

**USMANU DANFODIYO UNIVERSITY, SOKOTO
(POSTGRADUATE SCHOOL)**

**BAKOLORI IRRIGATION PROJECT AND ITS SOCIAL IMPACT ON THE MUSLIMS
OF BAKURA, MARADUN AND TALATA MAFARA LOCAL GOVERNMENT AREAS
IN ZAMFARA STATE**

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Dedication

This research work is dedicated to my (late) parents Alkali Muhammad Tukur and Hajiya Fatimatu (Babbar Gayya) Umar. May their soul, rest in perfect peace, Ameen.

Certification

This research work by Mustapha Muhammad Alkali, has met the requirements, for the award of the Degree in Master, of Arts Islamic Studies, Usmanu Danfodiyo University, Sokoto, Nigeria and is approved for its contribution to knowledge.

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Table of Contents

Title Page	i
Dedication	ii
Certification	iii
Acknowledgements	iv
Table of Contents	vi
List of Tables	viii
Glossary (Arabic Words)	ix
Glossary (Hausa Words/Phrases).....	x
Abstract	xii

CHAPTER ONE: General Introduction

1.1 Background to the Study.....	1
1.2 Scope and Limitation	2
1.3 Significance of the Study	3
1.4 Statement of the Research Problem	3
1.5 Aim and Objectives of the Study	4
1.6 Methodology	4
1.7 Literature Review.....	5

CHAPTER TWO: Overview of the Historical background of Bakura, Maradun and Talata Mafara Local Government Areas

2.1.1 Traditional Origin of Bakura District	13
2.1.2 Economic Institutions and Organization of Production.....	14
2.1.3 The Socio-Political Organizations of Bakura	17
2.2.1 Brief History of Maradun Local Government Area.....	19
2.3.1 Historical Background of Talata Mafara Local Government Area	21
2.3.2 Geographical Location of Mafara	25
2.3.3 Establishment of Talata Mafara Local Government.....	25
2.3.4 People of the Area.....	26
2.3.5 Socio-Cultural set up of Talata Mafara.....	26
2.3.6 Economic Engagement	27
2.3.7 Religion of the People and its Impact on their lives	28

CHAPTER THREE: Concept of Irrigation in Islam

3.1.1 Irrigation	30
3.1.2 Agricultural Policy of Prophet Muhammad (S.AW)	31
3.1.3 Irrigation During the Caliphates (Sahabah R.A).....	33
3.1.4 Irrigation During the Golden Age of Islam (Abbasids Period).....	34
3.1.5 Irrigation and Socio-Economic Development in the Muslims World	36
3.2.1 History of Irrigation in Nigeria	37
3.2.2 The Construction of Bakolori Irrigation Project	38
3.2.2.1 Geographical Location.....	38
3.2.3 The Bakolori Dam and Irrigation Project	38

CHAPTER FOUR: Data Presentation and Analysis on the Positive Impacts of the Contemporary Muslims of Bakura, Maradun and T/Mafara on B.I.P Scheme

4.1 Data Presentation and Analysis	42
4.2 Religious Impact	52
4.2.1 The Concept of <i>Zakah</i>	52
4.2.2 <i>Zakah</i> as an institution	53
4.2.3 <i>Zakah</i> has been Made Obligatory Upon Four Categories of Wealth:.....	53
4.2.4 Grains and Fruits	54
4.3 The Concept of <i>Hibah</i> (Gift).....	57
4.4 The construction of Mosque	58
4.5 Economic Impact	61
4.5.1 Does Bakolori Irrigation Project Boost Your Earnings?	61
4.5.2 Job opportunities.....	67

CHAPTER FIVE: Data analysis and Interpretation on Negative Impact of the Bakolori Irrigation Project.

5.1 Water Disaster.....	69
5.2 Women Request Divorce from Their Husbands.....	76
5.2.1 Implications of Requesting for Divorce.....	78
5.3 Displacement of Settlement	80
Summary	82
Conclusion	83
Recommendations.....	84
Bibliography	87
List of Informants	90
Appendixes	91

List of Tables

Table 4.1.1 Age of respondents	43
Table 4.1.2 Gender of respondents	44
Table 4.1.3 Marital status.....	44
Table 4.1.4 Educational qualification	45
Table 4.1.5 level of Islamic education	46
Table 4.1.6 Local Government origin.....	46
Table 4.1.7 Occupation of respondents.....	47
Table 4.1.8 Is water rate charged per person affordable to the farmers.....	48
Table 4.1.9 How affordable is the water rate charged per person per hectre	49
Table 4.1.10 Do you face any problems with money collectors.....	50
Table 4.1.11 Did you face any problem(s) with water distribution on your site (farm)?	51
Table 4.1.12 Did you pay <i>Zakah</i> of your farm produce on time?.....	55
Table 4.1.13 Did you face any problems in distributing <i>Zakah</i> from your farm produce?	56
Table 4.1.14 Apart from the <i>Zakah</i> , do you give out extra gifts to the relatives, masses, etc for the development of Islam?	58
Table 4.1.15 Have you ever constructed or donated to <i>Islamiyyah</i> School, a class room, a mosque or any building for the sake of Allah through irrigation farming?	59
Table 4.1.16 Does Bakolori Irrigation Project (B.I.P.) serves as a self-employment to you?	66
Table: 5.1.1 Is there any problems posed by farmers to the Bakolori Irrigation Project Authority with regards to water distribution?	68
Table: 5.1.2 Have you ever experienced flood in your farm?	70
Table: 5.1.3 How often have you faced mosquito challenges which resulted in your visiting doctor in the year?.....	71
Table 5.1.4 Has mosquito challenge resulted in hospitalizing you or your family?.....	72
Table: 5.1.5 Do you have a non-Muslim neighbor at your site (farm)	73
Table: 5.1.6 Have you ever had a misunderstanding with your non-Muslim neighbor while watering your farm?	74
Table: 5.1.7 Have you noticed any negative social behavior left by Impresit Bakolori (Nigeria) Limited?	75

Glossary (Arabic Words)

Ansar	:	(Singular Ansari) the companions of the Prophet (S.A.W) From the inhabitants of Medina who embraced and supported Islam and who received and entertained the Muslim emigrants from Makkah.
Ausuq	:	Plural of “Wasaq” which is a measure equal to 60 Sa’i, one Sa’i is equal to 3 kilograms
Dihliz	:	A room allocated/designed to teach and learn all branches of Islamic knowledge under a learned scholar.
Fadak	:	A town blessed with a vast fertile land near Madinah which was conquered during the life time of Prophet Muhammad (S.A.W).
Fay	:	War booty gained without fighting
Halal	:	Lawful means
Jihad	:	Fighting in the cause of Allah
Jizya	:	Head tax imposed by Islam on Non-Muslims living under Muslim rule (i.e. protection)
Kharaj	:	Taxes imposed on the yields of the land
Khumus	:	One fifth of war booty given in Allah’s cause, etc.
Nisab	:	The fixed/specified amount under which zakah becomes obligatory.
Sa’i	:	A measure that equals four muds (3 kilograms)
Shaduf/Shadoof	:	In Ancient Egypt it is a water-raising device consisting of a suspended pivoting pole with a bucket on one end and a counterweight on the other.
Ushr	:	One tenth of yields productions in a farm produce.

Glossary (Hausa Words/Phrases)

Bori	:	Is a form of supposed devil-possession.
Bubbugau	:	Is a word used to give a clear picture of an activity offered by group of individuals considered less privileged, on a farm after harvest, mostly weeding of rice.
Burmawa	:	A native name given to the inhabitants of Bakura.
Chanfe-Chanfe	:	Superstitious beliefs.
Fadama	:	A virgin fertile land.
Gandu	:	A large farm occupied by household members.
Gandun Sarki	:	A very large farm owned inclusively by a king.
Gayya	:	Communal activity.
Hakiman Kasa	:	Traditional heads.
Jekadu	:	Messengers of the king.
Kayaye	:	Minor chieftain who ruled a specific portion of a (Particular) town.
Kurga	:	It refers to night-time work by craftsmen in their craftsmanship.
Kyame	:	Strong palm tree.
Labuni	:	It is a fishing method.
Lehe	:	Is an asset which contains lots of dress materials wealth etc. given to a would- be -wife by a would – be- husband.
Lumu	:	In charge of market/market overseer.
Madawaki	:	A court official in charge of King's/Emir's horses.
Maguzanci	:	Is a belief in deities like Magiro, Atau, Uwarmu, Dodo, Aljannu etc.
Maguzawa	:	Is a Hausa plural word for worshippers of Maguzanci living in Hausa land, they consider all those deities as powerful.
Maigida	:	The most senior member of the household.
Makama	:	Is a court official who brings the prospective king for turbanning.
Masu Sarauta	:	Court officials..
Sarkin Magina	:	Chief builder.

Sarkin Marina	:	Chief of local dyers.
Sayen Baki	:	A token gift between a Husband and a Wife before she talks during consummation.
Tilimba	:	This is a fishing instrument.
Tsatsara	:	This is also another fishing instrument (used to trap a fish).
Tudu	:	A traditional title for a village/district head.
Waziri	:	Is one of the king emissaries, adviser as well as king makers.
Yari	:	Chief Warder.

Abstract

Islam is a complete way of life which encompasses all aspects of one's existence; his mode of worship, eating habits, how he acquires and disposes wealth, his attitude towards himself, his family and society at large and proper way to partake in irrigation system of farming. Irrigation therefore, is an artificial application of water to land for the purpose of farming activities in all seasons of the year. In this research, an attempt was made to study Bakolori Irrigation Project and its Social Impact on the Contemporary Muslims of Bakura, Maradun and Talata-Mafara Local Government Areas in Zamfara State. It is also Emphasized, in this research, that young generation should wake up to meet their needs, support others, and uplift the nation through irrigation system of farming rather than to be leech or parasite. It also encouraged its adherents to engage in seeking lawful means to make livelihood comfortable. More so, it tends to highlight the benefits drawn by the farmers of the study areas from this irrigation system of farming. Similarly, implication of not fully involved in irrigation scheme may render the farmers of the study areas in producing in sufficient food. The study has equally revealed method of Irrigation system of farming adopted during the life time of the Prophet Muhammad (S.A.W), some of his Sahabah (R.A) and even some parts of the Muslim world and how emphasis was given to the irrigation system of farming. Sadly, for a decade, farmers of the study areas were faced with lots of challenges expecting government assistance and intervention, private sectors, elites and non-governmental organizations (N.G.O's) to invest in agriculture and related Agro allied, such as pesticides; insecticides, fertilizers, improve varieties and also support them (Farmers) with soft loans to improve the standard of farming activities in the study areas, but nothing yet.

Chapter One: General Introduction

1.1 Background to the Study

In the name of Allah, the Beneficent, the Merciful. All praises are due to Allah the Exalted be He (SWT), on whom we seek for help and forgiveness; we also seek refuge in Allah (SWT) from the Devil (*Satan*) and from our evil actions. May peace be upon our noble Prophet Muhammad (S.A.W).

Water is an essential factor that plays vital roles in human being. It also serves as an important factor in the production of food for their good health and energy.

Agriculture refers to the cultivation of soil for the purpose of raising food crops which in other words is called farming. It also encompasses breeding of livestock, conservation of forest, and fisheries development.¹ Islam therefore, draws the attention of its adherents and encourages them to protect their integrity by seeking their ways of livelihood through lawful means (*Halal*). To achieve that, they should venture into business provided they are permissible by law (Islamic Injunctions). Economists are of the view that society cannot be peaceful when people are stricken by starvation and poverty. They posit that people's attitudes such as laziness and lack of seriousness to work could cause backwardness in the economic lives of the citizens. Consequently, food production that will fend off starvation and eradicate poverty has been neglected. However, economists believed that investment in agriculture and related Agro allied businesses will enhance the well-being of the people.

This will not be possible without water. Water plays vital role in human existence without which a society will perish. Societies utilize water to produce variety of food items through different ways, for examples irrigation system of farming and lots more. Almighty Allah State in the Glorious

Qur'an:

¹ Iwena, O. A. (1995), *Essential Agricultural Science for Senior Secondary School*, Tonal Publishers Limited, Lagos, Nigeria. P. 2

And We send down from the sky rain charged with blessing, and We produced there with gardens and grains for harvest. And tall date palms with ranged cluster. A Provision for (Allah's) slave. And we give life there with to a dead land.²

And Allah hath made the earth a wide expanse for you that ye may thread the valley ways thereof³

From the above verses of the Glorious Qur'an one will realize the bounties of Allah to His servants by sending water from the sky for man to use and live a comfortable life. People are encouraged to engage in farming activities.

Furthermore, irrigation system of farming enables all year round production of food. Irrigation is an artificial application of water to land for the purpose of farming activities in all seasons of the year.⁴

What this presupposes is that the artificial application of water to land implies an attempt by man to utilize the natural ecological system for better and more agricultural yields.

This study emanates from an observation over the years that large number of people, especially the youth, is nowadays running away from regular farming as well as irrigation system of farming in Bakura, Maradun and Talata-Mafara Local Government Areas. This is more obvious when compared with the percentage of population of those involved in farming in these areas (4/5%). For this reason, this research intends to examine the negative and positive impacts of irrigation system in the aforementioned three local government areas with a view to drawing attention to the existing problems of irrigation there and offer suggestions for possible solution to them.

1.2 Scope and Limitation

The scope of this study is to critically analyze the Bakolori Irrigation project and its social impact on the contemporary Muslims of Bakura, Maradun and Talata Mafara local government areas. Other

²Qur'an, 50:09-11

³Qur'an, 11:19-20

⁴Op cit, Iwena, p.320

local government areas do not fall within the scope of this study. However, non-Muslims in the areas would also be considered. Also the challenges faced by the farmers as well as Irrigation Project itself will also be addressed.

1.3 Significance of the Study

The significance of the study is to highlight both the positive and negative impacts of the Bakolori Irrigation Project in the areas under study.

Another significance of the study is to draw the attention of youth in the areas under review to fully partake in irrigation so as to become self-employed.

Also, part of the significance of the study is to appraise the irrigation activities during the reigns of

Khulafa 'u al-Rashidun (R.A).

1.4 Statement of the Research Problem

The Bakolori Irrigation Project, which started in 1983, improved the quality of lives of the people.

Among the positive social impact of the project include; increase in agricultural production and gainful employment among the people of the areas. Its negative impacts, on the other hand include proliferation of churches and spread of social vices such as alcoholism in the area of study. More so, there were other challenges of environmental hazards as a result of Dam over flooding in some areas and canals broken, birds' disaster, mosquito's diseases as well as shortage of improved seeds. Therefore, the research is specifically designed to address these socio-economic problems which are brought by the irrigation project. The research has specific question it intends to answer:

- (a) What are the ways to encourage the youth in the area of study to participate in the Bakolori Irrigation Project?
- (b) How does Positive Impact of Bakolori Irrigation Project influence contemporary Muslims in the areas under review to partake in Irrigation system of Farming?
- (c) How does it affect the relationship between the autochthons in the area of study?

- (d) How does the social relation between Muslims and non-Muslims affect irrigation in the area of study?
- (e) What are the ways to improve standard of the peasant farmers and to overcome the challenges in the area under review?

1.5 Aim and Objectives of the Study

One of the aim and objectives of this research is to examine the social impact of Bakolori Irrigation Project on the people of Bakura, Maradun and Talata-Mafara Local Government Areas. Other specific objectives of the study include;

- To examine the concept of irrigation (in Islam)
- To encourage Muslim Youth in Bakura, Maradun and Talata Mafara to engage in irrigation farming in order to improve and sustain themselves.
- To analyze some positive and negative social impacts of Bakolori irrigation project.
- To elaborate the shortcomings of the irrigation project in these three local government areas.
- To determine how irrigation will promote their economy.

1.6 Methodology

In order to ensure that the goals of this research are fully achieved, the methods of data collection as well as data analysis would be adopted as follows:-

The first method is library work where relevant theoretical materials, from the available textbooks and journals, would be sourced. It is through this method that books on irrigation, written by notable scholars would be consulted. In order to achieve these objectives effectively, libraries (public) would be identified with a view to visiting them. They include among others; Abullahi Fodiyo library of Usmanu Danfodiyo University, Centre for Islamic Studies Library, City Campus, Waziri Junaidu History and Culture Bureau Sokoto, Ahmad Bello University, Zaria Library.

In the second method, questionnaires would be administered in the selected eleven towns in the three local government areas in Zamfara State (i.e. Bakura, Maradun and Talata-Mafara). However, all towns/districts nominated would be taken as samples and twenty questionnaires would be administered, while in the case of Sabon Gari and Jabe towns ten questionnaires would be administered each. A total of two hundred (200) questionnaires in all the selected towns/villages would be distributed.

In addition to this, interviews with other people, whom we hope and believe may provide information relevant to the topic under research, would be conducted. To achieve this properly as designed, the researcher implores helping hands from research assistants who would possibly assist in one way or the other in collecting and administering the required information. Indeed, all information tapped through interview would be scrutinized satisfactory before being used.

1.7 Literature Review

This research project intends to review works of other scholars that are directly or indirectly related to this study. It is hoped that review of related literature will enable the researcher have a deeper insight into the areas of study. One of the important works in this direction is that of Abbas, titled “Sustainable Cost Recovery in Kano River Irrigation Project”. The author deals with irrigation project in Kano State, Nigeria. He viewed irrigation as:

The artificial application of water to land for the purpose of an all year round agricultural production. As this definition implies the artificial application of water to land implies an attempt by man to modify the natural ecological system so that the inherent inadequacy in the system can be made up for.⁵

The work extensively discussed the history of irrigation in Nigeria where he made mention that.

⁵Abbas, A.Y. (2008), Sustainable Cost Recovery in Kano River Irrigation Project Nigeria, submitted to the Department of Agricultural Economics and Extension, Usmanu Danfodiyo University, Sokoto, PhD Dissertation p. 9

It has been traced back to around 700AD when Shaduf lift irrigation system was believed to have been brought from North Africa to the northern part of Nigeria.⁶

Abbas also discussed some rivers in Nigeria, their operation and maintenance as well as affordability of water fees and profitability of crop enterprises. The thesis is relevant to this work. It dealt with Irrigation system of farming in Nigeria. The main difference is that the former primarily focuses on sustainable cost recovery in Kano, while the ongoing research dwells purely on the social impact of the Bakolori Irrigation Project on the Muslims of Bakura, Maradun and Talata Mafara local government areas in Zamfara State.

