This approach sees evaluation as based on establishing and measuring performance criteria using aggregate data. The objective is to keep a continuous check on the various project operations by providing a fairly broad picture of programme performance in terms of the extent to which programme targets have been met. However, such evaluations, using aggregate data are ad hoc in nature, and do not allow for conclusive assessment as projects effectiveness are seen in terms of number provided not those functional. Thus, it is difficult from the available reports to measure the contribution of the programmes to the development process.

Of all the rural development agencies in the country today BASIRDA is reputed to be the most successful and has been widely acclaimed for success

when compared with similar Integrated Rural Development Scheme, particularly in terms of amount of projects it achieved within its six years of existence. If that is the case, there is need now for an independent empirical evaluation of the agency especially against the background of the much talked about poor performance of DFRRI, which is a nationwide project. This study attempts to remedy the deficiency associated with institutional evaluation on BASIRDA.

Therefore, given the objectives of BASIRDA and the handsome amount of money provided for its operation over six years of its existence, it is worth while against this background to assess empirically the impact of the basic physical infrastructures namely water supply, rural feeder roads and rural electricity provided by BASIRDA to the rural communities in Bauchi State using the Eastern zone area as a case study; as these projects formed the focus of BASIRDA during its six years of existence (1986-1992), they commanded 59.84% of operational cost out of the numerous activities the agency was involved in, apart from high familiarity of BASIRDA with these programmes by the rural populace as if that is what BASIRDA was created to achieve. The study will also attempt to answer the following questions which are closely interrelated:

a) To what extent has the Bauchi State Integrated Rural Development Authority (BASIRDA) been

effective in achieving Rural Development through its physical infrastructures, and

b) What constraints have been experienced in realising this objective or in limiting the achievements?

1.3 Aim and Objectives

The study is aimed at assessing the contribution to the process of rural improvement by the Feeder Roads, Water Supply, and Electricity provided by BASIRDA on the rural populace in the study area.

This aim will be achieved through the following objectives:

a) To review the adequacy of the strategies and programmes of rural development and their achievements on rural development in Nigeria with particular reference to Bauchi State for meeting the set objectives and targets.

b) To examine the physical, social and economic characteristics of the study area, before and after the implementation of the programmes to determine direction and extent of changes.

c) To examine the structural organisation and operational strategy of BASIRDA in order to

determine their adequacy for the tasks of BASIRDA.

d) To assess the level of success achieved by BASIRDA in the areas of rural feeder roads, water supply and electrification.

e) To find out the level of peoples' participation on completed projects of roads, water and electricity as and indication of their involvement and likely sustainability.

f) To find whether the provision of the rural roads, water boreholes, and electricity has improved the condition of living of the people.

g) To make recommendation for rural improvements based on the experiences of BASIRDA.

1.4 Scope and Limitations of the Study

The study covers nine Local Government Areas (LGA), which make up the Eastern Zone, viz: Akko, Alkaleri Balanga, Billiri Gombe, Dukku, Kaltungo, Nafada-Bajoga and Yamaltu Deba. With a population of 1,722,446, about 40.1% of the state, and an area covering 25,710 sq.km., about 38.95% of the total area of the state.

In terms of contents, the study focuses on the provision of basic physical rural infrastructures namely feeder roads, water, and electricity. For a

study like this, which restricted itself to only three of the activities is not without limitations since it cannot be used to generalise other programmes of the Authority. Consequently, the study was limited to five selected LGA out of the nine, even much as it would have been desired to cover the twenty-three LGA's of the State. Nevertheless, this serves as a sub-regional area, since the programmes under BASIRDA are very wide, and unfortunately one cannot study everything in the scheme, hence the necessity for limiting the scope to the three projects. Furthermore, the money and time made available for this study do not make such a wide scope covering the whole state feasible. It is hoped that inspite of the limitations, the data assembled will provide a reasonably good basis for useful generalisation and conclusion.

1.5 Justification of the Topic and the Study Area

Rural Development Studies, particularly the evaluation of rural development institutions, are just gaining momentum. Thus, various government functionaries are studying the various aspects of rural development projects. It is anticipated that this study will contribute in general to the literature on rural development in LDC's with emphasis on the role of feeder roads, water and electricity. In particular, it will contribute to the body of literature on the assessment of BASIRDA

from an independent source as most reports on BASIRDA are government publications with a view of bringing to light its achievements, problems, and prospects. It will also make a comparison with earlier and similar programmes possible, which will help in identifying common and inherent problems which will provide guidance in the search for solutions to them and for alternatives. It is also anticipated that it will provide a stimulus for further research in other areas not covered.

Furthermore, the study will be useful to rural development administrators and planners, and for redirecting policy-makers in their efforts to develop the state. My hope therefore, is that this research will help to confirm some of the suspected malfunctions associated with our development efforts and contribute in the process of our march towards improving the living conditions of our rural majority.

The Eastern Zone was chosen as the study area, because among the four zones in the state, the pattern of settlement depicted in the area is more rural than any (except for only three settlements which can be classified as urban, namely Gombe, Billiri and Kumo). It is assumed here that BASIRDA, being an agency set up for the purpose of pursuing a vigorous and integrated development of the rural areas of Bauchi State would have had some impact on these rural communities.

1.6 Research Methodology

1.6.1 Sources of data

The researcher obtained data from a variety of sources which have been grouped into: (i) Primary, and (ii) Secondary sources.

The methods favoured in obtaining primary data during the study include the use of questionnaire for structured interviews, field measurements, and participants observations, and opinions. On the other hand secondary data came from documentary sources, such as existing literature, official documents, statistics and maps from ministries and other relevant offices.

Primary Data

(a) Questionnaire Interview

Primary data for this research came from two main sources namely,

i) target population who are rural dwellers.

ii) from respective Assistant Directors handling Rural Road, Rural Water Supply, and Rural Electrification departments under BASIRDA.

Hence two sets of questionnaires were designed and administered, designated A and B. The techniques used to administer each set of questionnaire are as follows:

i) Questionnaire A

Primary data for this study were collected through this questionnaire administered to a total of 300 adult dwellers in all the selected 20 villages (criteria for selection of villages is given in Section 1.6.2) who are the target population on household basis, both male and female adults (irrespective of marital status). Four trained assistants alongside the researcher were used to administer the questionnaire, this way 292 (97.3%) response rate was achieved, but, care was taken in interpreting the data because of unavoidable bias of interviewers.

On administration of the questionnaire each village transverse into two equal zones. From each zone, systematic sampling procedure was used and every seventh or eight household (depending on the size of the village) was picked, and any first adult met in the house was then interviewed. In each zone 7 or 8 copies of questionnaires were administered. In each village 15 copies of questionnaire were administered.

ii) Questionnaire B

Three copies of this set were administered to each Assistant Director of the three departments, one each for Rural Roads, Rural Water Supply and Rural Electrification. This was intended to solicit

information about official departmental objectives, operational techniques, ways decisions are made and their assessment of the success of their departmental projects.

b) Oral Interviews

The following people were orally interviewed:

i) Director, Engineering Division of BASIRDA.

ii) Community Development Officers of the LGA's

iii) Few Local residents and some village heads in the sampled villages.

These people were interviewed based on their familiarity with nature and location of the projects, and people's level of participation in the execution of these projects.

c) Field Observations

Field observations were carried out by visiting site locations to ascertain the actual work done and by who, and on-the-spot assessment of the quality of the projects, as well as confirming the physical presence of these infrastructures.

d) Secondary Data

In collecting this data the following sources were consulted:

i) BASIRDA publications (Annual and Quarterly Reports, Budget Reports, Blueprints and Maps).

ii) Government documents for information on the general characteristics of the State.

iii) Relevant publications and other library materials were used that provided information about similar studies.

1.6.2 Village sampling (sampling procedure)

A list of all the names of the villages provided with one form of water supply provided by BASIRDA (hand pump or motorised borehole) obtained from BASIRDA headquarters at Bauchi and the zonal headquarters in Gombe was made, including the two villages supplied with electricity, which fortunately enough were also provided with water by BASIRDA. The villages numbered 119.

From this list, villages located within an area of 2km radius from the feeder road either constructed or rehabilitated by BASIRDA were selected. The rationale for this limit is that 2km represents an approximate distance which users are willing to travel to the large settlements or their farms for purpose of conducting their daily transactions. The number of villages falling within this category were found to be 54. These villages were established through the use of a base map of the rural feeder roads and rehabilitated by BASIRDA. A sample size of 200 villages was decided upon representing 37.0%, which is a manageable size and is not too small for any statistical inferences, mainly also because of time and money constraints (see Section 1.5).

The twenty villages were selected from five LGAs out of nine in the zone. The selection of the five LGAs was based on the following sampling techniques:

i) Based on purposive sampling method Akko and Dukku LGA's were selected because they are the only LGA's having a village each supplied with electricity by BASIRDA, namely Gona and Hashidu villages.

ii) The third LGA, Billiri was also purposively selected because it is the home LGA of the researcher, and the high familiarity with the area.

iii) To select the remaining two LGA's the name of the remaining six LGA's were written on piece of papers and put inside a container and two LGAs were randomly picked. This LGA's happen to be Balanga and Yamaltu Deba.

As earlier mentioned, the twenty villages were selected in the five LGA's, with each LGA having four villages sampled. The sampling of these twenty villages was based on the following sampling techniques:

i) Based on purposive sampling method two villages namely Hashidu and Gona were selected from Dukku and Akko LGA

respectively. The purposive sampling technique is a non-probability sampling method in which a variable or variables of the population are singled out essentially because of certain attributes the researcher would like to study or draw inferences from (Babbie, 1933 as in Elabi, 1987 and quoted by Adebayo, 1991). Since the study focuses on rural infrastructures provided by BASIRDA, ie feeder roads, water supply, and electricity. Hashidu and Gona are the only rural settlements possessing these three infrastructures.

ii) To select the remaining eighteen villages, a list of all villages in the remaining five selected LGA within the radius of less than 2km from a feeder road and also possessing BASIRDA water supply were made for each LGA. For each LGA, except Akko and Dukku LGA's, four villages were randomly selected using a random table and three villages each from Akko and Dukku LGAs using the same random table. The random sampling technique was used to select the villages from each of the five LGAs, because this gives each village an equal chance of being selected to avoid biases that may be introduced (see Fig.1.1 and table 1.1 for the location of

sampled villages).

1.6.3 Data analysis

Statistical analysis of data obtained were computed in percentages, from which description and inferences were made, tables were also used for illustration.

Table 1.1. Sampled Villages and Sample Population Distribution.

LGA	Village	No. of People Sampled
Akko	Pindiga*	15
	Gona*	15
	Tukulma+	15
	Kobuwa+	15
Billiri	Ayaba+	15
	Kulgul+	15
	Poshiya*	15
	Tal*	15
Dukku	Hashidu*	15
	Gombe Abba	15
	Dashi*	15
	Zonge+	15
Balanga	Degri*	15
	Dong+	15
	Walawaja+	15
	Reme+	15
Yamaltu-Deba	Difa+	15
	Gwani+	15
	Kuri*	15
	Kwadon*	15
Total	20	300

Source: Fieldwork, 1993.

*Motorised borehole
+Handpump

FIG 1:1. EASTERN ZONE: LOCATION OF SAMPLED VILLAGES.



CHAPTER TWO

LITERATURE REVIEW

2.1 Development Concept

The concept of development has been popular among development economists and other social science scholars in related disciplines. A lot of meaning have been put forward as to what development is or should be and this evidenced by abundant literature on the subject matter.

The history of national development in Europe and as it affected the colonies indicates about three shifts or epoch in development goals and targets. These are the period of territorial acquisition and economic growth, the period of modernisation and the period of distributive justice. Each of these period was marked by a specific conception of what interests were to be pursued in practice of development planning. Thus, changes in the prevailing conceptions of development also implied that development actions taken to achieve the broad goals and their mode of operations would also have to change.

The first view sees development as being the same with economic growth which is measurable in aggregate terms as increase in Gross National Product (GNP). This is the view that was widely held by

economists of the classical and neo-classical schools of thought (Keynes, 1936; Mydral, 1956; Rostow, 1962). In essence, this means increasing the production of goods and services within a country to a level that exceeded the rate of population growth.

The second view of development sees it from an angle of modernising existing socio-infrastructural amenities and introduction of new ones. This meant a wide use of machine for almost every aspect of production, thus causing several changes in training and behaviours of both producers and consumers of such products, and eventually society at large. In this context the simple economic growth concept becomes a narrower interpretation of development. Modernisation requires changing attitudes of people, embracing new ideas, new economic activities and a new social order. This according to Seers (1969) bring the distinction placed between modernisation, as economic development and economic growth which put emphasis on sectoral growth.

The third view of development is distributive justice. This emerged through the failure of the application of the growth and modernisation models to provide solutions to the emerging political and moral questions on how development should be conducted, and what it should achieve and brought into focus this dimension of the concept of development, (Lyam,

1990). Development in this context is conceived as having to deal with several issues at once, economic growth, modernisation and the question of the distribution of the benefits of growth in a just manner to all concerned. This is succintly put by Todaro (1979) as "Multidimensional process involving changes in structures, attitudes and institutions as well as acceleration of economic growth and the reduction of inequality and eradication of absolute poverty." It represents the entire gamut of change for the better. It represents an upward mobility in the standard of living and a complete divorce from all the attributes of suffering and sordid poverty.

2.2 Concept of Rural Development

The phrase 'Rural Development' has been variously defined, and has been subjected to multiplicity of definitions that are yet to be given their true meaning (William, 1978); Osei-Bonsu, 1983; Okorie, 1985).

The concept of Rural Development has also witnessed noticeable shifts with time, especially in relation to where emphasis is placed between growth and welfare.

In a more restrictive sense, it has been defined by the World Bank (1975) as an economic issue, involving the improvement of the low levels of rural incomes

through agricultural modernisation. In this definition rural development is conceived as a hard drawn concept by which the rural poverty can be alleviated through sustained increases in the productivity and incomes of the low income rural workers and households. Unfortunately, it emphasises on agricultural improvements, essentially, to the neglect of other rural productive avenues.

In a much wider dimension, the concept has been defined as a process of not only increasing the level of per capita income in the rural areas, but also the standard of living of the rural population (Diejomoah, 1972). Similarly Mallya (1986), views Rural Development as a process which involves changes aimed at the enhancement of the quality of life of the people who live in villages.

Uma Lele, writing for the World Bank, defines rural development as "improving living standards of the rural mass of the low income population residing in the rural areas and making the process of their development self-sustaining" (Lele, 1975 p.20).

In Famoriyo's view, rural development is a process by which a set of technical, social and cultural and institutional measure are implemented with and for the inhabitants of the rural areas with the aim of improving their socio-economic conditions in

order to achieve harmony and balance both on regional and national scale. This definition necessarily involves consideration of political development, self-reliance and reduction of cultural dependence (Famoriyo, 1985).

To Awogbade and Kolawole (1980), rural development connotes changes; it involves changes in physical structure, attitudes and institutions and reduction of inequality between urban and rural centres.

Mabogunje (1980) in his own exposition argues that, rural development is concerned with the improvement of the living standards of the low income population living in the rural areas on a self-sustaining basis, through transformation of the socio-spatial structure of their reproductive activities. He goes on to differentiate rural development, from agricultural development, to which Adebayo (1991) said, "In the past up to the end of the Second National Development Plan, rural development in Nigeria was seen as synonymous with agricultural development."

Finally, Wards (1978) defined rural development as a process that is expected to raise the well-being of the rural poor, by increasing their ability to participate in the development process. This, she argues can be achieved through such measures as the encouragement of labour intensive production techniques and broad access to education, health and credit

facilities that could accelerate rather than hinder growth.

Although diversities exist in the definitions considered above, the general concensus seems to be, that economic forces hold the key to the socio-economic transformation of the rural areas. A complimentary definition therefore, is to conceive rural development as a self-sustaining process that encourages, through the participation of the rural population, improved productivity, income and standard of living of the rural dwellers. In essence, the rural folks are subjects and objects of development. They must be seen as participants and not just beneficiaries. The process of their development must also be seen not only in terms of higher incomes, but higher standards of living. The argument is that Rural Development must be comprehensively conceived to embrace the social, cultural, economic and political spheres of rural life.

2.3 Strategies for Rural Development

Strategies for Rural Development have tended to vary depending much on the adopted concept of Rural Development, its aims and the objectives of planner or government. Thus, quite a number of strategies have been adopted in various parts of the third world and can be broadly categorised into the following:

2.3.1 Commodity programme

This strategy was prompted by the relatively straight forward objectives of increasing production of export crops in the small-holder sector. The crops that were important then with reference to Nigeria were Cotton, Cocoa, Groundnut, Palm Oil, and Rubber. The programme were usually financed by European commercial companies and through development cooperations of government of former colonies. Example of such programmes include the Kenya Tea Development Authority established in 1960, Niger Agricultural Project located at Mokwa (Niger State, Nigeria) for the production of Groundnut established in 1951 (Adesiyan, 1985).

2.3.2 Functional Strategy

This strategy as Uma Lele (1975) observed are aimed solely at removing a single constraint that is considered to be particularly critical for getting rural development underway. One way of carrying out this project is the construction of feeder roads for easy transportation of agricultural commodities to the urban areas, or it can be in the form of agricultural marketing, or rather as investment directed at financing a number of activities in the rural areas. An example of this strategy includes Agricultural Credit being administered in Kenya since in the early 1940s.

Agricultural Finance Corporation and the Industrial Development Corporation credit scheme for small scle scale industries in Nigeria. All these aimed at large scale farmers and cash crop producers to increase their production.

The Functional Strategy has very clear precise and limited objectives and does not demand skilful labour for its implementation. With these characteristics, the complexities of the rural problems especially with regard to Africa, makes the realization of achieving this strategy often difficult.

2.3.3 Sub-sectoral Development Programmes

This strategy has been given various nomenclature; but essentially it is referred to as sub-sectoral Development Strategy. This strategy involves the provision of a number of services related to the Development of a specific sub-sector or region. The example of such programmes under this strategy carried out in various African countries are: The Kenyan Livestock Development Project which involves the development of commercial ranches in Kenya's Central, Eastern and Rift Valley Provinces; the minimum package programme of the Ethiopian Government which is based on the provision of services considered critical to rural development (such as agricultural extention services). A great obstacle to this

strategy is lack of involvement of the target groups in the designing and implementation of the programme, except only as end users or beneficiaries.

2.3.4 Rehabilitated Spontaneous Effort

These are strategies used by some developing countries to solve the problem of squatter settlements which constituted environmental hazards. In most of the urban areas where they are found such settlements are established by disadvantaged social groups of un-employed or landless usually on land to which they had no tittle. The efforts of such strategy is to provide or establish schools and health clinics and rehabilitate other housing services that are of lower standard. The examples of such programme are the Kibwezi.

2.3.5 The impact of the Four Strategies above

These four approaches to rural development efforts in developing countries since 1940's up to the early 1970's are only meant to increase production of the cash crop sector by solving the problem of peasant economy in food production. This conceptualization of rural development of course is not different from colonial concept of development which Ekong (1978) called a "mere smoke-screen generated to hide the underlying and real intentions of feeding the European factories and creating export-

development economies". It is the recognition of the weakness of these rural development programmes which could not bring both qualitative and quantitative development to the rural poor, (World Bank, 1975), that the new approach, - Integrated Rural Development (IRD).has come to prominence in the 1960's to date.

2.3.6 Integrated Rural Development Strategy (IRD)

The growing realisation by governments that the functional and institutional development strategies are not enough to trigger and sustain rural development led to the adoption of Integrated Rural Development Strategy. This strategy is based on the explicit assumption that a critical minimum effort is necessary to make a noticeable impact on the target population. The IRD strategy is a multi-sectoral and multidisciplinary approach to the improvement or transformation of rural welfare. It also involves the provision of the non-agricultural aspects of basic needs such as health, education and shelter and focuses on the small scale farmers as its main target group. Uma Lele (1975), identified two forms of this strategy.

