

Challenges and Prospects of Rice Production in Ikwo, Ebonyi State, 1976 - 2015

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Abstract

Rice is an essential cereal crop that is widely cultivated in different parts of Nigeria. It is one of the crops that define the agricultural activities among Ikwo people of Ebonyi State after it was introduced by the Colonial Department of Agriculture to Ikwo in 1943. Despite this, rice production was low, as farmers have been unable to meet up to the domestic demands. This article examines the challenges and prospects of rice production in Ikwo, Ebonyi State, between 1976 and 2015. It underscores the factors responsible for the inability of Ikwo rice farmers in meeting domestic demand and rise up to sustainability. It also considers the view that those challenging factors could be surmounted. The article combines both primary and secondary sources such as interviews, journals, books and internet material. It argues that concerted efforts of government and private investors are needed for rice production in Ikwo to rise to sustainable prosperity and ensure food security.

Keywords: Rice, production, challenges, prospects, sustainability.

Introduction

In 1976, Ikwo LGA was created under the Old Anambra State by the military government of General Olusagun Obasanjo. Operation Feed the Nation which impacted so much on rice production was also launched in the same year. On the other hand, 2015 marked the end of Governor Martin Nwanchor Elechi's administration that also impacted massively on rice production. Notable among the impacts was the establishment of the modern Ebonyi Rice Mill Clusters in the major rice producing areas of the three senatorial zones that make up Ebonyi State, of which that of Ebonyi Central was sited at Onu-Igboji in Ikwo LGA.

Ikwo is one of the local government areas and clan that make up the Old *Abankeleke* (Abakaliki). It is one of the local government areas that were created in 1976 in the Old Anambra State under the military regime of Gen. Olusegun Obasanjo. It shares the same historical origin with its Ezza and Izzi brother clans. Ikwo is geographically located in the Northeastern part of Igboland. It occupies the South-eastern flank, sharing boundaries with Izzi in the North, North-East and North-West, Ezza in the West, Abaomege (Onicha Local Government Area) in the South-West, and Cross River State in the South-West, South-South and South-East.¹Evidences have shown that the physical features of Ikwo which makes it possible for prosperous agriculture include, arable lands, flood plains and forests. Ikwo is the largest LGA in Ebonyi State and, it is estimated that about three-quarters of the entire land mass is uninhabited. The arable land that exist in the upland and the swamp are considerably fertile and are used for cultivating food crops. They are generally called *egu*, which means farmland. The farmland, *egu*, is vast in the sense that the entire community can farm extensively and inexhaustibly on them. Ikwo has an average rainfall of 195⁰mm per annum, with a daily temperature of 35⁰c maximum and 25⁰c minimum.²

Before the Ikwo people came in contact with the White men and, before the introduction of rice in Ikwo, their occupation was already basically farming, based on agricultural production of such staples as yam (*nji*), aerial yam (*edu*), groundnut (*ashimoko*), cassava (*njakpu*) and vegetables. According to O. N.U. Eze, *Before colonization, Ikwo was the largest producers of yam in Nigeria.*³ However, when rice was introduced in Ikwo in 1943, by the Europeans, the Colonial Department of Agriculture, Ikwo people found the crop so rewarding economically that they shifted much attention to it. The swampy nature of the area was also found very favourable for rice. Yam therefore, became secondary. This is because, rice was one of the most cash crops usually sought for export by the Europeans and in the course of this, Ikwo people got introduced to monetary economy as introduced then and up till date. They got money by selling their products to get what they want especially by hiring labourers to work for them. Presently, rice is the highest commercial crop in Ikwo. Ikwo is in fact the largest producer of rice not only in Ebonyi State, but the entire South Eastern Nigeria.⁴

However, since the 1970s, successive governments in Nigeria and the citizens have been emphasizing their desire to ensure food security, diversify the economy and reinstate the agricultural sector as a major driver of the Nigerian economy. Thus, from such agriculture-oriented policies as Operation Feed the Nation floated by the military regime of General Olusegun Obasanjo in 1976, the Green Revolution flagged off by the administration of President Shehu Shagari in 1982, the Presidential Initiatives on Increased Rice Production rolled out by President Olusegun Obasanjo in 2002 and the Agricultural Transformation Agenda launched by the administration of President Goodluck Jonathan in 2011. Those agricultural policies have increased rice production as one of their major focus, but no significant milestone achievement was recorded, and the agricultural sector is still backward despite its potentials.⁵ However, for the purpose of clarity and analysis other than the Introduction, this paper is divided into three sections and a conclusion: the process of rice production in Ikwo, the challenges of rice production in Ikwo, the prospects of rice production in Ikwo; and conclusion.

