

RICE AND FOOD SECURITY IN SHONGA EMIRATE OF EDU LGA OF KWARA STATE, NIGERIA, SINCE 1990s

By

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ABSTRACT

Food insecurity has become an object of debate in most academic forum, particularly the inability of the government to provide adequate funding and protection for the farmers and their farmland from herdsman. This paper, therefore, examined the production of rice and food security in Shonga Emirate of Kwara state since 1990s. It argued that rice has always been a vital food in the lives of the people of Shonga, Kwara state and Nigeria as a whole. It employed the use of both primary and secondary sources for data collection. It explains the fact that rice consumption is increasing rapidly in the state because of the shift in consumer preference towards rice, increasing population growth, increased income levels, and rapid urbanization. Evidence revealed that Nigeria is not self-sufficient in rice production, but it has the capacity to produce the quantity it needs and even more for export, through the implementation of policies which can enhance productivity and in terms of the sale of rice either to companies for the processing of rice paddy or exportation out of the country. The research concluded that with improved rice farming system, food security, alleviation of poverty and employment of the youth would be guaranteed in the state and Nigeria at large. Again, the research recommends that, there is urgent need for the government to re-direct its agricultural policies on rice production in Shonga; and ensure the adoption of modern farming facilities and machinery in order to improve productivity of rice that would grant the local farmers the opportunity to sell to other regions both inside and outside the country.

Keywords: Agriculture, Development, Farming, Marketing, Rice, Shonga

Introduction

Shonga is the capital of the Shonga Emirate district made up of about 57 localities, under the leadership of Alhaji (Dr) Haliru Ndanusa Yahaya. Shonga district has a common border with Tsaragi and Lafiagi districts, and the river Niger separated the Shonga people from Niger State of Nigeria. Culturally, they are of Nupe Kingdom, mainly the Batachi people that is Mash-land farmers. The community has a vast arable land stretching from Tsaduko (Shonga-Tsaragi

boundary) in the south to Kusogi (Shonga-River Niger, Niger State boundary) in the North and from Bidugi (Shonga-Lafiagi boundary) in the east to Shigo, near Bacita (Shonga-Tsaragi boundary) in the west. The Shonga massive land is fertile in nature and the people engages predominantly in agriculture -rice, sugarcane, fishing, cattle rearing etc. The Shonga people are 90 per cent rural farmers and they host the 15 white Zimbabwean farmers. The white farmers through the Kwara Commercial Agriculture Project (KWACAP) negotiated with the white farmers and handed over about 15,000 hectares of Shonga agricultural farm land to the white Zimbabwean farmers for the next 25 years.

Edu is one of the sixteen Local Governments Area of Kwara State with its headquarters in Lafiagi. It has three (3) districts namely; Lafiagi, Tsaragi and Shonga. It has an area of 2,542km² and a population of 201,469 as of the 2006 census. Rice and Livestock Production is prominent in this part of the state. Rice production is much favoured in the study area because of the natural fertile land of the floodplains of the River Niger that stretches from Jebu/ Bacita through Shonga in Edu Local Government. The vegetation in the northern parts of Kwara State, of which Edu Local Government Areas is a Savannah grassland which is adequate for open grazing for cows and cattle. The people of this region are known for different economic activities apart from farming such as fishery, wood work, hunting, etc. There are different types of soils in the study area. These soils are: loamy, clay and sandy soil. All these characteristics allied with good climate conditions and farmers experience have combined' to place Edu people in a very much competitive position and advantage in rice production with other rice producing communities in Kwara state (Kwara State Ministry of Agriculture 2004).

Location Of Research

Shonga a name of a town located to the north eastern part of Ilorin, the Kwara state Capital. It is one of the important towns in Kwara state. The town borders on the southern Bank of the River Niger with the former Kabba Province on the East, while to the West is Lafiagi Emirate and opposite of it (Shonga) is Bida in Niger state.² About three (3) quarter of the total area of the town is located on the hill while the rest one quarter is plane land for rice cultivation. In

essence, the location of Shonga does not only make it to be an important but also a trading centre for the riverine areas as one of the major occupation of the people (Mustapha, etal, 2012). According to Kohnert (1979), Shonga served as a gate way to the north. This is due to its strategic location which kept it in the direct trade routes of both Northern and Southern parts of modern day Nigeria. It has a large market centre for all the goods coming either from the north or from the south. Shonga was a cross road town for over three centuries and war centre in the olden days. But by 1920 after the British conquest, the emirate was carved out from the former Nupe kingdom and it forms part of the present Edu local government area of Kwara state (Awolalu, 1979).