Firstly, the Integrated Rural Development (externally planned and financed). This strategy according to her includesthose projects that are undertaken mainly on the initiative of donor agencies and subsequently planned and administered

by a large number of expatriate staff. The central component of this strategy is the provision of a package deal to farmers in the project areas. For this purpose, special centres such as farm service centres are created within the project areas to supply farm inputs, market farmers produce and to provide land preparation services. The provision of credit facilities is also part of the farmers package deal in many instances. This strategy involves concentrating a substantial financial and trained manpower in a relatively small geographical area. Since most developing countries, including Nigeria, are faced with shortage of skilled manpower, emphasis will tend to be on expatriate staff whose emoluments will constitute a heavy drain on what is already a precarious national foreign exchange situation. The appeal of this strategy however, lies in the fact that an action or activity in one field usually call for action in another area. The IRD strategy tries to solve these inter-related problems simultaneously and in an integrated manner. For instance, an increase in production requires good marketing and storage facilities.

The second form of the strategy as identified by Uma Lele is the one planned and financed locally. The principal distinguishing feature of this strategy is its emphasis on local planning, implementation and financing by the National Governments.

This strategy is also planned in line with the National Plan, goals and aspirations, the basic philosophy being self-reliance.

Within this framework, needs are related to the available resources and the means available for achieving them. Unlike other strategies, the village or rural area becomes the centre of development instead of the usual planning for the rural areas by outside agents. Two leading examples of this strategy are the Ujama'a village development programme which has been described as the most successful in Africa and the Kitbutz system of Israel.

Since its basic philosophy is self-reliance the success of this strategy will depend on a high level of consciousness on the part of the rural dwellers, which calls for the education and politicisation of the population as is apparent in Tanzania. Its appeal is basically in its inward looking approach to goal formulation and problem solving. Planning takes place at the grassroot level and is from 'within' instead from 'without'.

2.4 POLICIES AND PROGRAMMES FOR RURAL DEVELOPMENT IN NIGERIA

2.4.1 Background

Government's commitment to the development of the rural areas is reflected in its policy statements

contained in the various National Development Plans. Such policies have subsequently been translated into a number of rural development programmes which have been planned and implemented at the national, regional and local levels respectively. The purpose of this section is to review such policies and programmes during each National Development Plan Period.

2.4.2 Rural Development in the Colonial and Welfare Development Act (1946-56)

The First attempt at National Development planning in Nigeria was made in 1946, when the colonial office requested the local administration to submit a ten year Development Plan proposal to guide the allocation of colonial development and welfare funds. This resulted in the ten years of development and welfare planning for Nigeria. The plan placed premium on ensuring that every province, district or village generated its own plan of development.

However, this plan made no particular reference to rural development. It only emphasised the expansion of the agricultural sector with particular attention to a limited range of export crops in Nigeria, (1946). The assumption was that the attainment of improved agricultural productivity will lead to the overall development of the rural areas.

During this plan period, there was minimal investments in local welfare, the official emphasis being on the promotion of metropolitan commercial interests, notably export production and evacuation of agricultural produce. Subsequently, efforts were made to encourage settlement schemes which had as their objectives, the development of resources in unused frontier areas, the introduction of new farming techniques and the redistribution of population. By 1950 however, it had become clear that the new settlers could not attune themselves to the new system (Egunjobi, 1986).

With regionalisation of Agriculture under the 1954 constitution, regional governments differed in their rural development strategies, but still concentrated on export crops. The Northern Region, with its strong tradition of Local governments, built a wide network of extension services and embarked upon water resources and irrigation works, while the South concentrated on large schemes of farm settlements projects. There were also rural development projects financed by voluntary agencies such as the Colonial Development Corporation (C.D.C), religious bodies and philantrophic organisations as well as individual enterpreneurs. These projects included the establishment of industries, model farms, technical and other schools as well as

infrastructural projects. Only modest achievements were recorded due to inadequate funding, poor spread of the projects and the narrow conception of rural development.

2.4.3 Rural Development in the First National Development Plan (1962-68)

Although, there was no major policy statement on Rural development at the National level during this period, the various regional development plans made substantial provisions for the development of the rural areas. For instance, the Northern Nigeria development plan emphasised that government will aim to increase beef and other meat product; and to export to a much greater extent the fisheries in the rivers and lakes (Northern Nigerian Development Plan; 1962). The Eastern region development plan also recognised that government has the responsibility towards the social development of the region, through the provision of those needs of special areas (Eastern Nigeria; 1962). A further objective of the plan was to reduce the disparities in the levels of development in the different parts of the region, and to evolve as wide a general participation as possible in community development (Eastern Nigeria Development Plan; 1962).

The Western Nigeria development plan on the other hand emphasised that government will concentrate

efforts on strengthening the community development spirit as a medium of fostering economic progress (Western Nigeria; 1962). It also stated that an integrated rural development strategy will be adopted towards attacking all factors which tend to inhibit the rapid economic and social development of the villages (Western Nigeria; 1962).

Generally, government's efforts during this period was directed at the establishment of rural projects which they owned wholly or in part. They also participated in the distribution of subsidies in the form of finance, technical advice, modern tools and high yielding breeds to individuals, communities and cooperative societies. In other instances, basic infrastructural facilities and agro-industrial bases were provided towards stimulating the development of the rural areas. Furthermore, as in the former Eastern region, government efforts were directed towards establishing a number of rural centres and growth points as a means of increasing the tempo of rural development. Thus, while some new settlements were established, some existing ones were upgraded and provided with growth generating functions and services. During this period also, numerous multi-purpose farm settlement schemes were established as a means of introducing modern farm techniques and systems to the rural farmers.

Finally, subscribing to the ideals of rural development, government efforts towards providing various services and stimulating increased production have been augumented by peoples own efforts with relevant organisation and mobilization at the local levels.

2.4.4 Rural Development in the Second National Development Plan (1970-75)

Though the sole intention of the plan was the rehabilitation of war affected areas, it was stated as a matter of priority that the plan shall strive to balance development between urban and rural areas so as to improve the welfare of various communities (Nigeria; 1970). To achieve this, efforts were to be directed towards regrouping villages and hamlets into larger units for purposes of providing services at reasonable cost (Nigeria, 1970). Furthermore, it was the intention of government to foster a more sustained development consciousness among the masses especially in the rural areas and to establish River Basin Development Authorities towards fostering an integrated social and economic development in the rural areas of the country (Nigeria, 1970).

A significant contribution to rural development during this period was therefore the establishment of River Basin Development Authorities (R.B.D.A.) in 1973 and 1974 in the Sokoto and Chad Basins respectively.

These authorities, it may be observed, stress the orderly and optimal use of the land and water resources of a drainage area as a regional entity. They have as their responsibilities, large scale mechanised farming, construction of dams, boreholes and feeder roads, rural electrification, agro-service centres, rearing of improved livestock, establishment of grazing reserves, afforestation and the multiplication of improved seeds.

In 1974, government further initiated pilot enclave Agricultural Development Projects (A.D.Ps) in Funtua and Gusau. These projects were established as a means of increasing agricultural productivity and improving the incomes and standards of rural dwellers. This was planned to be achieved through assisting farmers with a package of measures which include the provision of improved seeds, fertilizers pesticides, credit facilities, marketing outlets, extension services and provision of infrastructure and farm service facilities, access roads, water supply etc. Their execution has however occasioned much comments and criticisms. Apart from the fact that the project management staff are dominated by expatriate staff, local involvement in their activities have been minimal. It has equally been argued that there has so far been nothing or very little integrated about the Projects (Idachaba, 1981).

2.4.5 Rural Development in the Third National Development Plan (1975-80)

The Third National Development Plan treated the issue of rural development more articulately. As its policy objectives, government was to strive to increase rural productivity and income, diversify the rural economy and generally enhance the quality of life in the rural areas (Nigeria, 1975). In addition, it was the intention of the plan to enhance the quality of life in the rural areas through the provision of basic social amenities, such as health centres, pipe borne water, feeder roads and electricity. Government was also to assist and promote private activities towards raising the quality of life of the rural communities (Nigeria, 1975).

A number of programmes directed at the rural areas were initiated during this period amongst which was the Operation Feed the Nation (OFN). It was launched in 1976, as a result of the sahelian drought. It was only aimed at relieving the immediate food shortage but had a long term goal of increasing food supply, attaining national self-sufficiency and raising rural incomes through the provision of capital, equipment and other agricultural inputs. The change from the O.F.N. to the Green Revolution did not, however, constitute a structural or systematic transition in approach. The two programmes are noted

for the collosal sum of money that went into the importation of fertilizers and the corruption in the management of funds that was closely associated with the transactions (Egunjobi, 1986).

Finally, the River Basin Development Authorities received formal legal backing during this plan period, with the promulgation of the River Basin Development Decree of 1976. Subsequently, eleven R.B.D.A.'s were replicated from the initial two at Sokoto and Chad basins.

2.4.6 Rural Development in the Fourth National Development Plan (1981-1985)

Integrated and Multidisciplinary approach to rural development formed the focus of the government's rural development policies during this period. Thus, government was to strive to improve the social amenities in the rural areas through the provision of feeder roads, water supply, storage facilities, in addition to promoting agricultural production (Nigeria; 1981). For this purpose, the plan proposed two main agriculture based programmes, namely the Agricultural Development Projects, (ADP), and the Accelerated Development Areas. It was also part of government's policies to encourage processing activities in the rural areas as an additional means of increasing the level of economic activities and slowing down the rate of rural-urban migration

(Nigeria, 1981).

During this period, specific government allocation to Agriculture and the rural areas rose to 11.86% from 5% in the first National Development Plan period (Adesiyan, 1985). A substantial proportion of this went to the replication of the initial enclave Agricultural Development Projects (ADP's), to cover all areas of each state of the federation. The emphasis of these projects remained just like the initial ones on the improvement of agricultural productivity and the provision of rural infrastructures.

Furthermore, other non-agricultural activities which are virtually important not only for their linkages with the agricultural sector, but also for their contribution to the overall development of the rural economy received attention during the period. Rural industrialization was one of such and had particular emphasis on agro-allied small scale industries which were established in numerous centres within the rural areas. Finally, the Back-to-Land Scheme was launched in 1984 and initially adopted by Rivers State. It was implemented by providing land and small short term loans to school leavers who wanted to take up farming as a career.

2.4.7 Rural Development Programmes (1985-92)

Major rural development policies during this period were aimed at improving the quality of life and standard of living of the rural population. It was also the policy of government to encourage the use of the enormous resources of the rural areas towards laying a solid foundation for National development (Babangida, 1986).

Accordingly a Directorate for Food, Roads and Rural Infrastructures (DFRRI) was established under the office of the President as a means of articulating the Federal government's rural development efforts. The directorate has the objectives of improving the quality of life and living standards of the rural inhabitants, raising the quality of rural housing, improving the health conditions of the rural dwellers, and laying a solid foundation for the security, socio-cultural, political and economic growth and development of the nation. Though its objectives are clearly spelled out, comprehensive planning towards achieving same has been minimal (Obot, 1987). Thus, findings by Onibokun (1987), Adebayo (1991) revealed that many rural communities have not yet seen the direct benefits of the programmes of the Directorate.

During the same period government undertook a number of policies and institutional reorganization to further the development of the rural areas.

Various measures were therefore introduced amongst which was the provision of fiscal incentives for companies to go into large scale agricultural undertakings such as income relief and duty-free importation of farm machinery. In addition, the agricultural credit scheme and the agricultural insurance schemes were initiated as a means of providing inducements and incentives towards improved agricultural productivity in the rural areas. Whereas for the institutions, the setting up of Commission for Women Affairs, National Directorate for Employment, the Peoples Bank, Community's Bank, MAMSER and National Land Development Authority (NALDA) were witnessed, the emphasis of all these institutions, also have great place for rural development.

2.5 Policies and Programmes for Rural Development in Bauchi State

Bauchi State was carved out of the former North Eastern State in 1976, a year after the third National Development Plan was launched. Since then, a number of policy statements on rural development have been made. This section reviews such policies and programmes within the framework of the two National Development Plans prepared since the creation of the State.

2.5.1 Rural Development in Bauchi State During the Third National Development Plan (1976-1980)

Bauchi State was created in 1976, efforts were

geared towards administrative arrangements and consolidation. Therefore, policies and programmes towards the development of the rural areas reflected those at the national level.

The only major rural development programme during the period was the Gombe Agricultural Development Project (GADP) which was inherited from the defunct North Eastern State. It was jointly funded by the World Bank, Federal Government and the defunct North Eastern State Government.

The project was aimed at achieving increased income and equity and reducing poverty in its project area, by improving the agricultural productivity of farming families. At the heart of this policy is a development strategy that emphasises new technology, supported by infrastructure and institutional coordination, (Adesiyan, 1985). The target group of the project included all farming families in the area. However, resource constraints and organisational difficulties made it necessary for priority to be given to the so-called "Progressive Farmers". It was expected that the emphasis placed on these farmers would result in demonstration and "trickle down" effects. Studies on related projects by Gana (1979), Ukoje, (1985), and Tsado (1987) have, however, shown that this has not operated according to plan.

Furthermore, while Gombe Agricultural Development Project was being confined to the eastern region of the State, efforts were made to create Development Areas in other parts of the state. Though their creation was a well conceived idea the policy lacked some organisational framework as well as a planned programme for execution (Nduri, 1987). The idea consequently died out without making any significant impact on the lives of the rural population.

Other rural development projects executed during this period included those that were the direct responsibilities of various ministries and departments. Such projects included rural roads, rural health, agricultural mechanisation and credit schemes, rural industrialization and community development.

2.5.2 Rural Development in Bauchi State During the Fourth National Development Plan Period (1980-85)

The Bauchi State Development Plan (1980-85) was the first development plan prepared by the State since its creation in 1976. The plan had the goal of achieving an increased and even distribution of incomes and the diversification of the rural economy (Bauchi State Govt., 1981). Some of the objectives of the plan included balanced development; reduction in unemployment; promoting self-reliance and achieving greater productivity. These objectives are in line

with the Federal Government's rural development objectives.

A major thrust of the state government's rural development programmes during this period was the extension of the Gombe Agricultural Development Project concept to cover the whole state. The project was subsequently renamed Bauchi State Agricultural Programme (BSADP). By this change, the programme became the first state wide Agricultural Development Programme in Nigeria. To the original GADP objectives of increasing food production, farm income and rural welfare was added a second objective to strengthen the existing institutions and improve the supply of trained and experienced manpower. These twin objectives were to be completemented by investments in Civil works and technical assistance.

The programme (IBRD loan - 3040[a] UNI) was to cost ₦192 million and be funded by a World Bank loan and grants from the Federal and State Governments. It was initially to run for five years, but subsequently, extended for an additional 2½ years. This was in order that the burden on the state and federal governments could be spread out, to complete targets which have not been achieved and to ensure greater continuity to programme activities.

A number of Federal and State government

ministries and parastatals have also contributed substantially to rural development during this period. Notable amongst these are the Hadejia-Jama'are and the Upper Benue River Basin and Rural Development Authorities whose contributions have been towards both agricultural development and the provision of rural infrastructure and facilities. Among their more significant contributions is the Dadin-Kowa Dam Project which was completed in 1984, with the objective of paving way for multipurpose benefits from irrigated agriculture in an area of 44,000 Ha.

2.5.3 Rural Development Programmes in Bauchi State (1985-92)

Rural development policies in the State remained in comformity with national goals and objectives. Thus major objectives were to improve the quality of life and standard of living of the rural dwellers and to encourage the use of abundant rural resources.

The single most significant contribution to rural development during the period was the establishment of the Bauchi State Integrated Rural Development Authority (B.A.S.I.R.D.A.) in 1986 as a successor to the Bauchi State Agricultural Development Programme (B.S.A.D.P.). It was a state level initiative to channel a larger proportion of the available resources to the rural areas towards

building a self-sustaining independent, confident and proud rural population. Ostensibly BASIRDA absorbed BSADP, and provided the necessary framework for the continuation of its activities after separate project funding had ceased. However, since programme life was extended by two and half years, BSADP had to remain, at least in principle, to meet the loan agreement. With the completion of the programme life, however, BSADP, became the agricultural arm of BASIRDA.

Major objectives identified to guide in the effective take off of the Authority included Agricultural development, physical developments, such as the construction of roads; rural electrification and rural water supply; and human development through mass mobilisation and education of the people to enable them control and improve their environments. According to the blue print, the Authority was to integrate these in such a way as to ensure a linkage development that will be mutually supportive.

Though the Authority's programmes were executed through direct labour, funding, especially for the more technical areas that were not within the capabilities of the Authority, has had to be provided by subventions from the state government, DFRRI grants (for rural roads, water, electricity, housing, livestock, and horticulture and subventions from the

local governments.

The programme commenced with a mass mobilisation and consultation drive through the formation of Advisory Committees at all levels, zones, local government areas, districts and villages and was to be executed over a period of five years, allowing it to extend into the sixth years before it was formally scrapped in October 1992, leaving behind only its agricultural arm BSADP, while the other departments were transfered to relevant ministries or parastatals. Thus from its inception between 1986 to 1992 the Authority has recorded the following achievements:

1. Constructed and rehabilitated 1,805 km and 2221km of rural feeder roads.

2. established 28 new water schemes, reactivated 67 dormant ones, dug 17 wells and maintained 1,200 hand pump boreholes handed over to it by the BSADP. In addition, the Authority has in collaboration with DFRRI drilled 200 hand pump operated boreholes, and also supervised the BSADP/World Bank financed 240 borehole programme.

3. Maintained and connected 28 rural electrification stations to the national grid and initiated 27 other schemes. In

addition, the Authority has in conjunction with DFRRI initiated 11 schemes in various rural locations.

4. Established 32 model villages.
5. Established 6 resettlement schemes
6. Initiated 162 community farms
7. Completed the construction of 13 cooperative shops and offices.
8. Established one sheep/goat farm at Kaltungo and two others in collaboration with DFRRI in Ningi and Kaltungo respectively.
9. Surveyed and demarcated 59 grazing reserves.
10. Registered 552 and reactivated 100 dormant cooperatives societies.

2.5.4 Rural Development in Eastern Zone

Rural development programmes in Eastern zone have been undertaken within the framework of National and State development plans. In essence, there has not been any defined policy statement on rural development. However, a number of rural development programmes have been initiated and executed by both the local governments and the local communities.

2.5.4.1 Rural development programmes by the local government areas of eastern zone

The traditional areas of activity by the nine Local Government Authorities in Eastern zone of Bauchi State, have been in the provision of facilities and services. These include:

1. Construction and maintenance of rural feeder roads some instances alongside with GADP, BSADP, BASIRDA, and the communities.

2. Construction of new markets and reactivation of existing ones.

3. Purchase of drugs and medical equipments.

4. Construction and maintenance of slaughter slabs.

5. Construction of Television Viewing centres.

6. Construction of dispensaries and maternities in various villages.

7. Construction and maintenance of motor parks.

The main area of activity of other government agencies in the Local Government Areas of Eastern zone has been in Agricultural development. In particular, the GADP and the BSADP have been involved in the procurements and distribution of farm inputs, construction of feeder roads, provision of water

supply and the dissemination of better farming practices and techniques. Between 1976 and 1980 GADP constructed a total of 690km of rural feeder roads, drilled 355 boreholes, constructed 55 dams and established 35 farm service centres in various locations within the local government areas in the zone. While between 1981 and 1986 BSADP has to its credit a total of 306km constructed and 395 km. rehabilitated rural feeder roads, 163 drilled boreholes, 15 constructed dams, and 41 farm service centres in various locations within the local government areas.

