

**ASSESSMENT OF THE EFFECT OF 2014 CONTRIBUTORY PENSION SCHEME ON
PENSIONERS' WELFARE IN ABUJA MUNICIPAL AREA COUNCIL, FEDERAL CAPITAL
TERRITORY - ABU JA, NIGERIA (2014 - 2019)**

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Abstract

The Nigerian pension administration have from its inception been bedevilled with irregularities and untimely payment of retirement benefits coupled with poor retiree's welfare. In response to the myriad of problems and in line with its fundamental objective of ensuring the security and welfare of the people, the government took measures aimed at developing a system that would be more sustainable and have the capacity of providing a stable, predictable and adequate source of retirement income for all its participants in 2004 and later amended as the Pension Act of 2014. Despite these efforts, the living condition of pensioners has not improved due to untimely payment of retirement benefits. The study, therefore, examined the effect of 2014 Contributory Pension Scheme on pensioners' welfare in AMAC. Agency theory was used to underpin the work. The study employed the descriptive survey design and data was collected through a structured questionnaire administered to a sample of 50 respondents in AMAC, of which 48 were correctly filled and returned. Simple linear regression analysis was used to test the hypothesis. The results revealed that there is a significant positive relationship between timely payment of retirement benefits and pensioner's welfare in AMAC. Based on the findings, the study recommended that apart from adequate sensitization of retirees to keep them abreast with the modalities of the scheme, they should be encouraged to make additional voluntary contributions into their Retirement Savings Account (RSA),

Key Words: Social Security Scheme, Pensioners, Contributory Pension Scheme, Timely Payment, Welfare.

Introduction

The security and welfare of the people have been one of the Fundamental Objectives and Directive Principles underpinning the policy of the government of Nigeria towards her people which is declared boldly in Chapter II of the Constitution of the Federal Republic of Nigeria, 1999. This duty in governance is universal in nature and scope sponsoring diverse social security initiatives and is widely practised globally. This has led to the evolution of various forms of arrangements that aim to achieve the above objective.

Pensions as a social security maintenance programme for employees are a response both to the growing practice of retirement and to the desire to reward loyal service. Making sure that ageing employees and or retirees have their basic needs met in retirement until death has been a common social value and objective since the beginning of civilization (Merker, 2017). In many parts of the world, advances in technology and rising living standards have succeeded in producing longer life expectancies than experienced before (Segue, 2015). Maintaining a decent standard of living during such a long period without relying on earned income presents a formidable challenge for pensioners. Studies such as that of (Ahmed, et al, 2016; Olatomide, 2015) have shown that retirement benefit may be inadequate for many employees. Unless supplemented by personal savings, many employees are likely to find that their benefits plan cannot deliver sufficient retirement income to ensure a comfortable retirement at the age the employee might expect. Workers in both public and private sector organizations are expected to live a comfortable life devoid of any form of dependency after their successful retirement from active service (Nwachukwu, 2007).

The pension which guarantees an employee certain comfort in his or her inactive years is critical to the sustenance of the life of individual and society (Nkanga, 2005). The function of social security generally, is the provision of food, childcare, housing and medicare/health. When these necessities are not available or are in limited supply it leads to stress at retirement. Thus, making life difficult for retirees, as more energy is exerted in a bid to not only cope with the existent retirement stress but also meeting their welfare needs too. Survival at old age, therefore, becomes worrisome and this has led to the increased dread in life after retirement by many Nigerian employees who are expected to live for at least another 16 years after they retire at 60 years (HAI, 2013).

Nigeria has witnessed various social security schemes by various successive governments in the country which have not been implemented satisfactorily necessitating reforms of all sorts geared towards enhancing the living standards among the elderly in the society. The 1951 Pension Ordinance was the first legislative Act introduced in Nigeria, followed by the establishment of the National Provident Fund (NPF) in 1961 to cater for pension issues in the private sector. In 1979, the Pension Act No. 102 and Armed Forces Pension Act No. 103 were instituted. Subsequently in 1987, the police and government agencies pension scheme were established under Pension Act No. 75 of 1987 (Ahmad, 2006). Similarly, in 1987, the local government staff pension board was established to take care of pension matters among local government employees. The shortcomings of the previous scheme heralded the National Social Insurance Trust Fund (NSITF) in 1993 to address pension and retirement issues in the private sector (Ayegba, James & Odoh, 2013).

The defined pension scheme was characterized by a series of problems ranging from lack of funds to the presence of ineligible pensioners on the pension payroll. To address these problems, the Federal government in 2004 introduced the contributory pension scheme (Umar, et al 2012). The National Assembly in 2014 amended the Act which was signed into law as Pension Act, 2014 by President Jonathan due to the obvious lapses in the Pension Act of 2004 which includes; non-remittance by government, inability of retired employees to access their pension benefits, inability of employees to open and own a retirement savings account, among others. Despite the visible efforts by the government to cater for the welfare of these pensioners', most of them still find it difficult to receive their pension at the end of every month; and this has left the pensioners to live a life of misery and penury (Anazodo, Ezenwile, Chidolue & Umetiti, 2014).

A review of the compliance reports forwarded by Pension Fund Administrators (PFAs) to the Commission during the first quarter of 2015 revealed that issues of non-compliance with investment limits by some PFAs; delay in the payment of retirement benefits; receipt of pension contributions without appropriate schedules; unresolved customer complaints; and non-implementation of disaster recovery plans are still weighing down the scheme (Ogah, 2016). The state of affair is raising questions as to whether the 2014 pension scheme can resolve the age-long problems faced by retiring and already retired employees in Nigeria. It is to this end that this paper seeks to answer the question to what extent has the timely payment of retirement benefits affected pensioners' welfare in Abuja Municipal Area Council, Federal Capital Territory – Abuja, Nigeria.

The objective of the study is to examine the extent at which timely payment on pensioners' benefits affects their welfare in Abuja Municipal Area Council, Federal Capital Territory – Abuja, Nigeria for the period of 2014–2019. The paper hypothesizes no significant relationship between timely payment and pensioners' welfare in Abuja Municipal Area Council, Federal Capital Territory – Abuja, Nigeria.

