

Semi-Skilled Labour and Food Security in Nigeria in the Fourth-Republic: An Assessment of FCT Abuja, Nigeria.

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Abstract

The paper examined Rice production and Food Security in Nigeria's fourth republic between 2007 and 2015 as well as identifying the contribution of artisans towards the uplift of the rural economy in the Federal Capital Territory (FCT), Abuja. Production theory was adopted for this study. The data for the study were lifted from primary sources and these were supplemented by secondary data. The findings of this study revealed that the services of road-side mechanics and plumbers as artisans assist to boost rice farming through their involvement in the area of tractor repair and irrigational equipment repair respectively; which are meant to augment the skilled labour of the engineers. However, the findings also revealed that over the years, FCT-ADP has shown less desire regards to encouraging artisans; has failed to provide credit facilities such as loans to them; and besides, FCT-ADP has failed to train them in modern technical skills which have indirectly led to fewer improvement in rice production output in the FCT. The paper concluded that the lack of government intervention policy on the acquisition of technical skills outside the school system has to some extent affected the growth of Rice-Food Security in the FCT. Therefore, the paper recommended that FCT-ADP should motivate the artisans by granting them the opportunity to get recruited into public and private farms as well as granting them the requisite training to be abreast with modern challenges in the agricultural sector, step up rural economic growth, thereby curbing the rate of poverty in the rural areas of the FCT.

Keywords: Labour, Republic, Rice-Food, Security, Semi-Skilled

Introduction

Rice is consumed by most households all over the world. It is a cereal crop that is desired by both children and adults. Federal Capital Territory-Agricultural Development Project, FCT-ADP Report (1998) states that rice is regarded as the food eaten by both rural and urban dwellers of middle and high income earners. Over time, rice farming locations were known to have attracted quite several of artisans. This has led to the development of the rural economy through the display of their semi-skilled techniques in the FCT, thereby enhancing mechanized agriculture and value addition; yet, rice production output has remained low because the government has refused to prioritize artisanship. In the same vein, it has not been able to adequately tap from its wealth of experience because of its failure in bringing them on board to handle the aspect of maintenance. For instance, broken down tractors that are abandoned in government departments would have been fixed by these artisans if only they could be given the requisite

training.

It is no longer news that procurement of new equipment is embarked upon annually in crude implements such as hoes and cutlasses which are still very much in use; and basically, these implements are responsible for the subsistence level of rice production in the FCT vis-à-vis the snail speed production rate. Most often than not, the government has been noticed to have prioritized the role of rice farmers as heads of agrarian households, by getting attention from agricultural extension workers in the area of training, access to loan, provision of irrigational facilities, provision of agricultural inputs such as fertilizers and pesticides as well as agricultural equipment such as wash bores and water pumps. But, stakeholders with technical skills such as road-mechanics and plumbers amongst others, who would have employed their technical know-how to overhaul and maintain broken down agricultural equipment that is littered around in government departments; are not being considered. This is a gap that this study sought to close.

However, this would have been avoided long ago if things were placed in their proper perspective and the huge funds released every year for procurement of new equipment would have been saved or at most, less equipment would have been procured and the remaining funds disbursed in the training of artisans in line with Plato's thought of building the economic base of the city state. This would in turn affect positively the hiring of farm equipment such as tractors by rural farmers at subsidized rate and would be rented out to them at reasonable or affordable prices, thereby enhancing rice production output. When this is eventually carried out, it will be in line with global best practices being adopted by many developed economies such as China, the USA etc, contrary to what is obtainable in many third world countries like Nigeria. This is perceived as a misplacement of priority, having led to a massive increase in rice importation into the country by successive governments as a result of low output in rice production.

Literature Review

According to a World Bank – Food and Agricultural Organization (FAO) study (2003) every year, 8% to 26% of rice is lost in third world countries on the average because of a lack of technical support such as artisanship skills coupled with post-harvest problems e.g lack of storage facilities and poor infrastructure such as dilapidated markets and poor road network. United States Department of Agricultural (USDA) Report 2012 asserts that Nigeria is amongst the world's major importers of rice which is detrimental to the enhancement of rice cultivation in the country as the market is flooded with Foreign Rice. International Planning Association (IPA, 1979) posits that the availability of water is relevant to economic and agricultural development in areas where rice cultivation is prevalent. Ehotiyan (1984) affirms that the vast surface and underground water constitute the resource base for agricultural development concerning rice production for the urban and rural economy of the FCT.

