



Kano River Irrigation Project (Krip) And The Promotion Of Capitalist Agricultural Production

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Abstract

This paper was designed to examine the ongoing transformation in the Kano River Irrigation Project (KRIP) vis-à-vis the promotion of capitalist agricultural production project area. Lewis dual sector model was adopted as a theoretical frame of this research. The model assumes the existence of dual sector in the LDCs, namely; subsistence and capitalist sector. While the motive of production in the former is subsistence-driven, exchange and profit making are that of the latter, and profits and rents are the major sources of savings and investments.

Key words; Transformation, capitalist, agricultural production

Introduction

Agriculture used to be the backbone of the Nigeria's economy, and the fundamental engine of economic development of the pre-colonial Hausa social formation. Agricultural production in the pre-colonial Hausaland was largely carried out by peasant farmers whose social relations of production were rooted to

household and communal co-operative ties (Sule-Kano, 2018:8). Although, the then motive of production was subsistence-driven – i.e. the satisfaction of their use-value, certain proportion of the produced were traded via the Northern and Southern exits, namely; the Saharan and the coastal routes. As argued by

Inikori, (2013:3), that subsistence agriculture was overwhelmingly dominant on the eve of European colonial rule. Yet, the sector was so robust in sustaining a consistent stability of the economy. Conversely, the gradual incorporation of the Nigeria's economy into the world market system by the colonialists had transformed the pre-existing motive and social relations of production to a new form based on the principle of capitalist exchange relations.

This was accomplished through the instrumentality of the monetization of taxation and other economic transactions, as well as the formulation of policies capable of compelling the peasants towards the production of cash crops. As such, huge surpluses were generated by the colonial government via the marketization of agricultural export produce – i.e. a fiscal instrument of taxing the peasants by increasing the wedge between producer prices and world prices. However, despite the immense revenue the colonial administrators accumulated from the rural and the agricultural sectors of Nigeria, estimated at the rate of 63 per cent of GDP as at the year 1960 (Edo and Ikelegbe, 2014:4). The role of the colonial office in enhancing the fortunes of these sectors was very modest. Their role was concentrated on taxing the peasants, and used the generated surpluses in providing the necessary facilities needed to enhance the colonial trade mission.

Owing to the colonial policy of promoting the production of cash crops, an irrigation engineer was sent from the colonial office to investigate the irrigation potentials of Northern region and the province of Kano in the year 1944 (Palmer-Jones, 1987:153 in Mustapha and Meagher, 2000:17). Conversely, as the sector kept on receiving poor attention from the colonial administrators, harnessing the irrigation potentials of the floodplain (i.e. *fadama*) areas of the Kano Close-settled Zone (KCSZ) – i.e. the precursor of the Kano River Irrigation Project (KRIP) had remained a mere illusion until the year 1967 when the vision of agrarian transformation through large dam and irrigation was declared by the new military governor of Kano state in person Audu Bako. Hence, a foreign consultant known as the Netherland Engineering Consultant (NEDECO) was contracted to embark on the feasibility studies and the construction of an alien irrigation structures entirely different from the farming practices predominantly used in the affected area.

One of the fundamental basis upon which the project consultant justify the adoption of this type of irrigation was that, it is the only form of structure that will curtail the incessant drift of the rural workers to urban areas in the dry

season to look for work, as it will occasion a dramatic increase in the demands of the rural workforce which will serve as a solution to what they see as rural underemployment and unemployment (Wallace, 1980:67). However, the inherent complexity nature of the scheme – characterized by a compulsory adoption of capital intensive farming techniques, and a resultant increased spending for cultivating the irrigated farmlands has occasioned a fundamental transformation in the land tenure system, the market value of land, cum an increasing trends in the commercialization of labor in the project area. It is imperative to note that, prior to the introduction of the large-scale and capital-intensive irrigation into the *fadama* areas of the KCSZ, there was a presence of small-scale irrigation carried out through the use of local farming implements in the area.

Simple and traditional water lifting techniques (*shadouf*) were been used to supplement the open and shallow groundwater sources in the dry season (Andrae and Beckman, 1985:94). As such, it did not cost the peasants much in carrying out their irrigated farming activities. One of the immediate consequences of the introduction of the modernized system of irrigation on the farmers operating in the KRIP area is the way and manner in which the scheme subordinated them to the capital - through the medium of extension service delivery by so as to promote the mono-cropping of hybrid seeds, the application of inorganic agrochemicals and advanced cultivation techniques, etc. (Williams, 1981:35; Mustapha and Meagher, 2000:43). In cognizance to the expensive nature of the farming practices the introduction of the modern type of irrigation occasioned in the various irrigation project areas across the country, the federal government had in the 1970s committed parts of its burgeoning oil revenue in the distribution of subsidized farming inputs.