This study is unique as its specific focus, this is because it is different from other previous research works in the same area which was mainly on the repealed 2004 Contributory Pension Scheme. The period covered in this study spans from 2014 – 2019. The choice of this period was necessitated by numerous problems associated with the 2004 scheme leading to its reform in 2014 by an Act of the legislature. The study, therefore, is limited to the operations of the 2014 Contributory Pension Scheme within the Abuja Municipal Area Council, Federal Capital Territory – Abuja as it affects pensioners of the Local Government Public Service.

Literature Review

Concept of Welfare

Welfare is a multi-dimensional concept. It is generally referred to as the availability of basic minimum resources and presence of conditions required for a reasonably comfortable, healthy and secured living of an individual. Welfare for anybody can be achieved through proper planning and coordination as the welfare of an individual involves his well-being, good health, security and general comfort (Nwogwugwu & Nwawolo, 2019). It is the provision of a minimal level of well-being and social support for citizens and other eligible residents who lack sufficient current means to support their basic needs. Welfare many a time has been used interchangeably with wellbeing and is used to connote access to the basic needs required for long term sustenance of an individual or individuals in every society.

Basic welfare needs are necessities-ongoing, non-discretionary expenses like food, shelter, transportation, health care, and other essentials (Wells, 2019). To him, developing a retirement income plan requires a clear understanding of what your expenses in retirement will be and these expenses should be covered first through consistent sources of income such as social security, and pensions. Pensioners' must face what is essentially the last transition in their lives; a time when careers are accomplished and the rest of their lives is left for themselves. These basic needs are the minimum requirements for a decent standard of living. Government has to ensure that the welfare of pensioners' is constantly adequate. All hope therefore would be lost should the government fail in the discharge of this sensitive duty.

Concept of Contributory Pension Scheme

Contributory pension scheme as a social protection package, approved by the Federal Government of Nigeria by a Pension Reform Act, allows employees and employers to make joint contributions of a worker's salary per month for the payment of pensions to employees towards their retirement era (Nweke, 2015). The contributions are invested in financial instruments and the level of contribution, which may be variable especially where voluntary contributions are allowed and, on the investment, income determines retirement benefits. There is therefore no certainty as to the level of retirement benefits (Gbitse, 2008).

Contributory Pension Scheme was established for payment of retirement benefits of employees whom the scheme applies under the PRA 2014. The scheme being a funded scheme, has accumulated a huge pool of long-term investable fund which is being invested, leading to national economic development. The essence of the 2014 Pension Reform Act is to ensure that employees have improved hope of fruitful and comfortable retirement life and retirees receive their pension benefits as and when due. Contributory pension scheme guarantees consolidated funds to cater adequately for the welfare of pensioners in Nigeria. The question therefore is – with the consolidated pension funds, are pensioners being paid promptly and regularly in the new scheme?

Empirical Review

Uzoh & Anekwe (2018) conducted a research on the contributory pension scheme and the fate of the retired and retiring Nigerian workers. The study sought to examine how Nigerian workers have fared after more than thirteen years of the introduction of the new scheme. The findings indicate that, the scheme is still enjoying low penetration as many public and private organizations are yet to key into it and that the administration of pension funds in Nigeria has been enmeshed in all manner of challenges since the commencement of pension payments to retired workers in Nigeria. This study is criticized because the study was analyzed based on the perception of individuals, newspapers and magazines which not give might room for generalizations of the findings of the study.

Nwagwu (2013) focused on the new contributory pension scheme and prompt payment of pension benefits to pensioners in Nigeria. The objective of this study is to appraise the administration of the new contributory pension scheme in federal universities in South-Eastern Nigeria to determine whether the scheme has ensured prompt and regular payment of pension benefits to pensioners. Agency

theory was adopted as the theoretical framework to examine the contractual relationship that exists between principal and agent. The research design applied was descriptive survey design, which involved the use of primary data source (questionnaire and interview) and qualitative method for documentary evidence. T-test was used in testing the hypothesis. The result revealed that the new pension scheme has ensured prompt and regular payment of pension benefits to pensioners in federal universities in South-Eastern Nigeria. Based on the findings, relevant recommendations were made.

Nwawolo & Nwogwugwu (2019) focused their study on examining contributor's involvement in pension fund investment decision making and retiree's standard of living. The main aim of the study is to examine retiree's access to their pension benefit and how it improves the retiree's living standard. The convergent parallel research design was adopted with the descriptive and inferential statistics (linear regression) employed in the analysis of data. From the findings of the study, it was discovered that contributor's decision making on pension fund investment exerted a positive significant effect on retiree's standard of living. The main weakness of this study was that it focused on just one aspect of the 2014 CPS being access to pension benefit by retirees while ignoring the rest.

Theoretical Framework

The theoretical framework adopted for this study is agency theory. The exponents of the theory are Jensen & Meckling (1976), Brown (1993), Chain & Rosenbloom (1994), Kay (1992) and Wood & Waterman (1994). Agency theory explains the relationship between principals, such as shareholders and agents. An agency relationship arises whenever one or more individuals called principals, hire one or more other individuals called agents, to perform some service and then delegate decision-making authority to the agents to keep custody of the fund and assets and to invest as he considers fit on behalf of the principal. The agency theory is applied to this study and it explained explicitly the relationship between the principal and the agent in a contractual venture. Agency theory provides insights into the contractual relationship between employees participating in the contributory pension scheme (the principal) and agents that is the PFA's. An agency relationship arises whenever one or more other individuals called principals, (in this sense the contributory employees) hire one or more other individuals called agents, (here also the pension fund custodians and pension fund administrators) to perform some service and then delegate decision-making authority to the agents to keep custody of the funds and assets and to invest as he considers fit on behalf of the principal.

The relationship is such that the principal delegate or hire agents to perform a task or do a work of service for consideration of incentive. The amount being deducted is kept and invested by the PFA's (agent) on behalf of the principal (employee participating in the contributory pension scheme) according to the subsisting pension law. The application of the operational guidelines and the regulatory policy instruments issued (from time to time) by the National Pension Commission to the licensed PFA's and PFC's translates to prompt and regular payment of pension benefits to retirees. The application of the theory indicates that the activities of the agent are meant to serve the interest of the principal in terms of prompt and regular payment of pension benefits to retirees in Nigeria with particular reference to pensioners' in Abuja Municipal Area Council, Federal Capital Territory - Abuja, Nigeria which is the hallmark of pension fund administration in Nigeria.