Eze (2010) asserts that Fadama I, II and III are major instruments for achieving the government's poverty eradication program through rice production in the rural areas of the

FCT and Nigeria in general. National Fadama Development Project (NFDP) Report, 2005 states that Fadama I was designed in the early 1990s to promote simple and low cost improved irrigation technology under World Bank financing in the area of rice production. This was meant to emphasize poverty reduction and beneficiary participation in the FCT and other parts of the country.

Lakoju (1995) posits that FCT-ADP has been the main organization that implements the accelerated rice food production program in the Federal Capital Territory, Abuja. Balogun (2001) states that effective marketing of agricultural produce such as rice is strongly facilitated by the provision of good quality roads. Shekwo (1986) states that the indigenous farmers and their families in the FCT are widely organized as very highly productive peasants and over 85% of them are engaged in farming activity having considered all other activities as secondary. Adeyemo (2001) states that markets are known to facilitate the development of rural rice production given the environmental conditions as well as the level of technological development. Ukwu (1980) asserts that without a good transportation system, demand and supply would be restricted as bags of rice cannot be moved easily from one place to the other. Performance Agricultural FCT Survey (2011) states that the production of rice in the FCT is done through interpersonal relationships among stakeholders ranging from the technical crew, to family members etc. Abumere (1983) asserts that poor accessibility of road has a strong negative effect on the people's economic development on which all economic activities such as rice farming depended.

Adeniyi (1980) posits that roads lay the foundation for economic prosperity and an increase in rice production output. A World Bank FAO study (2003) states that, every year, 8% to 21% of rice is sold at a loss in developing nations eg. In Nigeria we have poor roads. This is a result of the inability of rural farmers to bring their rice produce to the market. Performance Agricultural FCT survey (2011) posits that the production of rice in the FCT has to some extent made rice produce to be within the reach of the populace in line with the Federal Government's effort to boost rice production in Nigeria through her National Programme on

rice-food security. International Planning Association (IPA, 1979) asserts that the availability of water is relevant to economic and agricultural development, particularly in the area where there is rural rice cultivation. FCT-ADP Annual Report (2000) affirms that grain reserves such as silos were constructed in the FCT to store cereal such as rice and guinea corn. FCT-ADP Report, 2002 states that the FCT administration increased its efforts in boosting rice production in the rural areas of the FCT by distributing fertilizers and credit grants to rice farmers through the available agricultural cooperative societies.

During an agricultural workshop with the theme: Reviving rice production in Nigeria which took place on Wednesday, 23rd November 2011, the then Minister of Agriculture and rural development, Dr. Akinwumi Adesina stated that there must be an accelerated rice production mechanism meant to meet the quality of standards through various means which must be tapped to deliver green revolution that would make Nigeria self sufficient in rice production. Furthermore, while speaking during an agricultural programme as reported in Thisday Newspaper on Thursday 30th March 2013, the Minister stated that with Nigeria's continuous population growth and its corresponding appetite for imported rice, demand for rice is projected to rise from 5 million metric tonnes to 36 metric tonnes by the year 2050. Hence, Nigeria must begin an aggressive import substitution program for rice to make Nigeria self sufficient in rice production by the year 2015.

Alanana (2005) posits that globalization influences the structure of rural rice production and enhances the production and supply of new inputs for rural farmers intended to create a rural farm base whose outlook would be a replica of what obtains in developed economies. International Planning Association (IPA, 2002) asserts that Fadama rice farming would improve in Nigeria if the government improves its infrastructure and creates better conditions for the private sector. Abumere (1978) states that the bulk of rice production in Fadama areas being the flood plain or the inland valley takes place under the traditional system without the use of mechanical power. Garba (2000) in an article titled "Agricultural development in the

FCT' emphasized that a lot can be gained by intensifying Fadama farming in regions where rainfall is seasonal. Idris (1996) states that, Fadama areas have enormous potential in rice production because they are capable of contributing to the goal of attaining self sufficiency in food production in the FCT.