The emirate is located very close with (Nupe Chizhi) meaning Nupe speaking people and (Yagba Chichi) meaning Nupe speaking people as the majority and the Yagba people as minority. The North settlement consists of Kpada, Rogun, Echi-Wada, Koro,Duro and Etsuvun while, in the south settlement includes Lalagi, Esun, Edogi - Chapa to mention but few with lade as their chief town. The western part of the emirate consist of Rifun,Tankpafu, Chitta, Matokunalso within the zone existed only none Nupe speaking people such as Agboro, Ejiba and Oke erit (Levtzion, 1975). These settlements at Shonga followed the Nupe history as the town was found by the Etsu Nupe of Tsoode, Zaganla, who reigned between 1539 and 1592. He moved back to Gbara now in Niger state after he has founded Shonga a Garison of Nupe. Although he did not live in this new settlement but posted his second warrior Chief to command the cavalry. In 1895, Etsu Idrisu Gana, the twenty third Estu Nupe was installed at Shonga by one British officer "Mr.William Wallance" he was succeeded by his son Estu Isa who was presented with a second class staff of office in 1905.

Literature Review:

According to Akpokodje (2001), Rice production in Nigeria started about 1500BC with the low yield indigenous red grain species "Oryzaglaberimastued" that was widely grown in the Niger Delta. While Oryzasativa that has higher yield was introduced in 1980s.Today, rice is grown in almost all the agro-ecological zones in Nigeria but on a relative small scale. The

tremendous increase in area planted, output and productivity in paddy rice production were achieved over the last two decades, and now stand at 66,600ha, 1.09 million tonnes and 2.07 tonnes/ha respectively. Nigeria was the largest rice producing country in West Africa and the third largest in Africa after Egypt and Madagascar in 1980 (West Africa Rice Development Association (WARDA)). Shonga as a rice producer in the country has helped tremendously in the growth of rice production in the country, which in turn has helped grow the economy to where it stands (Ezeh, et al, 2012).

In 1990, the country produced 3.4 million tonnes of rice from about 1.2 million hectares of land, this normal production trend would have been sustained if government had steady policy on rice import. In 1985, rice production was increased due to the ban imposed on rice import and because of that, Nigerian rice farmers rose to the challenges of meeting the domestic demand for the commodity. In 2000, State was Kaduna the largest rice producer, accounting for about 22% of the country's rice output. This was followed by Niger state (16%), Benue state (10%) and Taraba state (7%). Great variations also exist in terms of yield. The average national rice yield during the dry season (3.5 tons/ha) was higher than that of the wet season (1.85 ton/ha). Similarly, Nigeria is currently the highest rice producer in West Africa, producing an average of 3.2 million tons of paddy rice or 2.0 million tons of milled rice per annum. Nevertheless, there is a wide gap between local supply and the ever increasing demand for rice in Nigeria. The growth of rice farming in neighbouring locations sparked a boost of production amongst any communities in Nigeria including Shonga (Damola, 2010).

Damola,(2010) attributed the structural increase in rice consumption in Nigeria to various reasons which include urbanization that has shifted consumer preference towards rice.¹¹ Thus, per-capita consumption during the 1980s averaged 18kg and reached 22kg in 1995-1999. Based on an estimated annual rice consumption of 5 million Mega tonnes in Nigeria, per capita consumption is 32kg per annum with per capita consumption in the urban area higher, averaging 47kg per annum (2008 estimates). With the arrival of the drought tolerant and high yielding rice variety, "NERICA" (new Rice for Africa) and other initiatives by the government of Nigeria has the potential to increase its domestic rice production, thus reducing its import bill and becoming self-sufficient in rice.