Research Methodology

Research Design

The study employed census method. This is a method of statistical enumeration where all members of the population are studied. The choice of this design hinges on beneficiaries of the 2014 scheme as captured by AMAC. A structured questionnaire was administered to these beneficiaries (the pensioners') through their respective Pension Fund Administrators. The population of the study constitutes the fifty pensioners' in Abuja Municipal Area Council from 2014–2019.

Sample Size and Sampling Technique

The sample size of the study is fifty (50) as the entire population was taken for the study. This is because the study adopted census design. This means that a census was taken for the pensioners as represented in Table 1 below.

Table 1 Distribution of Pensioners' in their respective PFA's

S/N	Retiree's Pension Fund Administrators (PFA's)	Total Number of Retirees in a Pension Fund Administrator (PFA)
1.	Sigma Pension Ltd	20
2.	ARM Pension Managers Ltd	12
3.	Premium Pension Limited	6
4.	Trustfund Pensions Plc	1
5.	Stanbic IBTC Pension Managers Limited	1
6.	First Guarantee	10
	Total	50

Source: AMAC Report, (2019)

The Instrument of Data Collection

The main instrument used for collecting the primary data is the questionnaire. A structured questionnaire was designed and administered to respondents with necessary instructions on how it should be completed. The questionnaire was structured using the 5point Likert scale to elicit the responses from the respondents on how timely payment has affected pensioners' welfare in AMAC.

Validity and Reliability of the Instrument

The researchers solicited the assistance of other research experts (including a PFA and a pensioner) for the content validation of the questionnaire schedule. Through this process, necessary modifications were made to ensure the content validity of the instrument. The reliability of the instrument was carried out using a pilot test. To ensure internal consistency of the questionnaire, a pilot study was conducted among 10 respondents and the Cronbach's Alpha output result from the SPSS was 84% showing that the instrument is reliable to proceed with the analysis.

Table 2 Reliability Statistics

Cronbach's Alpha	N of Items
.838	15

Source: Output from SPSS 20.0

β0= Constant Method of Data Analysis

The inferential statistical tools employed to test the hypothesis is simple linear regression. The choice of this statistical tool is based on its suitability for the data as the preliminary test conducted shows that the data are normally distributed, no sign of heteroscedasticity and no sign of serial autocorrelation. This shows that the data complies with regression assumptions. The simple linear regression can be specified as below as:

$$PW = \beta_0 + \beta_1 TP + \mu$$

Where:

W= Pensioners' welfare

TM= Timely Payment

β_1 = Coefficient

μ = Error Term (Signifying variables not included in the model)

Discussion of the Findings

The hypothesis of the study is stated in a null form as:

Ho¹: There is no significant relationship between timely payment and pensioners' welfare in the Abuja Municipal Area Council.

The variables for the study are Timely Payment and Pensioners' welfare. Regression was used to test the hypothesis at 5% level of probability.

Decision Rule: Accept null hypothesis if the P-value is greater than 5% level of probability and if otherwise, reject the null hypothesis.

Table 3 Model Summary

Model	R	R Square	Adjusted R Square	Std. The Error of the Estimate	Durbin-Watson
1	.747 ^a	.558	.538	1.36346	1.655

a. Predictors: (Constant), Timely Payment

b. Dependent Variable: Pensioners Welfare

Source: Research Survey, (2019)

Table 3 presents the model summary of the analysis. The R² of 0.558 calculated points to the fact that about 55.8 per cent variation in pensioners' welfare is explained by the regressor (timely payment). That is, 56% variation in pensioners' welfare can be explained by changes in the timely payment, while the other 44% variation can be explained by other factors outside this model.

The assumption of no autocorrelation of the error terms is also a requirement of linear regression. Durbin-Watson can be used to test the independence of error terms. The general rule of thumb is that if the Durbin-Watson value is between 1.5 and 2.5, the assumption of independence of the terms is not violated. The Durbin Watson coefficient stood at 1.765 as shown in Table 3 which falls within the benchmark. This indicates the absence of harmful serial correlation. This also fulfils one of the assumptions of linear regression.

Table 4 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.480	1.737		.758	.051
Timely Payment	.235	.080	.367	2.871	.005

a. Dependent Variable: Retirees' Welfare

Source: Research Survey, (2019)

Table 4 above shows the outcome of timely payment on pensioners' welfare. Upon fulfillment of the assumptions of regression analysis, simple linear regression analysis was considered suitable in testing the research hypothesis. From Table 4 the model is presented as follows:

$$PW = 3.480 + 0.235TP + \varepsilon$$

PW = Pensioner Welfare

TP = Timely Payment

ε = Error term (Signifying factors not included in the model)

Ho¹: There is no significant relationship between timely payment of retirement benefits and pensioners' welfare in Abuja Municipal Area Council (AMAC) FCT, Abuja. The coefficient of "Timely Payment" stood at 0.235 which is positive. This implies that an increase in timely payment would lead to an increase in pensioners' welfare in AMAC. However, the significance of this can be judged from the P-value represented as "sig".

The t statistics of "Timely payment" stood at 2.927 with a p-value of 0.005. The p-value is less than 0.05, indicating that the relationship depicted in the model is significant at 95% confidence level. This implies that the study does not have enough statistical evidence to accept the null hypothesis. Based on the above analysis, the study failed to accept the null hypothesis H01, which states that there is no significant relationship between Timely payment and Pensioners' welfare in AMAC in favour of the alternative hypothesis.

The study found that there is a significant relationship between timely payment and pensioner's welfare in AMAC. As depicted in table 4 that timely payment has significant relationship on pensioner's welfare in AMAC. In view of the above, timely payment, therefore, translates to pensioners' empowerment to access their basic needs-welfare. The findings of the study are line with the position of the theoretical framework that explains the relationship between the pension fund administrators and the pensioners as regards timely payment of pensioners' welfare into their retirement savings account. The findings also correlate with the discovery of Kotun, Adeoye & Alaka (2016) which revealed that 2014 contributory pension scheme has a positive impact on retiree's welfare which has a positive impact on the organization efficiency.