Theoretical Framework

Production theory as propounded by Cobb and Douglas (1929) was adopted for this study. The theory states that there is a relationship between physical laws governing the production of goods and variable proportions. Therefore, in the context of this study, the semi-skilled labour being exhibited by artisans would help fix the spoilt machines or abandoned machines as the case may be, especially with adequate funding in all ramifications, be it in the area of recruitment or training of artisans; which would in turn boost rural rice production output vis-à-vis the enhancement of rural economy. This is possible when a trained road side mechanic can service properly and put tractors back to life, while a trained plumber deals with the repair of irrigational equipment effectively to save cost and prevent financial waste or corruption. However, physical laws e.g. the law of diminishing returns that governs the production of agricultural commodities or goods, such as rice produce would occur in a situation whereby at a given point, rice production output decreases when variable proportions e.g. the respective artisans are being recruited continuously as members of the workforce.

Methodology

Likert scale was used in a self structured questionnaire which was administered directly to FCT-ADP extension staff and the rice farmers in the Gadabiyu community in Kwali Area Council of the Federal Capital Territory, Abuja. The responses to the questionnaire were used to generate primary data, which were converted to simple percentages and used to answer and analyze the research question. The primary data were supplemented by secondary data in the form of the available literature which was used to support empirical findings. One null hypothesis and one research question were formulated in line with the objective of the study. Analysis-of-variance (ANOVA) was

used as the statistical method to test the hypothesis. There were 200 rice farmers in Gadabiyu Community (Source: Interview granted by the Traditional Institution of the Community, 2012).

From the population size of 200 rice farmers, using the Taro Yamane formula, the sample size of 67 out of the population size of the 200 rice farmers was randomly selected. Therefore, 67 copies of the questionnaire were distributed to the rice farmers in Gadabiyu directly. Given the low literacy level of rice farmers in the Gadabiyu, two FCT-ADP staff took up the responsibility to interpret each of the items on the questionnaire in the Hausa language for the rice farmers. However, at the end of the exercise, 50 copies were submitted to the researchers and the effort to retrieve the remaining 17 copies proved abortive. Hence, 50 was adopted as the sample size for this study. In 2012, 20 extension FCT-ADP staff were posted to serve in Gadabiyu (FCT-ADP Extension services, Gwagwalada, 2012). This number was adopted as the population size of FCT-ADP staff in Gadabiyu and the same number was used as the sample size. Consequently, the total population of this study stood at 220 which is

equivalent to the 200 farmers and 20 FCT-ADP staff in Gadabiyu. Therefore, the total sample size of the study was 70 which is equivalent to a 50 sample size for rice farmers and the 20 sample size for FCT-ADP staff. There was a face-to-face administration of the questionnaire to the respondents i.e (the farmers and the FCT-ADP staff); and besides, the members of the traditional institution in Gadabiyu were interviewed directly.

Data Analysis

The data generated from the survey research is hereby presented and analyzed to answer this research question. To what extent has semi-skilled labour contributed to boosting rice production in the Federal Capital Territory? The null hypothesis formulated was: There is no significant difference in perception between rice farmers and FCT-ADP staff over the contribution of semi-skilled labour to rice production. Therefore, the alternative hypothesis formulated was: There is significant difference in perception between rice farmers and FCT-ADP staff over the contribution of semi-skilled labour to rice production.

Table 1: Response on the Impact of Mechanics' Contribution to Rice Production
Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree, U= Undecided

Item	Opinion	Rice Farmers	FCT-ADP Staff	Total
There is a contribution to rice production through the services of artisans in the Gadabiyu community in the area of mechanical works.	SA	9(18%)	3(15%)	12(17.14%)
	A	37(74%)	14(70%)	51(72.85%)
	D	3(6%)	0(0%)	3(04.29%)
	SD	1(2%)	1(5%)	2(02.86%)
	U	0(0%)	2(10%)	2(02.86%)
Total		50(100%)	20(100%)	70(100%)

Source: Field Survey, February 2012

The data in table 1 indicated that a total of 89.99% of both the farmers and FCT-ADP staff (respondents) strongly agree with 17.14% and agreed with 72.85% respectively with regards to the above item. However, a total of 7.15% of both respondents disagreed and strongly disagreed over the item with 04.29% and 02.86% respectively. A total of 02.86 of the respondents were undecided over the item. Therefore, a conclusion was drawn that the total percentage of respondents who agree with the item is in majority compared to the percentage of respondents that are in disagreement with the

item. This gives credence to the fact that there is indeed a mechanics' contribution to rice production.