Hussaini (2019), attributed that the determinants and profitability of rice farmers investment in value addition activities in Kebbi State and found that the net return of farmers in stage one value addition (parboiling, winnowing and drying) indicate the average rate of returns on investment was N1.25 indicating that for every N1 invested in value addition, a profit of N1 and 25 kobo was made.¹² Thus, it could be concluded that the value added to rice was though on a small scale, and economically viable. Due to the similarities in the economic prices of rice not only in Shonga, but across th country, similar reviews may be used to determine the profitability of rice farming in Shonga. Chidiebere-Mark stated from the analysis his findings that the value of rice production systems in Ebonyi State Highlighting the actors contribution of processing basic milled rice to quality rice. It showed the percentage value added of each activity at the processing stage. The percentage cost of adding value from paddy to basic milled rice is 7,625% and it covered activities like paddy transportation, parboiling and drying as well as milling. Percentage contribution of further processing to quality rice was estimated at the margin of basic milled rice of 34.875% is higher than that of quality rice of 5.875%.The growth of the cost of rice production in the consequent years have led to increase in the prices of rice production in communities such as Shonga.

Aigbokan (2001) in his work explained that Agriculture which used to be the mainstay of the Nigerian economy before the oil boom has resurfaced in recent times as one of the key sectors with huge potentials. Nigeria boasts of arable land, good climate, regular rainfall and abundant human resources capable of revolutionizing food and animal production on the African continent. This paper is premised upon the gigantic Shonga Farms established in order o promote public-private partnership with a view to boosting the growth of agricultural sector in Kwara state. The key players in Shonga Farms were interviewed in order to extract credible facts and figures. The paper made recommendations that will enhance the growth and development of Shonga Farms as a success story in Nigeria's agricultural sector.

Ayinde O.E (2011), assessed the anchors borrowers program by The central bank of Nigeria in Kwara state that Agriculture is a major source of livelihood and the main engine of

economic growth in developing countries therefore the development of agricultural production is a public priority but most farmers are poor, hence there is a gap in cash resources which blocks the adoption of new technologies innovation and credit is needed to fill the gap in Nigeria. The anchors borrowers programs was primarily aimed at increasing rice productivity in local communities such as Shonga. Through the anchors borrowers programs, A lot of farmers were provided with loans which helped them boost productivity through cash or appliances such as tractors, pumping machines, pipes for irrigation amongst many others.

Olabode, (2011) indicates the challenge of increasing food production (including rice) has been the concern of the three tiers of, government in Nigeria. His paper creates a geo-database to determine soil suitability for rice production at Duku-Lade rice production scheme in Kwara state Nigeria. Global Positioning System was used to reference soil sample points. The soil salinity in Duku-lade will be of utmost importance since it share an identical salinity and vegetation with Shonga community. The paper is aimed at searching for possible ways to improve rice production in Kwara state generally.

Mohammed (2015), in his research indicates that Rice as one of the major staple food in Nigeria can help boost the economy in this trying time. Currently, Nigeria is not self-sufficient in rice production, but it has the capacity to produce the quantity it needs and even more for export. Five major rice ecologies have been identified in the country, which include upland, hydromorphic, lowland, deep inland water and mangrove swamps. If these rice ecologies are utilized optimally there will be no need to import rice again in to the country. Due to the establishment of different forms of Rice grains, local farmers in Shonga have been able to plant the best suited rice variety in their community. These varieties are recommended to farmers due to their high yield potentials and ability to withstand environmental stress.

A survey was conducted by O, A. Olafadehan and M. K. Adewumi (2009) which used the administration of structured questionnaires to agro pastoralists in fifty settlements in the derived savannah of South-west Nigeria in order to highlight the management practices and some of the factors influencing production in the area. Their work is aimed at enumerating the

key advantages derived from open grazing of cattle in local communities of Nigeria. Open grazing has been prominent in Shonga, this is due to the vegetation of the region, and this in terms has brought about vibrant level of Pastoralism and livestock production in the region. The production system is traditional with animals being maintained on free range grazing, browsing and offer of crop-residues. It is noted that technical efficiency and its determinants among small scale rice farmers in Patigi Local Government Areas of Kwara State. Small scale farmers from Shonga employ the same techniques in terms of rice production in the region, this is due to the similarities between Shonga and Patigi since they are towns which share the same boarder. A systematic random sampling technique was used to select one hundred and twenty rice farmers for the study.

Traditional Production Of Rice In Shonga Emirate

With the rapid increase in the demand for rice in the early 1990's, the growth of the Rice production sector has risen steadily over the years with local communities such as Shonga growing in terms of Agricultural development. Rice production in its own form has brought about different economic advances in these communities.