Umar's, dissertation "A study of the Socio-Economic Impact of Kainji Hydroelectricity Dam project in Yauri Emirate", deals with the impact of Kainji hydroelectricity Dam Project. It also deals with anticipated impact on agriculture in Nigeria saying:

One of the benefits expected to be derived from the construction of Kainji Dam is improvement of agriculture within the reservoir area and downstream of the Dam through the establishment of irrigation project and the reclamation of the Fadama lands below the Dam site for controlled irrigation. Unfortunately there was no provision in the design of Dam for the achievement of this particular objective.⁷

The difference between this thesis and the ongoing research is that the work discussed the Socio-economic impact of *Kainji* hydroelectricity Dam project in Yauri emirate while the current research work will discuss the social impact of Bakolori Irrigation Project on the Muslims of Bakura, Maradun and Talata Mafara Local Government areas respectively. *Lakotoro's*, work, "Soil and Water Quality under Small-Scale Irrigation in a Semi-arid Ecosystem", gives a brief history of irrigation project in Niger Republic and soil quality under small-scale. The study deals with the history, general

⁶*Ibid.*, p. 11

⁷Umar, S. (2008), A study of the Socio-Economic Impact of Kainji Hydroelectricity Dam Project in Yauri Emirate, Department of Agricultural Economics and Extension, Usmanu Danfodiyo University, Sokoto.P. 7

soil properties and irrigation, water quality in the area. The study identified the areas of great agricultural potentials in Niger Republic. He gives the background of Irrigation as follows:

The Niger Republic has a potential of some 200,000 hectares out of an estimated 15 million hectares of arable land, which can be put under irrigated farming. They are located in the depressions and flood plains adjacent to the river (140,000hectares) the Majia valley (45,000 hectares) as well as the lake Chad Basin, the Goulbis of Maradi and the Dallols of Dosso (15,000ha) the Kandaji is expected to bring an additional 140,000ha of land under irrigation.⁸

The work is relevant to this research as it dealt with Irrigation system of farming. The main difference is that the former focused on small-scale Irrigation in Niger Republic with great emphasis on Agricultural potentials, while the ongoing research is aimed at discussing the social impact of Bakolori irrigation project on the Muslims of Bakura, Maradun and Talata Mafara local governments' areas in Zamfara State. *Nagogo's*, "The effect of irrigation development on income and income distribution", deals with entire effects and benefits of irrigation projects in *Tungan-kawo* in Niger state. The study quoted Balogun (1986) on the benefits of irrigation, emphasizing that:

It is undertaken to provide insurance against drought; for cooling the soil and atmosphere, thereby providing a more favourable environment for plant growth, to wash out or dilute salts in the soil, to reduce the hazard of soil piping, and to soften tillage pans.⁹

In this work, the research mentioned some benefits of irrigation such as easy planting, softening the soil for tillage operations, increase in crop yields and dealing with the challenges of drought.

The work is relevant to this research as it dealt with irrigation system of farming. The former discussed effects of irrigation but on income and income distribution in Tungan-Kawo Irrigation

⁸Lakotoro's, M. (1996), Soil and Water Quality Under Small-Scale Irrigation in a Semi-Arid Ecosystem, Department of Soil Sciences and Agricultural Engineering. Usmanu Danfodiyo University, Sokoto dissertation p.8

⁹ S. U. Balogun (1986), in Nagogo, (2011): The Effect of Irrigation Development on Income and Income Distribution. UDUS, Sokoto p. 8

Project while the current study is on the social impact of Bakolori Irrigation Project on the people of Bakura, Maradun and Talata Mafara Local Government areas in Zamfara state.

Ribe's, work titled "The impact of small scale irrigation scheme on income generation", extensively discusses the nature of irrigation in Nigeria as follows:

Irrigation is usually associated with physical water supply and a physical system consisting of diversion structures, pumps and canal or piped conveyance system and flow distribution structure. He noted that irrigation is generally advocated because deficiencies of climate constrains agriculture and that water for irrigation may be pumped from underground sources by means of wells, drawn from the natural flow of streams and by damming or otherwise regulating the flow of streams, it may be applied to the crop by flooding by channels, by spray or by drops from nozzle.¹⁰

In the irrigation development in Nigeria, the author stated that:

Irrigation development has received considerable attention from successive government in Nigeria. The development of water resources in Nigeria started indirectly in 1709 when a water level gauge was erected at Jebba in connection with the planned railway bridge across the Niger River: later in 1914 gauges were erected along the Niger at Baro, Lokoja, Iddah and Onitsha and along River Benue at Yola.¹¹

The dissertation is relevant to this work; because it dealt with irrigation system of farming in Nigeria. The main difference is the former dealt with impacts of small scale irrigation on income generation, while the ongoing research will focus on the social impact of Bakolori Irrigation Project with special consideration on Muslims in Bakura, Maradun and Talata Mafara Local Government areas.

A book entitled *Islam and the Development of Science and Technology* (ed) by Sambo, is a relevant material to this work. The book is a collection of papers, compiled and edited, as presented by each

¹⁰Ribe, I.A. (2007), *The Impact of Small Scales Irrigation Scheme on Income Generation*, Department of Agricultural Economics and Extension, UDUS, Sokoto p.7

¹¹*Ibid.*, p. 9

author, for example section D consists of seven different papers. It started with the Islamic point of view on land management and agricultural production by A.S Mikail and C.U Aliyu in their attempt to discuss the emphasis of Islam on farming; they quoted the verse from the Glorious Qur'an saying:

It is we who have placed you with authority on Earth and provided you therein with means for the fulfillment of your life: small are the thanks that ye give.¹²

This verse shows the bounties associated with land such as rivers and minerals contents, etc, thereby indicating, land can be used in different ways.

From this verse it could be understood that irrigation for the production of food is among the bounties of Allah to His servants from the land. In one of the sayings of the prophet Muhammad (S.A.W), he was quoted to have said:

There is non-amongst Muslims who plants a tree or sow a seeds and then a bird or a person or an animal eats from it, but is regarded as a charitable gift for him¹³

The above hadith enjoins people to undertake farming as it is rewarding; whether on the basis of feeding oneself or others. By implication, the hadith also indicates that if a person charges a fair price, he will be rewarded by Allah (S.W.A).

In another paper titled Agriculture and food: An Islamic point of view by Abubakar, M.M the study quoted Ensminger (1977) on the importance of Agriculture where he stated:

Agriculture, as the world's most basic enterprise, plays a number of vital roles especially to the developing countries of the world. A part from providing the nutrients required by human being, agriculture also provides jobs to farmers, crop processors, traders, middlemen, transporters, research scientists, administrators, teachers, bankers, and politicians. Agriculture acts as a source of fuel, housing, tools transport and packaging materials, each branch of

¹²Qur'an, 7:10

¹³- Muhsin Khan M. (2006), The Translation of the Meaning of SahihAl-Bukhari Arabic – English, Kitab Bharan New Delhi (India), Volume 3, Hadith No 513, page 295

agriculture has numerous uses. For instance, a cow may have more than 100 uses.¹⁴

Another important work cited is that of Malami, entitled “The Economic Principles and Practices of Sokoto Caliphate”, the work, quoted Muhammad Bello’s book, “Reminding brothers about economic principles in which he views Agriculture as;

A means of building, energizing and clothing human body and that is viable and reliable source of income.¹⁵

The author quoted Muhammad Bello as placing agriculture second in order of priority next to trade; he also placed it as the first policy tool for economic development apart from migration. He strives in adopting various strategies for the development of agricultural sector in Sokoto metropolis.

Malami opined that Muhammad Bello was very much interested in bringing improved farming techniques and methods. It was said that he introduced sugarcane for production of granulated brown sugar.¹⁶ He also established a sugar refinery at *Gidan Maikara*. In addition he introduced cassava, the herb, economic trees and pomegranates in Sakkwato.¹⁷

More so, method of irrigation using fulcrum and bucket shaduf was also introduced by him. The idea of leadership by example was also practiced by him. For instance, he established a garden for growing of medicinal herbs at Gidan Bango, Sagin lemu and a farm at Garin Maidaji his personal house, where he used to water, the garden in which he produced vegetables for sale so as to earn income for his personal use.¹⁸

The dissimilarity between Malami’s work and the current research is that, the former dealt with agricultural techniques of Muhammad Bello while this research deals with the Bakolori Irrigation

¹⁴Ensminger (1977), in Abubakar M.M. (1998), *Islam and the development of science and technology*, Islamic research centre, Sokoto. Usman Danfodiyo University Press, Sokoto. p.199

¹⁵H.U Malami (1998), *The Economic Principles and Practices of the Sokoto Caliphate*. The Institute of Islamic sciences, Sokoto Nigeria, P .50

¹⁶ *Ibid.*, p.50

¹⁷ *Ibid.*, p. 51

¹⁸ *Ibid.*, p.52

system of farming in Bakura, Maradun and Talata Mafara Local Governments Areas of Zamfara State.

The book of Intentions of Shaykh Abdullah b. Fodio has great relevance to this work. He viewed agriculture as most essential and rewardable. Its paramount importance is far beyond a farmer, it transcends human beings, animals, birds and insects¹⁹ Abdullah b. Fodio says that one of its requisite requirements is that one should possess basic techniques (knowledge,) should be sympathetic and should be for the sake of Allah, and that if these are done he will be blessed by Allah. A farmer should be pious thus he should make a thorough investigation about the variety of his farm seeds and tools. He should ensure it is lawful and has no trace of *Haram* and also to secure its blessing. However, this would not be possible unless one abide by the Sunnah of the Prophet Muhammad (SAW). In taking to farming, a farmer should make his intention explicit of seeking *Halal*, which is in line with the saying of Prophet Muhammad (SAW) which requires Muslims to go after *Halal* after obligatory prayers.²⁰

He expounds farming as a means of getting Allah's forgiveness, where he quoted the following hadith in which it was narrated that: the Angels were seeking Allah's forgiveness to a farmer as their farm products remain in farms in the process of getting ripe.²¹

In another narration it is said: whosoever sleeps as a result of fatigue in seeking *Halal*, he sleeps as a forgiven and wakes up as trustworthy in the sight of Allah.²²

Sheikh Abdullah's book describes the benefits and importance of farming and farmers in this world and the next. The main focus of this research work is on the social impact of Bakolori Irrigation

¹⁹Abdullahi Fodio, (2006), '*The Kitab al-Niyyat*', (translated in Hausa by Muhammad Isah Talata-Mafara), Nadabo Print Production Kaduna, Nigeria. P.25

²⁰*Ibid.*, p. 26

²¹*Ibid.*, p. 26

²²*Ibid.*, p. 26

Project on the people of Bakura, Maradun and Talata Mafara Local government areas in Zamfara state.

Finally, the reviewed related literature above will assist the researcher in carrying out a viable research on the irrigation system of the Bakolori Irrigation Project and its positive and negative impacts in Bakura, Maradun and Talata Mafara Local Government areas in Zamfara state.

CHAPTER TWO: Overview of the Historical background of Bakura, Maradun and Talata Mafara Local Government Areas

2.1.1 Traditional Origin of Bakura District

As in origin of various communities in Nigeria, there are divergent views on the tradition and origin of the people of Bakura district. Scholars in history have a general opinion that the people of Bakura comprise various ethnic groups from different social backgrounds. In the 19th century Bakura district comprises a population of over 200,000 people mostly *Burmawa*, *Zamfarawa*, *Gobirawa*, *Katsinawa*, *Bare-bari*, *Adamawa*, *Buzaye* and wandering fulanis. The earliest inhabitants of the district were said to be the *Burmawa* and *Zamfarawa*, whose exact date of arrival to the district is not known²³. However, the district continued to flourish up to the 20th century. It was also discovered that during the district's expansion, the nineteen areas that covered include settlements of Bakura, Yarkofoji, Tumba, Damri, Nasarawa, Rini, Dankadu, Danmanau, Dambo and Madaci among others. However, what is not certain was that, the earliest group settled in the area long before the arrival of *Burmawa* in the present day Bakura. The towns and their adjoining villages and hamlets can be found on the bank of River Rima a number of streams and lakes. As such, most of the areas under the district were surrounded by a belt of original virgin *Fadama* forest. This must have given the early settlers a formidable defensive obstacle²⁴. They depended on the land for their production and had less elaborate political structure. The district is bordered in the east by *Zamfara* and *Gobirawa* to the north-west.

²³M.Y Ibrahim, The Origin and Development of Bakura District, B.A project, Usmanu Danfodiyo University Sokoto 1993 p.5

²⁴M.Y Ibrahim "Rice Production in Bakura District in the Twentieth Century. M.A. history, Usmanu Danfodiyo University, Sokoto 1999, p.11

Burmawa, as it was with other communities prior to the introduction of Islam, worshipped local deities and practiced traditional rites and rituals²⁵. It was in the 18th century after the disintegration of Zamfara kingdom that, the *Burmawa* village began to witness the influx of a number of refugees, especially the Gobirawa refugees from Alkalawa. With this development, there emerged many settlements and increase in population of the already established settlements.

2.1.2 Economic Institutions and Organization of Production

The early economic institutions in Bakura district were systematically structured along the Hausa household system. Production and reproduction in the district in the 19th century were transformed to reflect that of the Sokoto Caliphate. The Caliphate provided Bakura a new systematic superstructure for the improvement of economic life of the area through Islam- based policies. In the caliphate as a whole, socio-economic changes such as urbanization and a more secured transportation system for travelling, 'merchants and petty traders became more secured (tenable). Farmlands in the 19th century in Bakura district can be classified into two upland and lowland (*Fadama*)²⁶. The upland area produced millet, groundnuts and beans, while the lowland which was utilized throughout the year for irrigation purpose produced fundamentally rice and sweet potatoes. This shows that long before the construction of the irrigation project in the area, the cultivation of *Fadama* land during the dry season has been the occupation of a good number of people in the area. The exploitation of land has been the primary and major sources of income of people of the district.

Before the construction of the irrigation project in the area household had right over the cultivation of land. People have right of land ownership for irrigation. It was only the authority or the ruling class has the right to withdraw such right from any household or individuals to cultivate at will²⁷.

²⁵*Ibid.*, p. 12

²⁶*Ibid.*, p. 13

²⁷*Ibid.*, p. 13

At the initial stage, land ownership for cultivation was free to the various households in their respective localities, through permission of the ruling class. These rights and privileges were granted to peasant farmers by village head; the rights were in turn transferred mainly through inheritance and gifts. Acquisition of land was not so strict, as it was so easy for settlers to access and cultivate at a very simple notification of the heir or rulers. During the period it was gathered that no special permit for land ownership for group activities such as hunting and fishing.²⁸ In the area, the main crops grown by majority of people were mainly food crops such as millet, g/corn, maize, and peanut. These were in addition to other cash crops such as groundnut nut, cotton, wheat and potatoes which were described in the word of Michael Wets as:

The basic unit of production.... perhaps embracing sons, clients and slaves in an extended domestic structure. The domestic group possessed the means of production, provided labour and disposed of at least part of its collective products.

As the case may be, the most senior member of the household (*Maigida*) was the head and owns the *Gandu*. He leads and organizes the system of production and taking decision on the cultivation of crops²⁹. He usually shoulders the responsibility of making food-stuffs available and other needs of the members of the *Gandu*. As tradition has it, head of the family shares to the grown up male members of the family a private farm land (*kurga*).

Each member of the *kurga* is expected to contribute to communal labour, initiated by a community to work in the district head farm on weekly or daily basis as the case may be. In Bakura district a network of labour land and product transaction, made possible, a strong integration of the various households and villages into community life in the 19th century. During the period, labour was the center to the survival and prosperity of every household and village. As such, the strength and

²⁸*Ibid.*, p. 14

²⁹*Ibid.*, p. 15

weakness of the family can be judged by numbers able men under such a production unit. From the early stage to the 19th century, labour was a social product and not a commodity³⁰.

The peasants engaged themselves and created value from or offered their labour to their rulers in household, social or professional groups.

The 19th century was a period of elaborate processes of production of both food and cash crops in Bakura district. These products have fed a number of industries. The items produced were used for industrial purpose. In the process of farming, the hoe (*Hauya*), axe (*Gatari*) cutlass (*Adda*), large hoe (*Sungumi*) and other farm tools were used for the clearing and harvesting services.³¹ At the same time, fishing activities were conducted during the rainy season, which was done through the *Rufi* method. During flooding, systematic water ways were prepared, to trap fishes and to control the movement of fish. Other instruments used include *Tilimba*, a basket shape line which traps fish and controls its movement. Also *Tsatsara* and *Labuni* among others. Though fishing activities were conducted during the rainy season, it was also done during the dry season in the water pools (*Tafukka*) that abound in the River Rima Valley which is important sources of fishing.³²

Though, agriculture was the major occupation and mainstay of the people in the 19th century, the people also engaged in craft activities. *Gandu* was responsible for making labour available to most industries. However, individual members of the household were free to participate in craft production. In the 19th century, most people were engaged in making simple crafts such as ropes, basket containers and other produce in the *Gandu* system. As a result, the benefit realized from such economic activities was the personal property of the producer individually.³³

³⁰*Ibid.*, p. 16

³¹*Ibid.*, p. 16

³²*Ibid.*, p. 17

³³*Ibid.*, p. 17

The household provides the labour needed for the industries and other major crafts. The senior member of the household acts as the key player in the production process and coordinate activities of other members. He oversees the technical local crafts such as, dyeing, weaving, tanning, butchering and calabash decorating. In most cases, the occupational groups lived in exclusive quarters in the towns and villages. The hereditary aspect of occupational craft and industries was seriously emphasized. For example it was traditionally an abuse to members of non-butchers to engage in butchery. Household served as unique and basic unit of recruitment, training and essentially production of goods and services.

2.1.3 The Socio-Political Organizations of Bakura

The political structure of Bakura had its legitimacy from the Sokoto caliphate's political system established in 1804. Bakura district was one of the early and prominent districts in the then caliphate state structure.³⁴ At the early 19th century the district was headed by *Sarkin Burmi*, who usually comes from the *Burmawa* ruling class. He was assisted by a number of officials. They include *Waziri*, *Makama*, *Madawaki*, *Yari* and a number of others. Each of these officials heads a unit in the administrative sector. Also each of towns in the district is headed by *Tudu*, except in Rini, where the head bears the title of *Sarkin Burmin Rini*. During inter-communal wars, Bakura district captured a numbers of villages. As such, members of the *Burmawa* ruling class were assigned to take control of such villages, just like *Fulanis*, during the jihad. Therefore, all the members of the ruling houses in the eight major towns and villages in the district have the same origin and can contest for *Sarkin Burmin* Bakura, when it becomes vacant. There were also a number of important officials. They include *Hakimai* (village heads), this group of officials performed various state duties on behalf of *Sarkin Burmi*. The *Hakiman kasa* maintained strong contact with village heads of their territorial entities, in the 19th century.

³⁴H.A.S Johnson, *The Fulani Empire of Sokoto*, Ibadan, Oxford University Press. 1970 p.87

In Bakura district, there was an effective communication strategy.³⁵ The main chain of communication was through *Jekadu* (messengers). Through this system of communication and systematic administrative mechanism, the ruling class enters into specific relation of production with common people of the time. Starting with Agriculture which was the leading sector of the economy, the state network and administrative structure were used to accumulate surpluses in kind.

By the Islamic state structure, the form of taxation was through the Islamic zakah, which was paid in agricultural produce. One tenth was paid on the total cereal crops produced³⁶. The people of the hamlets and villages passed zakat to their heads through *Jekadu*. The *Jekadu* will transfer it to *Hakiman Kasa* before reaching the *Sarki*. In the process of transmission, the various political office holders took portions from it, and then passed the part to *Sarki*. Each office holder had his own large farm in which his people worked as an obligatory responsibility. As such labour was provided on *Gandun Sarkin Burmi* by contingent from villages. These kinds of communal activities (*gayya*) were supervised by the state officials and all parties involved were headed by *Sarakunan noma* (farmers head).³⁷

The ruling class also accumulated surplus value from the crafts and industries carried out by the people. The *Masu Sarauta* may not actively be involved in the industries but they set a structure to link themselves with different industries, as they obtained either free labour or levy taxes. Each important craft and industry had its head (*Sarki*), who was the professional head of the group as well as their link with the state³⁸. Such include *Sarkin Magina* (chief builder), *Sarkin Marina* (chief dyer), and *Lumu* (market chief) among others. Some industries were taxed and others were exploited by the

³⁵Ibrahim Op. cit, p. 19

³⁶*Ibid.*, p. 19

³⁷*Ibid.*, p. 19

³⁸*Ibid.*, p. 19

state through the free use of their labour. With the use of craft officials, the ruling class was able to dominate the industries and to integrate them into the political economy.