Conclusion and Recommendation

The study in line with the theoretical framework and the tests conducted on the data and analyses of results, found that 2014 Contributory Pension Scheme has a significant effect on pensioner's welfare in AMAC during the period covered by the study. The study, therefore, concludes that timely payment has a significant effect on pensioner's welfare in AMAC. This means that prompt and timely payment of retirement benefits to the pensioners by the Pension Fund Administrators will positively enhance the retiree's welfare. The study therefore recommended that the federal government ensure the sustainability of the 2014 contributory pension scheme and also ensure timely release of these funds to the various PFAs who will in turn adequate remit these funds into the RSA of pensioners to ensure the sustainability of the scheme. This can be done by ensuring that adequate attention is being paid to the settlement of the 1year back log in the dispensing of retirement benefits for retirees who are yet to start receiving their retirement benefit owing to this delay. Also, early verification for the calculation of benefits and reconciliation of the retiree's account should be done by the pension operators to ensure that the retiree starts receiving his or her retirement benefit immediately after retirement.

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**EFFECT OF KADAWA IRRIGATION PROJECT ON EMPLOYMENT OPPORTUNITY
AMONG FARMERS IN KURA AND GARUN-MALAM LOCAL GOVERNMENT AREAS
, OFKANO STATE (2000-2015)**

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Abstract

This study examined the effect of Kadawa Irrigation Project on the creation of employment opportunities among beneficiaries in Kura and Garun-Malam Local Government Areas of Kano State from 2000-2015. The study adopted survey research approach, where data was generated from both primary and secondary sources. Primary data were sourced through the administration of questionnaires and conduct of interviews. Secondary data, on the other hand, were derived from reports and official documents. Ten Registered Farmers Associations (RFAs) was selected from 58 registered irrigation farmers in the study area. The RFAs have a population of 2000 members from which a sample of 322 was selected. Data were analyzed using descriptive statistical tools. Regression analysis was employed to test the hypothesis. It was revealed that Kadawa Irrigation project has a significant effect on providing employment opportunities among farmers in Kura and Garun-Malam Local Government Areas of Kano State. It was recommended among other things that, HJRBD should intensify its effort towards increasing the land coverage for irrigation by increasing to 22,000 hectares as was originally designed to cover, this will increase the opportunities for more employment to the youth. More so, credit schemes on agriculture provided by the current administration should be extended to irrigation farmers in the area to establish small, medium, and large processing and agrochemical industries in the area which is hoped to increase employment opportunities and the income levels of irrigation farmers

KeyWords: Kadawa Irrigation Project, Agro-Allied Industries, Irrigation Farming, Rice Processing Industries, Employment Opportunities, River Basin Development Authority.

Introduction

Since the early seventies, demand for agricultural commodities in Nigeria has risen considerably which could not be met by the production system. Worse still, the unprecedented emergence of the oil sector among others brought more neglect in the agricultural sector of the national economy. Consequently therefore, the rise in the prices of agricultural products and high food bills (Sangari, 1996) in Nigeria coupled with the intensity of drought faced in the Sahel Savannah around 1972-1974 necessitated the increase in government expenditure at the federal and state levels to enhance irrigation cultivation during the 1975-1980's Third National Development Plan to provide food security and provide alternative means for agricultural production to narrow down the unfortunate circumstance of food shortage resulting from the effect of drought. In 1975, the Federal Government established the Ministry of Water Resource, and in 1976 eleven (11) River Basin Development Authorities were created by Decree 25 and 37 of 1976. The authorities were charged with the responsibility for the development of irrigation and public water resources, each tagged with a specific irrigation project. Among these irrigation projects were: the Sokoto –Rima River Basin Development Authority; the Hadejia Jama'are River Basin Development Authority; the Chad Basin Development Authority; the Upper Benue River Basin Development Authority; the Lower Benue River Basin Development Authority; and the Cross River Basin Development Authority. Others include the Anambra River Basin Development Authority; the River Niger Basin Development Authority; the Ogun-Osun River Basin Development Authority; the Benin-Owena River Basin Development Authority; and the Niger Delta Basin Development Authority;

(RBDA Decree 87, 1979). The Kano River Project and three other projects including the Hadejia Valley project in Jigawa State, Wudil Pilot Farm in Kano, and Jama'are Valley project in Bauchi were put under the responsibility of Hadejia Jama'are River Basin Development Authority (HJRBDAs).

The creation of the RBDAs was motivated by the desire on the part of the Nigerian Federal Government to facilitate and accelerate the production of food crops and mobilize the rural agricultural population throughout the country toward increased food production and improved living standard of the rural dwellers. Thus, the RBDAs were specifically designed and saddled with the responsibility of first, increase in production of food and other raw materials to meet the country's growing population and expanding industries and to attain self-sufficiency in food production, and the expansion of employment opportunities at the rural levels and the need to develop underground water domestic use (FRN, Gazette, 1976 cited in Akindele, & Adebo, 2004).

To achieve the above objectives the RBDAs were saddled with the power to undertake comprehensive development of both surface and underground water resources for multi-purpose use; provide water from reservoirs and lakes under the control of the Authority for irrigation purposes to farmers and recognized association as well as for urban water supply Authority concerned. It also includes the control of pollution in rivers, lakes, lagoons, and creeks in Authority's area under the nationally laid standards; resettlement of persons affected by the works and schemes specified under special resettlement schemes; development of fishes and improve navigation on the rivers, lakes, reservoirs, lagoons, and creeks in the authority's area; undertake the mechanical clearing and cultivation of land for the production of crops and livestock, etc. and undertake large-scale multiplication of improved seeds, livestock and tree seedlings for distribution to farmers and afforestation schemes. Others are to; process crops, livestock products, and fish produced by farmers in the authority's area in partnership with state agencies and any other person; assist the state and local governments in the implementation of rural development works (construction of small dams, provision of power for rural electrification schemes, the establishment of grazing reserves and training of staff in the Authority's areas (RBDAs, 1979).

The Kano River project (KIP) which comprises 62,000 hectares of irrigable land, is planned to be implemented in two phases. The first centred on the KIP. The project began in 1965 as a pilot project, was one of the three original modern irrigation projects in the country, the others being; the Bakolori Irrigation Project in Zamfara State and the South-Chad Irrigation Project in Borno State. KIP which forms the study area covers an area of 22,000 hectares of irrigable land and the second phase based on the Hadejia Valley and Jama'are projects cover an area of 40,000 hectares of irrigable land (Sangari, 2006).