With the creation of BASIRDA in 1986, a number of projects were commissioned. These projects include the construction and maintenance of rural roads (see Appendix C). In addition, BASIRDA has maintained 260 boreholes inherited from the BSADP, and constructed 193 boreholes for 119 communities in various locations within the zone (see Appendix D). BASIRDA has also initiated a number of rural electrification schemes which are at various stages of completion, with two already commissioned at Gona and Hashidu.

Finally, towards maximising livestock production in the zone and encouraging nomadic and semi-nomadic livestock to settle under a well managed cattle settlement schemes, BASIRDA surveyed and demarcated 39 grazing reserves in various locations within the zone.

Table 2.1. Quantifiable Achievements of GADP (1975-1976).

Infrastructure	1975 Quantity	1975 Value (N'000)	1976 Quantity	1976 Value (N'000)
Rural Roads (km)	178	712	412	1,648
Water Storage Dams	10	200	25	500
Water Storage Tapkis	9	9	40	40
Water well Boreholes	8	90	200	250
Staff Houses	93	885	52	948
Offices/work-shops	9	260	9	293
Farm Service Centre	35	688	15	295
Total		2844		3974

Source: GADP Annual Report, 1976.

2.5.4.2 Rural development projects by local communities in eastern zone

Communities and organization have contributed substantially towards rural development in Eastern Zone of Bauchi State. Such projects are carried out on self-help basis and are usually geared towards providing facilities and services such as educational institutions, health facilities, roads and water supply. The projects are usually simple, less capital intensive and are initiated by the people

based on their felt needs and problems. A high degree of local participation is therefore involved in the design and implementation of the projects. While the people are mobilised to raise labour force, financial and other necessary material inputs for the projects, expert advice and subsidies are sometimes provided by both local and state governments.

Between 1989 and 1990, projects worth ₦3.1 million were executed by communities with very minimal local and state government contribution respectively (see table 2.2). Such projects include the following:

(a) Repair of minor roads.
(b) Clearing of bush and village squares.
(c) Building of schools.
(d) Refuse disposal.
(e) Construction of public wells and maintenance of drainage.
(f) Tree planting.

Table 2.2. Bauchi State Agricultural Development Programme (BSADP) Quantifyable Achievements (1981-90) in Bauchi State.

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	CUM.
Building Constructed											
Staff Houses	-	23	153	87	24	3	0	4	1	0	295
Office	-	3	19	16	7	-	1	-	-	-	46
FSC/Stores	-	14	65	49	6	1	1	-	-	-	135
Workshop	-	2	0	0	1	0	1	-	-	-	4
Others	-	10	29	18	19	-	-	-	-	-	76
Feeder Roads											
Constructed	62	189	429	167	272	271	0	0	0	0	1390
Maintained	-	0	-	450	407	318	314	650	327	547	3013
Training CTI	-	610	7378	4827	12484	2970	7043	11256	12399	1818	60785
Dams Constructed	2	0	24	24	8	5	0	0	0	2	63
Boreholes Drilled (successful)		164	423	419	192	0	150	82	0	0	1430
Pumps installed		164	423	419	192	0	150	82	0	0	1430
Washbores drilled		0	0	376	247	470	785	1144	0	0	3022
Course attended by staff											
In Nigeria		65	102	98	35	30	33	27	177	37	604
Overseas		7	9	6	7	5	6	8	6	4	58
CFA Loans disbursed in (₦ million)											
Cultivation Loan		3	3.1	3.6	5.5	4.5	0.87	5.774	-	-	26.344
Marketing Loan		1	0.4	0.4	0.6	4.9	6.097	6	-	-	19.397
Cattle Fattening Loan		1	0.76	0.54	1.5	2	0.551	0.6	-	-	6.951
Other Loans		-	-	0	1.76	2.5	1	1.6	-	-	6.86

Source: BASIRDA. Annual Report for 1990.

CHAPTER THREE

THE STUDY AREA

3.1 Location and Size

Eastern Zone of Bauchi State lie between latitudes 9^{o}N and $12^{o}45'$N and longitude $8^{o}30'$E and 12^{o}E, and is located in the South-Eastern part of Bauchi State. Eastern Zone covers nine local government areas of the State, namely Akko, Alkaleri, Balanga, Billiri, Dukku, Gombe, Kaltungo, Nafada-Bajoga and Yamaltu-Deba.

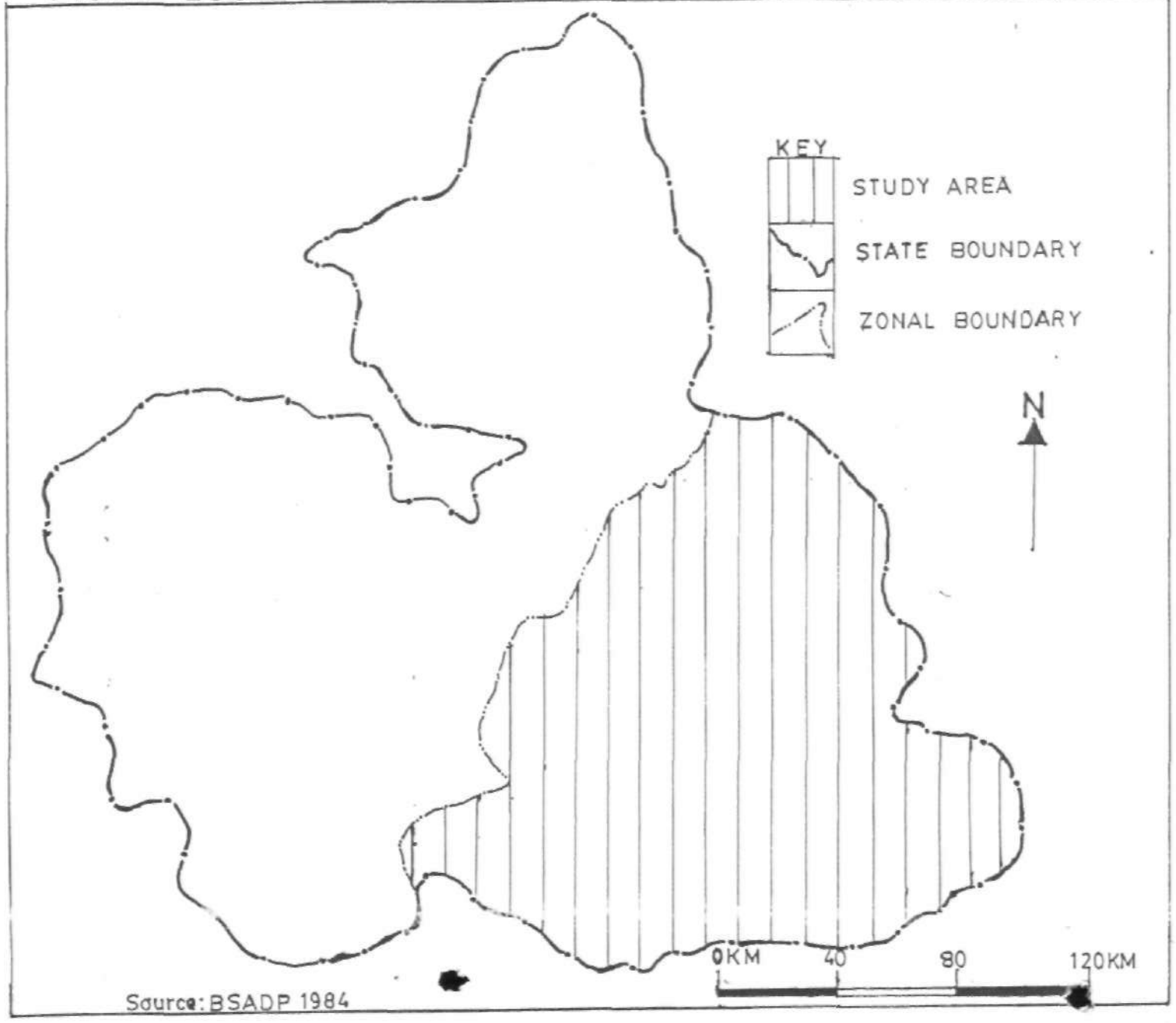
According to BSADP Area Statistics (1986) Eastern Zone covers an area of 25,710km sq. about 38.95% of the total area of Bauchi State (see Fig. 3.1 for location).

3.2 Geology

The relief of the area can be generally divided into two broad regions the North-East and North-West undulating plain on the one hand, and the Southern hilly regions as the second. The former is a slightly undulating plain with a few outcrops of rocks, mostly of sandstones and iron rocks.

The south is a country of hills and valleys. The hills are sandstones which are sometimes iron indurated; while some are of volcanic origin. The types of rocks according to Bawden (1972, p.45)

FIG:3.1 LOCATION MAP OF THE STUDY AREA. (55)



Source: BSADP 1984

found in this area can be conveniently divided into four:

i) Sandstones and Shale with thin limestone;

ii) Clay and Sandstones of Pindiga;

iii) Sandstone Continental facies of Gombe;

iv) Tertiary Continental Sandstones.

3.3 Climate

Like most of the northern savanna areas of Nigeria, the climate of Eastern Zone of Bauchi State which constituted the study area is influenced by the seasonal shifting of the pressure belts and the associated wind system. The winds, that are associated with the climate of the area are the dry continental north-east and the south-west maritime. Each wind in the study area, has two distinct seasons; rainy season when the south-west maritime prevails throughout the area, and the hot and cool dry season when the dry continental north-east wind prevails. The rainy season lasts from May to September, with July and August normally the wettest months (Tiffen, 1976, p.16). While the dry season last from October to April. The total annual rainfall for the zone varies from 800-900 mm.

March-April are the hottest months of the year. High temperatures of this period herald the setting in of the rainy season. In those hottest months

temperature usually rise from 23°C to 30°C. During the rainy season the humidity is always very high. From the months of November to February the north-east wind prevails, during this period the temperatures are always very low. The wind is accompanied by harmattan; the harmattan brings low temperature, low humidity and cooler nights.

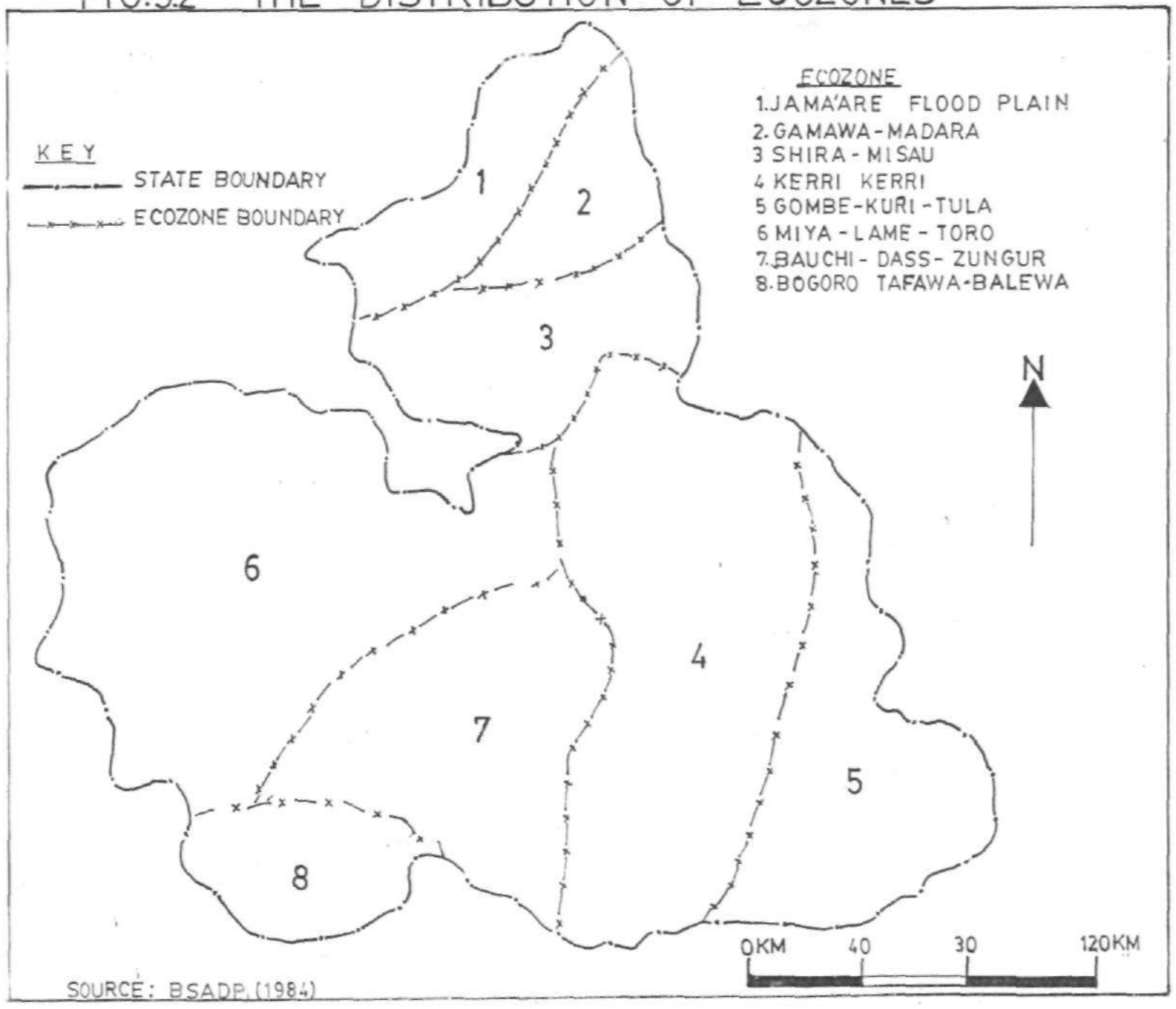
3.4 Vegetation

The natural vegetation of Eastern Zone does not differ from Sudan Savanna vegetation found elsewhere in northern Nigeria. Quite like any other area in the Sudan Savanna zone of Nigeria the natural vegetation has been extensively modified by the activities of man. The vegetation in the study area differs little from district to district. With very little exception particularly along the Gongola river banks starting from Nafada to Numan. The vegetation can be best described as Woodland.

3.5 Ecozones

On basis of soil types, rainfall and cropping pattern, Bauchi State has been stratified into eight ecozones based on an assessment of the distribution and abundance of cultivation area derived from low altitude aerial survey. Figure 3.2 shows the distribution of the ecozones.

FIG:3.2 THE DISTRIBUTION OF ECOZONES



SOURCE: BSADP, (1984)

A more detailed description of the two ecozones in which the study area falls within is given in Appendix A.

3.6 The Human Setting

3.6.1 Population size and composition

According to the 1991 population census, Eastern Zone had a population of 1,722,446 people, about 40.1% of the State, and a population density of about 66.9 persons per km sq, a little over 65.54 persons per sq km for the whole State. The population consist mainly of the following ethnic groups: Fulanis, Hausas, Tangale, Tera, Bolewa, Jukun, Waja, and Dadiya.

Table 3.1 gives the population by local government area of the State.

3.6.2 Settlement pattern

Although the rate of urbanization is rapidly increasing, Nigeria is still primarily a nation of village settlements and rural market towns (Gana, 1978). Such is the situation in the study area, thus, the major pattern of human settlement depicted in the area is rural, which according to BSADP Area Statistics (1986), more than 80% of the people in Eastern Zone live in small compounds and in hamlets of villages.

Table 3.1. Bauchi State: 1991 Population by Local Government.

LGA	Population
Akko	235,325
Alkaleri	254,447
Balanga	133,385
Bauchi	341,758
Billiri	85,219
Dass	53,213
Dukku	158,431
Gamawa	181,004
Gombe	283,189
Itas-Gadau	127,652
Jama'are	60,343
Kaltungo	165,515
Katagum	156,347
Ganjuwa	143,139
Misau	219,185
Nafada-Bajoga	186,131
Ningi	290,118
Shira	243,292
Tafawa-Balewa	188,485
Toro	215,455
Yamaltu-Deba	220,775
Zaki	188,127
Darazo	163,849
Total	4,294,413
Density	65.543

Source: Bauchi State Yearbook, 1992.

For the rural area as a whole, the settlement pattern is characterised by either nucleated villages,

linear pattern along the major roads or scattered homesteads surrounded by farm-lands. Within the nucleated and linear settlement villages, the settlement pattern is characterised by an open space which is usually regarded as the village square where meetings and cultural activities such as ceremonies, dances and wrestling make take place, in some cases this also serves as the market where things are brought or sold. Other notable structures that may influence the pattern of settlement include the chiefs compound, the mosque, the church, socio-economic centres and the road network or circulation pattern.

3.6.3 Socio-Economic Characteristics

Generally (as characteristics of all ethnic groups found in the area), the family unit is the basic form of social organisation. The family which would normally comprise of the man and his wife (or wives) and their children may be "extended" to include other relatives of either the man or his wife all staying together in a household. In a typical family, the man is usually the head and is supposed to provide the family with its basic needs. The wife comes next to the man and helps him in providing for the family. The children if well grown up also give a helping hand. In a typical settlement, two or more families can be found in the cluster known as the "compound" (gida). The compound (gida) represents the first lower order

of settlements in the area. Usually such a compound will have a head who is normally the eldest male of all the families comprising that compound. The second order is the 'Kauye' (Village, hamlet). This is what has been refered to as location or grouped compounds.

The social structure in the study like most parts of northern Nigeria is semi-feudal with the village head at the top of the pyramid. The village head carried a lot of functions in his village. He serves as an extension worker for agricultural activities, thus, for instance for any agricultural innovation to diffuse to farmers at the grassroot, the helping hands of the village head must be sought. In his survey of farmers in Akko district of Bauchi State Gill (Gill, 1956, p.8) confirmed the fact that the village head are the chief diffusers of innovation. Furthermore, village head also serve as mobilizers for self-help projects, and for the rural people to participate actively in such programme the village head are forces to reckon with.

The family is not only the basic form of social organization but also the basic unit of production, especially where the family is basically dependent on agriculture (BSADP, 1984).

The main religions of the people are Islam particularly in the northern part of the zone, and

christianity as the dorminant to the people in the southern part of the zone.

On the economy, Eastern Zone is an agricultural region. The fertile soils and suitable climatic conditions earlier described (Section 3.3 and 3.5) allow for various types of cereal crops, notably maize, millet, sorghum, rice and root crops to be grown widely in the area, hence the popular adage refered to the zone in Hausa as "Kasa mai albarka idan an tona", meaning an endowed land when put under cultivation.

According to estimated population of the area in 1984, more than 75 percent of the people within the zone are farmers and subsistence agriculture is the most important among these farmers in the zone (BSADP, 1984). Most farming activities are carried out in the rainy season, with commencement of the rains in April, planting of most crops is done, and these are harvested at various times of the growing season. In the dry season, a few farmers practice irrigation, growing mostly vegetables (Adesiyan, 1985).

Other occupational activities of importance in the area include animal rearing, popular with the nomadic Fulani, trading, craftwork, building, fishing, blacksmithing, weaving and hunting. These occupations may be practiced along side farming, even though some

few others take them as their main (primary) occupation with farming being the subsidiary. Data obtained on the field regarding the socio-economic characteristics of the zone are presented in Section 5.2.4 and 5.2.5.

3.7 Transportation

In the area of road development, the study area is fairly well transversed by Federal, State and Local Government and even community roads. In all, there are 697km length of Federal or Trunk 'A' roads, 407km length of State or Trunk 'B' roads and 4,580km of LGA roads, apart from several thousand of lateritic feeder road constructed by former GADP, BSADP and BASIRDA in the Eastern zone.

In the area of railway transportation Gombe has been well known as a railway town. One rail line passes through the study area, the rail is the Bauchi-Maiduguri line. Apart from Gombe other small stations exist in Alkaleri and Bajoga within the study area.