2.2.1 Brief History of Maradun Local Government Area

Maradun is the oldest settlement in the district and was built by Sarkin Kaya Abarshi, a ba-Zanfare, who left the hill top of Kayatau (Zurmi District) in the sixteenth century and land out the present walled town, Gebbawa, Gidan Dawa, Kyawawa, Gora, Gamma Giwa and Damaga are all walled towns, offshoots of the parent town and were built shortly afterwards, to house the overflow of people in Maradun.

The history of Maradun until the 19th century is uneventful for its populace, although numerous, appears to have accepted the rule of Kebbi, Zamfara, Gobir and the Fulani without offering any resistance to the changes in government involved.³⁹

In the time of Aliyu Babba (1842-1859) however, Mu'alledi, a son of Bello by his Gobir concubine Katambali, daughter of Sarkin Gobir, came looking for a place in which to settle somewhere in Zamfara, but was not favourably received by anyone except Sarkin Kaya Madutsi, who had originally made his submission to the Shehu and was still living at Maradun.

Mu'alledi first settled at Mabiroya, a village near Maradun, and from there he selected a site for the town of Chibirin Kwaranga which he built.⁴⁰

Later, in the time of Ahmadu Zaruku (1859-1866) Mu'alledi received permission to build Birnin Kaya wither he moved, here a dispute arose between Mu'alledi son and Muhammadu, a grandson of Mamman Tukur (one of the friends of the Shehu), who was living at Boko. After this was battled by

³⁹ P.G Harris, (1932), Provincial Gazetteer, History and Culture Bureau Sokoto, (NP), P.160

⁴⁰ *Ibid.*, p. 160

Sarkin Musulmi Ahmad Rufa'i (1867-1879) Mu'alledi died and his son Alhaji was appointed Sarkin Rafi.

On the death of Sarkin Musulmi Ummaru (1881-1891), the Sarkin Kaya Maiyaki and Sarkin Mafara raised a rebellion, and Alhaji Sarkin Rafi was given command of an expedition to quell these unruly Zamfara towns.⁴¹

Maradun was taken and Alhaji was thereupon appointed Sarkin Kaya by Sarki Abdulrahman (1891-1902). On the death of Alhaji the title went to his brother Muhammadu Dahiru and is held by a descendant to this day.

Maradun local government area was created out of the present Talata Mafara local government area in the former Sokoto state in 1984. It has an estimated land mass of about 3,023 square kilometers, it shares common boundaries with Talata Mafara local government area in the East. To the South it is bordered by Anka local government while to the North by Rabah local government.⁴²

Climate: climatic conditions of Maradun local government area are similar to these of other local government in Zamfara state. Rainfall is between the months of May and October; hot season comes with a high temperature during the months of April to May, while cold season is from December to February respectively.

Population: The population of Maradun local government area is 210, 293 according to 2006 NPC census figures. The inhabitants of the local government are mostly Hausa and Fulani and are mainly Muslims. Majority are farmers while a few of them are traders and animal rearers.⁴³

⁴¹ *Ibid.*, p. 161

⁴² Lawali Nasiru "Upstream Impact of Bakolori Dam Maradun Local Government Area Department of Geography, Usmanu Danfodiyo University, Sokoto. 2011, P.7

⁴³ *Ibid.*, p.8

Soil: The soils are characterized by semi-arid brown and dark soils that contain more organic because of persistent chemical and a biological action. These types of soils make- the area agriculturally fertile, producing mainly food and cash crops.

Vegetation: The vegetation found in Maradun is a Sudan Savannah type which is characterized with short grasses of about 1.5-2 meters in height. Scattered trees include Baoba (Adansomia), Digitala Neem (Azadirachta indica) locus; bean. Pterocarpus Bigilbosa) and other species found in Sudan savannah type.⁴⁴

2.3.1 Historical Background of Talata Mafara Local Government Area

Talata Mafara town is the headquarters of Talata Mafara local government area. The emirate is made up of nine districts namely, Mafara, Jangebe, Sauna, Kagara, Morai, Ruwan bore, Makera and Matusgi. It has an estimated population of about 436,000 people according to (2003 estimated population census). It covers around 112 kilometers from Sokoto and 88 kilometers away from Gusau.⁴⁵

Historically, Talata Mafara was derived from two distinct words, i.e. Talata and Mafara. The word Mafara is the name of the town, while Talata (Tuesday) is its market day. The popularity of the market made people to call the town as Talata Mafara.⁴⁶

The town was named Mafara after its founder Mafarfari, who migrated from Kano some hundred years ago and moved west ward of the hinterland and settled at Tsarka and Kafa in the high lands between Kaura Namoda and Maradun where they appointed their first chief, Buda Danmasani, They continued to pay allegiance to Kano, until the later part of the centuries when he made submission to

⁴⁴*Ibid.*, p.9

⁴⁵A. M. Tukur, The Role of the Local Government in Grass Roots Development: A Case Study of Talata Mafara Local Government of the Zamfara State, A Dissertation submitted to the post graduate school, Usmanu Danfodiyo University, Sokoto, 2002 p. 51

⁴⁶M. Isah Talata Mafara, *Tarihin Rayuwar Malam Bello na Malam Maharazu Mafara*, Bamoya printing press Kaduna, 1420/1999, p.1

Sarkin Zamfara whose capital was Birnin Zamfara which lies in the present town of Isa local government.⁴⁷ The people remained in Tsarka and Kafa during the Buda Danmasani, who ruled for about 45 years. It was reported that about 45 chiefs have probably ruled between 1150 CE to 1550 CE. However, in the later part of 16th century they moved to Tumfafiya, four miles South East of the present town of Mafara, where they remained for about 200 years. They continued to pay allegiance to Zamfara but rendered no help till in about 1750 CE when the lots over lords were assailed by the rising power of Gobir as it was quoted in Nadama's, the rise and collapse of the socio-political history of Zamfara.⁴⁸

In the struggle, Gobir captured Birnin Zamfara and succeeded in taking over Sarkin Zamfara who was killed as a result. The whole Northern part of the kingdom was annexed to Gobir and the remnant of Zamfara force under a new chief became homeless fugitive in the South. They so joined for a tie with the Mafara people at Tumfafiya. However it can be deduced that they were not welcomed because, they soon moved on to Damri in Sabon Garin Bakura district while Sarkin Mafara about the same time transferred his allegiance to Gobir.⁴⁹

At the end of 18th century, Sarkin Mafara Dangeda died and the vacant throne seized by a usurper, Dankofa chief of town of Garangi. His claim lies through the female line and was accepted only because Dankofa was able to dispose of bigger force than his legitimate rivals.

The most formidable of the other-contestant was Mamman Dangarji who then set upon establishing his claim. He went to his over lord Sarkin Gobir though he had no followers and obtained, a turban and gown. By displaying these, he was able on his way home to gather up a few supporters. With them he succeeded in gaining control of Mafara a new and important off shoots of Tumfafiya ruled

⁴⁷L.A.N Janbako, Islam and Moral Decadence: A Case Study of Talata-Mafara Local Government, Submitted to the Depart of Islamic Studies, Usmanu Danfodiyo University Sokoto, 1989. P.1

⁴⁸Garba Nadama, "The Rise and Collapse of Hausa Socio-political history of Zamfara, Ahmadu Bello University, Zaria, PhD History Department, 1977 p. 201

⁴⁹- *Ibid.*, p.202

by a minor chieftain with the title of Kayaye. A period of hostility followed in which the town of Tumfafiya tried unsuccessfully to crush the upstart and the feeble Mafara town.

This ended when Dangarji succeeding in getting intervention of Inna the Queen mother of Gobir. The combined forces of Mafara and Gobir employing the tactics of ambush, won a decisive victory. The usurper Dankofa and Tumfafiya were abandoned in favor of Mafara.⁵⁰

However, it was later in Dangarji's reign that Shehu Danfodiyo emerged. He gained the support of Mafara. Mafara threw off its allegiance to Alkalawa and helped the jihadist against Gobirawa. When the jihadists established their caliphate, Mafara and dependent town formed a unit under their own chief. On Shehu's death and on Bello's succession, there were revolts in Zamfara and Gobir on both occasions. But then the Mafara people remained loyal.⁵¹

But During the Time of Sultan Aliyu Babba, relations were strained for a long time but the quarrel was patched up without fighting. Muhammad Dangarji spent twenty years on throne before he died. After that his son Abubakar Agwaragi succeeded him, and ruled for forty years. In his reign he fought and defeated Kaura Namoda at kashagir and Mafara garagi.⁵²

Muhammad dan Doshe succeeded Abubakar Agwaragi, who ruled for twenty years, in his reign he defeated Bukkuyum. After his death; he was succeeded by his son Ummaru. Sarki Ummaru informed his people that he wanted to expand the territory of Talata Mafara, but his scholars told him that whoever dared expanding the territory of this town will die soon⁵³. Sarki Ummaru sacrificed his life and expanded the territory of Talata Mafara. For this reason, he died in a year. He ruled for three years. Muhammad Buzu succeeded Sarki Ummaru. Buzu waged war for forty days against Nagwamatse for settling in Kagara (in Talata Mafara area). It was during the reign of Buzu,

⁵⁰*Ibid.*, P. 203

⁵¹*Ibid.*, P. 204

⁵²Achieves Talata Mafara file, Waziri Junaidu History and Culture Burea, Sokoto. 93/21146 P.47

⁵³*Ibid.*, p.47

aggression between Talata Mafara and Sokoto Caliphate started in 1890 CE when Sultan Ummaru died in Kaura Namoda and Abdurrahman succeeded him⁵⁴. The election took place in Kaura, on his way back to Sokoto; Sarkin Mafara Muhammad Buzu refused to welcome and-pay homage to Sultan Abdurrahman. This caused a war between Sokoto and Talata Mafara which led to the defeat of Talata Mafara and displacement of Buzu. Buzu ruled for twelve years after him the following kings ruled Talata Mafara town.

1. Ali Dan Bakayace, ruled for three years (From 1893-1896)
2. Muhammad Bawa Bade II, ruled for three years (From 1896-1899)
3. Ali Dangono, ruled for two years (From 1899-1901)
4. Abubakar Barmo, ruled for sixteen years (From 1901-1917)
5. Ummaru Dantsoho, ruled for one and half years (From 1917-1919)
6. Muhammad Dan Baki, ruled for two and half years. (From 1919-1921)
7. Ummaru Barmo, ruled for three years.⁵⁵(From 1921-1924)

Ummaru Barmo was dismissed by Sultan of Sokoto for his lack of competence, and then Sokoto Caliphate decided that Talata Mafara should be ruled by a well learned and dedicated leader assigned from Sokoto. And the choice fell on Sardauna Abubakar III from that time Sokoto continued to appoint Sarki for Talata Mafara as follows:

1. Sardauna Abubakar III ruled for six month (From 1924-1930)
2. Sarkin kudu Muhammad ruled for eleven years (From 1930-1941)
3. Marafan Gada Ibrahim, ruled for five years (From 1941-1946)
4. Sarkin kudu Muhammad Maccido, ruled for three years (From 1946-1949)
5. Sarkin Zamfara Aliyu, ruled for two years (From 1949-1951)

⁵⁴M.I. Talata Mafara Op. cit, p.14

⁵⁵Achieves Talata Mafara file, Op. cit, p.48

6. Sarkin Gabas Usman, ruled for eleven years (From 1951-1962)

7. Sarki Mu'azu Lamido, ruled for eight years.⁵⁶(From 1962-1870)

From there, the throne was returned to traditional ruling families of Talata Mafara. And was there handed to Sarkin Mafara Alhaji Muhammad Barmo, who ruled for twenty years. He was succeeded by his son Emir Alh. (Dr.) Bello Muhammad Barmo, who till date is on the throne.

2.3.2 Geographical Location of Mafara

Talata Mafara local government is located in the western part of Gusau the headquarters of Zamfara state. It is along Sokoto-Gusau road, one hundred and twelve kilometers from Sokoto and eighty eight kilometers to Gusau.⁵⁷

Talata Mafara local government is bounded in the East by Maru local government; in the Northwest Bakura local government, in the North East by Maradun local government and in the South West by Anka local government.⁵⁸

Talata Mafara metropolis lies along latitude 12° 30° and 12° 50° North and longitude 5° 15° and 6° 20° South. The average rainfall is about 700 mm, mostly between May to September. This means daily maximum and minimum temperatures are 34.5°C and 21.6°C respectively. The climate is suitable for the growing of grain crops.⁵⁹

2.3.3 Establishment of Talata Mafara Local Government

Talata Mafara local government was one of the three hundred and one (301) pioneer local governments created in 1976 under the then head of State General Olusegun Obasanjo with Talata Mafara town as the headquarters.⁶⁰

⁵⁶*Ibid.*,

⁵⁷L.A.N Janbako, Op. cit, P. 14

⁵⁸A.M.T, Op. cit, p. 52

⁵⁹L.A.N Janbako, Op. cit, p. 14

⁶⁰A.M.T Op. cit, p.51

It was established by 1976 local government reforms as a means of decentralization of power and to support grassroots development throughout the country. This brought about increase in the number of local governments to 19 in the (old) North western state of which Talata Mafara was one of them. Talata Mafara occupies a very important position in the history of Zamfara state and even the old Sokoto state because of its economic importance in the state.⁶¹

2.3.4 People of the Area

It is generally acknowledged that the earliest inhabitants of the area were mostly Hausas, although there are other ethnic groups like Fulani, *Barebari* as well as *Dakarkari* and *Buzaye*. These are predominantly Muslims. Historically, they are said to have migrated from Kano and Katsina respectively. Those from Kano were said to have settled in at Mafara and its surroundings, while those that migrated from Katsina settled around Bakura.

2.3.5 Socio-Cultural set up of Talata Mafara

Talata Mafara local government is predominantly inhabited by Hausa people with distinct dialectal differences. The people mostly comprise *Zamfarawa*, *Torankawa*, Fulani, *Sullubawa*, *Barebari*, *Gobirawa*, *Kabawa*, *Katsinawa*, *Burmawa*, *Buzaye*, *Kanawa*, *Zazzagawa* etc. However, they all have common social way of life and relate with one another, in the most accepted social norms.⁶²

The socio-cultural life of Talata Mafara is an admixture of Hausa traditional way of life and Islamic socio – cultural way of life ranging from their social relations, marriage ceremonies, mode of dressing to moral and civil conduct in respect of one another as enshrined in the Islamic system, while marriages apart from Islamic principles of marriage remain uncorrupted, but with minor Hausa

⁶¹*Ibid.*, P. 52

⁶²Achieves Talata Mafara files Op. cit,

customs of *Lehe*,⁶³*Sayen Baki*⁶⁴ feast taking into cognizance etc. The ceremonies in Talata Mafara include *Ed-il-fitr*, *Ed il- kibir* and *Maulud*, among others.

2.3.6 Economic Engagement

With its Tuesday weekly market, Talata Mafara metropolis is a Centre of economic activities. The central market of Talata Mafara is well known in neighboring areas for selling and buying especially in cattle, rice, millet, ground nut and other farm products which people buy and take to the southern part of Nigeria.⁶⁵

Though farming has dominated the lives of people of this area, yet a certain percentage of the people have devoted themselves much to carrying out some traditional economic activities. These include local handcraft, like weaving, mat making, blacksmith and dying.

Mafara is blessed with a very vast land and enjoys adequate rainfall. The people are well known for their agricultural activities. There is no exception or restriction with regards to farming, as even women and children participate in farming activities. About 80% are farmers. However, even the Fulani's in the area that were known as cattle rearers do take part in farming, that is to say, they too own land for that purpose.⁶⁶ Furthermore, 10% of the produce is being consumed by the peoples 90% is sold out while some are stored in case of any disaster.

Similarly, cattle's rearing is another economic activity of the people of Talata Mafara. The Fulani's in Mafara keep cattle in large numbers with which they move in search of food, most especially in the day time.⁶⁷ Blacksmithing is another means of living, for the blacksmith not only produce farming implement, like hoe, but also knives that are being used by butchers, and also local hunters. However,

⁶³Lehe is an asset which contains lots of dress materials, wealth etc. given to a would-be wife by her would-be husband

⁶⁴Sayen Baki: A Token Gift between Husband and Wife before she talks

⁶⁵M. I, Talata Mafara. Op. cit, P.46

⁶⁶B.B.Kabir, Reflection on Socio-Economic Development in Talata Mafara local government area of Sokoto State, 1976, to present day, B.A project submitted to History Department UDU Sokoto 1988. P. 32

⁶⁷*Ibid.*, P. 33

before the introduction of steel, the blacksmiths were using local coal known as “*Taura*” in making their tools.

Similarly, textile weaving is another important thing to the lives of the people. They are prominent in weaving. They produce different types of materials such as “*Bunu*” which is used during harmattan for long distance trade.

Trading is another important activity in the area, as the people took part in long distance trade. In those days traders move along with their goods, ranging from textile materials to cattle and to some extent imperishable farm produce to another parts of the country. This is normally done by traveling on their horses, donkeys and camels. It takes them about two to six days to get them to where they are going. On arrival they sell the goods and in return bought what is being produced there back home, some of the things bought are sugar, glass and lots more.⁶⁸ The people of Talata Mafara local government engage in civil service as a means of livelihood.

2.3.7 Religion of the People and its Impact on their lives

The religious life of Hausa land then was dominated by *Maguzanci* belief⁶⁹. This belief directly or indirectly affects both socio-economic set up as well as religious and political live of Hausa people.

Talata Mafara in those days was in such belief. The belief in such practices has a great impact as well as influence. They indulged in practicing and displaying magic, *Bori* as well as *chanfe-chanfe*. It reached the extent that one cannot travel to another region, state etc except he goes to a herbalist to give him a charm, if there is success in it, or not so as to suspend the journey.

Consequently, due to the penetration of Islam, and also the advent of Sokoto jihad movement in Hausa land under the leadership of *Shaykh* Usman Danfodiyo such belief was wiped out⁷⁰. Similarly,

⁶⁸*Ibid.*, P. 34

⁶⁹Maguzanci is a belief in deities like Magiro, Atau, Uwarmu, Dodo, Aljannu etc. Maguzawa is a Hausa word attached to the Pegans living in Hausa land, Maguzawa considered all these deities as powerful.

⁷⁰A.I. Doi , *Islam in Nigeria*, Gaskiya Corporation Limited, Zaria, 1984. Pp. 86-89.

after the fall of Sokoto caliphate, some *Maguzawa* beliefs resurfaced, but now such beliefs no longer exist. Majority of Talata Mafara people are Muslims, worshipping One God and testifying to the messengership of prophet Muhammad (S.A.W). This can be seen in the numerous mosques for daily prayers and five Jumu'at Mosques, all within Talata Mafara metropolis.