KIP is phase I of the Kano River Project originally started by the Kano State Government, and it is the largest irrigation project in West Africa. Phase I of the project commenced operation in 1976 after it was formally taken over by the Hadejia-Jama'are River Basin Development Authority (HJRBDAs). It was expected, according to the original design, to be completed by the end of 1982. At its inception, it was estimated with a total capacity of 22,000 hectares of land and it achieved 14,000 hectares with Kura and Garun Malam Local Government Areas as the major parts that were integrated at the earlier stage. However, by 1978 about 4,000 hectares were completed and only 2,000 hectares of these were irrigated. Currently, a total of 15,000 hectares have been developed for irrigation (HJRBDAs, 1985, Sangari, 2006; HJRBDAs, 2015).

Research Problem, Objective and Hypothesis Statement

The condition of most rural areas in Nigeria is appalling. Rural areas have lower standard of living, high poverty rate, high rate of unemployment and lack basic infrastructure such as accessible roads, electricity, potable water source, good health care, schools, etc. due to government neglect either as a result of sheer negligence or dwindling resources in the face of growing demands by the citizenry. The neglect of the rural areas has not only resulted in a mass exodus of rural dwellers to the urban centres, but has made the rural areas less attractive for socio-economic investment.

The main objective of the KIP was to utilize the available water resources in Tiga Dam and modernize the traditional irrigation cultivation system to provide jobs, enhance higher agricultural

productivity, improve socio-economic activities as well as enhance the general living standard of the rural communities. Under these, the HJRBDA undertake some activities such as recruitment of personnel (extension workers), construction of water supply channels (direct and irrigation channels), provision of the water reservoir (largest reservoir at Tiga Dam, one semi largest reservoir located at Yar'kanya and the four medium volumes located at Dorawar-Sallau, Daka-Soye, Kura and Imawa respectively), provision of Siphons (used by farmers to irrigate their plots) and the construction of drainage ditches as well as provision of accommodation for extension workers located close to various farming communities. Others include the introduction of new product strategy such as planting methods, the introduction of new seeds and seedlings; water regulation; control of credits; hiring of agricultural types of machinery such as tractors, combine harvesters, etc; review water charges; and extension services such as organizing film show and other demonstration programs at villages, wards, and local government levels. This is primarily captured on finding better ways of executing the project toward ensuring socio-economic development of the communities creating more opportunities for employment both at agricultural farm production level as well as agro-allied businesses in the study areas.

Despite the efforts by HJRBDA in implementing the KIP, there are still numerous challenges facing the communities which directly affect the general wellbeing of the communities. Among these challenges is lack of access to credit schemes on agriculture provided by the current administration to irrigation farmers in the area to increase the economic base of the irrigation farmers as well as give the farmers opportunities to establish agricultural processing industries both small, medium, and large processing industries and agrochemical industries in the area to increase the employment opportunities in the area. The central question to ask is to what extent has KIP affected the employment opportunities of farmers in Kura and Garun-Malam local government areas? This paper is set to assess the effect of KIP on employment generation among farmers in Kura and Garun-Malam Local Government areas for the period of 2000-2015. The hypothesis postulated states that: Ho: Kadawa irrigation project has no significant effect on the provision of employment opportunities to farmers in Kura and Garun-Malam Local Government Areas.

Literature Review and Theoretical Framework

Irrigation Project

According to Yahaya (2002), Irrigation has been defined as the application of water to the soil to supply moisture essential for plant growth. It is also undertaken to provide insurance against droughts, for cooling the soil and atmosphere. It equally provides a more favourable environment for plant growth. Irrigation washes out or dilutes salts in the soil and reduces the hazards of piping and softening tillage pans. Irrigation will not be necessary if the distribution of rainfall were ideal for the growing of crops. It is clear from the above that, Irrigation is the application of controlled amounts of water to plants at needed intervals which helps grow crops, maintain landscapes, and re-vegetate disturbed soils in dry areas and during periods of inadequate rainfall. Irrigation also has other uses in crop production, including frost protection, suppressing weed growth in grain fields, and preventing soil consolidation. In contrast, agriculture that relies only on direct rainfall is referred to as rain-fed or dryland farming (Chukwuma, & Uju, 2013)

Furthermore, Irrigation is a farming system in which water is artificially supplied to the soil for raising crops. The practice is more common in areas where the total rainfall is found to have been insufficient for plant growth. The circumstance may have resulted from the drought of one kind to another. In this regard, therefore, irrigation is seen as artificial watering of crops. Most of the areas which are identified suitable for irrigation cultivation are in most cases faced with drought which occurred as a result of insufficient supply of moisture either from precipitation or from the soil to meet the moisture content needed for the growth of crops and plants.

The earliest method of irrigation was the impounding of natural floodwater on the flat land bordering rivers. In the same way, rainfall can be impounded by blundering, but the modern methods of irrigation commonly practised in different scales in Nigeria include, first, the *Sprinkler Irrigation* through which water can be supplied by overhead irrigation through a rotating sprinkler head, or a series

of holes in a pipe. Second, *the Tube wells irrigation*: In Nigeria, an increasing area is irrigated with water from a tube well. These are an investment made on the large holdings. This method is only profitable if surplus labour was available and with help of a pump. Third *Underground irrigation*, this is the water supplied by surface irrigation; 20-30% is lost by evaporation. Consequently, such losses are eliminated by an underground system where the water is placed directly in the root zone of a plant, using perforated plastic tubes through which water is pumped under pressure; and the *Trickle or drip irrigation*: This is the method of irrigating higher value crops where water is scarce. The system moves the water in plastic piping through main laterals, sub-laterals, and eventually through a very fine tube to each plant. It releases a continuous drip of water when irrigation is needed (Yahaya, 2002).

In a bid to tackle the effect of drought on agricultural activities many scholars have attempted to develop ideas toward this direction. Major among these ideas are: Undertaking of water control/management project to develop the available water and ensure its proper utilization; Undertaking of proper land use planning to ensure the use of land only for what it is best tested; and adoption of the modern system of farming which involves conservation of available public water (Muhammad, 2010).

Irrigation project gives farmers the ability to improve production, individuals and groups are more likely to be influential, and this no doubt allows one's operation at higher socio-economic status. More material returns in terms of oxen owned by the farmers, dry season farming utilizing motorized pumps and wash bores or tube wells, motor vehicles becoming common means to transport goods to nearby and far-away markets. Also, cash crop earnings are some of the envisaged indicators or boost to farmers' socio-economic status. Irrigation may also enable governments to exercise greater control over farmers cropping decisions through extension services and possibly, make it easier to regulate agricultural taxation. (Yahaya, 2002). To increase employment opportunities there is a need for all year-round cultivation, this could only be ensured through irrigation cultivation.