Test of Hypothesis/Results and Discussion of Findings

Null hypothesis: There is no significant difference in perception between rice farmers and FCT-ADP staff over the contribution of semi-skilled labour to rice production. This hypothesis was tested in table 1 using Analysis-of-Variance (ANOVA) statistical method and the result is presented below:

Table 2: Result of the Hypothesis Test using ANOVA on the Responses of Rice Farmers on their Perception of the Contribution of Semi-Skilled Labour to Rice Production.

Sources of variation	SS	Df	Ms	F	P-value	F Crit
Between Groups	7913	4	1978.25	39.43154	9.94504E-17	2.51304
Within Group	3261	65	50.16923			
Total	11174	69				

Source: Field Survey, February 2012

The data in table 2 revealed that P-value = 9.94504E-17 which is less than 0.05 alpha significant level, meaning that there is a significant difference in perception between rice farmers and FCT-ADP staff. Therefore, we can affirm that there the null hypothesis was rejected and the alternative hypothesis was accepted.

Table 3: Responses on the Impact of Plumbers' Contribution to Rice Production

Item	Opinion	Rice Farmers	FCT-ADP staff	Total
There is a contribution to rice production through the services of artisans in the Gadabiyu community in the area of plumbing works.	SA	24(48%)	4(20%)	28(40.00%)
	A	26(52%)	13(65%)	39(55.71%)
	D	0(0%)	1(5%)	1(01.43%)
	SD	0(0%)	0(0%)	0(0%)
	U	0(0%)	2(10%)	2(02.86%)
	Total	50(100%)	20(100%)	70(100%)

Source: Field Survey, February 2012

The data in table 3 revealed a total of 95.71% of both the farmers and FCT-ADP staff (respondents) agreed over the item; with 40% strongly agreeing and 55.71% agreeing respectively. But, a total of 01.43% of the respondents disagreed over the item with 01.43% of the respondents particularly disagreeing over the item and no respondent strongly disagreed with the item. The total of 02.86% of the respondents was undecided over the item. Therefore, it is clear that the total percentages of respondents agreed with the item

are in majority compared to the percentage of respondents that are in disagreement with the item. This has shown that there is a significant contribution to rice production by plumbers.

The Null Hypothesis: There is no significant difference in perception between rice farmers and FCT-ADP staff over the contribution of semi-skilled labour to rice production was also tested in table 3 using Analysis-of-Variance (ANOVA) Statistical method and the result is presented below:

Table 4: Result of the Hypothesis Testing using ANOVA on the Responses of FCT-ADP Staff on their Perception of the Contribution of Semi-Skilled Labour to Rice Production

Sources of variation	SS	Df	Ms	F	P-value	F Crit
Between Groups	886.4286	4	221.6071	42.17116	2.13E-17	2.51304
Within Group	341.57	65	5.254			
Total	1228	69				

Source: Field Survey, February 2012

The data in table 4 revealed that P-value = 2.13E-17 which is less than 0.05 alpha significant level, meaning that there is a significant difference in perception between rice farmers and FCT-ADP staff. Therefore, we can conclude that the null hypothesis was rejected and the alternative hypothesis was accepted.

Findings and Discussion

The findings of this study have shown that over

the years, successive Nigerian governments lack the political will to recruit artisans such as road-side mechanics, electricians or plumbers into the agricultural sector of the Nigerian economy; in order to build on economic base. Secondly, there was no thought by policy makers to train these artisans in technical schools spread across the nooks and crannies of the country and possibly an expansion of school facilities to accommodate the artisans. The services of artisans in every developing

economy like Nigeria cannot be over-emphasized especially in the agricultural sector. First, the services are categorized as semi-skilled labour which could be utilized side by side with the services of engineers on the farms.

Late president Umaru Musa Yar'Adua was confronted with a rice shortage in the country at the inception of his administration in 2007. This problem was inherited by President Goodluck Jonathan's administration in 2010. The reason behind the shortage was due to a shortfall in rice production in Thailand and China and partly because there was low rice production output locally owing to the non-encouragement of semi-skilled labour. The findings also revealed that the smuggling of bags of rice into Nigeria through land borders and other illegal routes was unabated.