In a nutshell, from the above mentioned statement, one can understand that any system of belief adopted by one will surely make an impact to those who accepted it. The religion made impact to their lives which facilitated their obligatory acts of worship as ordained by Allah the most high to them.

Chapter Three: Concept of Irrigation in Islam

3.1.1 Irrigation

According to web site definition, irrigation is applying dry land with water by means of ditches etc. Dictionary.com described it as the act of artificially applying water to the soil to allow plant growth. This can also include applying water to the lawn or garden. Erebor (2003) defined irrigation as the artificial application of water to the soil to supplement insufficient rainfall or to eliminate soil water handicap for crop production or agricultural purposes.⁷¹.

In another definition by answers.ask.com asserted that Irrigation is needed for growing large crops by the farming industries and all that water is brought by whatever ever means. Irrigation can be piped from a lake.

According to Hansen (1962), irrigation is the system of harnessing surface and underground waters to make up for deficiencies in total volume of seasonal precipitation or deficiencies in the distribution of the precipitation over time and space. He further stressed that it is undertaken to provide an insurance against drought, for cooling the soil and atmosphere, thereby providing a more favourable environment for plant growth, to wash out or dilute salts in the soil, to reduce the hazard of soil piping, and to soften tillage pans.⁷².

Baba and Alassane (1997) observed that irrigation is one of the most effective strategies for combating the problems of drought and desertification.⁷³. They further noted that irrigation is also considered necessary to increase utilization and productivity.

3.1.2 Agricultural Policy of Prophet Muhammad (S.AW)

⁷¹Erebor (2003), in Ribe, I.A. (2007), The Impact of Small Scales Irrigation Scheme on Income Generation, Department of Agricultural Economics and Extension, UDUS, Sokoto p.7

⁷² E.V. Hansen, (1962), Irrigation Principles and Practices, Logan, Utah State University, 3rd Edition, United States..

⁷³A.I. Doi, Op. cit, Pp. 86-89.

Prophet Muhammad (SAW) and the early Muslims came from Makkah which was a trade center and there was hardly any form of farming. Every family in Makkah which was inhabited by Quraish thrived on trade. The *Hijrah* of Prophet Muhammad (SAW) and his Companions from Makkah to Madinah was not a mere change of abode but also a departure from a business oriented society to a mainly agricultural environment. The Arabs of Madinah, who embraced Islam and were titled as Ansar, cultivated land for their livelihood⁷⁴.

Immediately after arrival in Madinah, the prophet faced the problem of rehabilitation of emigrants or *Muhajirun*. At the initial stage, the problem was solved by establishing a bond of brotherhood between Ansar and Muhajirun.⁷⁵ The *Ansar* shared their property with *Muhajirun*. Later, according to another agreement, *Muhajirun* started to work on the land of *Ansar* in form of annual payment (lease). Anas bin Malik reports that because the *Ansar* had land and the *Muhajirun* did not possess anything, they agreed to work as the caretaker. Prophet Muhammad (SAW), as a long term solution to the problems, distributed land among many *Muhajiruns*. He gave pieces of land to Abubakar, Umar, Zubair and others.⁷⁶

Asma' bint Abi Bakr (R.A), the wife of Zubair reports that their land was two miles away from Madinah. This was first step towards maximization of production.

During the time of Prophet Muhammad (SAW), Madinah had many farms. Abu Talha Ansari, Abu Qatada and the family of Rafi b. Khudaij had large farms and gardens. Usually the gardens were walled. They were irrigated by small canals and wells⁷⁷. There were numerous gardens of dates in Madinah. Date was staple food of the people. Prophet Muhammad (SAW) is reported to have said that a house without date is like house without food. The other crops included barley, a little wheat

⁷⁴Ilmi, I.H. (1998), *Islam's Attitude Towards Agriculture and Muslim Contributions to its Development and Progress*. Islamic Research Center City Campus, Sokoto. p. 220

⁷⁵Ibn Hisham (1975), *Siratul Nabi* (Urdu Trans) by Siddiqui A.J Sheikh Ghulan Ali and Sons Lahore p. 562

⁷⁶Abu Yusuf (1396A.H), *Kitab Alkharaji*, at al-Mutba'u Salafia, Cairo p. 58

⁷⁷Ilmi, I.H. op.cit, p. 220

and grapes. Onions were also grown⁷⁸, and there were grazing grounds reserved for state camels and other animals. In addition, to declaration of sanctity of Madinah, the cutting down of trees and killing of animals were also forbidden. Despite this apparently impressive agricultural occupation, the production in Madinah sometime fell short of demand and people anxiously waited for trade caravan to arrive. The Qur'an reminds us of an incident during congregational prayer in these words

But when they spy some merchandise or pastime they
break away to it and leave thee standing..⁷⁹

Later, with the inclusion of lands of *Banu Nadir* and *Banu Quraiza* and then the conquest of khaybar, things improved. *Fadak* fell to Muslims without using force. It was turned *Fay*, the property, for the exclusive use of prophet Muhammad (SAW).⁸⁰

The importance of the profession as well as the expansion of land required an effective administration of the affairs. Besides, the chemistry of the religion also demanded that this aspect of economy should be regularized.⁸¹

First of all, the prophet (SAW) issued a warning against illegal encroachment. He said that if a man illegally occupies a span of land, Allah will humiliate him on the Day of Judgment, thereby closing the door for land disputes.⁸²

Secondly, he forbade hoarding which is one of the main factors for inflation. He also laid down the rules for various- kinds of trade system which were prevalent during his time. Further, he encouraged the cultivation of barren or unused lands by giving the right to a cultivator, and if a land is left unused

⁷⁸*Ibid.*, p. 221

⁷⁹Qur'an, 62:11

⁸⁰Ibn Hisham, Op. cit, p. 419

⁸¹Ilmi, I.H Op. cit, p. 221

⁸²Abu Yusuf, Op. cit, p. 68

for three years the owner forfeits it⁸³. The grassland and water were made free for all. However, there was an exception, for owners of a well or canal.

There were definite and clear principles on the manner of irrigation from common water sources. Zubairu bin 'awwam and Ansar disputed over water. The land of Zubairu was nearer to the source and he used to water his land before releasing the water through the canal for the Ansar whose farms were next to his. The Ansar wanted Zubairu to release the water and let its flow for both, at the same time. When the dispute was brought to the Prophet (SAW), he decided in favor of Zubairu, showing that the land nearer to water has right to irrigation first.⁸⁴

The land of *kharaj* and *Ushr* were also specified and the officials were appointed for their collection. For example, Abu 'Ubaida bn al-jarrah was sent to Najaran.⁸⁵ Abdullahi b. Rawahah who was appointed to look after the crops of khaybar which had been returned to Jews did his work so judiciously that even the Jews themselves acknowledged it.⁸⁶ And after the death of 'Abdullahi b. Rawahah, the Prophet (SAW) appointed Jabbar b. Sakhr to do the job.⁸⁷ Thus, it is evident that agricultural activities had full patronage and supervision of the state during the time of prophet Muhammad (S.A.W). In Islam, state cannot be separated from religion.

3.1.3 Irrigation During the Caliphates (Sahabah R.A)

During the early caliphate, Umar b. *al Khattab (R.A)* gave due attention to agricultural development. The boundaries of Islamic state had expanded and the fertile land of Iraq, Syria and Egypt had been conquered. It naturally required serious attention of the State. However, a very brief look showed that Umar tried hard, and succeeded in rehabilitating the lands whose owners had either abandoned them

⁸³ *Ibid.*, p. 70

⁸⁴-Imam Al-Bukhari (2008), *Sahih Bukhari*, kitab al maghazi/Jizya, Vol.4, Hadith No.3158, Maktabah Auladu al-Sheikh Litturas

⁸⁵*Ibid.*, *Sahih Bukhari*, kitab al-Jizyah, Babu al-Jizyati wal Mawadaat maa ahliil zimmah, Juz'u. 6, Hadith No.3158, p.397

⁸⁶ Imam Malik (1994/1414), *Muwatta Malik*, kitab al-musaqah, Vol. 2, Hadith No.1412-13, P.640. Darul Fikr

⁸⁷ Ibn hisham, Op. cit, p.429

or fled away because of war. If an agricultural land or crop was destroyed by the state army, he would immediately pay compensation to the complainant.⁸⁸

He dug canals, constructed dams, made ponds and outlets for irrigation⁸⁹. He established a separate department to look after the progress of irrigation. The *Kharaji* and *Ushr's* income, during the time of Umar⁹⁰, was so high that even the Umayyad caliphs, with a higher rate of *Kharaj* and a wider area of yield, did not collect that amount. The credit goes to a very strict administration of Umar that was adjudged as fair and just. The Umayyad's, too gave due attention to land. However, the big, vast and fertile areas given to princes and other members of the royal family either as gifts from the caliph or as *Khums* were especially taken care of. Because of the resources available to them, these big landlords cultivated the land in a better way and got high yields. The irrigation network which Umar b. *Khattab* had introduced in Iraq had been neglected because of the civil wars between Ali and Mu'awiya, and later between Marwan and Ibn Zubair, was revived during the time of caliph Hisham⁹¹. Damascus, the Umayyad capital, is said to have seven canals, running through it, which supplied water for drinking as well as for irrigating gardens which was a common feature of every house in the town.

3.1.4 Irrigation During the Golden Age of Islam (Abbasids Period)

The Abbasids were fortunate to have a more stable government, at least for the century of their rule. They were not left behind in the promotion of agriculture. Particular attention was paid to rich and fertile area of Iraq which also happened to be the central point of the caliphate⁹². Caliph Mahdi built a canal in Wasit which irrigated a vast area of land around the district. Zubaidah, the wife of caliph Harun, personally built a canal for irrigation purpose known as *Nahr Zubaidah*. The Isa canal joined

⁸⁸Abu Yusuf, Op. cit, p. 72

⁸⁹Ali, S.A. (1979), *A Short history of Saracens*, Kitab Khana Isat Islam, Delhi p. 187

⁹⁰*Ibid.*, p. 290

⁹¹*Ibid.*, p. 193

⁹²*Ibid.*, p. 423

'Euphrates and Tigris, a technique used nowadays to avoid floods and promote waterways. The North of Baghdad was irrigated by Dujail canal. This extensive network of canals resulted in high agricultural yields from the farms. In fact, all over the empire, the work of promoting agriculture and horticulture was regarded as a religious duty.

Spain, under the Muslims' reign, prospered and flourished in every field of human endeavors including agriculture. There is no doubt that rice; cotton and sugar-cane were introduced by Muslims in Spain⁹³. Sugarcane was cultivated in large quantity and there was evidence of sugar being refined in Khuzistan during the Abbasid period⁹⁴. The Muslims in Spain adopted an indigenous colour. The sugar industry of Cuba owes much from legacy of Islam in Spain in the production and expansion of sugar industries.

The citrus fruit like orange and lemon along with other vegetables were founded by Muslims⁹⁵. The date tree was planted by Abdul Rahaman Ad-Dakhil, the first Umayyad and Ameer of Spain, as a souvenir of his home land, Syria. Dr. Sir Muhammad *Iqbal*, the renowned Muslim philosopher and poet, wrote a very touching poem referring to the occasion. Perhaps the most valuable gift of Muslim to Spain (or Andalus) was the introduction of an entirely new irrigation system. Firstly, the Muslim used animal-powered water-wheel to irrigate the land. Secondly, an underground canal system was introduced for both purposes of irrigation and drinking water for the urban population. They were accessible from the surface through the wells which were dug at proper intervals. Madrid, the current capital of Spain, owed its water supply to the above technique until 19th century. The system known as *Qanat* was not confined to Spain but as far away as Chile⁹⁶. Syed Ameer Ali sums up the agricultural condition of Spain in these words; At Elchar in the province of Valencia they left vast

⁹³*Ibid.*, p. 575

⁹⁴Cook, M.A. Economic Development in Legacy of Islam 2nd edition Oxford University Press 1979 p. 216.

⁹⁵*Ibid.*, p. 216

⁹⁶*Ibid.*, P. 214

groves of date palm trees. Rice was cultivated in large quantities near Albufera, sugarcane and cotton were grown at Olivia and Gandia Xeres, Granad and Malaga were full of grape vines while the country around Seville and the greater part of Andalusia were planted with olives⁹⁷.

The arrival of Muslims in Spain affected the whole southern Europe. How these countries transform the crops of cotton and sugar-cane into an industry which consequently helped them build an empire around the world is a story itself, but they owe a lot to Muslims for their development or renaissance. It is said that

In domestic economy of medieval Europe. The most important event was the replacement of millet and barley by wheat, in the East however, wheat had established its position long before. Everywhere, where there was sufficiency of water supply, it was cultivated⁹⁸

3.1.5 Irrigation and Socio-Economic Development in the Muslims World

The fall of Baghdad in 1258 AD marked an unfortunate decline and stagnation among Muslim intellectuals and scientists. The European nations were influenced by the legacy of Islam which revolutionized the industry, and fostered rapid technological development. However, with the recent reawakening of Muslims and the discovery of new resources, Muslims are competing to meet up with the global economic and technological challenges.

The mighty dams at Aswan (Egypt), Tarbela and Mangla (Pakistan) have brought thousands of hectares of land under irrigation. The multibillion dollar projects of pivot farming in Algeria, and man-made river of 1900 km in Libya⁹⁹ have not only promoted agriculture in these countries but have boosted their overall economy through irrigation. The black gold of Saudi Arabia is turning the brown desert into greenery. Similarly, the extensive farming in wheat has helped her win the FAO's award and become self-sufficient in the commodity. A traveller across the country witnessed the

⁹⁷Ali S.A Op. cit, P. 575

⁹⁸Ilmi, I.H Op. cit, P.225

⁹⁹ National Development (Magazine), New York, October 1988.p.34

green spots of farms watered through the most modern ways of irrigation. Malaysia and Indonesia are thriving in modern new production. In Syria, the modern methods of supplemental irrigation have increased yields from 2.55 t/ha to 5.7 t/ha¹⁰⁰. Malaysia and Bangladesh have tremendous potentials for other agricultural activities, such as fisheries, which they are effectively utilizing. Also, agricultural colleges and universities are being established like the ones in Peshawar and Quetta (both in Pakistan). In order to promote and expand agricultural economic Islam has encouraged agriculture and the Muslims response to it has always been positive. However, in the pursuit of worldly gains, one must not forget his duties toward his creator. All progress and development must be within the framework of Islam. Allah has said in the Qur'an:

But when the prayer is ended, then disperse in the land and seek for Allah's grace and remember Allah much, that you may be successful.¹⁰¹

3.2.1 History of Irrigation in Nigeria

Irrigation in Nigeria has been traced back to around 700 AD when Shaduf lift irrigation system was believed to have been brought from North Africa to the northeastern part of Nigeria. The Baro experimental irrigation farm started in Baro, Niger state in 1908..¹⁰² However, it was not until 1926 that the first formal irrigation scheme, the Kware irrigation scheme was established in the present Sokoto state.

In 1949 an irrigation division was set up in the then Northern provinces. Agricultural Department with an irrigation training school was established in Sokoto.¹⁰³ However, it was not until 1953 that an irrigation policy was actually promulgated for Northern Nigeria enabling the irrigation division set up

¹⁰⁰ International Conference on Supplementary Irrigation and Drought water Management Bari Italy Sept- Oct2, 1992.

¹⁰¹ Qur'an, 62:10

¹⁰² Abbas, A.Y. (2008), Sustainable cost Recovery in Kano River Irrigation Project Nigeria Usmanu Danfodiyo University, Sokoto, PhD Dissertation p. 11

¹⁰³ JICA (1993), in Abbas, A.Y. (2008), Sustainable cost Recovery in Kano River irrigation project Nigeria. UDUS .P.11

in 1949 “to construct village level irrigation schemes ranging between 40 to 200 hectares all over the region”.¹⁰⁴

In 1960, the Federal Government of Nigeria commissioned several studies to examine the water resources and irrigation potentials in Nigeria. These studies covered Sokoto Rima River Valley, Kano River Valley, Chad Basin and Anambra River Valleys. In 1962, the Federal Government of Nigeria included in its first National Development plan (1962-1968), as a matter of policy, the issue of water resources development for crop irrigation, among other things. In 1973, the Federal Government created the Sokoto Rima and Chad Basin Development Authorities with the responsibilities for full development of irrigation schemes among other mandate.¹⁰⁵

3.2.2 The Construction of Bakolori Irrigation Project

3.2.2.1 Geographical Location

The Bakolori Irrigation Project lies between latitude 12° 30 and 12° SN and longitude 50°S and 6° 20F on both sides of the Sokoto River¹⁰⁶. The project is located within local governments of Bakura, Talata Mafara and Maradun. It was the first to be implemented in the overall development programme of the River Basin and was first identified by the Food and Agricultural Organization (FAO) of the United Nations Organization (UNO) in 1965¹⁰⁷. The programme was initiated to improve the food production in the country.

3.2.3 The Bakolori Dam and Irrigation Project

The idea to construct the Bakolori Dam and Irrigation project predates the establishment of Sokoto River Rima Basin Development Authority (SRRBDA). Since 1960s various levels of Nigerian governments in conjunction with world agencies initiated several programmes with the sole aim of

¹⁰⁴Federal Ministry of Water Resources, (1991), Irrigation Policy in Nigeria, A Memorandum 12pp

¹⁰⁵ Abbas, A.Y Op cit,

¹⁰⁶“Special information Brochure on SRRBDA, VOL 1, Sokoto, 1985 p.1

¹⁰⁷*Ibid.*, p.3

improving agricultural activities in the country. Based on the experiment at *Gonar Sardauna*, the Bakolori Irrigation Project was conceived by F.A.O and was recommended to be one of the programmes for socio-economic development of the area.

The research for design and construction of the programme started since 1965¹⁰⁸. This indicates that the preliminary studies started long before then. The Bakolori multi-purpose irrigation project is made up of a dam construction across the River Sokoto in the now submerged village of Bakolori with a storage capacity of 450 million cubic meters for the irrigation of 23,000 hectares of land¹⁰⁹. The Impresit Bakolori (Nigeria) limited, was incorporated in 1975 for the management of the integrated irrigation project and development of agriculture in Nigeria. In the company's share, 60% owned by the Federal Government of Nigerian and the remaining 40% to its technical partner, Impresit of Milan, one of the world's largest company in civil engineering. The Board of Directors reflects the shareholding proportion by having six Nigerians and four Italian directors.

From its beginning, the company increased in size and by 1980 had fixed assets worth of \$100m and an annual turnover of approximately \$200m¹¹⁰. During the construction, over 5,000 people were employed for the work, which include the dam, supply canals and the three major bridges of Sokoto and *Bobo* Rivers. The followings were also constructed: transmission lines, pumping, lifting and drainage stations, drain roads, flood dikes, a siphon across the Gora valley, roads, and service centers among others.¹¹¹

For proper approach, design aspect, Impresit Bakolori set up and ran an experimental irrigation farm in the project area to test new irrigation methods, water requirements, agricultural techniques and

¹⁰⁸1969-70, Annual Report on Irrigation trials, 1970 p.5

¹⁰⁹SRRBDA, Special Information Brochure, Op. cit, p.3

¹¹⁰The Bakolori irrigation project: A background information, Impresit Bakolori (Nigeria) limited, Talata Mafara, 1975, P.2

¹¹¹*Ibid.*, P.3

crops, new to the area. The company also provided technical assistance and training for Nigerians who are to operate and maintain the project and its main structure.