3.8 Water and Electricity

Throughout the Eastern Zone, only Gombe, Dadin-Kowa, Alkaleri, Kumo, Dukku, Billiri, and Kaltungo are served with pipeborne water. The water supply here is done under the auspices of Bauchi State Water Board (BSWB). Even here the inhabitants of these settlements fringe still rely on wells, streams, and rainwater. In fact field investigation revealed that

inhabitants here are governed by principle of least effort. Hence they opt for well and stream rather than trek over a long distance to centralised water system. However, construction work is currently on, with the aim of meeting the water supply need of all those living within some accessible distance radius in most of the settlements above, nevertheless occassional use of mobile water tanker trucks are resorted to meet the water demand of those living on the periphery.

Next to pipeborne water supply is the supply from boreholes operated by electric generators, windmills or manually (Handpump). This category represents the widely done intervention of water supply situation done by BASIRDA. It is disheartening to note that despite the few rural communities provided with these facilities only very few are presently functional.

On electricity supply, Eastern Zone is the most poorly supplied in terms of towns and villages having electricity. At present the settlements enjoying electricity includes Gombe, Dadin-Kowa, Kwami, Bojude, Alkaleri, Billiri, Kumo, Kaltungo, Dukku, Hashidu, Nafada, A aka, and Gona. Nevertheless, many uncompleted projects are underway to supply some few other settlements.

3.9 Distribution of Utilities, Facilities and Services

Analysis of the distribution of utilities, facilities and services in Eastern Zone of Bauchi State revealed that there are only five General Hospitals in the zone located in Gombe, Kumo, Kaltungo, Alkaleri and Dukku, while four others are presently under construction at Billiri, Talasse, Deba and Bajoga Added to these are 54 maternity clinics and 98 dispensaries located in some large villages in the zone.

On educational sector, the number of primary school stands at 675 in the zone, 57 post-primary schools, a Federal College of Education, a Farm Training Centre, and a School of Health Technology all located in Gombe.

Commercial developments in the region are least developed. For instance, there are only two daily market located in Gombe and Kumo, and ninety-eight (98) weekly markets within the zone. Industrial development are also least developed in the region, except for the Ashaka Cement Company, Vegfru Industry at Dadin-Kowa, Ginnery mill at Kumo, mostly are cottage industries that specialises in blacksmithing, rice mills, block making, bread bakeries.

On security, it may also be noted that police

stations exist only in the LGA's headquarters, with police outpost in few remaining settlements. In area of agricultural development there are altogether 76 Farm Service Centres (FSC) in the zone. The total number of commercial banks in the zone now stands at 23 branches.

3.10 Human and Material Resource Evaluation

Population constitute a vital components of the resource base and the development potential of any country. The most relevant elements of the population in this regard are its size, rate of growth, spatial distribution, demographic structure and quality in terms of the level of education, health, and social welfare.

The National Population Census in 1991 recorded a total of 1,722,446 people for Eastern Zone. The reliability of these figures is however questionable considering the errors recorded in the enumeration. The evaluation of population of Eastern Zone as a resource is not conclusive here because of lack of data on the variables mentioned above from the 1991 census.

However, it may be noted that despite the many different tribal groupings in the zone, Hausa language is generally spoken and understood by over 90% of the population. The potential of this common lingua-franca

is that mobilisation of the people will be easier. Furthermore, the resourcefulness of the people can facilitate development in the region. This is with particular reference to their ability to mobilize both human and financial resources for the execution of projects like road, digging wells etc. This is reflected in table 3.3 below which shows that communities in Eastern Zone have always contributed substantially towards financing projects.

Table 3.2. Community participation in Self-Help Projects in Eastern Zone (₦'000).

Source of Contribution	1989	%	1990	%
Community	982.660	93.4	1,922.710	92.4
L.G.A.	58.200	5.5	157.146	7.5
State Government	12.00	1.1	-	-
TOTAL	1,056.860	100.0	2,079.856	100.0

Source: BASIRDA Annual Reports, 1989, 1990.

Table 3.2 above revealed the high level of participation of the communities in Eastern Zone towards self-help projects, for example 93.4% and 92.4% financial contribution by communities in 1989 and 1990 stands to attest how resourceful the population of the zone are.

The educational level of any population is a reflection of the manpower of the region. It is also

indicative of the socio-economic status of the society (Ahmadu, 1990). Result obtained from the field (table 5.3) revealed that 35.7% out of the 292 total respondents have benefitted from western education. This indicate the presence of skill manpower that could be mobilised for effective development.

Furthermore, based on BSADP research finding about 72.6% of their sampled population were found to have adopted new techniques of farming in Eastern Zone. This indicate the people of the zone are receptive to changes. This potential of the people towards accepting new ideas should therefore be exploited for the development of the area. Finally, there are quite a number of existing material resources which can be exploited towards the further development of the region. These material resources include to mention but a few, the existing soil and climatic conditions, which made it possible the cultivation of a wide range of crops, water resources, transportation network, and facilities such as Farm Service Centres, Hospitals, Schools, and markets.

Generally, it may be infered that the provision of these basic facilities and services are grossly inadequate to cater for the needs of the people. The few that have been provided are disproportionately located in major settlements to the neglect of minor ones.

CHAPTER FOUR

BACKGROUND TO THE BAUCHI STATE INTEGRATED RURAL DEVELOPMENT AUTHORITY

4.1 The Programme Design of BASIRDA

The Bauchi State Integrated Rural Development Programme (BASIRDP) evolved from the Bauchi State Agricultural Development Programme (BSADP). It was initiated in 1986 to provide for the long term continuity of the BSADP activities after World Bank funding had ceased.

With the transformation effected, major alterations were made to the original programme design of the BSADP. Accordingly, a number of areas were identified to guide the effective take off of BASIRDP. These included:

i) Agriculture,
ii) Physical Development, and
iii) Human Development.

The Bauchi State Integrated Rural Development Authority (BASIRDA) was to integrate these in such a way as to ensure a linkage development that will be mutually supportive. It was also to be responsible for monitoring and providing other necessary inputs and utilities in the rural environment of Bauchi State.

The major design components were identified to

include the following:

a) Agricultural Services,

b) Industrial Development,

c) Rural Water Supply,

d) Rural Electrification,

e) Rural Road Construction/Rehabilitation

f) Cooperative Development.

Although no provision was made in BASIRDA's Blue Print to suggest the principles adopted in designing the programme, it nevertheless is suggestive of the growing realisation of the need for multi-dimensional approaches to rural planning. Accordingly, the design attempted to provide a broad framework within which a number of mutually inter-related and supportive programmes are to be implemented as a basis for the attainment of a comprehensive development in the rural areas.

The main priority of the programme design remained as agricultural development. This is of course understandable since it provides employment for the majority of the rural labour force. Provisions have therefore been made to extend a wide range of supporting services like input supply credit, feeder roads, electricity, marketing etc. These services are the responsibility of a number of institutions which BSADP had established during its formative years. However, considering their ineffectiveness at

programme completion, these institutions were modified such that their design will reflect the local institutional structures and socio-cultural patterns that will be very effective towards achieving an integrated development of Bauchi State.

4.2 Aim and Objectives of BASIRDA

The cardinal objective of BASIRDA is to bring about a complete transformation of the State through mobilisation of the rural populace through self-realization and self-actualization.

The above objective is to be achieved through the following programme of activities:

a) Provision of comprehensive Agricultural Services and inputs for both crops and animal husbandry;

b) Research and development of seeds, implements and cottage industries;

c) Provision of adequate portable drinking water for human and animal consumption and water for irrigation;

d) Provision of light and electric power;

e) Provision of adequate feeder roads;

f) Building of viable and active cooperative societies;

g) Practically oriented non-formal education like the teaching of crafts, trade and health

education, etc.;

h) Comprehensive programme of publicity and enlightenment such as would enable the people to know the rights and obligations;

j) The retention of rural-based wealth for development of the rural areas.

4.3 Organisational and Management Structure

BASIRDA since inception as an agency is operated as a parastatal under the Military Governor then later the Executive Governor's office. Like the former, BSADP, BASIRDA has an Executive and Management Council. The Executive Council, otherwise known as the BASIRDA Council is the highest policy making body. Its membership comprises of:

- Military/Executive Governor (Chairman)
- Hon. Commissioners for Works, Agriculture Social Welfare, Health, Education, Finance, Information, Commerce and Industry.
- Managing Director of BASIRDA
- General Manager of GJRBRDA
- Representative of A.T.B.U. Bauchi
- Director of Personnel and Training, BASIRDA (Secretary).

The BASIRDA Council has the following responsibilities:

1. Definition and control of rural development policy
2. Determination and periodic review of the role of BASIRDA; with a view of eliminating any possible duplication of effort between the Authority and other department or ministries
3. Assessment of the financial requirements and budgetary and financial control of the including review and approval of annual budgets.
4. Award of contracts above ₦250,000.
5. Approval of the appointment of key staff, e.g. Managing Director, Zonal Managers and Departmental Directors.

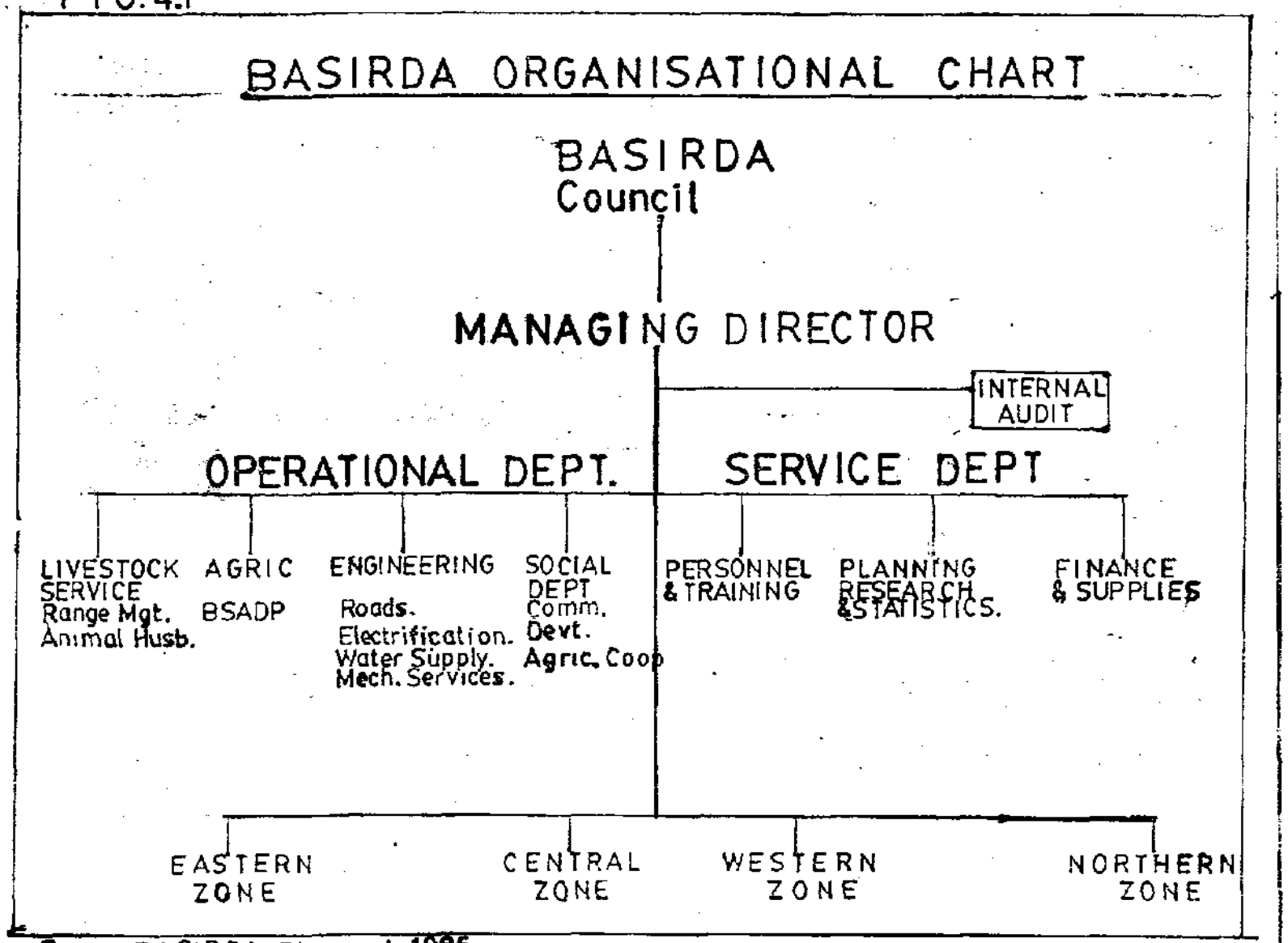
Next to the BASIRDA Council is the BASIRDA Management Council which has the responsibility for implementing the projects programme under clear policy guidelines contained in the Authority's Agreement/Documents.

The Authority's management consist of four operational departments and three service departments, each headed by a Director (Figure 4.1), directly under the Managing Director. Within this organisational structure the Managing Director oversees the day-to-day administration of the Authority.

In order to facilitate the implementation of the programme and for purposes of convenience and need to

FIG: 4.1

BASIRDA ORGANISATIONAL CHART



Source BASIRDA Blueprint. **1986**.

minimise costs, the State government agreed to base the operation of the Authority on the existing four zones structure of BSADP (see Fig. 4.2). This is because the basic infrastructures for the administration of the Authority exist, and do not require much expenditure to get the Authority into full operation. The zones are:

1. Eastern Zone - Consisting of Alkaleri, Akko Balanga, Billiri, Dukku, Kaltungo, Gombe, Nafada-Bajoga, and Yamaltu-Deba LGA's.

2. Northern Zone - Consisting of Katagum, Misau, Itas-Gadau, Gamawa, Shira, Jama'are.

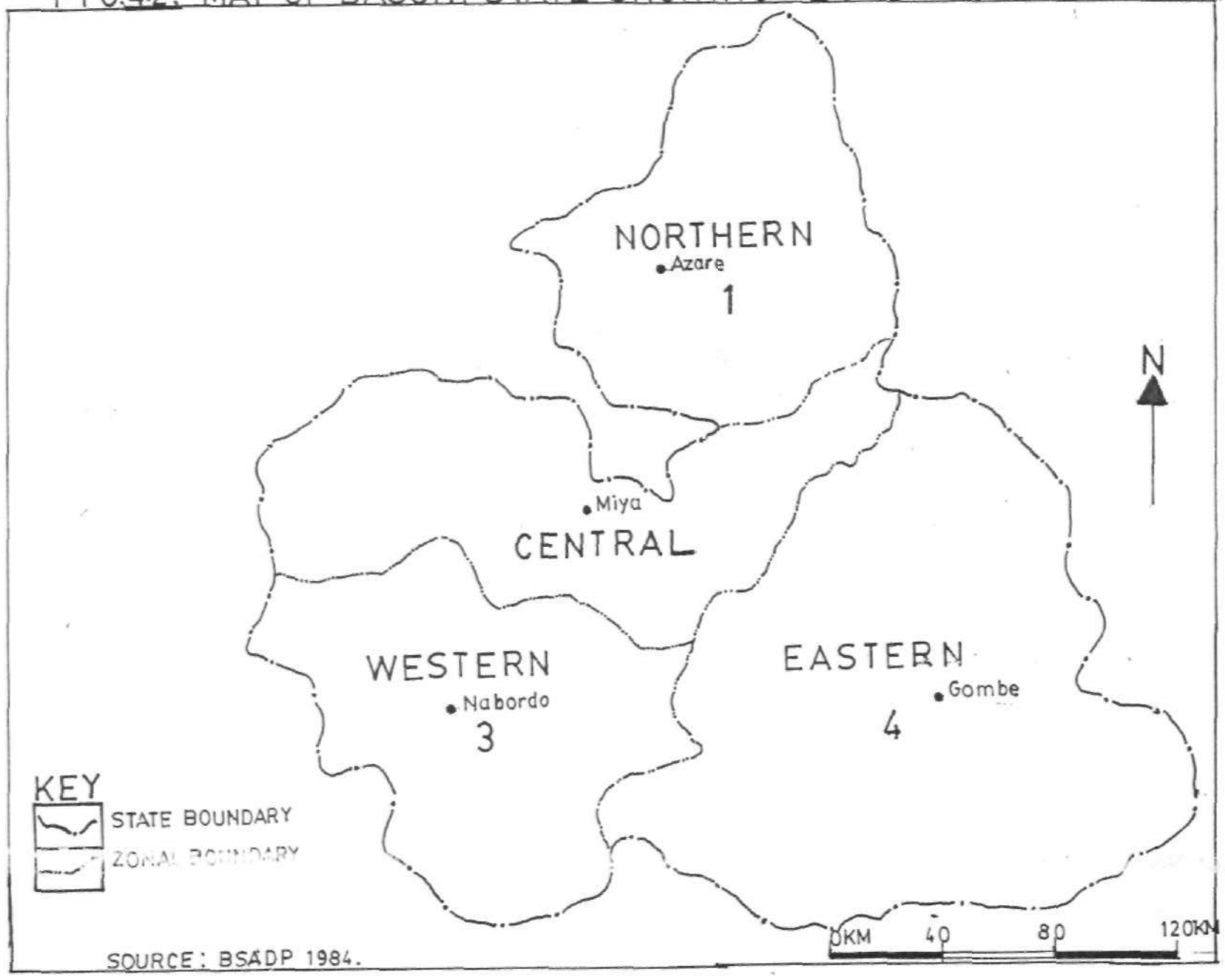
3. Western Zone - Consisting of Bauchi, Dass, Toro, and Tafawa-Balewa.

4. Central Zone - Consisting of Ningi, Zaki, Darazo, and Ganjuwa.

At the Zonal level an equivalent of the BASIRDA Council and the Management Council exist as Zonal Development Advisory Committee (ZDAC) and Zonal Management Unit (ZMU).

Membership of ZDAC includes the Zonal Manager and all the Local Government Area Chairmen in the zone of operation. The duties of ZDAC includes:

FIG:4.2. MAP OF BAUCHI STATE SHOWING BSADP ZONAL AREAS



SOURCE: BSADP 1984.

1. Provision of advice to the Authority on zonal physical development requirements.
2. Acting as a link between the Authority and leadership at local government level.
3. Performance of any functions as assigned by the Authority.
4. General supervision of all departments' activities of the Authority in the zone of operation.
5. Feedback to the Council through the Authority Management System.
6. Award of Contracts up to ₦10,000.

On the other hand ZMU consist of Zonal Manager and all heads of department, responsibilities include:

1. Overall execution and detailed supervision of field activities in their zone of operation.
2. Reporting direct to the Headquarters Management on progress achieved, problems faced and feedback.
3. Acting as a Secretariat to the Zonal Development Advisory Committee (ZDAC).
4. Preparation of detailed Zonal Development Budget following the establishment of policy and guidelines by the Authority and awards ₦10,000 - ₦50,000 contract.

At the local government level there is the Local Advisory Committee (LAC). The membership of each LAC consist of the following:

- Local Government Chairman-(Chairman)
- Area Agricultural Officer (Supervisory Councillors, District heads, Community Development Officers).

The Committee at this level is responsible for the mobilisation of people at the grassroots for the Authority's programmes in their areas. Although, this arrangement is expected to extend right down to the village level, but the arrangement stops at the local government level. Furthermore, the Authority does not have offices in the LGA. This means that much of the decision powers are concentrated in the zonal and state headquarters, and this has been a source of complaints of many local council.

4.4 Funding

The availability of financial capital is a very crucial factor to the successful implementation of rural development. The establishment of BASIRDA like similar ones throughout the country, particularly the ADP's is a tripatite agreement between the State Government, Federal Government and the World Bank (even though the World Bank loan agreement ended after its first two years of existence). Furthermore, in case of BASIRDA some little form of funding comes from other sources such as UNDP, Local Government Areas, mainly as grants and ones generated internally.