The Traditional Production Processes Includes:

Land Preparation and Planting:

Proper land preparation is necessary for rice production to minimize competition with weeds. Two harrowings provide sufficient tilt for rice growth. Ridging is not necessary and is often a waste of space. The time for sowing rice depends on the available kind of land, whether it is lowland or upland and on the agro ecology where the farm is situated. The recommended time for sowing rice in Shonga is during the rainy season. The actual timing of sowing should, however, be adjusted in accordance with the time of the establishment of the rains. Plant the rice seed at a depth of 2 to 4 cm. When rice is planted at a Depth of more than 5 cm, the emergence of the young seedlings is delayed. Also, the seed may rot and the plant stand will not be uniform (DRID, 2002).

Land preparation generally comprises a combination of land clearing, tillage and/or the use of herbicides. Land clearing is always manual, and primarily comprises the clearing with cutlass and removal of organic debris, pre-plant burning and stumping/felling (in upland areas). Land

clearing is a widespread practice, and nearly a universal practice for upland rice. Tillage is primarily manual with hoes, with the remainder using tractors, zero-tillage and animal traction. Manual hoe tillage tends to be the prevalent tillage practice across rice ecologies. However, in upland systems, zero-tillage tends to be equally common. Mechanized tillage with four-wheel tractors and the few cases of animal traction tend to be concentrated in lowland rice, particularly floodplains, but some use of tractors. is also reported for upland rice. In the semi-irrigated rice fields tillage was manual. The use of two-wheel tractors was not reported. Most common is to apply one single tillage operation. The remainder is split between those that reported two tillage-operations and the use of zero-tillage. Only a fraction of the farmers reportedly used herbicides at the time of land preparation- with a marked concentration amongst semi-irrigated rice. Physical obstacles such as stones and trees could jeopardize the potential for mechanization. Stones were reported in fields and were reportedly more common in upland fields compared to lowland (NCRI, 2004-2007).

Before planting fields should be leveled properly because level fields tend to give high yield with lower cost and healthy uniform crops that have the ability to withstand competition with weeds. It is good to use moldboard or disc plow that kills weed with a depth of 10 cm, if possible 6 - 8 weeks before planting. A tine harrow with a small size clod should be used at least in twofold two or three weeks (IRRI, 2003)



Fig 1. Land preparation by a citizen of Shonga Emirate

Planting of Rice:

Before planting. Bunds should be prepared to retain water where necessary. Early planting makes the crop to compete better with weeds, avoid some pests and grow fast with high yields. Nonetheless the appropriate time to start planting depends on various factors, such as the

ecology of the area, the availability of water in the case of irrigation, variety and the ideal time of harvest. Early planting makes the crop to compete better with weeds, avoid some pests and grow fast with high yields. Nonetheless the appropriate time to start planting depends on various factors, such as the ecology of the area, the availability of water in the case of irrigation, variety and the ideal time of harvest.5 of obtaining inputs and increase yields. The rice ecology to a large extent influences crop rotation practices (PROSAB, 2005-2009).

The rice ecology to a large extent influences crop rotation practices. Land use intensity is surveyed in Shonga for 3 years. The survey clearly shows that the prevalent practice (75%) - across ecologies - is the continuous year in-year out cultivation of one crop per year over the three year period. However, the survey also highlighted an increasing land use intensity progressing from upland through rain fed lowland to semi-irrigated. According to Omofonmwa, 2007), an intermittent single cropping implies that the field was fallowed at least once during the main season over the three year period. This practice was reported for 22% of surveyed fields - but for up to 32% of upland fields and none of the (semi-)irrigated fields. Continuous cropping with the same field year in year out proved the decline in the salinity of the soil. Through this, to a local farmer, it should be noted that over 83% the upland experienced sharp decline in terms of productivity while over 60% of the lowlands experienced around 40% decline in rice productivity (Alhaji Aminu Umar).