Feasibility studies have been done for agro-allied industries near the project, to process the large amount of food stuff produced and organize their transport and markets.

The project also provided housing, water, electricity, a hospital, schools, shopping and recreational facilities for the 3,000 families of its workers¹¹². The project set up one of the largest workshops in Nigeria, organized shipping from Europe and road transport from Apapa for the thousands of items required to implement such a large construction.

Programme and support such a large community. In short, large amount of human and material resources were mobilized during the construction.

The multi-sectorial organization developed by the company was the most efficient means for the rapid and sound implementation of the integrated agricultural project and operations were super-imposed on the condition and support for each other. Public and private ownership is another special feature of the company.

The reservoir of the dam over the Sokoto River is 5.5km long with a central gravity section of 356 meters long and 48 meters high¹¹³, flanked by two earth fill wings on the left and right banks. The reservoir formed by the dam covers 8.000 hectares and is capable of storing large amount of water which it releases downstream for irrigation and water supply purposes. The irrigation works include a concrete lined canal 15km long with a design of 30 cubic meters, two main canals carrying water to the left and right banks of total length of 45km, secondary canals of total length of 200km. tertiary canals, and field's ditches among others¹¹⁴. The net irrigation area covers 23 000 hectares which

¹¹²*Ibid.*, p.4

¹¹³Special Information Brochure Op. cit, p.5

¹¹⁴The Bakolori Irrigation Project, A background Information, Op. cit, p.7

include about 8,000 of surface irrigation and about 15,000 hectares of sprinkler irrigation¹¹⁵ Other works include hydro and diesel power stations of 3,000 and 7,600 kilo capacity respectively¹¹⁶ Twenty-five sprinkler pumping stations with a total pumping capacity of 16,000 lifting stations, services centers for agricultural machines, self-sufficient residential complex¹¹⁷.

The project was substantially completed and commissioned on 9th April 1983. The cropping seasons is done in both dry and wet seasons. In the wet cropping season only few crops such as maize and rice were given supplementary irrigation, while the entire cropping is by irrigation during the dry season. In the project site, apart from some 4,000 hectares owned by the authority, the entire irrigation area of 23,000 hectares¹¹⁸ were mainly developed and banded back to the original owners of the land. These people numbering over 14,000 farming families¹⁴ constituted the bulk of the project farmers¹¹⁹.

Horticulture is another important activity of the project. For the purpose of demonstrating the orchard development and fruit production as well as with view to generating revenue, the project is running on ambitious programme of orchard development and fruit production, as the centers fruits and seedlings are always available for sale to farmers. Also for the purpose of an afforestation, the forestry section of the project embarked on a massive direct tree-planting programme including the wind breakers especially in the sprinkler area. On the development of pastures and grazing reserves, project identified and developed include the following grazing reserves. They are: the Sauna grazing reserve in Talata Mafara, Kwanar Kalgo in Bakura and Carmate forestry in Maradun.

¹¹⁵Brief on project activities of SRRBDA, Sokoto, P.9

¹¹⁶*Ibid.*, p.9

¹¹⁷Special information, Brochure on SRRBDA, Vol.1 Op. cit, p.4

¹¹⁸A Background Information on SRRBDA. Op. cit, p.7

¹¹⁹*Ibid.*, p.7

Chapter Four: Data Presentation and Analysis on the Positive Impacts of the Contemporary Muslims of Bakura, Maradun and T/Mafara on B.I.P Scheme

4.1 Data Presentation and Analysis

In the previous chapter, discussion were made on the irrigation system during the life time of the Prophet Muhammad (S.A.W), the period of *Sahabah* (R.A) and some part of the Golden age of Islam. The chapter also expounds the brief history of Bakolori irrigation Project scheme since from its inception and other development was also highlighted.

In this chapter, we will examine the positive impact of Bakolori Irrigation Project (B.I.P). This will give a clue, on whether farmers in the study areas, have gotten positive result/production after harvest or otherwise. Also related issues would be discussed.

Bakolori irrigation scheme being one of the biggest dams in the Western part of Northern Nigeria has been producing different varieties of foodstuffs and cash crops for over thirty five (35) years ago. Many researchers have made different contributions by focusing on its essence in different aspects. Ours is to have a glance on its positive impacts on the Muslim autochthones of the study areas.

From the above paragraphs, it is clear that Bakolori Irrigation Project has been playing very vital roles in promoting and advancing the lives of individuals and groups of the autochthones of the study areas and Nigeria as a nation in general. We should therefore, have a gist on the water processing, how it makes an impact on the farmers in the study areas, which is the back bone of all productions of the Bakolori Irrigation Project (B.I.P) In Zamfara State.

In an effort to assemble data for this chapter, three hundred (300) questionnaires were administered within the three local government areas of Zamfara State namely; Bakura, Maradun and Talata Mafara. This is due to the fact that, random sampling was made in choosing eleven towns out of many in considering them more serious and close in partaking farming activities. Through the effort

of self-administered by the researcher and his assistants. Out of these questionnaires two hundred (200) were returned successfully leading to a rate of 66.6%. Data obtained were therefore analyzed using SPSS in descriptive statistics (frequencies and percentages).

The findings of the research were divided into two (2) chapters, namely positive and negative impacts. Chapter four comprises of positive impact while chapter five negative impact or problems faced by the farmers of the study areas.

The results were presented on positive impact in chapter four from tables 4.1.1 to 4.1.16.

Table 4.1.1 Age of respondents

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Age (years)	200	45	25	70	44.50	11.327	128.291
Water charges (Naira)	200	7950	800	8750	4084.25	1772.880	3143104.962

Source Field Data (2016)

Table 4.1.1above indicates that the average (range) ages of the respondents are 45 years; the highest ages of the respondent are 70 years, while the lowest are between 25-30 years. 44.5 years of the respondents stand as a means. Standard deviations of the table are 11.327 ages and 128.291 as its variance,

Table 4.1.2 Gender of respondents

Town	Frequency	
	Female	Male
Bakura	0	20
Birnin Tudu	2	18
Gidan Kano	1	19
Gora	0	20
Jabe	0	10
Mafara	1	19
Maradun	0	20
Matusgi	0	20
Rini	0	20
Sabon Gari	0	10
Ware	1	19
Total	5 2.5%	195 97.5%

Source Field Data (2016)

Table 4.1.2 above indicates that 195 (97.5%) of the respondents are male, while 5 (2.5%) are females. This however, shows that the majority of the respondents are male.

Table 4.1.3 marital status

Town	Frequency			
	Divorced	Married	Single	Widowed
Bakura	0	19	1	0
Birnin Tudu	0	18	0	2
Gidan Kano	1	17	2	0
Gora	0	19	1	0
Jabe	0	10	0	0
Mafara	0	19	0	1
Maradun	0	18	2	0
Matusgi	0	20	0	0
Rini	0	20	0	0
Sabon Gari	0	10	0	0
Ware	0	20	0	0
Total	1 0.5%	190 95.0%	6 3.0%	3 1.5%

Source Field Data (2016)

Table 4.1.3 above shows that the majority of the respondents are 190 which constitute 95.0% were married, while 6 (3.0%) are single, while 3 (1.5%) are widowed, while the lowest is 1 which constitute 0.5% only.

Table 4.1.4 Educational qualification

Town	Frequency				
	Nil	Non formal education	Primary education	Secondary education	Tertiary education
Bakura	9	2	4	2	3
Birnin Tudu	5	4	1	7	3
Gidan Kano	0	3	7	3	7
Gora	2	1	1	1	15
Jabe	4	0	4	2	0
Mafara	7	0	3	0	10
Maradun	0	3	2	5	10
Matusgi	6	5	3	3	3
Rini	4	4	3	5	4
Sabon Gari	6	2	2	0	0
Ware	11	2	4	2	1
Total	54	26	34	30	56
	27.0%	13.0%	17.0%	15.0%	28.0%

Source Field Data (2016)

In table 4.1.4 above we have seen that the lowest numbers of the respondents, who have tertiary certificates, are 56 (28.0%) while others (secondary education down to those who had not attended any certificate) has the highest number of 144 which constitutes 72% of the respondents.

Table 4.1.5 level of Islamic education

Town	Frequency		
	Advanced level	High level	Low level
Bakura	7	11	2
Birnin Tudu	2	15	3
Gidan Kano	0	4	16
Gora	2	7	11
Jabe	5	4	1
Mafara	5	6	9
Maradun	3	10	7
Matusgi	1	18	1
Rini	0	18	2
Sabon Gari	1	9	0
Ware	4	10	6
Total	30	112	58
	15.0%	56.0%	29.0%

Source Field Data (2016)

Table 4.1.5 above indicates that the highest number of the respondents have high level certificates are 112 (56.0%), while those with low level certificate constitute 58 (29.0%). However, the lowest number of the respondents represents those with advanced level which is 30 (15.0%).

Table 4.1.6 Local Government origin

Town	Frequency		
	Bakura	Maradun	Talata Mafara
Bakura	18	1	1
Birnin Tudu	20	0	0
Gidan Kano	0	20	0
Gora	0	18	2
Jabe	0	0	10
Mafara	0	0	20
Maradun	2	18	0
Matusgi	0	1	19
Rini	18	2	0
Sabon Gari	1	0	9
Ware	1	1	18
Total	60	61	79
	30.0%	30.5%	39.5%

Source Field Data (2016)

In table 4.1.6 the result presented indicates that the majority of the respondents 79 (39.5%) are in Talata-Mafara local government, while 61 which constitutes 30.5% came from Maradun local government area. However, the lowest number of the respondents came from Bakura local government area with 60 equivalents to 30.0% respectively.

Table 4.1.7 Occupation of respondents

Town	Occupation			
	Farming	Farming and Civil Service	Farming and others	Farming and trading
Bakura	7	0	13	0
Birnin Tudu	9	0	11	0
Gidan Kano	7	1	12	0
Gora	4	3	13	0
Jabe	0	0	9	1
Mafara	9	6	3	1
Maradun	8	1	9	2
Matusgi	8	1	9	2
Rini	8	0	12	0
Sabon Gari	6	0	4	0
Ware	6	0	14	6
Total	72	12	110	3.0%
	36.0%	6.0%	55.0%	

Source Field Data (2016)

In tables 4.1.7 above shows that those who reliant totally on farming activities are 72 which constitute 36.0%, while those who merged farming with other activity have the highest number of the respondents which is 128 (64.0%). They have done this for the preparation of rainy day.

The Table below shows how farmers responded to the water rate charge per person an acre and hectare.

Table 4.1.8 is water rate charged per person affordable to the farmers

Town	Frequency	
	No	Yes
Bakura	1	19
Birnin Tudu	1	19
Gidan Kano	8	12
Gora	2	18
Jabe	0	10
Mafara	1	19
Maradun	3	17
Matusgi	0	20
Rini	5	15
Sabon Gari	0	10
Ware	1	19
Total	22	178
	11.0%	89.0%

Source Field Data (2016)

The table above shows about 22 farmers which is equivalent to 11.0% percent out of the sampled population opined that the amount fixed as rate charges of the water was not affordable to them. Some of them based their argument/reason on the fact that the field workers do not release the water on time. Some of them, even contented, that in their sites (areas), water does not flow smoothly. And finally some people/farmers were reluctant in paying the money totally no matter what they charges may be.

However, the other segment opined that the water rate charges are affordable to them, considering that their number has risen up to 178 farmers which is equivalent to 89.0% of the sampled population. Yet, some suggested that, the tax should be increased to one hundred naira ₦100 (per one ridge's) saying this will be fair, considering the profits gained on different varieties of cash and food crops they harvested.

Table4.1.9 How affordable is the water rate charged per person per hectre

Town	Frequency		
	Very Affordable	Affordable	Somehow affordable
Bakura	1	17	2
Birnin Tudu	1	17	2
Gidan Kano	11	7	2
Gora	2	13	5
Jabe	0	10	0
Mafara	5	14	1
Maradun	7	8	5
Matusgi	1	18	1
Rini	4	11	5
Sabon Gari	0	10	0
Ware	0	20	0
Total	32 16.0%	145 72.5%	23 11.5%

Source Field Data (2016)

In the table 4.1.9 above, there are three, segments which show the average percentage of the farmers in the affordability or otherwise of the water charges in each acre//hectare of every individual farmer. The three segments are; very affordable, affordable and somehow affordable.

In the first segment, that is; 'very affordable' the table shows that 32 farmers that are equivalent to 16.0% of the sampled population are of the view that the amount of the water rate charged on every acre/hectare is fair, well balanced and very affordable to them. Some of them are even saying that the amount fixed is the cheapest, considering the time to be taken during the season up to the harvesting period. It has been estimated that the season will continue up to five months, in which a farmer is required to pay the sum of ₦50 for every ridge. Given this minimal amount of money to be paid, one can conclude that the fixed rate charges are justifiable and very affordable to the farmers of Bakolori irrigation project.

In the second segment we can notice the highest number of farmers that responded, in all 145 respondents. This took the largest percentage, of 72.5%, indicating that the amount fixed to be paid

as water charges is affordable to the farmers. Some were even pleased with the duration of the payment of the fixed charges, as they said it way favourable.

The last segment in the above table shown that about 23 farmers, that are equivalent to 11.5% out of the entire sampled population asserted that the amount fixed as a rate charges is somehow affordable, that is to say if something out of the above mentioned charges can be reduced they are willing to accept and pay.

Table 4.1.10 Do you face any problems with money collectors

Town	Frequency	
	No	Yes
Bakura	16	4
Birnin Tudu	18	2
Gidan Kano	20	0
Gora	18	2
Jabe	10	0
Mafara	11	9
Maradun	19	1
Matusgi	19	1
Rini	19	1
Sabon Gari	10	0
Ware	19	1
Total	179	21
	89.5%	10.5%

Source Field Data (2016)

We do come across problems in dealing with some issues involving many individuals with different opinions, contentions, and notions etc. However, collecting money and keeping them intact without trace of problem is very rare in human nature. With regard to the above table, we will see that about 179 farmers with percentage sampled population of about 89.5% have no problem with money collectors in their respective areas when the time is due. That is to say, farmers give out to collector as soon as they come. According to some of them, this is done in the friendliest manner between the two parties.

On the contrary, this second segment had about 21 farmers with percentage population of about 10.5%, in which out of the sampled population, are having problem with money collectors (B.I.P field works). Similarly, some farmers are not willing to pay the amount fixed by the B.L.P authority, despite the benefit they derived from irrigation service for about thirty to thirty five (30-35) years. Also some of the collectors are not remitting to Bakolori irrigation project (B.I.P) what they collected as revenue (farmers' leaders and some B.I.P staff).

Table 4.1.11Did you face any problem(s) with water distribution on your site (farm)?

Town	Frequency	
	No	Yes
Bakura	10	10
Birnin Tudu	17	3
Gidan Kano	17	3
Gora	11	9
Jabe	9	1
Mafara	12	8
Maradun	14	6
Matusgi	15	5
Rini	14	6
Sabon Gari	9	1
Ware	19	1
Total	147	53
	73.5%	26.5%

Source Field Data (2016)

As it has shown in the table above, here is another social negative impact faced by the farmers of Bakolori Irrigation Project on water distribution in their sites (farms). In the first part, the problem faced by the farmers concerning water distribution has only 147 people, who responded No, which are equivalent to 73.5% of the sampled population. This is the largest, among the share of the entire respondents. They described the mode of the distribution of water to their sites as favorable, because they have not encountered difficulties while watering their farms.

However, the second part in the table above shows that, 53 people (farmers) or 26.5% of the entire sampled population of the research work attribute the problem of water distribution to the Bakolori

Irrigation project (B.I.P) field workers. This was due to the delay in opening water stream to their locations (sites). They also blamed their colleagues who intentionally obstructed the flow of water stream by putting sandy bags to block it from reaching them, because their farm sites are located in the upper stream.

4.2 Religious Impact

At this juncture, we will discuss the religious impact of Bakolori Irrigation Project (B.I.P) to the autochthones of the study areas. Islam as a religion permits activities that could, promote human development and irrigation system of farming among others.

Similarly, it encourages people to work diligently for their survival as well as emphasizes on peaceful living among them.

It further motivates people to equally engage in things that could fetch them benefits of the next world (Al-Akhirah). Some of these things include giving out Zakah out of their wealth especially harvests due to irrigation farming.

4.2.1 The Concept of *Zakah*

The word *Zakah* is the infinitive noun of the verb: *Zakah*, meaning: to grow, to increase or to be pure in the heart.

The literal meaning of *Zakah*, therefore, is growing, increasing or purification of the heart.¹²⁰ But in Islamic law, *Zakah* takes a different meaning from the one known to the Arab before the coming of Islam. Prophet Muhammad (S.A.W) defined *Zakah* as what is taken out of the property of the rich ones and given to the poor ones.¹²¹ That is why the learned scholars said: *Zakah* is a portion of a person's wealth, which is the right of Allah, given to the poor people.¹²²

¹²⁰ Nigeria Certificate in Education NCE/DLS, (2000), National Teachers Institute, Kaduna, Nigeria p.15

¹²¹ A. J. Aljazair, (1992), *Minhajul Muslim*, Darul Alfikri, Beirut Lebanon p. 285.

¹²² Op. cit, p. 15

4.2.2 *Zakah* as an institution

Zakah institution is one of the basic pillars of Islamic religion. It is the third pillar which was instituted in the 3rd year after *hijrah* (from Makkah to Madinah). The Glorious Qur'an attaches great importance to it where it appears several times with 'prayers. In the Glorious Qur'an Allah says"

...and steadfast in prayers and spend out of what we have provided for them (i.e. giving *Zakah*) and also giving charity to the poor and also in Allah's cause.¹²³

Islam has been built upon five pillars: the testimony that none has the right to be worshiped except Allah, and that Muhammad is the Messenger of Allah, establishing prayers, giving (legal) alms, fasting the month of *Ramadan*, and performing Hajj to His House (the *Ka'abah*).¹²⁴

The fact that *Zakah* is an obligation upon Muslims is one of the most apparent indications of the beauty of Islam and the concern it has for its adherents. The Glorious Qur'an reads:

Take alms (*Sadaqah*) from their wealth in order to purify them and sanctify them with it.¹²⁵

The above verse shows clearly the benefit of giving out *Zakah* that is it purifies and cleanses the soul of giver and distances it from greed and avarice. It also strengthens the bonds of love between the rich and the poor, for it is from human nature that a person shows affinity to those who treat them well. More so, it brings increase and blessings to one's wealth and Allah replaces it (The wealth giving as charity with something better), as Allah (STW) Said:

And what so ever you spend of anything (in Allah's cause),he will replace it. And He is the best of providers"¹²⁶

4.2.3 *Zakah* has been Made Obligatory Upon Four Categories of Wealth:

1. Grains and fruits produced by the earth.
2. Grazing or herding animals which feed freely from the earth
3. Gold and silver

¹²³ Qur'an, 02:03

¹²⁴ Muhammad M. Khan (N.D) Sahih al-Bukhari, Darul alfikri, vol. 5, Book of *Zakah*, Hadith No. 150 p.65

¹²⁵ Qur'an, 09:103

¹²⁶ Qur'an, 34:39

4. And inventory (stock) with which one does business.¹²⁷

For each of these categories, there is a specified amount under which *Zakah* becomes obligatory (termed as '*Nisab*'). At this juncture, our major concern is for grains and fruits which are predominantly large in the production of Bakolori Irrigation project in Zamfara State.