The funding of BASIRDA from inception to December 1990 vis-a-vis each source's contribution to the Authority is presented in Table 4.1. The table shows that sponsoring agencies have responded adequately in the funding of the authority's programmes since well over 50% of their expected contributions have been provided.

Table 4.1. BASIRDA Cummulative Finance Report (1986-90) Source of Funding (₦'000).

Source of Funding	Budget	Actual	% Budget Provision	% Total Provision
BSG Subvention	186,831	74,073	39.65	47.47
IBRD Loan	10,000	4,425	44.25	2.83
BSG/FGN Grants	-	21,929	-	14.05
DFRRI Grants	84,600	36,977	44.00	23.70
UNDP/FGN Hand-pump	700	254	36.00	0.16
LGAs Contribution	7,000	11,905	170.00	7.63
BSADP (For road maintenance)	-	4,159	-	2.67
Internal Revenue	4,882	2,310	47.00	1.48
TOTAL	284,013	156,032		100.00

Source: BASIRDA Annual Report, 1991.

4.5 Operational Cost

Table 4.2, shows the cost of operations of BASIRDA from 1986-1990. It can be seen from this table that three projects under study commanded 59.84%

Table 4.2. BASIRDA Cumulative Finance Report (1986-1990) Activities by Cost Summary (₦'000).

Division	Budget	Expenses	% Budget Provision	% Total Provision
Mgt, Admin, Training	3,954.1	7,219.8	182.6	5.08
Finance	1,472.7	614.9	41.8	0.43
Range Mgt.	16,218.5	7,025.1	43.3	4.94
Animal Husbandry	9,709.9	10,987.5	113.2	7.72
Wheat production	0.0	9,439.5	-	6.62
Coop. Devt.	9,363.1	5,324.4	56.9	3.74
Primary Education	500.1	150.0	-	0.11
Rural Health	702.0	2,579.3	367.4	1.81
Community Devt.	9,535.7	7,106.5	74.5	5.00
CFA	250.0	50.0	20.0	0.04
Rural Electrification	94,919.8	16,315.4	17.2	11.47
Rural Roads	45,696.9	32,504.5	71.1	22.85
Rural Water	80,447.2	36,304.1	45.1	25.52
Dam Construction	5,568.6	6,625.9	119.0	4.66
TOTAL	278,338.5	142,247.3		100.00

Source: BASIRDA Annual Budget, 1990.

of the operational cost out of the numerous activities, with Rural Water Supply having the highest expenditure of 25.52%, followed by Rural Roads projects 22.85%, and thirdly Rural Electrification 11.47%. This confirms why these three projects formed the focus of BASIRDA during its six year of existence 1986-1992.

4.6 Staffing

The objective of any rural development agency is not only to increase the overall productivity in a region, but also to improve the employment opportunities, through the diversification of economic activities.

It is significant to note however, that by the end of 1990, about 4 years since the inception of BASIRDA about 2,189 workers have benefited from direct employment opportunities created by the programme throughout the state. Furthermore, although statistics about people who benefited from indirect employment created by BASIRDA could not be ascertained, there is no doubt that a number of opportunities have been created during the period under review. These indirect employment opportunities have been mainly created through the construction of infrastructure and facilities provided throughout the State. Table 4.6 below gives the breakdown of the staff situation by departments as of 1990.

From table 4.6 above the staff strength with respect to department showed that Rural Water Supply department has the highest number of staff of 613 (28.0%) of the whole total, it is closely followed by the livestock department having 420 (19.18%) members of staff, the least department with regards to staff is the Range Management with 138 (6.30%).

Table 4.6. Staff Strength of BASIRDA as of 1990.

Department	No. of Staff	%
Management	104	4.75
Livestock	420	19.18
Range Management	138	6.30
Community Development	227	10.37
Rural Water	613	28.00
Rural Road	304	13.88
Rural Electrification	159	7.26
Cooperatives	224	10.23
TOTAL	2,189	100.00

Source: BASIRDA Annual Report, 1990.

On the whole Rural Electrification, Water and Roads departments have 1076 (49.15%) staffs, this stand to attest and further give credence to table 4.5 on how these three departments dorminates the activities of BASIRDA, making most of the rural folks only associating BASIRDA with only these three activities.

Furthermore, Bauchi State supplied 1979 (90.4%) of the total staff, while 210 (9.6%) came from other states of Nigeria.

4.7 An Evaluation of the Structural Organization and Operational Strategy

The outstanding success in terms of high number of projects executed by BASIRDA during its six years of existence, can be attributed generally to the Structural Organisation and Operational Strategy adopted by the agency. Those factors in these areas that were responsible can be summarised to include the following:

1. Location of BASIRDA under the Governor's Office, which gives it opportunity to command a lot of resources (Section 4.3) as it gets its renumeration directly and seen as a brain child of the government house.

2. The Management Structure revealed a much finer bureaucratic outlay, which gives a proper accommodation for the broader design components of the agency. It represents an improvement on what obtained under BSADP (Figure 4.1) enhances the fastness on which activities are carried out.

3. Decentralization of Management: The operation of the authority in four zones (Figure 4.1), which makes it easy the control of programme throughout the State.

4. Training Proficiency: The exposure of all staff to different courses both within and outside the authority, enhanced their skills and effectiveness in their operation.

5. Direct Labour approach in project implementation rather than use of contract award, reduced costs and ensured quality.

6. BASIRDA's mode of operation was based on the second form of IRD strategy identified by Uma Lele (1975), because unlike GADP and BSADP, it was internally planned, and emphasised local planning, also its possession of 100% nationality staff whose emoluments did not constitute any precarious foreign exchange.

7. On accountability, the operations at BASIRDA were based on quarterly budget derived from annual budget, furthermore, quarterly expenditure return were routinely done.

The good operational strategy far transcends the seven given above. Indeed a visit to the management and to the field particularly during its formative years then one will fully attest to the sincerety of I.B. Babangida's speech he made about BASIRDA during his visit to Bauchi State in June, 1988, and I quote

> "BASIRDA has been purposeful; it is well articulated, it is dynamic, and in both conception and implementation, it has been most scientific. It was therefore not surprising that the evaluation of the Presidential Advisory Committee (PAC) ranked Bauchi top of all other states evaluated on rural development".

CHAPTER FIVE

5.0 ASSESSMENT OF BASIRDA PLANNED INFRASTRUCTURES

5.1 Targets and achievements of BASIRDA on Planned Infrastructures

Targets for the three projects under study namely water supply, rural feeder roads and electrification were set out in the Staff Appraisal Report (SAR) of 1986 Plan of Action. Table 5.1 below gives the level of achievement as regards to what has been achieved from the set out target.

Table 5.1. Infrastructures Provided (1986-90)

Activity	Target	Actual Achieve-ment	% Achieve-ment	Proportion Achieve-ment
Rural Roads (km)				
- Constructed	1820	1805	99.2	1:99
- Rehabilitated	1820	2211	121.5	1:1.21
Rural Water Supply				
- Borehole Drilled	412	440	106.8	1:1.07
Electricity				
- Settlements connected	263	28	10.6	1:0.11

Source: BASIRDA Annual Report, 1990.

A careful perusal of Table 5.1 above shows the overwhelming achievements of BASIRDA, far above what has been achieved by the past rural development agencies in the state in this field. This stands to confirm the widely applauded success of BASIRDA, but

the question now lies on how effective are these projects provided in meeting the objectives for which they were set up? The preceeding sections in this chapter provides proper answers to these. The inferences derived from this chapter have significant implications for the design and carrying out similar projects not only in Eastern zone, but in Nigeria as a whole. It also provides a background for making recommendations that will bring improvements.

5.2 Demographic Characteristics

Personal information of the respondents comprising their sex, age, literacy level, occupational distribution and annual income are presented in order to give a background information of the socio-economic condition of the people.

5.2.1 Sex distribution

Two hundred and ninety-two questionnaires were recovered out of the three hundred administered, of this, two hundred and thirteen (72.9%) were males and seventy-nine (27.1%) were females. The dorminance of male respondents can be attributed to the cultural and social situation of the area under study, where female are not very accessible to strangers. Table 5.2 below gives the distribution.

Table 5.2. Sex Distribution of Respondents.

Sex	No. of Respondents	%
Male	213	72.9
Female	79	27.1
Total	292	100.0

Source: Fieldwork, 1992.

5.2.2 Age Distribution

The distribution on table 5.3 below indicated that majority of the respondents - one hundred and twenty-eight (43.8%) were within the age limit of 31-40 years. The marital status of this respondents indicated them they are all married. This further confirmed to the importance attached to marriage institution in the rural areas of northern Nigeria. Between 21-30 years of age, seventy-eight (26.7%) respondents were within this age group. Another 16-20 years accounted for twenty-one (7.2%) of the total sampled population. The last age group 41 years and above had sixty-five (22.3%) respondents.

The cummulative percentage of 77.7% of the respondents between the ages of 16-40 years found in the study area, indicates that the bulk of the

respondents belong to economically active population in the study area it also signify a low dependency ratio in the area, Table 5.3 below gives the age distribution of the respondents.

Table 5.3: Distribution of Respondents by Age

Age group (years)	No of Respondents	%
16 - 20	21	7.2
21 - 30	78	26.7
31 - 40	128	43.8
Over 41	65	22.3
Total	292	100.0

Source: Fieldwork, 1992.

5.2.3 Literacy Level

The ability to read and write are often used as one of the social and economic indicators of the state of development of the economy. To make effective utilization of human resources, it is highly necessary to employ education to broaden the scope and understanding of the people. It's also necessary to orient the educational system towards the real requirements and aspirations of the people.

In the rural Nigeria, literacy level is very low and this often have a negative effects on the productive capacity of the people, and ability to be

involved in decision making. Table 5.4 below gives the literacy situation of the sampled population.

Table 5.4. Literacy Level of Respondents

Level of Education	No. of Respondents	%
No formal	163	55.8
Primary	61	20.9
Secondary	32	11.0
Tertiary	11	3.8
Quaranic	25	8.5
Total	292	100.0

Source: Fieldwork, 1992.

From the table 5.4, one hundred and sixty-three (55.8%) were without formal education. This truly implies that the bulk of the population sampled are illiterates, similar to what is obtained in most rural areas of Northern Nigeria.

The table further reveals that only twenty-five (8.5%) had Quaranic education, sixty-one (20.9%) had primary education, thirty-two (11.0%) had secondary education, while eleven (3.8%) had tertiary education. On the whole about 35.7% of the respondents have benefitted from western education, bringing the literacy level to 42.2% in addition to 8.5% those having Quaranic education. This suggests the presence of skilled manpower base that could be mobilized

for effective development potentials of the region, which holds a great promise for Eastern Zone.

5.2.4 Occupational Distribution

We have earlier in Section 3.6.3, examined the socio-economic characteristics of the people under study, and to a certain degree that they are principally agriculturist. However, to be able to establish the extent to which the people are engaged in agriculture, provision was made for respondents to state their occupation. For the purpose of this study only the main occupation (primary) will be analysed here. Table 5.5 below, summarises the findings.

Table 5.5. Distribution of Respondents According to their Occupation

Occupation	No. of Respondents	%
Farming	231	79.1
Trading	21	7.2
Civil Service	24	8.2
Craftmen (artesian)	7	2.4
Others	9	3.1
Total	292	100.0

Source: Fieldwork, 1992.

Table 5.5 above establishes that majority of the people are engaged in agricultural production.

This is obvious from the fact that of the 292 people, interviewed 231 (79.1%) of them stated that their main occupation is farming. And of the rest, 21 (7.2%) are traders, 24 (8.2%) are civil servants, 7 (2.4%) are craftmen and 9 (3.1%) are engaged in other occupation. From oral interviews and discussion off record I had with some, most of the traders, trade in agricultural products, such as maize, corn, beans and ice. The activities that comes under crafts include blacksmithing and weaving, while "Other Occupations", include bricklaying, carpentry, tailoring, and catering. It must be said however, that those who are mainly engaged in agricultural practices at subsidiary level may take on one or more of these occupations.

5.2.5 Income Distribution

Collecting data on rural income is a difficult task, as questions on income attracts high level of suspicion and refusal to comment, and where respondents decide to do so, precision is difficult to obtain (Hornville, 1978, cited by Kolawole, 1986, p.218).

In the study area there was difficulty in obtaining data on income. With realisation that majority of the residents are farmers (table 5.5), so bulk of their income comes from agriculture even though some are also involved in some secondary

(subsidiary) occupations, but income from these sector is often very minimal and inconsistent, as such only income from main occupation was approximated with reference to farmers income. For some farmers, income was done through converting the amount of crop obtained into monetary value (as of October, 1992). Table 5.6 gives the level of annual income of respondents.

As seen in table 5.6 below, the income levels of respondents vary from ₦1,000 to over N8,000 per annum. From the table it was obvious that majority of the respondents, 86 (29.5%) has an annual income group of N2001 - ₦4,000. 75 (25.7%) of the respondents put their annual income between ₦4,001-N6,000. 39 (13.4%) of the respondents had between N6,001-N8,000, while 35 (12.0%) of the respondents fall within a relatively high income bracket of over N8,000 per annum. About 10 (3.3%) respondents failed to give the income they earn, the reason for it is mainly due to suscipion held by respondents when asked to state their income. A cursory observation of the table shows that there is a decrease in number of respondents with higher income level.

Furthermore, the computed average income of the 292 total number of respondent stood at ₦5,248 (see Appendix B). Considering the low value of the naira, this income implies a low economy. This also

signifies negative implication on financial resources mobilisation for development of infrastructural facilities in their communities, such as motorable roads, handpumps and motorised boreholes, and electricity, the burden of such programmes will therefore rightly be borne by government as done by BASIRDA, because of the huge capital investment involved. Nevertheless, an important area whereby the population resources can rightly be utilised is in provision of labour considering the age structure of the respondents as given in table 5.2.

Table 5.6. Level of Income of Respondents.

Income group (₦)	No. of Respondents	%
1,000 - 2,000	47	16.1
2,001 - 4,000	86	29.5
4,001 - 6,000	75	25.7
6,001 - 8,000	39	13.4
Over 8,000	35	12.0
No response	10	3.3
Total	292	100.00

Source: Fieldwork, 1992.

5.3 Awareness of BASIRDA Programmes

A logical step in any successful agricultural or rural development programme is for the target population to be aware of the existence and usefulness

of the project. This is a necessary condition if the objectives of the project are to be achieved. Eight activities were used to determine people's awareness of BASIRDA in the study area. The degree of awareness was quite high for all the activities except Fadama Development (Table 5.7). The lack of awareness of Fadama land Development is handicap to improving the standard of living of the people because the Fadama has the highest potential for commercial agriculture. Its neglect means persistence of subsistence in the area.

Table 5.7. Awareness of BASIRDA Programmes

Programme	Number of Responses	%
Grazing Reserves	203	69.5
Electrification	268	91.8
Credit Scheme	205	72.2
Water Supply	292	100.0
Cooperative Societies	209	71.6
Extension Services	257	88.0
Fadama Land Development	23	7.9
Road Construction/Rehab.	284	97.3
Not aware of any programme	-	-

Number of Respondents - 292.

Source: Fieldwork, 1992.

The respondents were further asked to mention the first channel through which they came to know

about the Authority and its programmes.

Table 5.8. Channels of Awareness about BASIRDA

Channel	No. of Responses	%
Radio	32	10.9
Publication	13	4.5
People	48	16.4
Project	199	68.2
Total	292	100.0

Source: Fieldwork, 1992.

Table 5.8 above showed that majority of respondents 68.2% claimed to know of the existence of BASIRDA only in course of the projects execution in their villages. This suggest that the Authority has not kept the communities well informed about its programmes before embarking on them.

Thirteen (4.5%) had their first encounter with BASIRDA through printed publications. An interesting thing about this batch of respondents is that most of them were respondents with tertiary education, with only four having secondary and two primary education. Another thirty-two (10.9%) respondents indicated to have heard about the agency over radio.

Forty-eight (16.4%) respondents came to know about BASIRDA from other people, this knowledge about BASIRDA cannot be disengaged from discussion held during

Table 5.9: **Peoples' views on who took locational Decision for Projects.**

Organization	Rural Roads		Rural Water		Rural Electrification	
	No. of Responses	%	No. of Responses	%	No. of Responses	%
BASIRDA/Government	267	94.5	252	86.3	28	93.3
Village Head	2	0.7	8	2.7	-	-
Contractor	4	1.4	2	0.7	-	-
Community	9	3.1	18	6.2	2	6.7
None	1	0.3	12	4.1	-	-
Total	292	100.0	292	100.0	30	100.0

Source: Fieldwork, 1992.

roads 6.2% for boreholes and 6.7% for the electrification.

On the whole table 5.9 shows clearly the dorminating role of BASIRDA with regards to location of the three infrastructures. On the average BASIRD achieved 90.5% decision on places and direction where the three infrastructures are sited. The skewness of this decision towards the initiators rather than the beneficiaries can greatly affect the effective utilization of the facilities by the target population. This explains why 43.5%, 68.2% and 13.3% respondents indicated their non-satisfaction with the location of feeder road, boreholes and pattern of electricity distribution in their villages.

Furthermore, based on my personal observation in three villages namely Ayaba, Kob a and Kulgul, boreholes are located near village head residence, this explains the manipulative tendencies of local heads, who opt for the location of water point near their houses even though to the detriment of many village residents, thus, the assumption of ten (16.2%) respondents to the locational decision taken by village heads.

Another area of local participation in execution of development projects is in area of forms of contribution to the executed projects. Table 5.10 gives the different forms of contribution made to the three named BASIRDA projects.

Table 5.10. Forms of Local Contribution to executed BASIRDA Projects.

Forms of contribution	Rural Roads		Rural Water		Rural Electrification	
	No. of Responses	%	No. of Responses	%	No. of Responses	%
Financial	31	10.6	5	1.7	3	10.0
Labour	21	7.2	18	6.2	-	-
Materials	3	1.0	3	1.0	1	3.3
None	240	82.2	272	93.1	26	86.7

Number of Respondents - 292 (Rural Road and Water)
- 30 (Rural Electrification)

Source: Fieldwork, 1992.

Even though very few people among the target population contributed either finance, labour or materials during the execution of these projects in their village as evidenced in table 5.5. The inferences drawn from the table revealed the willingness of rural communities to be involved in the programmes that will benefit them, particularly if they were given the opportunity to participate.

When the result on table 5.10 was compared with that on table 5.9 it became clear that the rural communities in Eastern Zone have less to say or protect as far as BASIRDA projects are concerned.

In addition to identifying the forms of contribution to BASIRDA projects, this study also went ahead to establish the levels of community involvements in executed BASIRDA projects. Respondents were therefore asked to indicate the stages of participation.

Findings on table 5.11 revealed a poor involvement of the target population to stages of execution of BASIRDA projects. About 3.1%, 4.1% and 6.7% respondents became involved during identification and initiation of projects, whereas only 1.7% respondents were involved in the implementation of rural feeder roads projects alone. The low level of involvement is also recorded for the monitoring and evaluation and maintenance stages

Table 5.11. Peoples participation in BASIRDA Projects.

Nature of Involvement	Roads No. of Responses	%	Water No. of Responses	%	Electrification No.	%
Identification and Initiation	9	3.1	12	4.1	2	6.7
Implementation	5	1.7	-	-	-	-
Monitoring and Evaluation	2	0.3	4	1.4	5	16.7
Maintenance	4	1.4	7	2.4	-	-
No participation	280	95.8	299	95.5	24	80.0

Number of Respondents - 292 (Roads and Water)
- 30 (Electricity)

Source: Fieldwork, 1992.

of the projects (table 5.11). The table further revealed that majority of the respondents 95.8%, 95.5% and 80% were not involved at any stage of execution of the three projects.