However, a provision for the distribution of major irrigation inputs on a credit advance was also made available to the farmers and to be paid at the harvest. This has led to a serious increase in the penetration of commercial farming into the rural areas and attempt to force the farmer to use his land primarily to make money, rather than agriculture with food as the priority (Wallace, 1980:66). Conversely, the unprecedented slide in the government budgetary allocation to the various sectors of the economy due to the adoption of the SAP in the year 1986 has occasioned a rising prices of agricultural inputs. This has forced more households into non-farm occupations to meet both production and reproduction costs. The use of fertilizers and the planting of the hybrid varieties

introduced in the earlier period decreased substantially (Mustapha and Meagher, 2000:48).

In this regard, it is posited by Wallace, (1980:62) that, the modernization of agriculture is forcing large numbers of Hausa people into non-viable rural situations. But, the planners cry, there must be losers because change is necessary, the peasant farmer must adapt to a new way of life and farming, the future demands the destruction of the old ways. In line with this assertion, it is argued by Bush, Bujra and LittleJohn (2011:190) that, once agriculture becomes a capitalist oriented, peasant farmers will be displaced to work either as agricultural laborers or as proletarians in the town. In this vein, cost of farming and the unprecedented slump in the country's budgetary allocations to agriculture were attributed to persistent decline in the percentage share of the active people engaged in agricultural production in Nigeria from 54 per cent in the 1980s to 43, 33 and 25 per cents in the 1990s, 2000 and 2010 respectively (FAO, 2012:117).

Thus, examining the ongoing transformation in the Kano River Irrigation Project (KRIP) vis-à-vis the promotion of capitalist agricultural production is an empirical issue that can be carried out through research.

Methods and Procedures

The Study Area

The Kano River Irrigation Project (KRIP) is a large-scale irrigation project located in the expanse of KCSZ – about 30 kilometres southwest of Kano, the capital city of Kano state (FMWR, 2017:27). Describing the topography and the climatic adaptability of irrigation farming of the KRIP area, Kebbeh, Haefele and Fagade, (2003:5), has pointed out that, the KRIP is situated in the Sudan Savanna agro-ecological zone, which is characterized by a mono-modal rainfall distribution averaging 550 to 1,000 mm per annum. The length of the growing period is 90 to 165 days (for rain fed crops), with most rains occurring between May and September.

Research Method

Survey and quantitative research methods were employed in conducting the study. Both primary and secondary sources of data were used in carrying out the research.

Population of the Study

The population of this study is made up of all farmers operating within the expanse of the Kura, Bunkure and Garun-Mallam fragments of the Kano River Irrigation Project (KRIP) area. HJRBDA, (nd:2), has estimated the actual population size of the farmers cultivating the KRIP farmlands 34,358 farmers – comprises of; 20,651 (equivalent to 60.1 per cent), 7,735 (equivalent to 22.5 per cent) and 5,972 (equivalent to 17.4 per cent) operating across the Kura, Bunkure and Garun-Mallam parts of the project.

Sampling and Data Collection

Out of the total population of 34,358 farmers that are cultivating the KRIP farmlands, a sample size of 381 farmers was established, as justified by The Research Advisors, (2006:608), that a sample of 381 can satisfy the population of 26,000 to 50,000 respondents. Thus, going by the disproportionate distribution of the population of this study, a stratified sampling technique was used in selecting the sample of this research. As such, a sample of 381 respondents – comprises of; 228, 87 and 66 (equivalent to 60.1, 22.5 and 17.4 per cents) of the farmers were randomly selected across Kura, Bunkure and Garun Mallam fragments of the KRIP.

Data Analysis

Statistical Package for Social Sciences (SPSS) was used in analyzing the collected data.