4.2.4 Grains and Fruits

According to Oxford English dictionary, Grains can be defined as cereal crops, a small hard seed or a tiny individual piece of something such as sand or salt. This includes oats, barley, wheat, rice, maize, millet and corn.

The *Nisab* for grains and fruits is 5 '*Ausuq*' and one *Ausuq* is equal to 60 *Sai* measured during the time of the Prophet Muhammad (S.A.W)¹²⁸. This amount measured according to the *Sai* during the time of the Prophet (S.A.W), such as dates, raisins, wheat, rice barley and their likes, is equal to 300 *Sai*, (one *Sai*) is equal to 4 handfuls of an average sized man.¹²⁹

The amount which is due upon grains and fruits (if it reaches the *nisab*) is 10% if the date-palm or plants relied upon natural means for water, such as rain, rivers, flowing streams and their likes. If they relied on unnatural means for water, such as using animals to water or machines which lift water or their likes, the amount which is due upon them is 5% as has authentically been reported by the messenger of Allah (S.W.A):

The amount due upon that which is watered by the sky or streams, or was ... is a tenth, and what was fed by (manual) watering a twentieth.¹³⁰

There are two important things to note with regard to *Nisab*. Firstly, the property must reach a fixed minimum amount. And secondly that fixed minimum amount should remain in one's possession for a

¹²⁷ Abdulaziz bn Baaz, (2004), *Al-Zakat*, The Islamic Propagation Rabwah, p.9

¹²⁸ *Ibid.*, p.10

¹²⁹ *Sai* is equal to about 3 kilograms of wheat/rice.

¹³⁰ Muhsin Khan M. (1391A.H), *The Translation of the Meaning of SahihAl-Bukhari* Arabic – English, Darul Fikr Publishers, Volume 2, Hadith No 560, page 327

complete year. Therefore, if it becomes more within the year, the *Zakah* is compulsory. But in the case, where the amount decreases and becomes less, there is no *Zakah*.

Table 4.1.12 Did you pay *Zakah* of your farm produce on time?

Town	Frequency	
	No	Yes
Bakura	0	20
Birnin Tudu	1	19
Gidan Kano	1	19
Gora	1	19
Jabe	0	10
Mafara	0	20
Maradun	0	20
Matusgi	0	20
Rini	1	19
Sabon Gari	0	10
Ware	0	20
Total	4 2.0%	196 98.0%

Source Field Data (2016)

The table 4.1.12 above shows an illustration of the farmers with different dimension of paying *Zakah* of their produce. In the first segment about four (4) farmers which are equal to 2.0% of the sampled population, gave a ‘no’ response (denial) in giving out *Zakah*. This does not mean that they are not abiding by Allah’s injunctions, but what they have produced does not meet the minimum percentage required to be given out as *Zakah*. (If it reaches they are willing to pay).

The second column of the table above shows that 196 farmers or 98.0% of the entire sampled population of research study areas were able to make a positive response that, they do observe the payment of *Zakah* as soon as they harvested their farm products. If the above percentages can give out *Zakah* promptly and issue it to those entitled, no doubt poverty and hunger may reduce and fend off for a short period of time. It also promotes and elevates some lives of the contemporary Muslims (autochthones) of the study areas.

Table 4.1.13Did you face any problems in distributing *Zakah* from your farm produce?

Town	Frequency	
	No	Yes
Bakura	18	2
Birnin Tudu	19	1
Gidan Kano	20	0
Gora	20	0
Jabe	9	1
Mafara	19	1
Maradun	18	2
Matusgi	20	0
Rini	18	2
Sabon Gari	10	0
Ware	20	0
Total	191	9
	95.5%	4.5%

Source Field Data (2016)

In the table 4.1.13 above, the first segment/Column shows that the respondents have the highest/largest number of farmers which is about 191 or equivalent of 95.5% of the total sample of the study areas opined that, they do not observe or come across any problem while distributing *Zakah* after harvesting their farm products. According to some farmers, the first thing they do after harvest is to earmark what is *Zakah* and to give it out as a protection against any misfortune such as fire, water disasters, and theft etc. However, in the second column, the respondents have only 9 farmers' equivalent to 4.5% that encountered some problems in the course of giving out *Zakah* in their areas/localities.

4.3 The Concept of *Hibah* (Gift)

Gift (*Hibah*)

According to Al-Jazair, Hibah, implies giving out what one possesses legally out of his wealth, to his fellow. Such things include a house, clothes, food or money (e.g. Dollars, pounds, Naira etc.)¹³¹

In view of this, let us have a glance at the Glorious Qur'an for more clarification, in the following verses:

... and we gave him Ishaq (Isaac) and Yaqub (Jacob), and each one of them we made a Prophet.¹³²

It also says:

... and do good as Allah has been good to you, and seek not mischief in the land...¹³³

The Risalah of Abu Zaid *Al-Qairawan* explains that gift (*Hibah*), charity (*Sadaqah*), and endowment (*Hubus*) would not be complete without full possession (to meet hand of receiver).

He further said if the giver dies before possession, it is returned to the estate of the deceased person.

But if he is on death bed, (sickness) then, it should be treated within the bequest (will) $\frac{1}{3}$ of his wealth.¹³⁴

¹³¹ Op. cit, Abubakar Jaza'ir, p.422

¹³² Qur'an, 19:49

¹³³ Qur'an, 28:77

¹³⁴ Abu Muhammad bn Abi Zaid al-Qairawan (N.D), *Matnu al-Risalah*, Darul fikr, p.103

Table 4.1.14 Apart from the *Zakah*, do you give out extra gifts to the relatives, masses, etc for the development of Islam?

Town	Frequency	
	No	Yes
Bakura	0	20
Birnin Tudu	1	19
Gidan Kano	3	17
Gora	2	18
Jabe	0	10
Mafara	0	20
Maradun	2	18
Matusgi	0	20
Rini	0	20
Sabon Gari	0	10
Ware	0	20
Total	8 4.0%	192 96.0%

Source Field Data (2016)

The table 4.1.14above shows that only 8 people/farmers responded ‘No’ in giving out extra gifts to their relatives. This is equivalent to 4.0% of the sample population opined that, what remains after remittance of their debt and other expenses would not be extended to the next dry season. For this reason, there is no room for giving extra gifts to others.

In the other segment, the table above shows that 192 respondents/farmers, which equals to 96.0% out of the total sampled population of the research study, took the largest number, with their ‘Yes’ response in giving out extra gifts to relatives, masses etc. Some even said their relatives from far and near were eager to pay a visit, on hearing that their farm products were ripe for harvest. The givers (farmers) feel encouraged and satisfied to assist their brothers, their sisters, relatives or masses etc.

4.4 The construction of Mosque

Construction of mosque is important and rewarding in the religion of Islam. Reflecting back to the Islamic history, the building of the Prophet Muhammad (S.A.W) mosque (Masjid-*Annabawi*) was attached to his house. The first mosque to be built in Islam serves as a center of worship, preaching,

learning, as well as place for public gathering for the entire Muslim Ummah during the life time of the Prophet Muhammad (SAW) for execution and co-ordination of all the affairs of Islam and Muslims in general. However, it is noticed that only few individuals have the capacity to build mosques without assistance from some quarters. Some provide plots, others in bringing blocks; bags of cement, flanks, ceilings, Zinc for roofing and those who have the means may sacrifice their physical strength to work as laborers. In this research, therefore, the random sampling of 300 target farmers in the study areas has shown that very few individuals had used their possessions, gained under Bakolori Irrigation project to construct some classrooms in *Islamiyyah* or a Mosque. This is shown thus:

Table 4.1.15 Have you ever constructed or donated to *Islamiyyah* School, a class room, a mosque or any building for the sake of Allah through irrigation farming?

Town	Frequency	
	No	Yes
Bakura	3	17
Birnin Tudu	4	16
Gidan Kano	5	15
Gora	3	17
Jabe	0	10
Mafara	7	13
Maradun	5	15
Matusgi	0	20
Rini	0	20
Sabon Gari	4	6
Ware	1	19
Total	32	168
	16.0%	84.0%

Source Field Data (2016)

The table 4.1.15 above, shows only 32 people/farmers, equivalent to 16.0% out of the sample population of the study area; do not construct or donate to *Islamiyyah* School, build a classroom and a mosque through irrigation system of farming in their localities. However, in other part, the above table shows that 168farmers which is equivalent to 84.0%, out of the total sample population of the

study areas, the responded have contributed their quota in either of the above stated structures. In addition to that, some individuals farmers do assist with little amount in their possession. Some of them, invested/assisted through the use of their physical power, which means exerting their energy in building or constructing a mosque.

From the above, about four (4) personnel have made a tremendous and marvelous contributions through this system of irrigation. The first person is Alhaji Yusuf Son Allah who with the assistance of some few individuals, was able to construct a large *Dihliz* with three (3) small rooms were some students took as their residence, situated in Mallamawa area in Talata-Mafara local government. The Dihliz can contain a hundred people, in it the father of the current Sarkin Malaman Mafara, Sheikh Liman Zaid conducted for several years a Ramadan Tafsir session. After his demise, his son, Malan Sanusi Sarkin Malamai succeeded him. It was later transformed and reconstructed to an upstairs level by the current administration of Abdulaziz Yari Abubakar of Zamfara State, under the supervision of some Engineers from the ministry of works and that of Religious Affairs respectively.

Also, in Ware village, under Talata-Mafara local government there was a development. Alhaji Abubakar Sha Madara Sarkin Fulanin Ware who was able to construct a classroom for Islamiyya session, is still there for many years (see in appendix 3)

The construction of five daily prayers mosques, situated at Bamfa area in Bakura local government by the two personalities is also visible. According to Alhaji Yusuf Farnana Bakura the construction of the mosques was an opportunity for good, in the hereafter and therefore the philanthropists should thank God for giving them the chance to do the work.

These personalities, made use of their minimum income derived from irrigation system of farming, after giving out Zakah and with some gifts to their relatives, masses as well as settling some expenses. Most of the projects conceived took long time before being completed. However, this could encourage others to give their own quota, so as to reap abundant benefits in the hereafter.

4.5 Economic Impact

This can be seen as economic advancement or improvement. In every group of people or society there are certain activities that would no doubt promote or enhance their living. These include total engagement in business activities whether traditional, local or in modern ways. In these activities some may lose or gain. In this connection, we will express views by some respondents (farmers) in the study areas on how Bakolori Irrigation Project made an impact in their economic activities. We will look at the following sub-headings:

- Does Bakolori irrigation project (scheme) boost your earnings
- Does it serve as a means of self-employment
- Job opportunities.

4.5.1 Does Bakolori Irrigation Project Boost Your Earnings?

Here, we are going to examine the opinions of some individuals (farmers) based on their responses to see if it really promotes their living or otherwise. It is well known fact that some significant numbers of the farmers in the study areas do farming as a means of survival. Therefore, after harvesting, they reserve what they expect may reach them a certain period that would fend-off hunger.

One of the notable farmers and a retired civil servant, who engaged in farming for about fifteen years (15), was quoted to have said: and I quote, “After every harvest, I usually keep sufficient product, for my personal need i.e. to feed my family and assist my relatives. I sold some part of it for cash to meet up with my financial needs; such as marrying off my female Children, visiting the holy land for pilgrimage and meeting other social needs.”¹³⁵

According to Magaji Rini, under Bakura Local Government Area, after, having completed secondary school, he seriously engaged in farming activity in which Bakolori irrigation project played major role, in his earnings that improve his economic status. He said, he was able to save part of it, and

¹³⁵ Alhaji Yahaya Abubakar, Former Project Manager, (P.M) aged 60years interviewed at his residence on 22/06/2016.

gradually established a trade. From then, he bought a commercial car (Toyota). He also built a concrete house in Rini town. He further visited the holy land for pilgrimage. In addition to that, he also bought another car making them two. For these he said, he is showing gratitude to Almighty Allah for meeting some of his needs financially.¹³⁶

On another note, at a meeting, with the district head of Birnin Tudu who is also an Islamic scholar, he narrated to us how farming, under the Bakolori Irrigation lifted his life. This, he said, had helped him, to settle all his financial needs. He also said, he undertook a visit to the Holy land, built a house, marrying off many male and female children etc.

As a scholar, according to him he is teaching his people some Islamic books such as Arabic, grammar and Islamic jurisprudence (the books include Ishriniyyat, al-Akhdari, Ishmawi, Risalah up to *Fathul-Jawad*/al- Askar). Hearing these, we were impressed and encouraged in our research study.¹³⁷

Alhaji Haruna Abdullah was another experienced farmer who was brought up under this irrigation system of farming. According to him, he is proud to be a farmer and continue to live as such. He is also training his family to step into his shoes. With farming he said, he was able to construct a modern house which accommodated his family. He also went to Hajj for pilgrimage out of what he gained under the Irrigation system of farming.¹³⁸

The method adopted by Dan Ige Dan Dogari ware and Malan Isah Aliyu Jabe was also impressive. According to them after harvest they normally give out Allah's right and keep some amount to buy animals such as cows and sheep for rearing, as assets to them. The animal bought would be expected to increase in number before the dry season. And this serves as a way of saving their money. The animals will later be sold in preparation for the next farming season.¹³⁹

¹³⁶ Alhaji Bello Magaji Rini aged (42)years interviewed at his residence on 06/03/2016

¹³⁷ Alhaji Garba mai Abinsha, District Head of Birnin Tudu aged (60) years interviewed at his residence on 03-03-2016

¹³⁸ Alhaji Haruna Abdullahi Rini aged (50) years interviewed at his home on 6/3/2016

¹³⁹ Malam Aliyu Isah Ware and Dan Ige Dan Dogari Jabe aged (40) years and 56years interviewed at their residence.

“After harvest, I kept sufficient food stuffs for my family. I also used part of the money in marrying off my two female children. More so, he said, he was able to purchase a moderate farm land to avoid renting from others. With these, he said his earning has been increasing every blessed year” He said (respondent).¹⁴⁰

Farming is a way of living to others. Many are proud to be farmers, as it is through that, they were able to succeed in other activities in life. These include; marrying off of female children, as well as investing part of it in small and large scale/businesses. We also pay visits to the holy land (Makkah) for pilgrimage. Also, we save the remaining part of the money gained under this system of farming by buying sheep and cows for preparation against the next dry season. Said, Alhaji Yusuf Farnana and Alhaji Hussaini Sarkin *Noma* Matusgi respectively.¹⁴¹

In another development Alhaji Dan Shatu Ware was quoted as saying and I quote, “Undoubtedly, my father has influenced me to engage in this system of farming, by providing me with a portion free. These few ridges produced high yields in the first year. In realization of its importance, I was eager to live to witness the subsequent dry season. Since then I hold this Irrigation system of farming with molar teeth, and also increasing the percentage of ridges up from one Acre (40 ridges) to a Hectare (one hundred ridges). Finally, I do solve all my problems in with the little gains from this irrigation system of farming.”¹⁴²

Furthermore, two personalities, share similar things as far as irrigation farming is concerned. They are Ibrahim Sarkin Gardi Birnin Tudu and Alhaji Jariri. According to them, they have started it with one Acre (40) ridges, producing good yields. In the subsequent year, they added 20-30 ridges making 60-70 ridges. From this it gradually reached a point of farming a Hectare which is 100 ridges. It then

¹⁴⁰ Alhaji Haruna Sabon Gari, aged (50) years at his residence on 06/03/2016

¹⁴¹ Alhaji Yusuf Farnana, aged (70) years and Alhaji Hussaini Sarkin *Noma* Matusgi aged 43years interviewed at his home on 12/3/2016.

¹⁴² Alhaji Dan Shatu Ware, aged(45) years interviewed at his home on 5/5/2016

reached 200 ridges equivalent to 2hectres. In view of this level reached, one can conclude, that their economic earning has undoubtedly increased.¹⁴³

In adopting multiple crops system that is appropriately observed, in order to avoid over lapping, farmers can make a lot of progress in their activities. Abdullahi M.B Yunus Gora was one of farmers adopting it. It offers him an opportunity in solving virtually all his problems in life; these include marrying of his female daughters, building a modern house and undertaking a pilgrimage among others.¹⁴⁴

Some of the beneficiaries of Bakolori irrigation system of farming who have similar idea and procedure are Alhaji Shehu Madaha, living in Talata Mafara and Alh. Garba Tela Birnin Tudu. Having met with them, they expressed satisfaction and gratitude to Allah whom in his infinite mercy brought this project to their localities. They said, the coming up of the scheme, has ensured their full engagement in it. According to them, investment of at least One Hundred Thousand Naira in the scheme could translate into a double or even triple sometimes, at the end of harvest.¹⁴⁵

A farmer who is also a civil servant asserted that, “the produce got under Bakolori irrigation system of farming has helped to keep my earnings in other sources, as it is used for subsistence living. This is to say it advances and promote their living, standard as they were able to solve other problems in life.¹⁴⁶

Sada Yusuf Birnin Tudu and Isa Sanusi Gora, opined that this irrigation system of farming eases their earning and help in feeding their families comfortably. It also discourages other family members

¹⁴³ Ibrahim Sarkin Gardi and Alhaji Jariri aged 45 and 60years at home on 02/03/2016

¹⁴⁴ Malam Abdullahi M.B Yunusa Gora aged 48years at his residence on 22/3/2016.

¹⁴⁵ Alhaji Yusuf Madaha and Alhaji Garba Tela, aged 50 and 60 years interviewed at their residence on 11/3/2016 and 3/3/2016 respectively.

¹⁴⁶ Alhaji Bala Qola^(ES) Mafara, aged 55 years interviewed at his home on 10/10/2016.

from going in search of other means of livelihood as the scheme has proved to be good enough in providing for such.¹⁴⁷

Muhammad Lawal Dan Hajiya Jabe and Abubakar Dogo Maitako Sabon Gari, on their part, opined that, after harvest they reserved a reasonable amount of money and make good investment. They also bought some animals for rearing. All these serve as good preparation for subsequent dry season activity.¹⁴⁸

On the other hand some maintain what they farm so that during the next dry season they could increase the ridges they farm. Some insignificant numbers of the farmers are doing so. But when a flood disaster, Quelea birds consume, the opportunity would not be there to replace what they have withdrawn or get another alternative site (farm land).

However, some farmers could only solve little problems depending on their capacity to get and prepare their farm lands. If one can ensure from selecting improved varieties of seedlings, clearing of farmlands, applying necessary things, such as fertilizer, pesticides, one could get good yields on one's farmland.