The Concept of Employment Opportunities

Employment could simply refer to a situation in which people have work (Amupitan, 2011). This definition clearly states that when a person has work doing, he/she is employed, but it fails to specify if the person is being paid for the work or not. Operationally, therefore, employment could be referred to as the act of labour force being temporarily or fully occupied on either wage's basis for self-occupied work. This definition added a new dimension, in that employment could be work based on wages or mere self-interest, either way, one is employed provided he/she is working. Furthermore, Frank and Bernard (2001) from their line of thought defined employment in terms of being employed. To them, a person is employed if he or she worked full-time or part-time (even for a few hours) during the past week or is on vacation or sick leave from a regular job.

Achegbolu, (2008) avers that there are two domains of employment namely: The Public Sector Employment and the Private Sector Employment. Public sector employment could be summarized as comprising employees/workers who are paid with public funds. They include workers at federal, state, and local government levels in ministries, extra-ministerial departments or parastatals, agencies, commissions, boards, armed forces, and paramilitary organizations, etc. On the other hand, the private sector equally consists of two variants; the organized private sectors and the non-organized private sectors. The organized private sectors are usually big/large business organizations and are incorporated as legal and corporate entities. The non-organized private sectors are usually like the one-man business or sole proprietorship and partnership businesses which are relatively small in terms of size paid-up capital and workers employed. It is worthy of note that all the aforementioned domains of employment are all employers of labour. From the authors' point of view, the non-organized private sectors or sole proprietorship type of employment is mostly what is obtainable under irrigation farming in the study area. Therefore, in a nutshell, an employed individual could be defined as a person who is currently working for wages or self-interest.

There are differing views about a nation's employment status. These views are the Classical view and the Keynesian view. The classical economists believed in the existence of full employment in the

economy. Full employment to them was a normal situation and any deviation from this was regarded as abnormal. To the classical economists; Unemployment resulted from the rigidity in the wage structure and interference in the working of the free market system. This comes in the form of trade union legislation, minimum wage legislation, etc. On the other hand, Full employment exists “when everybody who at the running rate of wages wishes to be employed. According to Amupitan (2011) those who are not prepared to work at the existing wage rate are not unemployed because they are voluntarily unemployed. To them, there should be no possibility of involuntary unemployment in the sense that, people are prepared to work but they do not find work. According to the classical economists, the above view only operates in an ideal economy.

The second view i.e. the Keynesian view was championed by Keynes (1936). He asserts that full employment means the absence of involuntary unemployment, that is, full employment is a situation in which everybody who wants to work gets work. He assumes that “with a given organization, equipment and technique, real wages and the volume of output are uniquely correlated so that, in general, an increase in employment can only occur to the accompaniment of a decline in the rate of wages”. To achieve full employment, Keynes advocates increases in effective demand to bring about a reduction in real wages (Keynes, 1975).

It can be deduced from the above that, the situation of full employment in the current global economic trends is unattainable due to the interdependency nature of the world economy most especially that of developing countries like Nigeria. However, to ensure opportunities for employment, government may initiate economic diversification in agriculture through the intensification of all year-round farming through irrigation projects like that of KIP. Therefore, employment opportunity in KIP is a state in which all capable and willing individuals are engaged in either all year round personal work on the farm (wet season farming), dry season farming (irrigation farming); on a paid work either daily, weekly or monthly wage; engage in buying and selling of agricultural product and; or processing and transportation of agricultural product either permanently or temporarily.

Theoretical Framework

The study adopted the Suchman (1963) performance evaluation model as a theoretical framework. Suchman (1963) developed five criteria for performance evaluation which include efforts, performance, and adequacy of performance, efficiency, and process. To him, the five categories of evaluation refer to: (1) effort (the quantity and quality of activity that takes place), (2) performance (effect criteria that measure the results of effort), (3) adequacy of performance (degree to which performance is adequate to the total amount of need), (4) efficiency (examination of alternative paths or methods in terms of human and monetary costs), and (5) process (how and why a program works or does not work).

In a sense, the Efforts criteria refer to measures taken to attain a goal, entailing objectives and appropriate institutional framework. Performance criteria mean the quantity and the quality of input as a result of the effort made to attain a goal. Its components entail quantum of the effect (impact) made; the degree of change obtained concerning goal setting. Adequacy of performance criteria measures success with the total amount of needs. Efficiency measures the correlation between the worth or cost of the input (effort) put into the system and the worth or amount of output produced or generated. It is often defined as the capacity of an individual, organization, facility, operation, or activity to produce results in proportion to the effort expended. The process examines the attribute or nature of the program or policy, the peculiarity of the program, a context that makes it successful or fails as well as analysis of operational attitude that negate the effect (impact) of the program (Suchman 1963 cited in Yusuf, Yusuf & Idris, 2019). However, one of the criticisms of the performance evaluation theory is that, it fails to indicate the possible types and amount of impact created by various kinds of programmes or project and that, it fails to give differences between long term and short-term effects of a project.

The study used the model criteria to measure the effort, performance, and adequacy of performance, efficiency, and the process of the Kadawa irrigation project. The effort measurement in this respect is that the Government had put in all necessarily needed effort by constructing Tiga Dam

which has a storage capacity of over 1974 million cubic meters with an annual average flow of 1300 million cubic meters with a catchment area of 6600 square kilometres. The project was carried out by the water resource division under the Kano state ministry of works and survey which was later changed to Kano State Water Resource and Engineering Construction Agency (WRECA) through direct labour. Considering the importance of the project the state government handed over the project to the federal government in 1976 under the supervision of the Hadejia Jama'are River Basin Authority (HJRBA). The authority was charged with the responsibility of full development of surface and underground water reserves for multipurpose use with special attention on the provision of infrastructures and control of flood and erosion for watershed control; construction operation and maintenance of dam, dykes, wells, boreholes, irrigation and drainage system; supply of water to the public for uses from the completed storage schemes at the government authorized fee among others. All these are efforts from both the state and the federal government aimed at improving the socio-economic development of the rural communities.

Measuring performance is concerned with the effect criteria that measure the result of effort on the improvement in the socio-economic well-being of the rural community farmers through improved agricultural productivity facilitated though all season (cool dry season, hot dry season, and warm rainy season) irrigation cultivation which provides all-year-round employment opportunities to communities. It may not be an overstatement to conclude that, the government's performance was adequate.