Results and Discussion

Table 1.1; The ongoing Transformation in the Social Relations of Production in the Project area

Compositions of the KRIP farmers	KUR	BNK	GN
Farmers cultivating inherited/family/personal lands	90(39.5%)	27(31.0%)	13(19.7%)
Tenant farmers	30(13.2%)	20(23.0%)	13(19.7%)
1 & 2	108(47.3%)	39(44.8%)	39(59.1%)
Others	0(0.0%)	1(1.1%)	1(1.5%)

Rate at which each basin (0.25 acre) was rented out

₦ 5,000 – ₦ 7,500	18(13.0%)	45(76.3%)	12(23.1%)
₦ 8,000 – ₦ 14,500	93(67.4%)	14(23.7%)	24(46.2%)
₦ 15,000 – ₦ 19,500	20(14.5%)	0(0.0%)	15(28.8%)
₦ 20,000 and above	7(5.1%)	0(0.0%)	1(1.9%)

Sources of labor-power

Hired and self labor	149(65.3%)	78(89.7%)	41(62.1%)
Hired, self and family labor	61(26.8%)	7(8.0%)	15(22.7%)
Hired labor	13(5.7%)	2(2.3%)	8(12.1%)
Self/family labor and co-operative ties	5(2.2%)	0(0.0%)	2(3.0%)

Source: Field Survey, 31/03/2021 – 18/04/2021

Table 1.1 is containing data on the contradictory tendencies of the ongoing transformation in the tenure system of the KRIP farmlands on the social relations of production in the project area. In this respect, the responses obtained from the project farmers indicated that, an average of 50.5 per cent (comprises of; 59.1, 47.3 and 44.8 per cents across Garun-Mallam, Kura and Bunkure parts of the project) of the project farmers were cultivating both their personal, inherited/family owned lands and rented farmlands. While the average percentage of 30.1 per cent (comprises of; 39.5, 31.0 and 19.7 per cents across Kura, Bunkure and Garun-Mallam fragments of the scheme) of the KRIP farmers were carrying out their farming operations on their personal, inherited/family owned lands. However, an average of 18.6 per cent (comprises of; 23.0, 19.7 and 13.2 per cents across Bunkure, Garun-Mallam and Kura parts of the project) of farmers operating in the area were purely tenants.

Whereas, an average of 0.8 per cent (comprises of; 1.5, 1.1 and 0.0 per cents across Garun-Mallam, Bunkure and Kura fragments of the scheme) of the KRIP farmers were made up of others (namely; farmers with pledged lands and or those that have held lands in trust of someone). It is therefore implied from this result that, a considerable proportion of the project famers amounting to an average of 69.1 per cent (comprises of; 78.8, 67.8 and 60.5 pre cents across Garun-Mallam, Bunkure and Kura parts of the project) were (in one way or the other) carried out their farming operations on rented farmlands. This has indicated a more than twofold increase in the level of accessing rented

farmlands in the KRIP, was reported by Wallace, (1981:289), that in 1977 one-third of the project farmers have rented out their irrigated land to wealthier men who have money to pay for the extra labor needed to farm and the ability to carry a loss if necessary.

As regard to rate at which each and every basin (i.e. 0.25 acre of land) of the project farmlands were rented out, it is indicated from the responses of the respondents that an average of 45.8 per cent (comprises of; 67.4, 46.2 and 23.7 per cents across Kura, Garun-Mallam and Bunkure fragments of the scheme) of the project farmers paid 8,000 – 14,500 used to pay 8,000 – 14,500 to rent each and every basin of land. This is followed by an average of 37.5 per cent (76.3, 23.1 and 13.0 per cents across Bunkure, Garun-Mallam and Kura parts of the project) that used to pay ₦5,000 – ₦7,500 for renting every basin of land. Similarly, an average percentage share of 14.4 per cent (comprises of; 28.8, 14.5 and 0.0 per cents across Garun-Mallam, Bunkure and Kura fragments of the scheme) of the tenant farmers paid ₦15,000 – ₦19,500 to access each and every basin of land. While an average of 2.3 per cent (comprises of; 5.1, 1.9 and 0.0 per cents across Kura, Garun-Mallam and Bunkure parts of the project) of the tenant farmers used to pay ₦20,000 and above for the land they rented.

This result entirely differed from what the FMWR, (2017:68), found to be the rate at which the individual landowners leased out each and every basin of land (0.25 acre) to the tenant farmers (at the rate of ₦5,000) in the project area. Nevertheless, in an empirical study carried out by Baba, (1974 in Wallace, 1981:282), it is also found that the increasing intervention of land speculators has made the cost of accessing and or acquiring land in the project area to rise unprecedentedly. This result has conformed to one of the basic assumptions of the Lewis dual sector model, that the major source of savings and investments in the countries with surplus labor is profits and rents (Lewis, 1954).