Fig 2. Rice planting by farmers in Shonga Emirate

Crop Establishment:

The best variety is the variety suitable to particular rice ecology. So farmers are advised to select a variety suitable to their farmland ecology that is using an upland rice variety in an Upland area or using a lowland variety in a low land area (Abubakar, M.M.). And it is best to use the variety that is popular with the consumers in the area, which has a good yield potential and is Resistant to diseases. Seeds of high quality reduces the number of seeds to be planted, due to their viability and they tend to produce healthy and strong seedlings with high yields. To Seck (2012), a qualitative seed is Very clean with no weed seed and obvious cracks. Improved rice varieties such as FARO 44, NERICA 1 and NERICA 2 have shown promising results in some studies carried out recently.

Overall, rice tends to be cropped as a sole crop. Rice intercropping was reported in 30% of the Upland rice fields, and 8% of lowland rice fields. Rice intercropping is primarily with maize - both in upland and lowland. In lowlands Intercropping includes maize-rice relay cropping, whereby the maize is harvested prior to the Incidence of flooding. Reported seed rates for the intercrop are low - averaging 2.5 kg per ha-in part due to intercropping only in part of the rice field (Erhie, 2018).

In terms of the type of rice varieties used, farmers reported common use of both 'traditional' (56%) And 'improved' varieties (65%).¹² Use rates of 'improved' varieties are higher in the upland and Irrigated surveyed fields (71-72%) compared to lowland fields (61%). However, in lowland and irrigated fields it is also common for farmers to use 'traditional' varieties. As a result, it is only in Upland fields that use rates of 'improved' varieties clearly surpass 'traditional' varieties (Akpokodje, 2001). At first Glance this is remarkable, as upland rice is often considered as more traditional and upland Ecology more heterogeneous compared to lowlands.

Crop establishment is always manual, with three modes of establishment being reported: drilling (or dibbling), broadcasting and transplanting. Mode of crop establishment is ecology

dependant: in upland rice fields, drilling is the prevalent practice, and in irrigated fields transplanting. Lowland rice fields present a more varied picture, with an emphasis on broadcasting and drilling and to a lesser degree transplanting. Rice seeds are generally kept from the previous harvest. The reported seed rate averages 75 kg per ha. The mode of crop establishment determines the corresponding labor use, with broadcasting being least labor intensive and transplanting the most (Idachaba, 2004).

Weed Management:

Weeds are capable of reducing yield as a result of the competition they provide to rice plants. For a weed to accumulate 1 kg of dry matter, it means it has reduce 1 kg of potential grain to be produced. The yield loss caused by weeds mostly occur within 20 -50 days after establishment of the crop, which is why early weeding is necessary (Alhaji Aminu). It is also important to weed immediately after initiation of panicle to prevent shedding caused by weeds (Lamidi e-tal, 2013). When using herbicides, it is important to identify correctly the weed in order to use the right Herbicide base on the label recommendation. Herbicides are more effective when they are applied to small weeds. Nonetheless pre-emergence herbicides can be applied before weeds are established and post-emergence after weeds are established, but care must be taking to avoid crop damage. It is necessary to wear protective clothing before spraying herbicides (Mustapha, e-tal, 2012).

According to an informant, hoe weeding is the predominant weed control method in rice systems in Shonga (Ibrahim, Abubakar). However, the efficacy of hoe weeding is often compromised by the continued wet conditions characteristic of the beginning of the rainy season. Hoe weeding under wet conditions often causes weed to re root and reestablish, necessitating several rounds of weeding to keep the crop weed free and avert yield losses. This is however, tedious. In efficient, time consuming and associated with high labour demands. In addition, labour for manual weeding is scarce and often too expensive for the average farmer to afford. Consequently, farmers spend a large amount of time in weeding operation. In upland rice systems, hand weeding was estimated to take 173 to 376 person hours per hectare

depending on the number of weeding interventions. Weeding is reported to negatively affect women and children's wellbeing because of the high labour burden and drudgery involved. Despite the effort expended in hoe weeding by farmers, however, weeds still cause considerable yield losses, because most of the weeding operations are done well after the crops have suffered irrevocable damage from weeds (Okoruwa, et-al, 1996).

Fertilizer Application:

Almost all soil types provide little quantity of nutrients to crops, which make fertilizer application necessary to increase yield. Fertilizers have the ability to improve the physical conditions of the soil. The amount of fertilizer to apply depends on the quantities and level of residual nutrients in the soil and the type of fertilizer materials Available. It is advisable to apply fertilizer doses based on soil test Results and expected yield. There are two different types of fertilizer which are: artificial Fertilizers which are industrially made and Organic manure which can be found in the faeces of animals and decomposing plants. Fertilizer is applied manually, typically in a single dose and by broadcasting. (Harris. 1982), most frequently used fertilizers are NPK (40% of rice fields) and urea (23%), with 5% of rice fields receiving unspecified fertilizer. Fertilizer dosages vary, with an average of 150 kg per ha for those that apply NPK, 69 kg per ha for urea and 103 kg per ha for unspecified fertilizer type.