The next criterion was the measurement of "efficiency". To this study, therefore, we may need to ask what are the cost involved in the establishment and maintenance of the Kadawa irrigation scheme and how are they compared to the actual benefits produced? i.e. improved well-being of the rural farmer through the provision of employment opportunities and ensuring food security not only to the rural farmers but to the State in particular and the country in general. With the current improvement in the agricultural output in the area as a result of an increase in local consumption of our local product as a result of a change in government policy on the self-sufficiency in food production and the banning of importation of some crops like rice by the Buhari Administration, the project is contributing enormously to the advancement of the socio-economic status of the communities. This cannot be disputed, because as a result of the irrigation cultivation undertaken by household farmers within the project area, the food supply has tremendously improved where the supply covers not only Kano State but the entire country most especially with the increase in the number of Rice Processing Industries in the study area which provides more access to jobs in Kura and Garun Malam local government areas.

Measurement of the process helps managers of the project and the policymakers to redirect project activities to achieve desired goals. This is concerned with the efficient use of resources such as personnel (extension workers), water supply channels (direct and irrigation channels), water reservoir (largest reservoir at Tiga Dam, one semi largest reservoir located at Yar'kanya and the four medium volumes located at Dorawar-Salfau, Daka-Soye, Kura and Imawa respectively), siphons (used by farmers to irrigate their plots) and the drainage ditches, as well as the construction of accommodation for extension workers, located close to various farming communities. introduction of new product strategy such as planting methods, the introduction of new seeds and seedlings; water regulation; control of credits; hiring of agricultural machinery such as tractors, combine harvesters, etc.; review water charges; and extension services such as organizing film show and other demonstration programs at villages, wards, and local government levels. This is primarily captured on finding better ways of executing the project toward ensuring socio-economic development of the communities creating more opportunities for employment both at agricultural farm production level as well as agro-allied businesses in the study areas.

Methodology

The study adopted a cross-sectional survey research design method to allow the study to collect data once from respondents upon which the analysis is based. The Source of data for the study was from primary and secondary sources. The primary source entails the administration of questionnaire and the conduct of interview. The questionnaire and interview were justified on the facts that, interview

information was used to complement the questionnaire information. This was evidenced from the data presentation and analysis. The secondary tool was reports obtained from HJRBDA and other documented sources. The population consists of Irrigation Farmers Associations in Kura and Garun-Malam local government areas. There was 58 Farmers' Association (HJRBDA, 2018) out of which 10 were randomly selected. The Farmers Associations selected had a population of 2000 and a sample of 322 respondents was selected (Krejcie & Morgan 1970) through a multi-stage sampling procedure. The first stage was the random selection of two local government areas of Kura and Garun-Malam from the existing four major Local Governments covered by the KIP in Kano State. The second stage involved the purposive selection of irrigation farmers associations covering the two selected local government areas. Registered farmers associations were purposively selected for the administration of questionnaires and ten (10) farmers and staff of HJRBDA were purposively selected for the conduct of interview. A total of ten respondents were sampled. Data were collected with the aid of an adopted structured questionnaire and interview schedule designed to elicit information on the impact of the Kadawa irrigation project on the provision of employment opportunities to farmers in Kura and Garun Malam Local Governments. Data were analyzed using descriptive statistics and the hypotheses were tested using linear regression analysis.

Discussions and Summary of Findings

This section deals with the analysis of data collated from the field, secondary data derived from HJRBDA as information generated through interviews were used in discussing employment generation of the KIP in the study area. Data generated through questionnaires were used to test our formulated hypothesis using regression analysis at a 5% level of significance. Out of 322 administered questionnaires, 302 were successfully filled and returned which give a 94% rate of return and formed the basis of our analysis.

To ascertain whether KIP has significantly provided employment opportunities in the area of study, respondents were asked to rate their opinion on whether KIP has provided them with employment opportunities within the period under review. Their responses were presented in table 1

Table 1 : Kadawa Irrigation Project Provides Employment Opportunities

	Frequency	Per cent	Per cent	Cumulative Per cent
SA	137	45.4	45.4	45.4
A	140	46.4	46.4	91.7
UN	7	2.3	2.3	94.0
DA	10	3.3	3.3	97.4
SD	8	2.6	2.6	100.0
Total	302	100.0	100.0	

Source: Field Survey, (2018)

Responses in table 1 show that 137 (45.4%) respondents do strongly agreed that, Kadawa irrigation project provided employment opportunities in Kura and Garun Malam local government areas. also, 140 respondents representing 46.4% of the entire response agreed to the statement. While 7 respondents representing 2.3% were undecided, also 10 (3.3%) disagreed with the statement. and 8 respondents representing 2.6 % strongly disagreed with the statement. Findings revealed that the majority of respondents 277 (91.7%) agreed that, with the introduction of the Kadawa irrigation project there was a significant increase in the employment opportunities in the study area.

To complement the questionnaire responses an interview result on the question whether KIP has provided opportunities for employment in the study area, their responses about the number of labourers required for cultivating per acre concerning various crops were presented in table 2 below:

Table 2: Labour Requirement in Irrigation Cultivation Per Acre

Labour required/acre	Rice	Tomato	Wheat	Maize	Onions	Pepper
Land preparation	5	5	5	5	5	5
Planting/broadcasting	1	5	1	5	5	5
Weeding	5	5	5	5	5	5
Chemical application	2	1	2	1	1	1
Watering	10	10	5	5	8	10
Harvesting	10	20	10	13	10	5
Total	33	46	28	34	34	31

Source: Field Survey, (2018)

Based on table 2, irrigation and rain-fed agriculture require a diverse labour force both in quantity and technical quality. For various purposes such as land preparation, weeding, adding of chemicals, watering, and harvesting of the products somewhere in different seasons, most of the irrigating farmers in the study area employed different labourers at different levels of wages. As the result shows, though the employment is seasonal ranging from January to March and from May to September, irrigators employed on average three to five daily local labourers for different agricultural activities in different seasons. For instance, from land preparation to the harvesting of rice per acre may need the services of not less than 33 labourers, a farmer needs the services of not less than 82.5 labourers to cultivate one hectare of rice. This is applied to other crops like wheat. But for tomatoes, pepper, and onions to cultivate a hectare of land require the services of not less than 115, 70, 85, 85, and 77.5 labourers respectively who are to be paid different wages within the prevailing season. Table 3 below presents the total irrigated land covered and the labour required within the years under review.