Consequently, Jonathan's regime saw the need to kick-start a transformation agenda in the agricultural sector to boost rice production vis-à-vis making Nigeria self-sufficiency in the consumption of the commodity. Unfortunately, the administration did not look the way of the artisans and their semi-skilled labour. This can easily be noticed from the former president's independence broadcast of Saturday, 1st October 2011, as reported in the Guardian Newspaper that there is a clear agricultural transformation action plans and policy measures to achieve self-sufficiency in rice production meant to revamp the way fertilizer are distributed to rural farmers. Similarly, during his annual budget presentation to the national assembly as reported in the Guardian Newspaper on 4th January 2012, the former president stated that government shall look at supportive fiscal policies in the agricultural sector to stimulate rice production in which rice farmers and rice millers respectively would be encouraged to move towards domestic rice production and rice milling.

However, the overwhelming positive opinion expressed by the rice farmers and FCT-ADP Staff over semi-skilled labour has ascertained that road-side mechanics and plumbers amongst other artisans have contributed to rice production in the Federal Capital Territory (FCT), Abuja and there is every possibility that if these artisans are trained appropriately through an artisanship scheme funded adequately by government, will enhance

their performance especially when they are recruited into various farm departments involved in rice production. In addition, Mr. Claver Gatete, Minister of Finance and Economic Planning of Rwanda, in an interview reported in Spore Magazine of April – May, 2013 stated that agriculture had been prioritized within the development strategy of vision '2020' because it is critical to poverty reduction. Again, during the annual financial briefing in Rwanda as reported in the same magazine at the same period, Mr. Claver Gatete stated that in terms of financing, government through the central bank has been using a system of a long term-loan to commercial banks to lend to the agricultural sector.

But, the researchers think that the inability of successive Nigerian governments to translate agricultural policy measures into the adequate enhancement of National Rice-food security amidst abundant resources in the country, points to the fact that government is merely out to impress the public with its policy. To this end, this study will assist policy-makers within the agricultural rice-food sector of the Nigerian economy to formulate workable policies concerning semi-skill labour vis-à-vis the artisanship empowerment scheme. Consequent upon this, loans would be granted by the government to road-side mechanics, electricians or plumbers; aside from this, the required training would be given to them to boost rice productivity; thereby alleviating rural poverty and at the same time enhancing the rural economy. And by extension, adding a boost to the urban economy. Therefore, this research has been able to reveal the various ways that government could bring artisans on board to help contribute significantly to rice-food security in the Federal Capital Territory (FCT), Abuja.

Conclusion and Recommendations

Ever since the government had not deemed it fit to consider the necessity of looking the way of artisans because it has not fully given recognition to the contribution of semi-skilled labour to the development of both rural and urban economy vis-à-vis the enhancement of National Rice-Food Security. The contribution of artisans to the growth of the Nigerian economy was a result of the failure of the

government in the area of creating an artisanship empowerment program and supporting it with adequate funds. Secondly, the notion that artisans do not have a place in the rice farms has done more harm than good in the sense that the government has not thought of a policy on the need to recruit artisans such as road-side mechanics or plumbers into rice farms and train them in modern techniques on how to handle modern agricultural equipment to the advantage of rice farmers in the FCT and Nigeria. If this was considered by the government, it should have led to the uplift of Rice-Food Security. Consequent upon these, the following recommendations are presented:

1. The Federal Capital Territory-Agricultural Development Project (FCT-ADP) should imitate the National Youth Service Corp (NYSC) by recruiting artisans into both private and public farms for them to bring their experience to bare and indirectly boost rice production output in the FCT.
2. An Artisanship Scheme should be set up and through this means, mechanics, plumbers, electricians etc should be trained in technical schools for efficient performance in the farms.
3. The government through its agricultural agencies should procure modern working tools for use in the farms.
4. Government should make adequate funding a priority and by this, superior spare parts for mechanized equipment in the rice farms should be procured more importantly, artisans should be motivated through salary increments; to enhance productivity in rice farms in the FCT, thereby, addressing rice shortage vis-à-vis Rice Food-Security.

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