The recommended rate of fertilizer application ranges from 120 kg -200 kg/ha (kilograms/hectares) of NPK 15:15:15 28 days after seedling emergence and 50-100kg of Urea/ha after panicle initiation, However, upland rice ecology rice require more fertilizer application, that is 200kg of NPK 15:15:15 and 100 kg of Urea/ha. Applying high rate of fertilizer to local varieties is not encouraged, because it can cause lodging (Aminu Dahiru).

Harvesting and Threshing:

The harvest and post-harvest operations are manual. Harvesting is commonly done by sickle or knife. The harvest is subsequently threshed and winnowed manually-typically in the field or at the compound. Rice is ready for harvesting when the grains are hard and are turning

yellow/brown (about 30-45 days after Howering). Rice is fully mature for harvesting when 80-85% of the grains are straw color. To harvest, cut the rice stems with a sickle at about 10-15 cm above the ground. Tie the panicles in bundles, then place the tied-up bundles of the harvested rice crop in an upright position for drying before threshing (Bamidele, e-tal, 2010).

In fact, a local rice farmers, agreed that rice must be harvested on time in order to get maximum yield with good grain quality (Faridah, Musa). On the other hand if rice crop is harvested too early, many of the grains will be unfilled or immature and immature grains easily break when milled and cannot be used as seeds because they do not germinate. Late harvest cause heavy loss through bird attacks and shattering of seeds. The best time to harvest rice is when 80 -85% of the grains are coloured like the straw and the grain moisture that is required is 20 -22% and this is usually 30 days after flower production (Aminu, Dahiru). However, Olukosi (1990), assert that since the grains at the lower part of the panicle are not soft but hard, it is also good to separate the panicles from each other after cutting and dry the grains soon after threshing, preferably sun drying on tarpaulins.

Likewise, thresh on hard surfaces by beating the grains out from the ears. Winnow to separate the chaff and empty grains from the well-filled mature grains (IRRI, 2001). Dry the paddy to a safe Moisture level of Between 12 and 14% before storing. Freshly Harvested paddy does not store well under High temperatures. Remove foreign Matter in the paddy to Avoid localized heating Spots. Drying should be on mats spread on concrete floors and should be done slowly for the first few days to reduce breakage during milling. Avoid drying on bare floors to minimize the introduction of sand and pebbles and other foreign matter as they reduce the quality of the rice (Fasoyiro, 2012).

One of the simplest systems for threshing rice is to pick up the sheaf of rice and strike or beat the panicles against a hard surface such as a tub, threshing board or rack; or beating the sheaves spread out on a threshing-floor with a flail or a stick or tramples it underfoot. The threshing-floors on which the sheaves are spread must have a hard, clean surface. The pedal-operated thresher consists of a rotating drum with wire loops which strip the grains from the panicles when fed by hand. It can be operated by women and can be used in hilly or terraced

areas because of its portability. By using one of these methods of hand-threshing, a worker can obtain 15 to 40 kg of product per hour (IRRI, 2001)

It is noted that, (Alhaji, Aminu) whenever draught animals are available and there are large quantities of rice, threshing can be done by driving the animals (harnessed, in that case, to threshing devices) over a layer of sheaves about 30 cm thick. This operation, which is also called “treading out”. This method of threshing rice is adopted in some Shonga farmers, of draught animals. Paddy is obtained by running the carriage twice over sheaves of rice that are spread in layers on a circular threshing-floor 15-18 m in diameter. The sheaves must be turned over between the two passages of the tractor. If operations are alternated between two contiguous threshing-floors, yields of about 640 kg/h can be obtained (Neveke, 1979).

Challenges Of Rice Production In Shonga Emirate

There are a lot of challenges associated with rice production worldwide, although every geographic area has major issues to deal with. However, the issues common to almost all places are; drought, availability of fertilizer, soil salinity, pest and diseases, mechanization, availability of land and support from government, NGOs and international organisation. To Bamidele, (2010), these issues have been of great disadvantage to the farming prospect in Shonga emirate and Nigeria in General.