Table 3: Irrigated Land Covered and the Labour Required from 2000-2013

Year	Irrigated Land (HA)	Labour Required
2000	13,652.00	1,250,353
2001	13,057.5	1,200,188
2002	12,738.00	1,162,805
2003	14,380.00	1,322,314
2004	13,600.00	1,220,800
2005	13,171.16	1,250,716
2006	13,114.00	1,184,051
2007	12,750.00	1,032,925
2008	12,525.00	1,175,625
2009	13,143.59	1,223,791
2010	13,500.00	1,200,965
2011	12,070.00	965,853
2012	13,127.00	989,714
2013	12,720.00	1,143,374

Source: Adapted from HIRBDA, (2015:1-8).

Looking into the total land covered in the irrigation cultivation in table 3 (dry season cultivation) which is the concern of the study from the previous seasons will provide details of the opportunities created by the dry season farming in the study area. For instance, rice, wheat, maize, tomato, onion,

cowpea, pepper, cucumber, and cabbage cultivations for the years under review. A look into the interview response above will reveal that 83 number of labour is required in cultivating a hectare of rice in dry seasons; 115 is required to cultivate a hectare of tomato, 70 for wheat, 85 for maize, and onions and pepper required 78 labourers. Multiplying the labour requirement for cultivating a hectare by the number of hectares cultivated will give a total labour requirement of 1,250,353 for the year 2000 alone. This implies that the irrigation farming in Kura and Garun Malam local government areas has the potential of creating daily employment opportunities of not less than 1.25 million opportunities among irrigation farmers. This applies to all years under review with a differing number of opportunities obtainable based on the number of hectares of land under cultivation. Therefore, it is safe to say that irrigation project creates job opportunities for a large segment of farmers in the study areas. For more detail, the secondary data obtained from HJRBDA on the number of hectares cultivated within the years under review is provided which is computed by the labour required for cultivating the various crops for each year by the researcher and presented to complement the questionnaire and interview information presented in the table above.

Furthermore, interview responses have shown that, with the irrigation project, there was a proliferation of small, medium, and large-scale rice processing mills. According to the responses of the majority of those interviewed indicates that there are over 100 rice processing mills in Kura, over 20 in Imawa, over 30 in Danhassan and environs, over 20 in Dakasoye, 30 in Daka Tsalle, and over 40 rice mills in Garun Malam town and Chiromawa with over 30 rice processing mills. Also, interview responses indicate that with the availability of these rice mills more youths, as well as housewives, are engaged in the buying, milling, and selling activities of agricultural products in the study area. In essence, rice milling has employed over 20,000 people.

Test of hypothesis

Table 4: Regression Model Summary Between Kadawa Irrigation Project and Provision of Employment Opportunities

Model	R	R Square	Adjusted R Square	Standard. Error of the Estimate
1	.751 ^a	.564	.563	.58000

a. Predictors: (Constant), Kadawa Irrigation Project
 Source: Field Survey, (2018)

Table 4 provides the R and R² values. The R-value represents the simple correlation and is 0.751 or 75.1% which indicates a high degree of correlation, the R² value indicates how much total variation in the dependent variable (employment opportunities) could be explained by the independent variable (Kadawa irrigation project). In this case, 0.564 or 56.4% is statistically significant. the adjusted R² =0.56.3 indicates the likely hood of 56.3% of IV to cause a change in the DV (employment opportunities)

Table 5: Regression ANOVA Between Kadawa Irrigation Project and Provision of Employment Opportunities

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.616	.065		9.477	.000
1 Kadawa Irrigation Project	.462	.023	.751	19.703	.000

a. Dependent Variable: Kadawa Irrigation Project
 Source: Field Survey, (2018)

Table 6 indicates that the regression model predicts the DV significantly well. For the predictor (kadawa irrigation project), $Y=0.616+0.462X$ for the standardized Beta coefficient, the result shows that KIP can cause a 75.1% change in the provision of employment opportunities of Kura and Garun Malam Local Government Areas. With P-value = 0.000 which is less than 0.05.

Based on the data presented and hypotheses tested the followings are the major findings of the study:

- a. The study revealed that KIP has significantly improved the opportunities for employment in the study area within the years under review. For instance, with annual cultivation of 13,652.00 hectares of land in the year 2000 and 13,057.5 hectares of land for the year 2001 has provided employment opportunities to 1,250,353 and 1,200,188 labourers respectively covering dry season farming as evidenced in Table 3.
- b. The study also revealed that KIP has facilitated the emergence of small, medium, and large-scale rice processing industries located in different places within the study area as shown in the interview analysis which increased the employment opportunities and generated over 20,000 employments people.
- c. It was also discovered that KIP has provided opportunities for the youth, children of school age, and women by engaging in various businesses ranging from local processing of irrigation output, engaging in harvesting, sale, and marketing of agricultural output.

Conclusion and Recommendations

The study concludes that KIP has significantly impacted the Irrigation farmers more especially in the area of increased access to land and employment opportunities which helps in reducing poverty the irrigation farmers. Sequel to the forgone discussions and findings and conclusion reached, the following recommendations were offered:

- a. It is recommended that HJRBDA should intensify its effort towards increasing the land coverage for irrigation by increasing to 22,000 hectares as it was originally designed to cover. This will increase the opportunities for more employment for the youth.
- b. Furthermore, there is a need for government intervention to create more and adequate market with the increased production of some crops like wheat where poor price as a result of the lack of interlinkage between agro-allied industries and the farmers has de-motivated most of the farmers in producing the crop which has affected the opportunities for more employment. Linking the farmers with those industries will boost the production of the crops, reduce the reliance of the industries on the imported product which will lead to the provision of more employments on farms and industries this will raise the country's GDP.
- c. More so, Government should make necessary efforts in fostering the general market distribution of primary commodity markets through improvement in transportation networks, marketing and storage infrastructure as well as irrigation infrastructure.
- d. Finally, more credit schemes on agriculture provided by the current Buhari administration should be extended to irrigation farmers in the area to establish small, medium, and large processing industries and agrochemical industries in the area which is hoped to increase the employment opportunities for irrigation farmers in the area.

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