A general overview of tables 5.9, 5.10 and 5.11, therefore, one can conclude that people's participation in decision-making by BASIRDA leaves much to be desired, as the Authority showed no appreciation of the resourcefulness of rural communities towards the implementation of rural projects. The implication of this is that communities have tended to see projects particularly these infrastructures as "theirs" rather than "ours". Thus efforts towards getting them to maintain them therefore been abortive.

5.5 Rural Feeder Roads

Transportation networks are the major elements for the spatial integration of communities. The most common, though, the most inclusive, road networks can facilitate spatial integration by reducing travel time, increasing productive capacity, allowing greater access to non-agricultural employment, improving communication and finally extending service delivery systems. Mabogunje (1968), Hodder (1957), and Harrison-Church (1949), Gyoreng (1991), Ogwude (1984), and Baba and Salau (1984) have documented how roads have led to substantial increase in

production and reduction in travel time.

Total length of rural feeder roads constructed and rehabilitated by BASIRDA in the state between 1986-1990 was 1,805km and 2211km respectively. However, only 594km (32.9%) and 649km (29.4%) length of feeder roads were constructed and rehabilitated in the study area within the same period (see Appendix C).

5.5.1 Effects of the Rural Feeder Roads on Agriculture

(a) Farm productivity

Among the expectation people will anticipate from the role of improved accessibility on the economic development of people of the rural areas according to Gyoreng (1991) would be "an increase in the agricultural production capacity of the rural communities". This is true because improved access road will enable the rural communities market their products outside their immediate boundary thus, encouraging them to increase size and number of their farms and in some respect the type of crop they grow (Baba and Salau, 1984). Therefore growth in agricultural productivity constitutes an important aspect of evaluating the outcome of rural accessibility created by BASIRDA through its construction/ rehabilitation of feeder roads.

On farm productivity, 196 (67.1%) of the

respondents were of the opinion that the feeder roads constructed/rehabilitated had positive impact on agricultural productivity. However, data gathered on the field with reference to yield of the three major crops grown in Eastern Zone namely, maize, guinea-corn, and beans from 1986 to 1992 presented however a scanty and unreliable information, chiefly as a result of the poor ability of most of the respondents to remember correctly the total amount of crops they grew in the past years, that can be useful for any meaningful analysis. In the absence of this, nevertheless, data gathered by the Evaluation Unit of BASIRDA since 1988-1990 revealed a significant improvement in farm productivity. For instance farm production rose by 7.8% from 1,344,425 G.E tonnes, two years after the commencement of rural feeder roads projects to 1,443, 143 G.E tonnes in 1990. The production of some of the major crops in the state is given in table 5.12 below.

From the data shown above despite the drop in level of production of some crops such as groundnut, rice and cassava, it showed a significant increase in production of crops in the state on a general basis. Considering the opening up of many rural areas by the feeder roads constructed/rehabilitated by BASIRDA, it can be said that the increase in crop production is one of the direct impact of the BASIRDA rural feeder roads. The difficulty in determining

Table 5.12. Crop Production in Bauchi State in Metric Tonnes (1988-1990).

Crop	1988	Average Yearly Increases (%)*	1989	Average Yearly Increases (%)	1990	Average Yearly Increases (%)
Sorghum	327981	+7.8	288398	-13.7	352323	+18.1
Millet	480393	-16.6	449655	- 6.8	544954	+17.5
Maize	236525	+38.7	124931	-89.3	203246	+38.5
Cowpea	165577	+25.3	73589	-125.0	258653	+71.5
G/nut	81700	-30.8	95746	+14.7	88791	- 7.8
Rice	5704	-58.4	10772	+47.0	10085	- 6.8
Cotton	12226	+26.4	15799	+22.6	17085	7.5
Cassava	82454	-	55860	-47.6	36368	-53.6
GE tonnes	1344425	+ 8.96	1098855	-22.3	1443143	+23.8

Source: BASIRDA Annual Report, 1990.

*% Average Yearly increases from 1987 crop production,

the level of impact here, is that agricultural production is governed by many factors of which improve spatial accessibility is one.

The most impressing observation therefore with reference to the improvements in productivity observed in the table above, is that like any natural phenomenon, when production increases it will lead to increase in income savings and investments in farming operation, an outcome likely to be transformation of the rural economy. To butress the authenticity of the positive relationship ascertain by the 67.1% of the respondents between the rural feeder roads and agricultural productivity, further factors were investigated.

(b) Farm Size

Data gathered on the field showed that there is an increase in the area of land under cultivation in which 17.3% of the respondents cultivated 0.1 - 1 hectare before the feeder roads were constructed/ rehabilitated as opposed to 9.0% who cultivate the same size of land area after construction/ rehabilitation. Again 15.6% of the respondents cultivated between 3.1 - 4 hectares before against 20.2% who cultivated the same after the road's projects.

These proportion shows that more land have been put into cultivation, and by implication it means that farms under cultivation have increased in size. The increase of farm size could be as a result of increased

Table 5.13. Land Area Under Cultivation Among Sampled Population.

Size of Farm (Ha)	Land Area Before Road Construction and Rehabilitation		Land Area After Road Construction and Rehabilitation	
	No. of Responses	%	No. of Responses	%
0.1 - 1	42	17.3	23	9.0
1.1 - 2	85	35.0	71	27.6
2.1 - 3	78	32.1	57	22.2
3.1 - 4	38	15.6	54	21.0
Over 4	-	-	52	20.2
TOTAL	243	100.0	257	100.0

Source: Fieldwork, 1992.

production recorded and discussed above, to which 67.1% of the total respondents were of the opinion the construction and rehabilitation of feeder roads carried by BASIRDA has made. This increase in farm size and production no doubt had in turn improved the quality of life of the rural dwellers.

Furthermore, the findings here attest to the earlier findings observed by Ogwude (1984), in which farms increased in size and number among some rural communities, in his study of the Numan-Wukari road in 1984.

(c) Distance to Farm

On facilitation of movement, respondents reported that feeder roads have facilitated their movement to both farms and to other settlements. On this it was found out that 34.2% of the respondents commuted between 0.1-1km and 3.5% of them commuted above 4km before feeder roads construction/rehabilitation against 19.1% who commuted between 0.1-1km and 9.3% who travelled above 4km to their farms after the completion of the roads. This shows that most (67.7%) of the respondents had their farms between 0.1 - 2km before the opening up and rehabilitation of some of the roads, against 44.7% of them whose farms are between 0.1-2km after the completion of the roads.

Table 5.14. Distances to Farm.

Distance Interval (km)	Before Road Construction/ Rehabilitation		After Road Construction/ Rehabilitation	
	No. of Responses	%	No. of Responses	%
0.1 - 1	88	34.2	49	19.1
1.1 - 2	86	33.4	66	25.7
2.1 - 3	54	21.0	73	28.4
3.1 - 4	20	7.9	45	17.5
Over 4	9	3.5	24	9.3
Total	257	100.0	257	100.0

Source: Fieldwork, 1992.

It is therefore observed that while there is a decrease in the number of respondents who owned farms between 2.1 - over 4km there is an increase of 23.0% of them who owned farms between 2.1 - over 4km after the completion of the roads (see table 5.14).

The extension of farms beyond the previous trekkable distances, for instance 3- over 4km can be seen to be as a result of improved accessibility, and the willingness of the farmers to travel outside their settlements surroundings in order to increase the size and number of their farms brought and made possible by BASIRDA rural feeder roads in Eastern Zone of Bauchi State. From personal observation it was noticed that many rural dwellers prefer use of inanimate source of energy such as bicycle, motor-cycles, and vehicles, than the animate in commuting to their farms daily, and people going to farms particularly forms the bulk of passengers daily especially during the harvest and wet seasons in most of the rural areas.

(d) Agricultural landuse

Another effect of rural feeder roads can be seen in the increasing change in land use with reference to production of certain crops, for instance out of the sampled respondents (292 people), (137 or 46.9%) of the respondents have stopped planting some certain crops such as ground nut, cotton, and to certain extent sorghum but on the other hand have adopted the and

increased the cultivation of new crops like tomatoes, potatoes, soya beans, rice and vegetables after the completion of the feeder roads (see table 5.15).

This change in agricultural land use is basically a response to changes in demand brought largely by the feeder roads and the willingness of

Table 5.15. Introduction of New Crops among the Sampled Population.

	Respondent Occurence	Percentage Occurrence
Yes	137	46.9
No	155	53.1
Total	292	100.0

Source: Fieldwork, 1992.

the farmers to respond to the demand of an increasing rural and urban population. Again the low farm gate and disease infection on certain crops like cotton and groundnut may be among the factors that have influenced some of the respondents to introduce or intensify the cultivation of new crops as opposed to those who haven't. A field observation however showed an increase in movement of vegetables crops along the feeder roads to large villages and towns, to which large villages and towns, to which large portions of agricultural land have been converted for their cultivation.

Finally for the purpose of this research evidences from section a, b, c, and d above may not be conclusive enough to show the real effect of feeder roads on increased crop production. As in the questionnaire many of the statements were deliberately designed to be qualitative because quantitative data would simply be avoided by the respondents as they had no quantitative records to answer them.

5.5.2 Saving in Travel Time

Apart from basis on which road is evaluated on productivity in agriculture. However, main benefits due to improve accessibility result from savings in time, since time saved while travelling can be converted to other uses. Table 5.16 presents an evaluation of BASIRDA rural feeder roads on travel time savings. This was evaluated from travelling undertaken on the road for the purpose of transporting agricultural goods to and from market, or commuting to the nearest market for purposes of buying and selling, with the construction/ rehabilitation of the road.

Table 5.16. Travel Time Saving.

Saving (Mins)	No. of Response	%
1 - 10	254	87.0
11 - 20	9	3.1
21 - 30	5	1.7
None	24	8.2
Total	292	100.0

Source: Fieldwork, 1992.

From Table 5.16, 254 (87.0%) of the respondents are of the opinion that there is a reduction of between 1-10 minutes when travelling on BASIRDA feeder road. 9 (3.1%) of the respondents recorded between 11-20 minutes, while 5 (1.7%) gave between 21-30 minutes. The high number of respondents (87.0%) with the opinion of 1-10 minutes clearly autenticated the short distances commuted by the rural dwellers such that a long reduction in travel time is hardly experienced.

On the whole 91.8% have agreed that there is a reduction in travel time, the likely reason for this with regards to impacts of the feeder roads probably could not be unconnected with the good quality of the roads provided. The findings here is not conclusive because this expresses the views of many respondents assessing the time saving on different length of roads, but it generally suggests that there is a shortening in travel time, which is actually a leeway towards improving the condition of living of the users.

5.5.3 Saving in Transportation Cost

Like reduction in travel time, transportation fares may be reduced if a road is good. If transport fare is reduced the proceeds accumulated from the payment of less transport fare could be used to increase the production capacity and economic activities of the people particularly rural economy

where proceeds can be used to increase farming operations. An assessment of transportation cost along a unit length of 5km of feeder road with reference to transporting a unit mass of 1 bag of maize grain in Eastern Zone is presented in Table 5.17 below.

Table 5.17. Transportation Cost along BASIRDA Feeder Roads.

Transport Cost	No. of Responses	%
Has reduced	7	2.4
Has not changed	28	9.5
Has Increased	228	78.2
Indeterminate	29	9.9
TOTAL	292	100.0

Source: Fieldwork, 1992.

From the data shown above the increase in transportation cost appears significant as revealed by 228 (78.2%) of the respondents. This reason could be accounted for by either one or all of the following explanations. First, the continuous deterioration of the roads through bumps, potholes, and broken culverts, or alternatively it could be due to astronomical increases in transport fares throughout the country, could have also led to increase in the transport fare.along the routes.

Results from table 5.17 contradicted with that on table 5.16, where 91.8% of the total respondents agreed that there has been reduction in travel time which is supposed to have a positive relationship with a reduction in transportation cost. Thus, the reason from field observation for the mass increase in transportation cost could be unconnected with the poor state of road but with daily increase in transportation fare, despite even the improved condition or poor condition of roads.

5.5.4 Utilisation of Roads

On this aspect, inferences to be drawn here will greatly emphasise whether the objectives of the roads are met or not. On regularity of use table 5.18 below gives the extent. As seen in table 5.18 below, majority of the respondents (85.2%) confirmed that feeder roads are motorable throughout the year. This high percentage confirmed the quality of the roads made by BASIRDA against the common feeder roads

Table 5.18. Regularity of Use of Feeder Roads.

Regularity	No. of Responses	%
Monthly	11	3.8
Seasonally	32	11.0
Throughout the year	249	85.2
TOTAL	292	100.0

Source: Fieldwork, 1992.

embarked upon by local government authorities, which are mainly motorable during the dry season. Furthermore, 11% of the respondents attest the regularity of use of feeder road to only during the dry season, this mainly due to erosional action on the roads and broken culverts. This complain simply suggests what needs to be improved. On the other hand 3.8% of the respondents attest that the feeder roads are accessible only some few months. These months I found out are dry season months, the findings stands to confirm the same problem as being seasonal.

Furthermore, on the area of utilization, was mode of transportation commonly used. Pick-up vans were ranked first most important mode of transportation in the study area. About 88.69% of the total respondents ranked it first, while 9.93%, 1.36 ranked it second and third. In order of importance were found to be lorry, motorcycles, buses, and lastly cars. The ranking given here stands to confirm the dominant use of these feeder roads for evacuation of agricultural products mainly to market and homes.

5.5.5 Rating of the Feeder Road

Rating here was done here in terms of quality of what has been provided from the target population perspectives. Table 5.19 shows the results of the findings.

Table 5.19. Local Rating of BASIRDA Feeder Roads.

Rating	No. of Responses	%
Excellent	13	4.5
Good	111	38.0
Average	125	42.8
Poor	43	14.7
TOTAL	292	100.0

Source: Fieldwork, 1992.

Based on the criteria of the quality of feeder roads, about 4.5% of the respondent considered the work done by BASIRDA as being excellent, while 38.0%, 42.8% considered the roads as being good and average. On the whole about 85.3% considered BASIRDA to have done satisfactorily. This local people assessment of the feeder road must however be interpreted with caution because it may be based on their own perception of what the project means to them in terms of their priority need solved.

Finally from the findings obtained on the feeder roads and from personal field observations, one can conclude that BASIRDA has recorded some positive results with regards to improving the standard of living of the rural populace in Eastern Zone has been achieved through its feeder roads projects. Nevertheless there exist some areas which

need improvement, and this may be the reason why 14.7% of the respondents rated the feeder roads as poor.

5.6 Rural Water Supply

Rural water supply in the context of this study refers to water provision to the rural areas of Bauchi made by BASIRDA either through handpump or motorised boreholes. The provision of these water supply sources is aimed at improving the socio-economic status of the people by (i) reducing the inadequacy of drinking water in the rural areas ii) helping to alleviate the suffering of the rural people by bringing some changes in their water carrying and water use pattern, (iii) helping to improve their lot through health care system associated with portable water. It is against this background the provision of water made by BASIRDA will be assessed.

5.6.1 Adequacy of water

To find out the most common source of water supply for domestic use to individual households, respondents were asked to indicate their main source for domestic use. This was carried out to assess the level of borehole water utilisation by the people. Table 5.20 presents the frequency distribution of the respondents according to sources of water supply for daily use now.

Table 5.20. Most Common Source of Water Supply for Daily Household Use.

Source	No. of Respondents	%
Borehole (BASIRDA)	82	28.1
Other Sources	210	71.9
Total	292	100.0

Source: Fieldwork, 1992.

The result of the survey on table 5.20 above revealed a heavy reliance on other sources, which includes wells, streams, and ponds, against 28.1% relying on BASIRDA.

The heavy dependence on wells streams and ponds by the people for their needs raises a number of questions about the demand and supply of the boreholes in the area under study. Some of the questions that readily came to mind include (a) were people in the area under study refusing to utilise the services of the boreholes because of cultural or traditional reasons? (b) were boreholes not properly located?, and (c) has the demand exceeded the supply?

When asked off record to state the reason, majority of the respondents expressed the non-availability of water of some boreholes now. From the answer given by the people, and visit to some of the borehole water points, one can clearly understand

that the non-availability rather than any factor was the main reason why the people in most of the villages were not patronising the BASIRDA boreholes, this problem has existed for a long time in some of the villages.

The evidence here therefore, is that the success of the boreholes so far in creating adequacy in water supply in rural areas of Eastern Zone still remains far below the expected targets, as most of them have dried up and are not producing even a drop of water. This is indeed contrary to the morale and visible enthusiasm with which senior officials at the headquarters talked about the borehole projects, without reappraising the success of the projects, as to whether they are functional, but only after the number of communities they had drilled boreholes for.

5.6.2 Quality and Quantity of Water Supply from Boreholes

Regarding the quality of the supply respondents were urged to consider the colour taste, and the absence of impurities in the supply. Table 5.21 gives the picture of how the respondents in the area under study assessed the quality of water obtained from their boreholes, when compared to other sources.

Table 5.21 below, indicates that at present, majority of the respondents (68.8%) rated water from their boreholes as of good quality. The reason for

this high rating is because of high standard of portability and hygeinity when compared with other sources presently obtained in the villages which are of open surface. In essence this ratings shows that water supply from boreholes is in high demand in the rural areas of Eastern Zone.

Table 5.21. Quality of Borehole Water Supply.

Quality	No. of Respondents	%
Good	201	63.8
Fair	75	25.7
Poor	16	5.5
TOTAL	292	100.0

Source: Fieldwork, 1992.

The 5.5% of the respondents attributes the reason of their poor rating due to the taste, which they complained is salty. Majority of this category of respondents were found to come from Kobuwa and Degri where it was also observed in Kobuwa that the water is indeed salty.

On the adequacy in terms of quantity of supply, (239), 81.8% of the respondents attributes the quantity of supply to be adequate in the villages thats when the water from the boreholes is available, while 53 (18.2%) of them claimed the supply as been

inadequate, this is particularly so because of the demand which superceded the supply.

The findings as regards to quantity of supply therefore implies if only all the boreholes are producing water now then the problem of inadequacy of portable domestic water supply experienced in most of the villages surveyed will have been non-existent. Another indicator of effective water supply is the incidence and frequency of reported water-borne diseases. Data on this was not solicited as only few of settlements possessed medical centres to which this information can come from.

5.6.3 Distance to Water Sources

Water collection from distant sources is one of the problems, which setting up of BASIRDA borehole were designed to ease especially in the rural areas. It is because of this important aspect in the overall objectives of improving the well being of the rural lot, that this study also set out to find the distance expended to get water both before and after the establishment of boreholes. Table 5.22 presents the picture.

Data gathered on the field showed that there is an increase in distance to water sources as 28.4% of the respondents cover less than 1½km to get their water supply as opposed to 26.1% who cover the same distance after setting up boreholes. An interesting thing about this category of respondents is that,

most of them are using private wells dug inside compounds. Again 4.8% of the respondents trek over 2km before boreholes to obtain water, against 6.1% who trek the same distance at present to obtain their water supply.

Table 5.22. Comparison of Water Supply Distance.

Distance (km)	Before BASIRDA Boreholes No. of Responses	%	After BASIRDA Boreholes No. of Responses	%
½	83	28.4	76	26.1
½ - 1	115	39.4	112	38.3
1 - 1½	59	20.2	62	21.2
1½- 2	21	7.2	24	8.3
2	14	4.8	18	6.1
Total	292	100.0	292	100.0

Source: Fieldwork, 1992.

Result of the survey seemed to suggest that despite the boreholes in the villages, people at present travelled longer distances than before. This could not have been so had the boreholes been functioning. The result confirmed and further lent credence to an earlier observation (Section 5.6.1) of the obsoleteness of most of the boreholes, as they fail to meet the objectives for which they were set up.