Based largely on the report from the farmers, one of the most crucial factors of production known to man is capital. Capital is needed to set up an animal production and processing farm and capital is needed to sustain productivity. One of the major constraints of the animal industry especially in developing countries like Nigeria is capital. Food produce and fertilizer prices have been skyrocketing over the years, Fertilizer availability has been a pressing issue for a long time, most especially in Nigeria, where the prices keep skyrocketing despite government intervention. This can lead to a decline in the production of rice. Farmers are mindful of the significance of fertilizers that is both organic and inorganic in farming activity. Financial inadequacies have led to slow growing animal industries or moribund ones or even destroyed animal production industries. Low income earners who dominate the animal

industry are not able to cope with the demands of the industry especially when production is not at its optimum level.

Farm mechanization is a process of introduction and development of mechanized support of all kinds at various levels of agricultural production in order to reduce manual labour. In support of this assertion, Olukosi (1990), further said that large scale farms in Nigeria are faced with the following constraints to mechanization include: credit accessibility, inability of entrepreneurs to set up manufacturing and repair services, lack of improved infrastructure, inadequate complementary inputs due to high cost, such as electricity and fuel, inadequate legal capacity to protect the rights of owners of machinery, and poor implementation of policies. Addressing this issues should be the policy objectives of the federal government.

Drought and Pest Control of Rice

Decreased rain fall coupled with intermittent drought is a common feature in the tropical and sub-tropical savannas such as Shonga emirate. It has been estimated that 25% of the Fields used for upland crop production are prone to yield reductions as a consequence of Drought. To Scott (1995), Drought tolerant varieties developed through plant breeding are More accessible to farmers than costly agronomic practices or irrigation enhancements that Might require large investments by farmers,

Most of the local varieties of rice are vulnerable to pest and diseases (Farida Musa). The common diseases Associated with rice include blast, rice yellow mottle virus (RYMV) and brown spot while Common rice pest include Diopsis speciés, African Rice gall midge, short horned grasshopper, birds, rice rats, and grain sucking insect pests (e.g. stink bug). Using disease resistant rice varieties and good cultural practices often limit infection to most Of the diseases. High nitrogen in the soil associated with little potassium can increase blast Damage. Cultural practices such as early sowing, narrow spacing of plants, using scarecrow and Maintaining weed free field and the use of bio pesticides can minimize pest damage. Ezendinwa, (2001), others include rouging of infected plants and immediate Replanting,

manually scaring the birds, tying old VHS tapes diagonally, installation of bird Nets when available, the use catapults and fencing with bamboo or chicken wire mesh or Polythene sheet to prevent rats and grass cutters from encroaching. The control of other pests and diseases was reportedly rare. Only in upland rice - and particularly in Shonga- was it relatively common to control other vertebrate pests by setting traps and fencing fields with physical barricades. These methods of traps worked most of the Time if installed correctly and in terms reduce the flow of animals such as rats to the farm.

Dynamics Of Rice Marketing Strategies In Shonga Emirate

Rice producing households typically sell their paddy to traders. Second most common is to sell to millers. Rice traders normally come from outside village (81% of villages). The place of transaction for rice sales varies-with most sales taking place within the village, at the main market or at the local market. Sales at the farm itself are uncommon. The peak period of paddy sales is immediately after harvest. For most of the farmers, this period is December to April, with December as the absolute peak month (Alkire, 2002).

Farmers don't produce agricultural commodities for global markets, they produce food for local customers. Thus, marketing strategies for new farmers are food marketing strategies. The farm media has begun to give some attention to the rapidly growing markets for natural, organic, and locally grown foods. However, these new markets are treated as niche markets, suggesting they are of limited importance and relevant to only a few specialty producers. If the niches grow large enough to be of interest to mainstream retailers, as with organics, the experts seem to assume that marketing strategies of new farmers will become pretty much the same as commodity marketing. Most of the local rice farmers asserts that the market will determine prices and that the farmers can either take them or leave them.