“If a farmer applies new techniques and use improves varieties of seedlings his earning under this irrigation system of farming would be enhanced to some extent that he will be able to solve some part of his problems” Muhammad Isa Gora said.¹⁴⁹

In line with the above statement, the experiment of the improved varieties of seedlings by SYGENTA Company was observed at *Famfo* area under Talata Mafara local government area in collaboration with Bakolori irrigation project field workers. According to one of the eye witnesses and I quote” we work in the trial field (farm land) as laborers in planting new variety of C.P Rice.

¹⁴⁷ Sada Yusuf Birnin Tudou and Isa Sanusi Gora aged 40 and 42years interviewed at their residence on 06/03/2016.

¹⁴⁸ Muh'd Lawal Dan Hajiya and Abubakar Dogo Maitako aged 50 and 70years interviewed at their homes on 05/06/2016 and 12/05/2016.

¹⁴⁹ Muhammad Isa Gora aged 35years interviewed at his home on 22/3/2016.

Having completed the work (sowing the new seedling and after sometimes transplanting it), we were given our dues accurately. This variety has ensured a positive result as higher quality in the processing and sacking was achieved. In a nutshell, from the inception of the new government of the federation, it came out with new policy of de-emphasizing importation of some food items, particularly Rice.

Though, the policy is in place but not much was received as assistance from either the federal government or Zamfara state government to empower its teeming farmers. Despite this, farmers in the study areas have produced adequate food in both dry and rainy season farming, in 2016, as admitted by a farmer.

From the above we can deduce that farmers in Bakolori Irrigation Project have, through this scheme generated a lot of money there by improving their economic status. The table below illustrates how Bakolori irrigation project serves as a means of employment generation to its farmers

Table 4.1.16 Does Bakolori Irrigation Project (B.I.P.) serves as a self-employment to you?

Town	Frequency	
	No	Yes
Bakura	1	19
Birnin Tudu	0	20
Gidan Kano	12	8
Gora	1	19
Jabe	0	10
Mafara	2	18
Maradun	0	20
Matusgi	0	20
Rini	1	19
Sabon Gari	0	10
Ware	0	20
Total	17	183
	8.5%	91.5%

Source Field Data (2016)

The table 4.1.16 above show that only 17 farmers equivalent to 8.5% out of the total number of sample population opined that Bakolori irrigation project does not serve as a self-employment

scheme to them. Some were of view that they do not fully engage in it, because they have some businesses that could sustain them. Some said, they have less or no experience at all in farming activities and that they are afraid of investing their money on the business, due to the likely problems of Quelea birds.

The second segment of the table above shows that about 183 farmers equivalent to 91.5% of the sample population which took the largest number of the respondents of the questionnaire, responded yes, that the Bakolori Irrigation Project is a self-employment scheme to them. Considering the number, one can deduce without doubt that, people engage, in this activities, are optimistic that B.I.P serves as self-employment scheme to them.

4.5.2 Job opportunities

Under this we are going to examine, how Bakolori irrigation project offers Job opportunities to the following categories of people.

- ✚ Laborers
- ✚ Middle men
- ✚ Revenue collectors
- ✚ Camel riders
- ✚ Truck, canter and vehicles drivers and
- ✚ Yan *Bubbugau*

Laborer/Laborers

According to oxford English advanced learners' dictionary, a laborer is somebody who works at a job that requires physical strength and stamina. The laborers work for their survival as well as to solve some minor needs. When the land preparation starts during dry season they usually engage in the activity.

Chapter Five: Data analysis and Interpretation on Negative Impact of the Bakolori Irrigation Project.

Though, in the previous chapter we have given a gist on the positive impacts, but we will now emphasize much on the problems faced by the farmers of Bakolori Irrigation Project during the process of sowing seeds, up to the harvesting period. Recommendations and Summary would also be highlighted.

According to oxford English dictionary, problem(s) is a difficult situation as well as a failure or flaw that somebody may come across in a system or organization.

With the above definition, we would briefly look at the shortcomings that many farmers of the above scheme encountered in the process of farming varieties of seedlings as a result of excess water, birds, air, Rodents, insects disaster or human action (blockage of flow of water) etc.

The table below illustrates some respondents (farmers) barring their minds to the effect, that they have never caused any form of damage to the water distribution equipment of the Bakolori Irrigation scheme.

Table: 5.1.1 is there any problems posed by farmers to the Bakolori Irrigation Project Authority with regards to water distribution?

Town	Frequency	
	No	Yes
Bakura	17	3
BirninTudu	13	7
Gidan Kano	18	2
Gora	13	7
Jabe	10	0
Mafara	10	10
Maradun	14	6
Matusgi	19	1
Rini	15	5
SabonGari	10	0
Ware	18	2
Total	157	43
	78.5%	21.5%

Source Field Data (2016)

The table: 5.1.2 above, shows that in the first segment the problem posed by farmers to the Bakolori Irrigation Project Authority concerning water distribution, 'No', responses, has 157 farmers equivalent to 78.5% out of the total number of the sampled population which conveyed the highest/largest number. The farmers of this category had never created any problem that may cause any damage to the facilities or structure of the Bakolori Irrigation Project. No any riot has ever taken place. They were always impressed with the way officials and field workers were running the affairs of the Bakolori Irrigation Project in their sites.

However, the other segment on the table shows 43 farmers, equivalent to 21.5%, out of the total number of the sampled population opined that there were some problems, as the officials do not care much as when to release water. They do not make proper supervision and that they do not maintain and repair the broken canals before the commencement of the dry season activity. They do not checkmate illegal distortion of stream flow which causes damage to farm products, there-by igniting farmers' demonstration.

Again, if the activity did not take place at the appropriate time and the months earmarked elapsed, the flow of the stream would cease and the product may not produce yields. Likewise, if the rainy season stretches to the times when the products are being grown, then it will cause them damage as they do not require much water.

5.1 Water Disaster

There is no doubt, out of entire sampled population; very small number may come across this problem, during the season, starting from land preparation to the time of harvest.

One of the major problems faced by farmers of the Bakolori Irrigation Project (scheme) is flood.

According to Oxford English Dictionary, Flood is a very large amount of water that has over flowed from source, such as a river or a broken pipe onto a previously dry area.

Floods have occurred in many towns, cities, and countries of the world resulting in loss of lives and properties running into trillions of Naira. Farmers of Bakolori Irrigation Project have been having similar experience of flood during the dry season, due to some factors which in most cases affect their areas (sites).

Water is the bedrock of living and good production as well as the basis of this Bakolori Irrigation Project. When applied appropriately, it could result in massive production that will boost the standard of these concerned. This, on the other hand, will enhance the economy of the state and the nation in general.

The table below shows how farmers of the Bakolori Irrigation Project encountered the problem of flood in their areas (sites)

Table: 5.1.2 Have you ever experienced flood in your farm?

Town	Frequency	
	No	Yes
Bakura	4	16
BirninTudu	7	13
Gidan Kano	14	6
Gora	8	12
Jabe	5	5
Mafara	14	6
Maradun	9	11
Matusgi	2	18
Rini	5	15
SabonGari	4	6
Ware	12	8
Total	84	116
	42.0%	58.0%

Source Field Data (2016)

The table above shows the first segment of those who had not experienced flood. About 84 farmers responded and which is equivalent to 42.0% of the sampled population. They considered it as a destiny and that they were lucky that their farmlands were located in an upper stream of water.

Similarly, the farmers have not destroyed the canals or distorted it with sandy bags which would cause flood in the area.

However, in the second segment, the table shows that 116 farmers responded. This means that 58% of the entire sampled population of the research study was able to attribute flood to destroying canals by some farmers and blocking them with bags of sands.

One of the victims was reported to have said “I have lost over 60% of 25 hectares planted at Rini and (in take E) left Area due to flood in the 2008.¹⁵⁰

Most of the victims explained that the level/gravity of the flood was worst. Some lost half of what they planted. To others, it reached up to 90% from the year 2014 to 2016 respectively.

Table: 5.1.3 how often have you faced mosquito challenges which resulted in your visiting doctor in the year?

Town	Frequency		
	More than twice a year	Once a year	Twice a year
Bakura	8	8	4
BirninTudu	15	1	4
Gidan Kano	4	13	3
Gora	14	6	0
Jabe	5	1	4
Mafara	15	2	3
Maradun	17	1	2
Matusgi	14	0	6
Rini	16	2	2
SabonGari	5	2	3
Ware	18	1	1
Total	131	37	32
	65.5%	18.5%	16.0%

Source Field Data (2016)

The table: 5.1.3 above shows, about 131 farmer's equivalents to 65.5% out of the total sampled population, opined that mosquito challenges have made them to undertake a visit a Doctor more than

¹⁵⁰Alhaji Yahaya Abubakar (Project Manager) aged 60years interviewed at his residence on 22/06/2016.

twice in a year as a result of mosquito bites. This shows that they are in dilemma needing serious attention by health personnel in their localities.

The second segment of the table above shows that 37 farmers equivalent to 18.5% out of the total sampled population believed that mosquito challenges made them to be visiting hospital once in a year. This is the trend among most citizens of Zamfara state particularly autochthones of Talata Mafara local government, and other parts of the study area even before the conceptualization of Bakolori Irrigation Project. The last segment of this table shows that about 32 farmers, equivalent to 16.0% out of the total number of the sampled population opined that mosquito challenges resulted in going to hospital twice in a year. These are the middle people with the least percentage.

From the above we may deduce that urgent assistance is highly needed by the localities emasculated by the Bakolori Irrigation Project. This; will enable to recover so as to be strengthened to partake in this Irrigation system of farming actively.

Table 5.1.4Has mosquito challenge resulted in hospitalizing you or your family?

Town	Frequency	
	No	Yes
Bakura	3	17
BirninTudu	10	10
Gidan Kano	8	12
Gora	2	18
Jabe	2	8
Mafara	6	14
Maradun	2	18
Matusgi	10	10
Rini	5	15
SabonGari	1	9
Ware	2	18
Total	51	149
	25.5%	74.5%

Source Field Data (2016)

The table: 5.1.4 above shows that 51 farmers equivalent to 25.5% out of the total number of the sampled population considered mosquito challenges not harmful enough to warrant their hospitalization or their families. They were only given some drugs and injections, and went back home to continue taking drugs for easy recovery.

The second segment of the table shows that about 149 farmers equivalent to 74.5% of the total sampled population opined that mosquito challenges have resulted in hospitalizing them and or even their children/family. This shows that $\frac{3}{4}$ of the respondents are victims of this challenges. There is the urgent, need for team of health personnel in the areas of study to ease the hardship of these localities (farmers).

The table below illustrates the interaction between the Muslim autochthones of the study areas and non-Muslim.

Table: 5.1.5 Do you have a non-Muslim neighbor at your site (farm)

Town	Frequency	
	No	Yes
Bakura	20	0
BirninTudu	17	3
Gidan Kano	20	0
Gora	20	0
Jabe	10	0
Mafara	16	4
Maradun	20	0
Matusgi	20	0
Rini	16	4
SabonGari	10	0
Ware	20	0
Total	189	11
	94.5%	5.5%

Source Field Data (2016)

The table: 5.1.5 above shows that about 189 farmers equivalent to 94.5% out of the total number of the sampled population have ‘no, non-Muslim as neighbors in their farmlands (sites). They are all

Muslims who testify that there is only one God deserving of worship and Prophet Muhammad (S.A.W) is His messenger.

In the other segment of the table, 11 farmers which are equal to 5.5% out of the total number of the sampled population, have Non-Muslim neighbors partaking in this Irrigation system of farming.

This shows that there is right to live in the study areas. In as much as one can acquire farmland by hiring, or purchasing, one can make positive impact in the activity (Irrigation system of farming).

Table: 5.1.6 Have you ever had a misunderstanding with your non-Muslim neighbor while watering your farm?

Town	Frequency	
	No	Yes
Bakura	20	0
BirninTudu	20	0
Gidan Kano	20	0
Gora	19	1
Jabe	10	0
Mafara	20	0
Maradun	20	0
Matusgi	20	0
Rini	19	1
SabonGari	10	0
Ware	20	0
Total	198	2
	99.0%	1.0%

Source Field Data (2016)

The table: 5.1.6 above shows that about 198 farmers/respondents equivalent to 99.0% out of total number of the sampled population averred that they have never had a quarrel/misunderstanding between Muslims autochthones and non-Muslim in the areas of study in watering their farmland (site). This shows that if people can live together harmoniously irrespective of religious differences, then the desired progress can be recorded.

The second segment of the table shows that only 2 farmers that are equal to 1.0% out of total number of the sampled population had conflicts with non-Muslim neighbors in their sites due to the provocative act of preventing them from watering their farmlands.

From the above, we may deduce that, 1.0% ‘Yes’ response, is an insignificant number, but maintaining peace in the society is compulsory upon every Muslim as enshrined by the Islamic law.

Table: 5.1.7 Have you noticed any negative social behavior left by Impresit Bakolori (Nigeria) Limited?

Town	Frequency	
	No	Yes
Bakura	20	0
BirninTudu	10	10
Gidan Kano	20	0
Gora	16	4
Jabe	9	1
Mafara	12	8
Maradun	18	2
Matusgi	18	2
Rini	20	0
SabonGari	10	0
Ware	18	2
Total	171 85.5%	29 14.5%

Source Field Data (2016)

The table: 5.1.7 above shows that about 171 respondents equivalent to 85.5% out of the total number of the sampled population concluded that they have not noticed any negative social behavior bequeathed by Italians who had worked to actualize the Bakolori Irrigation Project.

However, the second segment of the table above, shows that about 29 respondents equivalent to 14.5% out of the total number of the sampled population believed that the Italians had left some negative social impacts.

One of the respondents was quoted as saying: some of our youths who worked under the Italians (during construction of BIP scheme) learnt taking alcohol and continued after they left. This shows that Italians left some alcoholic drinks in some bottles, which influenced our youths to taste and from there they took on some bottles themselves. In addition to that, Italians earmarked a specific area that was the eastern part of the Birnin Tudu town where they had established swimming pools, social club, tennis courts, squash, volley ball fields etc.

Undoubtedly they were exposed to such issues mentioned above. Let me just take social club out of many aspects. In this place, people usually gather at night, where music and dancing play out. Everybody is free to do whatever he wants. Moving with girls half nakedly, taking alcohol freely and tobacco smoking were common sight. Our youth and other categories of people trooped out in large number to witness that. This led to our youth emulating them, there-by jeopardizing their lives.

5.2 Women Request Divorce from Their Husbands

There are times in a one's life when it will become difficult to continue with cordial relationship with one's wife. It is in fact a human nature that in spite of all the achievements and scientific progress, human frailties are bound to become apparent. Satan being an open enemy of man comes to play his role at all times and even at the height of glory of human civilization. At times, good preaching and wise counsel are not accepted by some people. It is in such times when marriage becomes impossible to work. It is in this circumstance that divorce is permitted in *Shari'ah*.

According to Orire (2007), Divorce (Talaq), means the untying of the marriage bond and the contract between married couples.¹⁵¹ The power of Talaq is vested only in the husband. Although this power is legal, it is in reality abhorred. Doi, (1984), defines Talaq literally as setting an animal free.¹⁵² But

¹⁵¹Orire, A. (2007), *Shari'ah: A Misunderstood legal system*, Printing by Sankore Educational Publishers Limited, Samaru Road Zaria. P.48

¹⁵²Doi, A. (1984), *Shari'ah the Islamic Law*, Alyassar Publishers, Kurmi Market, Kano-Nigeria. P. 169

adds that technically in Shari'ah, it denotes a legal method whereby a marriage is brought to an end. However, the Shari'ah frowns at it in the words of the Noble Prophet Muhammad (S.A.W).

Marry and do not divorce, for Allah does not like men and
women whose only aim is the satisfaction of sexual lust.¹⁵³

The aims of Shari'ah is to establish peaceful and healthy family through marriage, but if for some reasons this objective fails, there is no need to linger on under false hopes like what obtains in other religions where divorce is not permitted at all. Islam therefore, encourages reconciliation between spouses rather than severe or total cutting of their relations.

However, it has taken another dimension in the area of study, when the time of harvest is approaching, some married women in some towns and villages do request divorce from their husbands' such towns include: Rini and *Birnin Tudu* under Bakura local government, as well as Ware Village, *Yardala* and Hura all in Talata Mafara local government area.

According to an eye witness "I have observed for about three to four consecutive years that a woman witnessing this activity (*Bubbugau*), got married when the activity ceased. In the subsequent year, she requested for another divorce and engaged in *Bubbugau* activity, later she went on to marry another person.¹⁵⁴

Malam Abubakar Gora termed this illicit act as ingratitude to Allah by them (women), who are found of getting involved in this actually every year, instead of staying in their marital houses conducting a petty trade, which is far better and rewarding than going out for *Bubbugau* activity. Also, their number has increased(double) compared with last year.¹⁵⁵

One of the eye-catching episodes which happened in Talata Mafara for the past twenty years was that a woman called Ayyu living at Gandu area in Talata Mafara town sued her husband seeking for a divorce. After sometimes people came to know that she had requested the divorce in order to partake

¹⁵³Sahih Muslim, Hadith No. 1324, p. 342

¹⁵⁴Isma'il Ashura , aged , (44)years at his residence 20/12/2016

¹⁵⁵Malam Abubakar Gora, (55)years interviewed at his residence 2/2/2017

in Bubbugau activity in the cultivated area of (B.I.P) scheme. This was because of her thought that she might benefit with something that would solve her problems in life. Unfortunately she delivered a baby child in the farmland during Bubbugau activity. Said by the respondents.¹⁵⁶

Also, Aminu Maishaho opined that the women that engaged in the activity, might get money and product/grains in the process but will remain of no benefit and unblessed, because of the nasty face attached to Bubbugau activity. Whatever they might acquire, will diminish in prestige.¹⁵⁷

5.2.1 Implications of Requesting for Divorce

In their desperation/quest to acquire means of livelihood, some ladies and women got impregnated in Bubbugau activity, which resulted in the ruining of their lives and future wellbeing, and consequently brought shame into their families.

It is narrated on the authority of Thauban, he said: Allah's Apostle "May Allah's blessings and peace be upon him" said: "Any woman who asks her husband to divorce her when there is no necessity (nor harm to cause her to do so) the smell of the garden becomes forbidden to her"¹⁵⁸

It is clear from the above hadith that, Muslim women are being seriously warned against demanding for divorce from their husbands without legitimate reason.

Also, Islam draws the attention of the women to stay in their marital homes, as this, is worship to their creator so as to reap benefits of marriage. Allah says in the Glorious Qur'an:

And stay quietly in your houses.....¹⁵⁹

Meaning stay you in your homes and abstain from going out unless you are driven by urgent needs, among which is the offering of prayers in mosque, as long as the conditions required are fulfilled: as the messenger of Allah (P.B.U.H) said: Do not prevent the female servants of Allah from the

¹⁵⁶Danjummai Baushi, aged (35)years and Suleman aged (36) at their residence on 2/3/2017

¹⁵⁷Aminu MaishahoTalata Mafara aged (45)years at his residence on 5/2/2017

¹⁵⁸Suleiman Ibn Al-Ash'ath As-Sijistani, (2008), Sunan Abu Dawud, Darul-Alkutubul Al-Ilmiyah, Lebanon, Volume 3, 1st edition, p.13. see also in Tirmidhi Hadith no. 1187 vol. 2 p.176

¹⁵⁹Qur'an, 33:33

mosques, but have them go out without being scented. In another narration, "...even though their homes are better for them".¹⁶⁰ Al-Bazar and Abu-Dawud reported that the messenger of Allah (P.B.U.H) said: the woman's offering of her prayer in her sleeping room is better than her praying in her home (outside her sleeping room).