On the whole the distance covered by the various households within Eastern Zone both before and after BASIRDA boreholes (nowadays) is within tolerable

limit, when compared to situations obtained elsewhere in Africa. For example in their extensive survey of water use in East Africa, White et al. (1972) as noted by Elabi (1987) observed that women in Muka'a cover a distance of about 4.8km to get to their water sources. White (Ibid), also noted that the Muka'a case is even more tolerable when compared to case of the Shilluk women in the Sudan who start before dawn and journey more than eight kilometres to the Nile for water.

Related to distance is the time taken by individuals households to get enough water for a day's domestic use. Some people (Biswas, 1978) were of the opinion that a relationship exist between the distance covered by an individual to get to the source of water supply and the time it takes him to fetch enough for daily household use. However, such a relationship according to Elabi (Ibid), is subject to a number of factors, such as, one's household size, the container used in fetching among others. Time as we earlier mentioned is an important factor in the water collection journey and an improvement in water source will lead to less time spent in collecting water, and conversely allow more time to be used for some purposes. The study therefore attempts to find out the time it takes people to fetch enough water needed for daily household use. This is presented in table 5.23 below.

Table 5.23. Comparison of Time Spent on Water Collection for Household Use.

Time(Hr)	Before BASIRDA Boreholes		After BASIRDA Boreholes	
	No. of Responses	%	No. of Responses	%
1	6	2.1	5	1.7
1.1-2	60	20.8	44	15.3
2.1-3	131	45.5	138	47.9
3.1-4	77	26.7	83	28.8
Over 4.1	14	4.9	18	6.3
Total	288	100.0	288	100.0

Source: Fieldwork, 1992.

From table 5.23 above it can be seen that 2.1% of the respondents spent less than an hour daily on water collection for household use and 4.9% of them spent over 4 hours on water collection before the setting up of boreholes by BASIRDA in their villages, against 1.7% who spent less than an hour and 6.3% who spent over 4 hours daily on collection of water after BASIRDA boreholes now. This shows that most (68.4%) of the respondents spent between 0.1-3 hours on water collection before BASIRDA water point, against 64.9% who spent the same length of time after the borehole now.

It is therefore seen that while there is a decrease in the number of respondents who spent between 3.1- over 4.1 hours before the boreholes

there is an increase of 3.5% of them who now spent between 3.1-Over 4.1 hours despite the installed borehole in the villages.

The extension of time spent on water collection beyond the previous length of time spent is due mainly to the non-availability of water and non-functional nature of most of the handpumps and motorised boreholes, and also the likely reason of an increase rapid population in the rural areas, whereby the demand outstrip the available supply sources.

On the whole, the result on tables 5.22 and 5.23 suggests that despite the substantial progress recorded by BASIRDA in the high number of boreholes it constructed the success is very minimal, when considered on improving the condition of living as the benefits of these, are not readily felt by the target population.

5.7 Rural Electrification

Electrification is a huge investment, thus BASIRDA made very little achievement as regards to the number of rural settlement it electrified, as only two villages Hashidu and Gona were opportuned to benefit from this scheme in the Eastern Zone out of the 28 for the whole state. This study intends to implore briefly on the forms of use, benefits and problems associated with this infrastructure, as we

should take into consideration that two years of its existence in the two villages may be short for one to expect the electricity to have had any significant impacts for a meaningful assessment.

5.7.1 Forms of Electricity Supply Uses

From the sample of 30 respondents sampled in the two villages, the dorminant form of electricity use was found to be residential which accounted for 73.3% of the respondents. This group use electricity mainly for lighting and for other appliances in their homes.

Table 5.24. Forms of Electricity Use.

Type of Use	No. of Responses	%
Agricultural	-	-
Residential	22	73.3
Industrial	1	3.3
Commercial	5	16.6

Number of Respondents = 30.

Source: Fieldwork, 1992.

Commercial purposes ranked second among the uses of electricity in the villages (16.6%) of the respondents. An interesting thing about this category of respondents is that some of them carry out their commercial activities in their personal houses, thereby combining the two forms of uses. The low level

of electricity use for both commercial and industrial activities, show that economic use of electricity has not been fully appreciated and exploited. Nevertheless, what is obtained is indicative of the potential future use to which electricity will be subjected to.

Furthermore, agricultural use of electricity was not recorded in the sample. The hope of using electricity for agriculture needs to be vigorously pursued in order to move ahead with the jet age as in the developed economies (Kaka, 1988).

5.7.2 Regularity of Electricity Supply

The regularity of electricity can serve both as deterants or impulse to potential economic development of an area. The objectives of BASIRDA Rural Electrification includes to ensure a constant supply, that explains why their provisions tried connection to the National Grid mostly. The regularity of supply is used as means of testing the effectiveness of the electrification scheme presented in table 5.25.

Table 5.25. Daily Duration of Electricity Supply.

Measure of Regularity(Daily)	No. of Responses	%
Less than 12 hours	-	-
12 hours only	3	10.0
More than 12 hours	27	90.0
Total	30	100.0

Source: Fieldwork, 1992.

From table 5.25 majority of respondents 90% claimed that power supply was in a range of more than 12 hours, this simply means the supply of electricity is throughout the day, except for minor blackouts. When constrasted with the 10.0% respondents, then it is probably that these category might have been expressing whats happening before now. The constant power supply in the two village stands to attest the quality of work carried by BASIRDA, and also expresses the potentiality of electricity use even during the daytime in the villages, that will make it possible for industrial use.

5.7.3 Standard of Living

Another index to determine the quality of life brought by electricity is to examine whether the people are using some selected personal items. A careful perusal of the outcome is given in table 5.26 below.

Table 5.26 Types of Appliances in Use.

Item	Frequency	%
Radio	11	36.7
Fan	9	30.0
Television	4	13.3
Heater	7	23.0
Refrigeration	3	10.0
Electrical Bulbs	22	73.3

Number of Respondents = 30

Source: Fieldwork, 1992.

From table 5.26 above, it was obvious that 73.3% of the respondents uses electrical bulbs of different sizes attesting to the most widely accepted function of electricity, mainly for lightining. The use of radio comes second (36.7%). The use of electricity can be said to enhance the cheapness of owning a radio, because of the constant electricity supply, furthermore, the power does not run down as in case of dry cell.

A low use of television, Heater and Refrigerator (table 5.26) were recorded. In spite of the low use, the results obtained indicate the awareness of the respondents about the usefulness of these items. The possession of these items by the ruralite imply an improvement in their condition of living, a change for the better made possible through electricity.

Furthermore, it was also found out that the presence of electricity in the villages has made it possible the establishment of clinics, and electrical grind mills in the two villages and a television viewing centre by the Akko Local Government Authority in Gona.

Finally, the need for provision of electricity to the rural areas is in pipeline to stem down the rapid tide of migration of able bodied people from rural to urban areas, and if possible to encourage urban to rural migration. On this account respondents

were asked to critically consider the impact of the electricity provided in their villages now in relation to pattern of migration in their villages. Table 5.27 presents the findings.

Table 5.27. The Situation of Migration in Gona and Hashidu Villages.

Situation	No. of Responses	%
Reduced outmigration	21	70.0
Reduced in-migration	8	26.7
Increased out-migration	6	20.0
Increased in-migration	17	56.7
No response	8	26.7

Number of Respondents = 30.

Source: Fieldwork, 1992.

The 70% of respondents represents the majority view that with the provision of electricity in the villages in the last two years, the villages experienced reduced out migration from the villages, this is indeed in line with objectives of setting up of rural electricity. This is also followed by 56.7% who claimed that the village has experienced in-migration. The reason for this inmigration can be adduced to presence of electricity compared to a very few people migrating out of the villages in which only a few of the respondents 20.0% agree that

there is increased out-migration. Therefore, one can conclude that electricity in the two villages have brought about increase of people moving inside them and a reduced number of people moving out.

CHAPTER SIX

DISCUSSION

The performance outcome of the BASIRDA rural infrastructural package has revealed a number of interesting findings which shall be discussed briefly here.

It is apparent from the study that BASIRDA seems not to appreciate the potentials of mass participation towards successful implementation of projects as indicated in tables 5.10, 5.11 and 5.12, by the low level of participation from the target population. The implication of this is that communities have tended to see the three projects executed by BASIRDA under study, namely the feeder roads, boreholes and the electricity as "theirs" rather than "ours". This has subsequently undermined ability of feeder roads and boreholes to sustain themselves, as many were seen needing some maintenance which are within the reach of the rural beneficiaries; but their poor orientation and alienation from the conception up to the implementations of the projects, have greatly discouraged them to come together.and maintain them rather than anticipating the maintenance to come from government, which does not seem to be forthcoming. The maintenances include, construction of damaged

culverts, and filling in of some pot-holes, fencing of handpumps to regulate the man handling of the facilities by children, who often use the handpump as toys for their plays.

On the assessment of the three projects, the construction and rehabilitation of feeder roads was seen as one of the most observable benefits accruing from BASIRDA. These feeder roads no doubt have provided the rural dwellers with the opportunity of increased crop production (table 5.7) as 67.1% of the respondents were of the opinion that feeder roads had positive impact on agricultural productivity. Increase in land under cultivation, increase in distance to farm, and the year-through utilisation of the BASIRDA feeder roads given in tables 5.18 and 5.19 truly attest to widely accepted theoretical and empirical evidence that the efficacy of transport improvement, particularly road transport, in enhancing the development of an area cannot be over-stressed. From data obtained and analysed on the BASIRDA rural feeder roads in chapter five, the feeder roads can be said to be making a very positive economic and social contribution to the well being of the rural dwellers in Eastern Zone.

It is significant to note that by implication of the routing of the new feeder roads, many of the existing village settlements have remained detached

from these feeder roads ateries. This has contributed subsequently in reinforcing spatial polarisation in the zone, by facilitating the flow of resources into major settlements located on their routes. Therefore, in view of this, and the tangible benefits derived from the feeder roads programmes, the present administration should ensure that feeder roads are intensified, not only in number but also in quality.

Water is one of the basic necessities of human life, and its supply is one of the most important infrastructural bases for rapid economic, social and industrial development of any nation. Interest in the provision of good rural water supplies as done by BASIRDA is based on the notion that safe supply of water would lead to improvement on the health of the people, and that a healthier society would contribute towards the growth of the national economy which will consequently hasten the rate of development. On BASIRDA water supply, first analysis of the data has shown a gross inadequacy of borehole water source in the area (table 5.12). The situation had therefore compelled majority of people in the zone to turn to wells, streams, ponds, and to some extent mobile water tankers to meet their water need for daily household use. As a result of this the boreholes in some of the villages were rendered ineffective and

completely obsolete.

On water collection for instance it was discovered that the distance and time taken is longer than before BASIRDA boreholes were installed in most of the villages, this is because of the non-availability, and in some case, inadequacy of the borehole water supply. Conclusively, taking the existing situation of boreholes water supply in Eastern Zone vis-a-vis the claim of successes by BASIRDA in terms of mass provision of boreholes water supply in the rural areas of Bauchi, one begins to wonder if the claim was not like the proverb "counting your chicken before they hatched". Most of the boreholes have dried up and not producing even a single drop of water, after barely six years, if not less from the time they were drilled. This raises the issue of sustainability as a very important component of rural development objectives.

The situation had indicated that the objectives for which boreholes had been provided in the zone has not been achieved. Inspite of all these however, a lot of prospects for the improvement of the poor water supply situation in Eastern zone abound, as recommended in the next chapter.

Rural electrification exemplifies the kind of living bestowed on people who are determined to better

their lot and are willing to put forth hard labour to do themselves those things that cannot be obtained otherwise. Based on the above, Smith (1957), said "America is a better place to live whether it be in the city or in the rural areas as a result of rural electrification". This ascertation can be seen in the light of the various uses to which electricity can be subjected to, and which will subsequently improve the condition of living.

On the evaluation of electricity provided to two villages, Hashidu and Gona in Eastern zone, data obtained showed a high level of adoption mainly for residential purposes, with only a few for commercial and industrial purposes, despite the low use for the last two purposes, it still indicate the potential future use (table 5.24). The constant supply of electric power also signifies the excellent assurance to investors. Information obtained also reveals the possession of some electrical appliances and their uses in the two villages made possible by electricity, another important observation was reduction in the tide of outmigration and slight increase in the in-migration in the two villages since the electrification of the villages in the opinion of the residents. All these stands to attest the positive contribution made by electricity in the Eastern Zone particularly Hashidu and Gona apart from the other social

infrastructures now established in the villages (Section 5.7.3).

Finally, considering the improvement in the condition of living experienced in Gona and Hashidu, being the only rural settlement out of the vast number in the zone. This signifies if the same can be extended to other settlements. Then truly a high promise awaits the Eastern Zone. This only two villages are truly disproportionate considering also size and number of villages in the zone.

CHAPTER SEVEN

7.0 SUMMARY, RECOMMENDATION AND CONCLUSION

7.1 Summary of Findings

The analyses of the data so far had revealed some interesting findings in respect to answering the crux of this research, has BASIRDA been a success?

On logical step in any successful rural development agency, which is the target people being aware of the existence and usefulness of such agency has been realised. Therefore BASIRDA has the potential of achieving much in the future if periodic evaluations are carried out to highlight problems and offer solutions.

The investigation carried out revealed that the levels of peoples participation in the three projects studied have not been encouraging because the initiation, planning and implementation are often done by the Authority itself. Therefore one can conclude that peoples participation in decision-making by BASIRDA leaves much to be desired, and this is detrimental to the realization of rural development.

Rural Feeder Roads constructed/rehabilitated by BASIRDA has shown some evidence of positive

contribution to improvement of rural condition in areas of increased agricultural production, increase in sizes of farms, and spatial integration in the region, which invariably means also an increase of income to the majority of the rural dwellers. This gives a credence to BASIRDA's aim of improving the condition of the rural populace.

The performance of boreholes water supply towards alleviating the problem of long distance and time expended on water collection, and poor portable water obtained from other sources haven't been achieved, or have been shortlived, mainly due to non-availability of water in most of the boreholes, which were mostly dug during the wet season, when water table is higher. The contribution of BASIRDA in this area was found to be minimal since majority trek longer distance and spend longer time daily than even before the setting up of the boreholes.

The rural electricity even though is at its infancy in Hashidu and Gona is making significant contributions, based on the forms it is subjected for use, social infrastructures now located in the villages made possible by it. This signify the high promise electricity is holding for these rural areas.

On the whole, except for the dried boreholes, data gathered on the field, and from personal observation evidenced that BASIRDA has made and is

still making significant contribution which are positive in improving the living conditions of the rural populace of Eastern Zone in its area of basic rural infrastructures namely the Feeder roads, and to some extent its electricity scheme. Thus, to the majority of rural populace also, "BASIRDA is a success story".

7.2 Recommendations

Based on the findings of this study and the experiences of BASIRDA, the following recommendations are being made:

The drying up of water from most of the boreholes cannot be disassociated mainly to the nature of the acquifer thus, any further drilling should ensure a proper geological survey and map of the site before undertaking the drilling, furthermore the drilling should be carried out during the dry season to reach the lowest depth of watertable of the area toaavoid early drying-up.

The rate of flow of water as observed from some of the handpumps is very slow, therefore, may be rather than constructing boreholes, government should provide concrete open wells which allows for many people to fetch at the same time. Nevertheless a device should be made to cover the well to reduce pollution when not in use. Furthermore, is the problem associated with maintaining boreholes which

is highly technical and above the skills of the rural populace, hence concrete open wells are much easier to maintain, and are hereby suggested.

It was observed that some of the feeder roads do not lead to farms or pass through farmlands to connect large villages. Government should ensure that any future feeder roads pass through farmlands. It is only when feeder roads pass through farmlands before linking villages that that they can facilitate farm operations.

There is need for village reorganisation to bring smaller villages together to reach a threshold where common facilities such as electricity can be provided, since it involves a huge investments. This if seen to be feasible explains why Eastern Zone profitted minimally compared to other zones when it comes to rural electrification scheme of BASIRDA, because of very few large villages.

The success of any development programme depends on how much the people themselves are involved in the initiation, planning, financing, and implementation of projects. It is therefore necessary to de-emphasise the approach taken by BASIRDA in the provision of the three projects on itself, rather than to tap the knowledge and mainly labour of rural residents, as this would make them perceive the projects as their own rather than that of the government.

Finally, there is a strong need for Bauchi State and other states of the Federation to have an agency of rural development under the office of the State Governor, rather than whats obtained now, as a Ministry of Rural Development, for then will there be a speedy move towards developing the rural areas (Ariyo, 1991).

7.3 Conclusion

The provision of rural infrastructural facilities in our rural area must be given priority by government, because they are major tools for any meaningful development. A country like Nigeria cannot claim to be developed if the rural areas where 70% of its population live are still in absolutely relegated. Therefore there is greater need to redirect our attitude to the rural areas in order to have a balanced and equitable national development.

Community Development Association (CDA) meetings or with the Village Heads. This rightly suggest how CDA's and traditional rulers can be used as mobilisers and informants about new innovations. Although at certain times, because of the actions of some traditional rulers, most respondents perceived traditional rulers as not representing the interest of the masses.

5.4 Local Participation

One of the objectives of BASIRDA was the involvement of the target population in decision-making, and also to share jointly in the execution and maintenance of projects, to ensure their continuous success. To be able to establish the level of people participating in the three BASIRDA Projects under study, the respondents were asked to indicate their roles in siting of these projects, forms of contribution to the executed projects and the stages of their participation.

Table 5.9 gives the peoples' responses on who took locational decisions for water points (boreholes), route of feeder road direction and pattern of distribution of electricity.

The role of community with respect to locational decision is very disappointing considering the low percentage recorded by them in determining the point of locations of the projects, with only 3.1% for

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APPENDIX A

ECOZONE DESCRIPTIONS

BSADP, 1983

KERRI-KERRI

Geology:	Tertiary Continental Sandstones.
Soils:	Leached Ferruginous Tropical Soils on impoverished material. Chemically poor, very deep red sandy loam.
Vegetation:	Shrubbed Woodland and Wooded Shrubland.
Major Crops:	Sorghum; Millet; Maize; Cowpea.
Rainfall:	800-900mm.
Land Use:	Wet season rangeland.

GOMBE-KURI-TULA

Geology:	Older Cretaceous Sandstones, Cretaceous marine shales and limestone. Younger Cretaceous esturine sandstone, shales, clays and siltstones; Crystalline Basement igneous gneisses/ granite.
Soils:	Leached Hydromorphic Ferruginous Tropical Soils; Non-and Weakly Leached Ferruginous Tropical Soils.
Vegetation:	Wooded shrubland on plains; Shrubbed woodland on hills/mountains.
Land Use:	Arable/settled; dry season rangeland;

arable on heavier soils of clay plains and unused occassional grazing or fuelwood and pole cutting in shrubbed woodland.

Major Crops: Sorghum; cowpea; millet; maize; cotton.

Rainfall: 800-900mm.

APPENDIX B

MEAN ANNUAL INCOME (₦) PER RESPONDENT

To get the average income per respondent, we use the assumed mean as follows:

$$\bar{x} = xm + \frac{f\ (x-xm)}{N}$$

where

$\bar{x}$ = mean.

xm = assumed mean.

x = mid-point

N = total number of frequencies.

f = frequency.