The marketing strategies employed by the people of Shonga are not about advertising, promoting, or selling; they are about finding people who already want to buy what they produce, not only because it is fresher and tastes better, but also because of how it is produced and who produces it (Khadija, Ibrahim). The new consumers are willing to pay a fair price for

food produced with ecological, social integrity. New farm marketing is not about finding large numbers of people who want the same things, but finding just enough people who share the values reflected in the new farmers' products and processes to make their farms successful. Evidence from the field reveals that new farm marketing is not about reducing costs through volume, it is about creating value through uniqueness.

Marketing strategies for Shonga may involve farmers markets, roadside stands, or on-farm sales associated with pick-your-own or agro-tourism events. As farmers move into these higher-volume food markets they are particularly susceptible to the old patterns of mass-production and mass-marketing of the industrial food system (Scott, 1995). Through mass production, the idea of sell is shifted to Industries who process these foods and sell the finished product to consumers.

An interaction with Aminu, a local rice farmer on the marketing of their products in Shonga, he asserts that like many other communities, Shonga have a local market which operates on market days. On these market days, particularly every Friday, people from different parts of Kwara state converged in Shonga. In fact, some of these people brought their own goods to sell while the rest were supplied by the people of the local community. People from close communities such as Lakanla, Share, Tsaragi Lafiyagi participated in these market days while people from far places such as Mokwa, Oyo and many others attend in order to buy agricultural and other commodities in the best prices available.

It is noted that the state government is yet to fix a pre-season price for rice. Farmers' organizations and Co-operatives have neither a role in fixing rice prices nor serve as an information source on prices. Hence, the traders constitute the most important information source for rice prices. Other farmers also constitute an important source. Only few respondents stated that they obtained information from the radio (Faridah). This suggests that the radio has not been put to effective use in service delivery to farmers. Farmers should be empowered to fix the prices of their produce through institutional reforms, such as capacity building of Farmers' Organisations rather than through the middleman.

Evidence found that the activities of middlemen serves as hindrance in the marketing of rice in Shonga communities. These traders have ready cash and unite to fix the price of paddy rice. They equally bought rice directly from farmers and often resell it in the same market, thereby earning commission for doing absolutely nothing. Their union prevents farmers from selling directly to bona fide traders. This system keeps farm gate prices very low; farmers usually need cash during festivals and therefore have to sell off their produce in order to meet social obligations. More respondents attributed bad roads linking from Share to Shonga as a mitigating factor against the profitable marketing of in the community. Poor storage infrastructures, the lack of a standard measure, the poor quality of parboiled rice. The availability of varieties that attract only low prices and poor processing technology are also cited as problems facing the rice farmers in Shonga Emiarte.

Concluding Remarks

This paper has examined the production of rice and food security in Shonga Emirate of Edu LGA of Kwara State. It explained that rice has been the first and foremost cash crop been produced by the local people in Shonga. It is produced primarily for the market. This paper explicitly show that rice producing Farm households are primarily small-holders with limited capital resources. They cultivated an average of 8 ha with crops per year-of which 3.3 ha devoted to rice production. Crop farming typically is the main source of household income, but households variously supplement their income with livestock and off-farm sources of income.

Government in recent times have realised the need to focus more attention in the production of the cereal crops more especially on rice and cassava production as major plans in the agricultural Transformation agenda. Therefore, to make this laudable initiative a reality, it is important that adequate attention is given to rice production and processing at all levels of government particularly in rice producing centre like Shonga Emirate of Kwara State. In order to transform the current trends in Rice production and processing in the state, it is pertinent that agricultural development agencies need to work closely with the small-scale farmers in the field to understand the real situation of things and the challenges confronting them. This implies that, strategies on how to improve the working conditions of these farmers should be the central point in the government planning and implementation process.

The study also revealed that youths in the study area were rarely involved in rice Production. The major factors affecting their involvement in rice production were years of experience, organization membership, access to credit, source of inputs/ Implements and extension contacts. The major constraints faced by youth in rice production were inadequate capital, inadequate storage facilities, inadequate farm lands, inaccessibility to information on farming practices and inadequate farm inputs. The youths involved in rice production should be helped and be encouraged by relevant authorities through the provision of needed resources to alleviate the constraints identified in Shonga Emirate. Youths involved in the programme of rice production should have access to micro-finance institutions and government should ensure more Credit, control of these institutions so as to enhance their capital acquisition requirements and to ensure greater productivity.

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