Looking at the predominant source(s) of labor-power in carrying out their farming operations by the KRIP farmers, it is indicated from the responses of the respondents that an average of 72.4 per cent (comprises of; 89.7, 65.3 and 62.1 per cents across Bunkure, Kura and Garun-Mallam fragments of the scheme) of the farmers were using hired and self labor. This is followed by an average of 19.2 per cent (comprises of; 26.8, 22.7 and 8.0 per cents across Kura, Garun-Mallam and Bunkure parts of the project) that carried out their farming operations through the use of hired, self and family labor. However, an average of 6.7 per cent (comprises of; 12.1, 5.7 and 2.3 per cents across Garun-Mallam,

Kura and Bunkure fragments of the scheme) of the farmers fully applied hired labor to embark on their farming activities. While an average of 1.7 per cent (comprises of; 3.0, 2.2 and 0.0 per cents across Garun-Mallam, Kura and Bunkure parts of the project) used to apply self, family labor and co-operative ties in cultivating their farmlands.

It is therefore indicated from this result that, up to 98.2 per cent of the KRIP farmers were (in one way or the other) using hired labor while embarking on their farming operations. This result is in conformity to the finding of Kohnert, (1986:8-9), that an average percentage (ranging within 16 – 27 per cent) of total hired farm labor in Northern Nigeria during the late 1960s and early 1970s. ... The prevailing hypothesis concerning the development of co-operative labor (*gayya*) is that there exists a trade-off between the increasing use of hired labour (*kwadago*) and the use of *gayya*. The result is also in agreement with the projection forwarded by Wallace, (1981:296) that, over 35 per cent of the family land is farmed using hired labor. That family labor will increasingly become less available as the scheme develops is evidenced by the fact that already 25 per cent of the sons over 16 in Chiromawa have laboring wage jobs on the scheme.

In this regard, it is posited by Williams, (1981:35), that with the introduction of modern system of irrigation and the compulsory adoption of new technologies ... Peasants who apply them come to rely on the market to purchase both their means of production and their means of subsistence. Smith, (1955; Nwozu, 1975; Adeniyi, 1972; Tiffen, 1972; Norman, 1979 as cited in Kohnert, 1986:9), have observed a transition from the non-capitalist to capitalist forms of rural labour organization in the Hausaland by positing that, while hired labor, provides for a better control of the labourer, communal work is said to be ineffective and unprofitable, and only suited for subsistence production or villages at the periphery of the economy were traditional communal social relations still prevail. It is in this regard, that Wallace, (1980:66), observed a serious increase in the penetration of commercial farming into the rural areas of Nigeria, which force the farmer to use his land primarily to make money, rather than agriculture with food as the priority.

This is in agreement with what Lewis considered to be the motive of production in the capitalist sector – i.e. exchange and profit making (Lewis, 1954). It is therefore implied from these findings that, the ongoing transformation of the

social relations of production in the KRIP area is embedding a capitalist exchange relations in the project area.

Conclusion

It is undoubtedly clear that, the construction of the modern irrigation structures in the KRIP area has occasioned a quantitative and qualitative improvement in the productive capacity of the productive forces of the project area, as it created the opportunity of cultivating the project farmlands twice in a year. Intrinsic to the year-round cropping opportunity created by the scheme, there was increased application of mechanized inputs and implements (capitalist farming system) in the project area. As such, there was a fundamental transformation in the social fabric of the household and communal relations of production to a new form based on the principles of capitalist exchange. Thus, up to 98.2, and 69.1 per cents of the project famers were (in one way or the other) using hired labor and rented farmland lands while embarking on their farming operations. Similarly, up to 62.5 per cent of the KRIP farmers used to pay an average of 8,000 – 19,500 to rent each and every basin (0.25 acre) of land in the project area.

Recommendation

It is therefore recommended that all the stakeholders of the KRIP, namely; the Federal, Kano state and the affected local governments and the individual landowners should jointly embark on the institutionalization of cooperative agricultural production in the project area so as to bring the full benefits of mechanization and the large economies of scale to the farmers operating in the project area. Unlike agricultural cooperative services – which provide agricultural services to their individual members, under the agricultural production cooperative production resources (such as; land, machineries, etc.) are pooled to farm jointly. Thus, an agency that would manage the affairs of the cooperation should be established to diligently register the prospective members and their respective inputs. However, even the landless rural populace would not be left out, as they have the labor-power to partake, thereby mitigating the growing unemployment of the landless rural populace. As such, gain/loss will be shared among the cooperating members based on their individual contributions.

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