It also reads:

And do not expose yourselves like those of the times of ignorance¹⁶¹...

According to Mujahid" Women used to go out walking in front of men, and this was a typical example of the times of ignorance".¹⁶² Qatadah said "Allah the Almighty forbids women going out from their homes walking in a shameless, coquettish and enticing manner". Muqatil ibn Hayan said "A woman is counted to be indulged in shameless display of her beauty when she puts her veil on her head without tying it properly, the matter that would make her necklaces, earrings and neck be to others apparent".¹⁶³ In another narration by Anas bn Malik (R.A), some women went to the prophet (S.A.W) and said: O messenger of Allah male (Sahabas) had superseded us (in many things) and in *Jihad* (fighting in the cause of Allah), do we have anything to meet them (in getting reward of those who fought in Allah's cause). He answered: who so ever among you stay in their houses (in worshipping Allah and obeying their husbands), no doubt she would meet the reward of those who fought in Allah's cause".¹⁶⁴

¹⁶⁰ Ibn Kathir, *Tafsir al-Qur'an al-Azeem*, (Translated by Muhammad Anis Gad Khalil), (2007 C.E/1428A.H), Darul-Al-Manarah, al-Mansurah Cairo Egypt, , 1st edition, Volume 3, p.1731.

¹⁶¹ Qur'an, 33:33

¹⁶² Ibn Kathir, Op. cit, Volume 3, p.1731.

¹⁶³ *Ibid.*, p.1731

¹⁶⁴ *Ibid.*, p.1731

The Prophet (S.A.W) was reported to have said: Unite in marriage tie, your numbers will increase. I will boast justly on seeing your numbers on the Resurrection Day in comparison with the followers of others.¹⁶⁵

Women in the study area were strongly advised to uphold the virtues of marriage as the most essential path, than going out to participate in Bubbugau activity. However, even if it becomes necessary to go out in seeking means of livelihood, they should not expose their beauties and submit themselves to those undesirable elements as substitute in gaining small amount of money that would cause them to ruin their lives.

5.3 Displacement of Settlement

The eight thousand (8,000) hectares of Bakolori Irrigation Project reservoir displaced 15 villages living within approximately 24 kilometers radius of the Dam. The mode of resettlement was such that they could be rightly described as people disinherited of their land. The 15 villages were resettled in new Maradun, Gidan Kano and Kuka Mairaffu, while the old Maradun, Birnin Kaya, Gawa Hudu and Bakolori village were merged together into new Maradun settlement, just only five months before, the water reservoir over flooded the old villages. The initial plan was to give the people enough money which could enable them put up new houses to replace their houses in old Maradun.¹⁶⁶ However, when it was time for payment of compensation the people of the area were each given a plot and flat of land, ₦1,300.00, some bundle of Zinc, three packets of nails and wood *Kyame* (strong palm tree).

The table illustrates the items/materials and money given to the victims for their new houses in new Maradun.

¹⁶⁵ Imam Ghazzali, (2001), *Ihya Ulumiddeen*, (Translated by Al-Haj Maulana Fazul-Karim), Alnabar Publishers, Cairo, Egypt, Vol.2 p.17

¹⁶⁶ Sokoto Rima River Basin development Authority Bulletin (1982), p. 16

No. of Room	Kyame post	Zinc sheet pieces	Nail in kilo	Construction/labour
4 bedrooms	450	166	62	₦1,580,00
3 bedrooms	300	132	41	₦1,420,00
2 bedrooms	240	123	37	₦1,300, 00

Other indigenes of Bakolori Dam sites were resettled in Gidan Kano and Kuka Mairaffu along the Sokoto-Gusau highway.

The indigenes of Makera and Tumfafiya in Talata Mafara local government and Dosara and Gwargwabe in Maradun local government were not resettled as they were dislocated temporarily while their land was being leveled. They were later rehabilitated.¹⁶⁷

By April, 1983 about 17,980 farmers from different villages such as Yar Kofoji, Rini, Birnin Tudu etc. in Talata Mafara local government Area were resettled on their previous land. Each person was given 0.32 hectares out of about 13,000 hectares made available for farming.¹⁶⁸

The system used gave room for so many scandals, because instead of building houses for the displaced, the cash were paid to meet the construction expenses in addition to the building materials. This made the officials involved in the exercise engaged in an irregularity to the detriment of the affected people. Even those that were paid part of what they were supposed to be given, the money was misused by many of them. This made them unable to construct houses of their own.

However, the Rima Basin development authority blamed them, for insisting on cash payment, which gave room to this mess. This was corroborated by the SRRBDA's special information Brochure.

... all the major decisions culminating in the final pattern of the Resettlement including the selection of the site as well as the idea of self- employed labor for the construction were made by the displaced people and only supervised by Sokoto Rima River Basin Development Authority officials.¹⁶⁹

¹⁶⁷ Bakolori Irrigation Project visitors Brochure 1982 p.30

¹⁶⁸ *Ibid.*, P. 31

¹⁶⁹ Special information Brochure on SRRBDA Vol.1, 1985 p.20

Summary

The work is divided into five chapters. Chapter one is an introductory part of the work which gives a clear picture of the methodologies used in undertaking the research, and its objectives. It also serves as its background in explaining the theme of the work. The introductory chapter also recognizes and appreciates the previous contributions in tracing the relevant areas of divergent differences and similarities. It therefore suggests other areas on which less or no attention was paid to the basis upon which the current research work begins.

Chapter two examines the historical backgrounds of Bakura, Maradun and Talata Mafara local government areas, right from their geographical locations, socio political organizations, and establishment of the local governments. It also elaborates on the historical origin of the people of the study areas. The chapter also discusses the socio-cultural set up of the three local government areas. It also highlights the economic engagement, as well as the religion of people of the study area.

Chapter three, deals with the concept of Irrigation in Islam. The chapter tries to trace and examine some definitions of irrigation given by various writers. The agricultural policies of the Prophet and his immediate companions were also explained. The chapter expounds irrigation system of farming during the golden age of Islam as well as the construction of the Bakolori irrigation Project.

Chapter four presents analysis of all the data, collated from the respondents' questionnaires from the sampled farmers in three local government areas in Zamfara state, as well as an assessment of the positive impacts of Bakolori Irrigation project. This notwithstanding comprises the water distribution, Zakah institution as well as Zakah which is watered by the sky or dry systems. Also the research expounds gift (Hibah) by different scholars/writers. More so, economic impact was also discussed. In this way, boosting the economic status of the farmers was explored. The chapter also analyses the job opportunities created by the Bakolori irrigation project to different people such as farmers, as well as

the ones. Also livestock benefits from pasture, as well as fishing in the Bakolori Irrigation Project (B.I.P), was also looked at.

Chapter five deals with the last part of the research that is the negative impact of Bakolori Irrigation project, which includes: flood, mosquito challenges and peaceful co-existence during watering.

Finally the chapter also expounds the negative social behaviors left by the Italians, the Quelea problems, some women requesting divorce from their husbands, Rodents' problems, and displacement of settlements as well as proliferation of churches within Mafara metropolis.

Summary, recommendations and conclusion were also discussed.

Conclusion

In conclusion, economic indices have shown that agriculture contributes 40% of the Gross Domestic Product (GDP) and employs about 70% of the working population in Nigeria (C/A, 2012). It is widely believed that agriculture is the largest economic activity in rural areas where almost 50% of the population lives.

However, these agricultural successes are due to the influence of irrigation activities in rural areas. Irrigation has no doubt contributed positively to farmers of Bakura, Maradun and Talata Mafara Local Government Areas by the influence of Bakolori Irrigation system of farming. In addition, it promotes the socio-economic lives of the people by creating job opportunities and provision of food to large numbers of residents in Zamfara state.

However, inspite of the relevance of irrigation farming in catering for the needs of large rural population and ensuring growth of the nation's economy, a lot needs to be done to neutralize the challenges faced by the sector. The construction of earth dams for irrigation activities has been neglected by the government, lack of maintenance and expansion of Bakolori water project to meet the large demands of farmers, lack of machineries, inadequate materials (sprinklers, herbicides,

insecticides et), poor monetary support, lack of trained personnel, insecurity etc. have affected irrigation activities in the study area.

To achieve greater success and promote economic growth by creating employment to the teeming unemployed graduates, reducing redundancy among youths and curbing high rate of crimes, the government should make irrigation farming its priority in order to align with the 2020 vision in world food population target and a means to make Zamfara state an agricultural haven.

Recommendations

- The federal government of Nigeria under the supervision of the Federal Ministry of Water Resources should make proper and adequate siltation (of canals and reservoirs) of the Bakolori Irrigation Project Dam, in order to expand its thousands of hectares through adequate water supply.
- The Federal Ministry of Agriculture should also extend farmlands by using the upper land (sprinkler) which has been in use over a decade, to make them in lower stream. This will make other lands users to meet the targets in feeding the population (nation).
- There is the need to shift from local farming to the new modern farming techniques. This could ensure by most developed nations by meeting the target needs of their countries in term of local consumption and exporting food and cash crops to other nations.
- It is recommended that training and re-training of the extension/field workers for proper implementation of new techniques should be accorded priority. This will enable them impart and assist farmers to improve in the modern farming methods.
- There is also the need for laws to guard against vandalizing of the equipment/properties of the Bakolori Irrigation project.

- It is recommended that in the course of sensitizing the BIP field workers, seminars, conferences, and workshops coupled with meaningful contributions of government and non-governmental organization could be very useful.
- It is also recommended that the success of Bakolori Irrigation Project and farmers of the study Areas is a collective responsibility of government, elites, traditional rulers, non-governmental organizations, and the general public.
- Mobilization and sensitization activities need to be put in place to enable farmers' access adequate information and knowledge on new techniques to enable them achieve maximum yields in their production.
- Government should ensure adequate mobilization, sensitization as well as involve youths of the study areas in the B.I.P scheme.
- There is need for non-governmental organizations to invest in Irrigation system of farming to reduce tension, redundancy and to provide job opportunities to the less privileged.
- There is need to expand the B.I.P farmlands, thousands of farmers were either not satisfied with their farmlands or have no farmlands to cultivate what would make them to sustain their families.
- The federal and state governments in collaboration with banks should provide free interest loans to empower the farmers of Bakolori Irrigation Project.
- The Bakolori Irrigation Project should design an efficient cropping system to ensure double or triple cropping in a year and to re-establish Agricultural Extension services Co-operatives.
- The federal government/Bakolori Irrigation Project officials should provide enough farming implements such as tractors, excavators for clearing of the lands, as well as provide enough fertilizers, and pesticides and insecticides.

- There is need to provide adequate and dedicated qualified personnel that would guide the farmers in all their farming activities.
- Also farmers should be made to know the implication of distorting the flow of water stream in their areas, as well as vandalizing properties of the Bakolori Irrigation Project as; this is against their religion and detrimental to the development of the entire country.
- Finally there is need for the reliable, pious as well as worthy trusted Muslim scholars to preach to the farmers for them to give out Allah's right (Zakah) promptly and appropriately and to assist their brothers, the less privileged and give some parts for the progress of Islam.

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List of Informants

- 1-Alhaji Yahaya Abubakar (PM) aged 60years interviewed at his residence on 22/06/2016.
- 2-Alhaji Bello Magaji Rini aged 42years interviewd at his residence on 06/03/2016
- 3-Alhaji Garba mai Abinsha, district head of Birnin Tudu aged 60years interviewed at his residence on 03-03-2016
- 4-Alhaji Haruna Abdullahi Rini aged 50years interviewed at his home on 6/3/2016
- 5-Malam Aliyu Isah Ware and Dan Ige Dan Dogari Jabe aged 40years and 56years interviewed at their residence.
- 6-Alhaji Haruna Sabon Gari, aged 50years at his residence on 06/03/2016
- 7-Alhaji Yusuf Farnana aged 70years and Alhaji Hussaini Sarkin Noma Matusgi aged 43years interviewed at his home home 12/3/2016
- 8-Alhaji Dan Shatu ware, aged 45ayears interviewed at his home on 5/5/2016
- 9-Ibrahim Sarkin Gardi and Alhaji Jariri aged 45 and 60years at home on 02/03/2016
- 10-Malam Abdullahi M.B Yunusa Gora aged 48years at his residence on 22/3/2016.
- 11-Alhaji Yusuf Madaha and Alhaji Garba Tela aged 50 and 60 years interviewed at their residence on 11/3/2016 and 3/3/2016 respectively.
- 12-Alhaji Bala Qola^(ES) Mafara, aged 55 years interviewed at his home on 10/10/2016.
- 13-Sada Yusuf Birnin Tudu and Isa Sanusi Gora aged 40 and 42years interviewed at their residence on 06/03/2016.
- 14-Muhd Lawal Dan Hajiya and Abubakar Dogo Maitako aged 50 and 70years interviewed at their homes on 05/06/2016 and 12/05/2016.
- 15-Muhammad Isa Gora aged 35years interviewed at his home on 22/3/2016
- 16- Isma'il Alhaji Ashura aged 43 years interviewed at home on 12/12/2016

APPENDIX ONE
QUESTIONNAIRE

Dear respondent,

I am a postgraduate student in the Department of Islamic studies, Usmanu Danfodiyo University, Sokoto.

I am currently undertaking a research project entitled **Bakolori Irrigation Project and Its Social Impact on the Muslims of Bakura, Maradun and Talata Mafara Local Government Areas.**

Please read the questions over-leaf carefully and fill the spaces provided. Your responses will be treated with utmost confidentiality and that the information you provide will be used strictly for the research purpose only.

Thank you

Mustapha Muhammad Alkali

(Adm No. 10211103012)

SECTION A: PERSONAL DATA

Instructions: -Please tick all that apply

- i. Age: (a) 25-30 (b) 31-40 (c) 41-50 (d) 51-60 (e) 60 and above ()
- ii. Gender:- Male [] Female []
- iii. Marital Status: (a) Married [] (b) Single [] (c) Divorce []
(d) Widowed [] (e) Separated []
- iv. Educational Qualification: (a) Primary Education [] (b) Secondary Education [] (c)
Tertiary Education [] (d) Non Formal [] (e) Others Specify
.....
- v. Level of Islamic Education: (a) Lower Level [] (b) High Level [] (c) Advanced Level []
- vi. Local Government of Origin
- vii. Occupation (a) Farming [] (b) Trading and Farming [] (c) Farming and Civil service []
(d) Farming and others []

SECTION B. KEY CONCEPTS

WATER MANAGEMENT

- 1. What is the water rate charged per season per hectare? (~~N~~)
- 2. Is it affordable to the farmers? Yes [] No []
- 3. If in 2 above is yes, how affordable?
(a) Very affordable [] (b) Affordable [] (c) Somehow affordable []
- 4. Do you face any problems with money collectors Yes [] No []
- 5. If yes specify the problem(s).....
.....
.....

6. Do you face any problem (s) with water distribution on your site (farm)?

Yes [] No []

7. If yes, state the problem (s)

.....
.....
.....

8. Is there any problem(s) posed by the farmers to the Bakolori Irrigation Project Authority
with regards to water distribution? Yes [] No []

9. If yes, specify

.....
.....
.....

SECTION C:

**BENEFITS OF BAKOLORI IRRIGATION PROJECT (BIP) TO THE
HOST COMMUNITY.**

10. Do you pay Zakah of your farm produce on time? Yes [] No []

11. Do you face any problem(s) in distributing it? Yes [] No []

12. Apart from the Zakah, do you give out extra gifts to the relatives, masses, etc.for the
development of Islam? Yes [] No []

13. Have you ever constructed or donated on Islamiyyah School, a classroom, a mosque or any
building for the sake of Allah through irrigation farming? Yes [] No []

14. If yes, how do you manage to construct it?

.....
.....
.....

15. How does Bakolori Irrigation Project (B.I.P) boost your earnings?

.....
.....
.....
.....

16. Does Bakolori irrigation project (B.I.P) serve as self-employment to you? Yes [☐] No [☐]

17. If yes to 16 above, specify how?

.....
.....
.....
.....
.....

18. To what extent does B.I.P motivate youths of your area to partake in irrigation farming?

.....
.....
.....
.....
.....

19. In your own opinion what do you think are the other positive impacts of Bakolori Irrigation project to your community?

.....
.....
.....
.....

20. In your own opinion what are the problems that hinder people to engage in Irrigation farming activities?

.....

.....

.....

.....

21. Beside the above stated problems can you list some short comings of BIP?

.....

.....

.....

.....

.....

22. How often does the B.I.P assist you in order to partake in irrigation in Bakolori Dam?

.....

.....

.....

.....

SECTION D:-

NEGATIVE IMPACT OF BAKOLORI IRRIGATION PROJECT (B.I.P)

23. Have you ever experienced flood in your farm? Yes [] No []

24. If the above is yes, specify the extent of damage done?

.....

.....

.....

.....

.....

25. How often have you faced a mosquito challenges which resulted in your visiting doctor in the year? (a) Once a year [] (b) Twice a year [] (c) More than twice a year []

26. Has it resulted in hospitalizing you or your family? Yes [] No []

27. Do you have a non-Muslim neighbor at your farm? Yes [] No []

28. If the above is yes, have you ever had a misunderstanding while watering your farm? Yes [] No []

29. If yes to what extent

.....

.....

.....

.....

30. To your own understanding/opinion what brings the proliferation of churches in your area?

.....

.....

.....

31. Have you noticed any negative social behavior left by the Impresit Bakolori (Nigeria) Limited? Yes [] No []

32. If the above is yes, specify?

.....

.....

.....

.....

33. Suggest possible ways of solving some of the stated problem (s)

.....

.....

.....

.....

.....

APPENDIX 2

CROSSTABS

```

/TABLES=Town          BY          How_affordable          Problem_with_Money_collectors
Problems_water_distribution Timely_Zak_pay Prob_zak_distr Extra_gift BIP_selfem
Flood Mosq_challenge Mosq_hospital Neighbour Misunderstanding Imp_behaviuor
Water_charges_affordability
Farmers_posed_problems Allah_sake_constr
/FORMAT=AVALUE TABLES
/CELLS=COUNT TOTAL
/COUNT ROUND CELL.

```

Crosstabs

Notes

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Missing Value Handling	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Cases Used	

Syntax	CROSSTABS	
	/TABLES=Town BY How_affordable Problem_with_Money_col lectors Problems_water_distrib ution Timely_Zak_pay Prob_zak_distr Extra_gift BIP_selfem Flood Mosq_challenge Mosq_hospital Neighbour Misundertanding Imp_behaviuor Water_charges_affordab ility Farmers_posed_problems Allah_sake_constr /FORMAT=AVALUE TABLES /CELLS=COUNT TOTAL /COUNT ROUND CELL.	
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The School built by Sarkin Fulanin Ware Alhaji Abubakar Sha Madara



A Mosque built by Alhaji Yusuf Farnana Bakura and Alhaji Atiku



Figure 6. A proud female rice farmer, Hayija Ladi Baladi shows off her rice farm (in the background) to the Honorable Minister of Agriculture at Bakolori, Zamfara State