Thus,

Income (₦)	f	x(₦)	x-xm (₦)	f(x-xm) (₦)
1000-2000	47	1,500.5	-1,500	70,500
2001-4000	86	3,000.5	0	0
4001-6000	75	5,000.5	2,000	150,000
6001-8000	39	7,000.5	4,000	156,000
Over 8000	35	9,000.5	6,000	210,000
	282			586,500

$$\therefore \quad \bar{x} = 3000.5 + \frac{586,500}{261} = 3,000.5 + 2247.12$$

$$= 5247.6 \quad ₦5248.$$

APPENDIX C

BASIRDA FEEDER ROAD PROJECT

AKKO AND YAMALTU DEBA LGA's

	Route	Length (km)	Remark	Phase
1.	Kuri-Kuniji-Kumo	38	Rehab.	I
2.	Baure-Zambuk-Lubo	17	Rehab.	I
3.	Gona-Garko	6	Rehab.	I
4.	Wade-Bera (Borno Border)	7	New Const.	I
5.	Wade-Garin-Koshi	8	New Const.	I
6.	Hamza-Kalshingi-Alkali-Dottiwa	30	" "	I
7.	D/Fulani-Gwani-Lubo	26	" "	I
8.	Wade-Shinga-Gwani	10	" "	I
9.	Hina-Wade	22	Rehab.	II
10.	Lawanti-Tukul-Goni	35	"	II
11.	Kuri-Jigawa-D/Kowa	20	Rehab.	II
12.	Deba-D/Kowa	12	Const.	II
13.	Garko-Kabhingi-Boltang-Deba	28	"	II
14.	Kumo-Zabin Kani-Baba Jaba	25	"	II
15.	Akko-Tukulma-Gona	35	"	II
16.	Kumo-Kembu-Kuri	30	Rehab.	II
		349		

ALKALERI LGA

	Route	Length (km)	Remark	Phase
1.	Pali-Futuk	55	New Const.	I
2.	Alkaleri-S/Gari-Pali	34	Rehab.	I
3.	Yelwan Duguri-Bajama	22	New Const.	I
4.	Arawa-Kirfi Boli	25	" "	II
5.	Lariski-Maimadi-Kirfi	45	" "	II
6.	Gwaram-Fanti	25	" "	II
		206		

DUKKU AND NAFADA-BAJOGA LGA

1.	Gombe Abba-Malala	42	Rehab.	I
2.	Gombe Abba-Nafada	98	Rehab.	I
3.	Gombe Abba-Boli	54	Rehab.	I
4.	Wawa-Jamari	38	New Const.	I
5.	Nafada-Jigawa	35	Rehab.	II
6.	Tongo-Kubto	20	New Const.	II
7.	Tongo-Tilde-Munda	15	New Const.	II
8.	Dukku-Dokoro	15	New Const.	II
		317		

GOMBE LGA

1.	Gidan Wuta-Shongo	18	New Const.	I
2.	Mallam Sidi-Daban Fulani	11	Rehab.	
3.	Maigedo-Gerkwami-Lubo	31	Rehab.	
		60		

BALANGA, BILLIRI AND KALTUNGO LGA'S

	Route	Length (km)	Remark	Phase
1.	Billiri-Leggal	22	Rehab.	I
2.	Cham-Degri	22	Rehab	I
3.	Yolde-Nyuwar	6	N. Const.	I
4.	Bambam-Filya	70	Rehab.	I
5.	Yolde-Jessu	4	New Const.	I
6.	Nyuwar-Reme-Tallase	36	"	I
7.	Bambam-Tula Yiri	25	"	II
8.	Kaltungo-Ture	8	"	II
9.	Todi-Tudu	17	"	II
10.	Ture-Sabunlayi Awak	15	"	II
11.	Ladungor-Sabonlayi-Ayaba-Tal.	34	Rehab.	II
12.	Kalmai-Sabonlayi-Kashere-Tumu	35	Rehab.	
13.	Gelengu-Wadachi	10	New Const.	II
14.	Talasse-Kolarku	14	New Const.	II
15.	Nyuwar-Degiri-Reme	25	Rehab.	II
		343		
		1,275		

APPENDIX D

BAGIRDA RURAL WATER SUPPLY PROJECT: COMMUNITIES AND TYPE OF WATER SCHEME FACILITY

AKKO LGA

1.	Chilo	HP	Kumo	HP
2.	Jabba	HP	Kembu Madaki	Hp
3.	Kembu	HP	Gona	
4.	Koranti Londo	HP	Misanyel	HP
5.	Tabra Gobana	HP	GGSS Doma	HP
6.	Pindiga			
7.	Jauro Hammadu	HP		

ALKALERI LGA

1.	Bara	Motorised	Wurno Madaki	HP
2.	R/Garmu	HP	Guza	HP
3.	Wanka	HP	Bahba	HP
4.	Kifin Kasa	HP	Wuro Gumbal	HP
5.	Kirfin Sania	HP	Kyesuwa	HP
6.	Duguri	M	Gula	HP
7.	Mainamaji	M	Zamari	HP
8.	Alkaleri	HP	Gidan Gona	HP
9.	Arawa	W	Yalo	M
10.	Sabon Gwaram	HP	Jauro Bunne	HP
11.	Garin Saula	HP	Alh. Sule	HP

BALANGA LGA

1.	Degri	M	7.	Cham	M
2.	Reme	HP	8.	Bambam	HP
3.	Dong	HP	9.	Tula Baule	M
4.	Tallase	HP	10.	Walawaja	HP
5.	Gelengu	M	11.	Tula Wange	HP
6.	Tula Balam	HP	12.	Dadiya	M

BILLIRI LGA

1.	Poshiya	M	5.	Baganje	HP
2.	Tal	M	6.	Billiri	HP
3.	Kulkul	HP	7.	Ayaba	HP
4.	Sansani	HP	8.	Popandi	HP

DUKKU LGA

1.	Dashi	M	12.	Hashiduyel	HP
2.	Kabade	HP	13.	Wuro-Bali	HP
3.	Wuro-daya	HP	14.	Bali Mallam	HP
4.	Gaji-Gala	HP	15.	Tawul	HP
5.	Baguram	HP	16.	Daya Tso	HP
6.	Kesuwo	M	17.	Garin Alh. Gidado	HP
7.	GSS Dukku	HP	18.	Jauro Jibir	HP
8.	Jalingo	HP	19.	Birin	HP
9.	Hashidu	M	20	Zonge	HP
10.	Malala	HP			
11.	Gombe Abba	M			

GOMBE LGA

1.	Jauro	HP	6.	Gadam	HP
2.	Doho	M	7.	Mallam	HP
3.	Gerkwami	M	8.	Daban Fulani	HP
4.	Dukul	HP	9.	Kwami	M
5.	Gaji-Bauchi	M			

KALTUNGO LGA

1.	Lapan	HP	6.	Tula Balam	HP
2.	Shongom	HP	7.	Tula Yiri	HP
3.	Ture Balam	M	8.	Filiya	M
4.	Pokwangli	HP	9.	Kushi	M
5.	Tula Wange	M	10.	Nahnta	HP
			11.	Bangunji	HP
			12.	Lalaipido	HP

NAFADA-BAJOGA LGA

1.	Birnin Bolawa	HP	8.	Kukaw	HP
2.	GSS Nafada	HP	9.	Nafada	HP
3.	GSS Baye	HP	10.	Bajoga	M
4.	Shole	HP	11.	Abuku	HP
5.	Bodor	HP	12.	Tondi	HP
6.	Shaganawa	HP	13.	Magaba	HP
7.	Lafiyawo	HP			

YAMALTU DEBA LGA

1.	Jauro Ali	HP	Kabhingi	HP
2.	Deba	HP	Difa	HP
3.	Lariski Zambuk	HP	Lubo	M
4.	Baguram	HP	Zambuk	M
5.	Garin Koshi	HP	Kuri	M
6.	Gwani	M	Hina	HP
7.	Dadin Kowa	HP	Kwadon	M
9.	Lambam	HP	Kunjele	
10.	Jagali	HP	Wade	HP

*M = Motorised Borehole.
HP = Handpump Borehole.
W = Windmill Borehole.

APPENDIX E

BASIRDA RURAL ELECTRIFICATION SCHEME

	Village	LGA
1.	Hashidu	Dukku
2.	Gona	Akko

APPENDIX F

QUESTIONNAIRE A

The purpose of this questionnaire is to gather information necessary for the assessment of the effectiveness of BASIRDA on the provision of water, Feeder Roads, and Electricity for the award of an M.Sc. in Rural Development at the Ahmadu Bello University, Zaria. Your cooperation is hereby needed in filling this questionnaire honestly, as all answers will be treated as confidential.

PART I: PERSONAL

1. Respondent No.:_____
2. Village:_____ 3. District:_____
4. L.G.A.:_____ 5. Sex: M ( ) F ( )_____
6. M/Status:_____
7. Age: a) 16-20 yrs ( ) b) 21-30 yrs ( )
   c) 31-40 yrs ( ) d) Over 41 yrs ( )
8. Main Occupation:_____
9. Secondary Occupation:_____
10. Educational Background:
    a) No formal education ( )
    b) Quaranic education ( )
    c) Primary education ( )
    d) Secondary education ( )
    e) Tertiary education ( )

11. Annual Income

a) N1000-2000 ( )

b) N2001-4000 ( )

c) N4001-6000 ( )

d) N6001-8000 ( )

e) Over N8001 ( )

12. Tick ( ):/ programme you are aware BASIRDA is involved in:

a) Grazing Reserves ( )

b) Electrification ( )

c) Credit Scheme ( )

d) Water Supply ( )

e) Cooperative Societies ( )

f) Extension Services ( )

g) Fadama Land Development ( )

h) Road Construction/Rehabilitation ( )

i) Not aware of any programme ( )

13. First Source of information about BASIRDA:

a) Radio ( ) b) Publication ( )

c) People ( ) d) Projects ( )

PART II: RURAL FEEDER ROADS CONSTRUCTION/REHABILITATION

14. Year this project was

a) Started _____ b) Completed _____

i) dry season ( ) i) dry season ( )

ii) wet season ( ) ii) wet season ( )

15. In that year what do you consider the most critical need(s) of your Community (Rank them 1,2,3, according to importance).

a) Water_____ b) Road_____

c) Health Centre_____ d) Electricity____

e) Agricultural Inputs_____

16. Did your community request for this project before it was established?

a) Several times ( ) b) Only Once ( )

c) Never ( )

17. What contribution did you make towards the project?

a) Financial ( ) b) Material ( )

c) Labour ( ) d) Others (specify)_

e) None

18. Who decided to locate the road along this route?

a) BASIRDA/Govt. ( ) b) Contractor ( )

c) Village Head ( ) d) Community ( )

Are you satisfied with the location?

Yes ( ) No ( )

19. At what stages of this project are people allowed to participate?

a) Identification and initiation ( )

b) Implementation ( )

c) Monitoring and Evaluation ( )

d) Maintenance

20. Supposed this project was executed by the Community entirely my contribution will be:

a) Labour ( ) b) Material ( )

c) Financial ( ) d) Mobilisation ( )

e) None ( )

21. This route is motorable:

a) Monthly ( ) b) Seasonal(specify ( )

c) Throughout the year ( )

22. The commonest means of transport along this route are (Rank them).

a) Cars_____ b) Lorries_____

c) Buses____ d) Pick-up vans___

e) Motorcycles_____

23. Has the construction/rehabilitation of this road influenced your agricultural production positively?

Yes ( ) No ( )

24. Total size of your farm under cultivation.

Size of farm land	Before road Construction/ rehabilitation	After Road Construction/ Rehabilitation
0.1-1		
1.1-2		
2.1-3		
3.1-4		
Over 4		

25. Average distance of your main farm from your house.

Distance (km)	Before road Construction/ Rehabilitation	After Road Construction/ Rehabilitation
0.1-1		
1.1-2		
2.1-3		
3.1-4		
Over 4		

26. With the construction/rehabilitation the travel time from the previous has reduced along this route by:

a) 1-10 mins. ( ) b) 10-20 mins. ( )

c) 21-30 mins.( ) d) More than 30 mins.(

e) None

27. With the construction/rehabilitation the cost of transporting 1 bag of maize over a 5km distance along this route in comparison with the previous:

a) has reduced ( )

b) has increased ( )

c) has not changed ( )

d) is indeterminate ( )

28. The commonest good transported along this route are (Rank them).

a) Fuelwood____ b) Building materials__

c) Agricultural produce___

d) Agricultural Inputs ___

29. How will you rate the BASIRDA Rural Road Programme?

a) Excellent ( ) b) Good ( )

c) Average ( ) d) Poor.

30. Production of Crops:

I. Maize

Years	1986	87	88	89	90	91	92
Yield(Bags)	___	___	___	___	___	___	___

II. Sorghum

Yield(Bags)	___	___	___	___	___	___	___

III. Beans

Yield(Bags	___	___	___	___	___	___	___

31. Have you introduced cultivation of new crops after the BASIRDA feeder road construction/ rehabilitation?

a) Yes ( ) b) No ( )

PART III: RURAL WATER SCHEME

32. Year this project

a) Started _____ b) Completed_____

i) dry season ( ) i) dry season ( )

ii) wet season ( ) ii) wet season ( )

33. Did your community request for this project before it was established?

a) Several times ( ) b) Only once ( )

c) Never ( )

34. Who decided to locate this project at this point?

a) BASIRDA/Govt. ( ) b) Contractor ( )

c) Village Head ( ) d) Community ( )

35. At what stages of this project are people allowed to participate?

a) Identification/initiation ( )

b) Implementation ( )

c) Monitoring and Evaluation ( )

d) Maintenance ( )

36. What Contribution did you make towards this project?

a) Financial ( ) b) Material ( )

c) Labour ( ) d) Others(specify)____

e) None ( )

37. Supposed this project was executed exclusively by the Community. My contribution will be:

a) Labour ( ) b) Materials ( )

c) Labour ( ) d) Others(specify)____

38. The most commonest source of domestic water to the village since BASIRDA water point is:

a) BASIRDA Water Point ( )

b) Other Sources ( )

39. The regularity of people's use of this BASIRDA water point in the village is:

a) Monthly ( ) b) Seasonally(specify)___

c) Throughout the year ( )

d) Not in use now ( )

40. Maximum distance to water supply is

Distance (km)	Before BASIRDA Water Point	After BASIRDA Water Point
$\frac{1}{2}$		
$\frac{1}{2}$ - 1		
1 - $1\frac{1}{2}$		
$1\frac{1}{2}$ - 2		
2		

41. How much time is spent to fetch enough water for a day's use:

Time (Hr.)	Before BASIRDA Water Point	After BASIRDA Water Point
1		
1.1-2		
2.1-3		
3.1-4		
Over 4.1		

42. The quality of water from BASIRDA water point in comparison to other sources is:

a) Good ( ) b) Fair ( ) c) Poor ( )

43. The quantity of water supply from BASIRDA water point in the village is:

a) adequate ( ) b) inadequate ( )

PART IV. RURAL ELECTRIFICATION SCHEME

44. Year this project

a) Started _____ b) Completed_____

i) dry season ( ) i) dry season

ii) wet season ( ) ii) wet season

45. In that year what do you consider the most critical need(s) of your village (rank them):

a) Water ( ) b) Road ( )

c) Electricity ( ) d) Health centre ( )

e) Agric. Inputs ( )

46. What contribution did you make towards the project?

a) Financial ( ) b) Material ( )

c) Labour ( ) d) Others(specify)___

e) None ( )

47. Who decided on the distribution pattern of the electric power in the village?

a) BASIRDA/Govt. ( ) b) Contractor ( )

c) Village Head ( ) d) Community ( )

Are you satisfied with the arrangement?

a) Yes ( ) b) No ( )

48. At what stages of this project are community allowed to participate?

a) Identification/initiation ( )

b) Implementation ( )

c) Monitoring and Evaluation ( )

d) Maintenance

49. Supposed this project was executed by the community entirely. My contribution will be

a) Labour ( ) b) Material ( )

c) Financial ( ) d) None ( )

50. How long do you get electricity supply?

a) More than 12 hours ( )

b) 12 hours only ( )

c) Less than 12 hours ( )

51. In what form do you consume electricity?

a) Agricultural ( ) b) Residential ( )

c) Industrial ( ) d) Commercial

52. Which of these appliances do you use now?

a) Lightning bulb ( ) b) Radio ( )

c) Fan ( ) d) T/V ( )

e) Heater ( ) f) Refrigerator ( )

53. Infrastructures established since BASIRDA electricity in this village:

a) Clinic/Health Centre ( )

b) TV Viewing Centre ( )

c) Schools ( )

d) Grinding mills ( )

54. With the coming of electricity to this village, the village has experienced:

a) Reduced out-migration ( )

b) Reduced in-migration ( )

c) Increased out-migration ( )

d) Increased in-migration ( )

PART V. GENERAL

55. Do you prefer another organisation to handle the three activities of BASIRDA discussed?

a) Yes ( ) b) No ( )

State reasons:_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

_ _

_ _

56. Rank the needs of your village at present:

a) Good roads ( )

b) Primary School ( )

c) Electricity ( )

d) Secondary School ( )

e) Health Centre ( )

f) Improved water supply ( )

57. Are you willing to join cooperatives/union to propagate the activities of BASIRDA when it comes up with another project for the village?

a) Most willing ( )

b) Willing ( )

c) Indifferent ( )

d) Unwilling ( )

APPENDIX G

QUESTIONNAIRE B

INTERVIEW GUIDE FOR ASSISTANT DIRECTORS OF RURAL ROAD, RURAL WATER AND RURAL ELECTRIFICATION DEPARTMENTS OF BASIRDA.

1. What are the objectives of BASIRDA and your department?

- -

- -

- -

2. Do you think the inclusion of your department in BASIRDA programme of activity is relevant considering that other agencies/institutions perform similar functions?

- -

- -

3. What are the organisational framework of BASIRDA and your department?

- -

- -

- -

- -

4. How does your department identify the project needs of the people in a location?

- -

- -

5. What criteria do you use in siting your projects in a locality?

- -

- -

6. How efficient can you compare the work quality of work done through direct labour and those given out to contractors?

- -

- -

7. Which of the following components do you think have often influenced decisions in your department? Score each components as follows:

i) Never considered ( )

ii) Occasionally considered ( )

iii) Always considered ( )

	Decisions	Reasons
a) Cost effectiveness		
b) Easy implementation		
c) Consideration of equity		
d) Encouraging user patronage		
e) Keeping project working		

8. In which of the following ways are issues debated in your departmental meeting?

a) All issues are always thoroughly debated ( )

b) Most decisions are only made by the executive head ( )

c) Most decisions are only to rubber-stamp decisions already made.( )

d) We rarely have management meetings ( )

e) Any other (state)_ - - - - - - - - - - - - - - -

9. Please, state the type of infrastructure you have provided, in the rural areas of Eastern Zone of Bauchi State.

Type of Infrast-ructure	Location	No. of Beneficiary	No. Planned	No. Completed	Total Cost

10. How regular do you go out for inspection of your project?

    a) Weekly ( ) b) Monthly ( )

    c) Seasonally ( ) d) Yearly ( )

11. How do you come to know if your project needs repairs and who is responsible for the maintenance?

    -

12. How would you rate the staff performance in your department in the following areas.

	Most satisfactory	Satisfactory	Undecided	Dissatisfactory	Most dissatisfactory
	1	2	3	4	5
a) Staff moral					
b) Hard work					
c) Staff cooperation					
d) Nonesty					

13. Which of the following in your view constitutes the major constraints to the success of department objectives? (Rank them 1,2,3, according to importance):

    a) Inability to use and maintain sophisticated implements (including lack of spare parts).

    b) Excessive control from the headquarters (ie field staff and users are not given enough authority to operate.

    c) Lack of money and other resources.

    d) Lack of skills.

    e) Corrupt practices among staff.

    f) Lack of cooperation from the target population

    g) Any other (state)_ _ _ _ _ _ _ _ _ _ _ _ _ _ _

    -

14. What in your opinion are possible solution to those problems?

- -

- -

- -

15. Your department has been criticized on the ground that:

a) Alleged duplication of other agencies/ institutions work.

b) To much money had been expended on its programmes but little to show.

c) Haphazard locations of projects without taking the felt-need of the people into consideration.

d) Low quality of work.

e) To many uncompleted and abandoned projects.

f) Delay in completion of projects.

g) The target population are not given free hand to participate in some of the on-going and completed projects.

How then can you reconcile those criticisms to the success achieved by your department?

- -

- -

- -