Process of Rice Production in Ikwo, Ebonyi State

The process of rice farming or production in Ikwo begins from fallow, preparation of land, establishment, and maintenance from planting to harvesting and storage. Rice planting itself begins from April, especially in the flood prone areas. The periods between April and July are basically the period of rice planting depending on the variety of rice and the kind of land involved. 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. Early planting makes the crop to compete better with weeds, avoid some pests, withstand flood 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. After planting comes the period of weeding. The yield loss caused by weeds mostly occur within 20 to 50 days after establishment of the crop, which is why early weeding is necessary. It is also important to weed immediately after initiation of panicle to prevent shedding caused by weeds. However, almost all soil types provide little quantity of nutrients to crops, which make fertilizer application necessary to increase yield. Fertilizers are necessary as it have the ability to improve the physical conditions of the soil.⁶

However, when the rice grain matures, it is important to harvest the rice on time in order to get maximum yield with good grain quality. 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 causes heavy loss through bird attacks and shattering of seeds. The best time to harvest rice is when 80 to 85% of the grains are coloured like the straw and the grain moisture and this is usually 30 days after flower production. 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. Also, good storage system plays role in the quality of rice produced in Ikwo. The best way to store rice is storing it with the husk, because it provides some form of protection to the grains from insects and it also prevents the deterioration of the grain quality. A good storing system ensures grains are protected from wet conditions, rodents, birds and insects. It is also necessary to maintain the temperature of the storage system to prolong seed life. Milling removes the husk and bran layer of rice to give the edible form. When grains with poor quality are milled the product will be edible rice with poor quality.⁷

Challenges of Rice Production in Ikwo, Ebonyi State

Despite the large piece of land, favourable environment and workforce that can work perfectly to supply all the needed rice not only to feed Ikwo populace but also to produce enough that can sustain the entire South Eastern Nigeria and even beyond, this has not been achieved in Ikwo. This is as a result of several challenges facing rice farmers in the area. These challenges to a large extent have succeeded in hindering rice production. The series of changes that have occurred in recent times in the area of rice production have succeeded in addressing some of these challenges, while others are still lingering up till this present moment as we shall see in the discussion below.

Inconsistent and Failed Government Policies and Initiatives: Each presiding government in Nigeria formulates policies without cause other than political considerations and some intangible reasons. In

the democratic setting, states are autonomous and their policies can even be at variance with the Federal government. Every government has its own area of interest and resources are allocated to meet them. This makes most government of the day jettison laudable policies of previous administrations without recourse to their aims and attendant benefits on improving agricultural productivity and rice sufficiency. The issue of fertilizer subsidy best illustrates this; Fertilizer use is promoted mainly by the fertilizer subsidy policy in Nigeria. In spite of economic reforms in Nigeria, fertilizer subsidies remained, widely practiced in the 1960s through 1990s. The costs of subsidies became high and unsustainable. Due to diversion of fertilizer subsidy to unintended beneficiaries and persistent economic woes, government could no longer bear it as it placed a high budgetary burden on the government of Nigeria, and it was terminated.⁸ Government policies have been very inconsistent, again, in 1976, the military regime of General Olusegun Obasanjo introduced Operation Feed the Nation. The agricultural programme by all indications failed to achieve its set out aims and objectives, and in 1979, Shehu Shagari came in and abandoned the agricultural programme and introduced another called Green Revolution in 1980. Muhammadu Buhari toppled the government in 1983 and became the military head of states and abandoned the Green Revolution Programme. Those inconsistencies and failures in agricultural policies of different successive governments in Nigeria have continued till date, and that is one of the challenges facing rice production in Ikwo.⁹

Illiteracy among the Rice Farmers: Another serious challenge facing rice producers in Ikwo is lack of technical know-how in the area of applications of some chemicals such as fertilizers, herbicides, insecticides, pesticides on their farms. Most times, they over apply those chemical contents, and that reacts negatively on the rice farms. Most of the rice farmers also lack the knowledge to use the modern farm implements. Government, NORCAP and some rich individuals provided mechanised tools for the farmers but most of these farmers do not have the knowledge of how to operate them. A very good example of an implement that needs expert handling is the thresher, which when wrongly handled will result in the loss of quality of the rice grain. The inadequate knowledge among the rice farmers on the usage of these implements and chemical contents usually results in loss of some nutritional values when wrongly utilised.¹⁰

Inadequate Funding: Another major challenge facing rice farmers is inadequate funding. Many rice farmers in Ikwo are peasant farmers and do not have what it takes to lease or purchase land and expensive mechanised implements. This has made rice production almost impracticable for them. Majority of these farmers have not been able to compete favourably with their colleagues who have source of raising capital. In fact, lack of funding has been very inimical to the production of rice in Ikwo. This emanates from the fact that government at all level hardly fund local farmers in the area by either sending agricultural extension officers to go to the rural areas in Ikwo and educated rice farmers on modern process of rice farming, supporting the farmers with rice seedlings or farming machines or fund the farmers. This has drastically reduced the quantity and quality of rice produced in the area and even Nigeria at large. Nonetheless, lack of funding subjects the rural farmers to untold hardship and also makes them not to be able to secure collaterals they can use to obtain loan. Most of them are never able to access credit facilities and are therefore unable to progress up to modern standard of rice farming. Most times, interest rate is high and many of these rural farmers in Ikwo don't have the capacity to pay. While some are even scared of obtaining loan and investing it on rice farming because of flood, rice pests and diseases or any other factor, they prefer maintaining on subsistence farming than taking a big risks.¹¹

Inadequate Infrastructure: Inadequate infrastructures such as road network, irrigation, processing and storage facilities played a key role in the under-productivity of rice in Ikwo. Critical examination shows that almost every road that leads to any rice farm is very dangerous and even harmful when trekking on it let alone of containing the motorists. Most of the roads are very narrow and as such made it very difficult for farmers in the area to transport their crops from the farms to the markets or city centres for sales. Many of the rice produced therefore get affected by pest and disease before they can be conveyed to the market. As a matter of fact, sometimes, these rural farmers have no other option than to accept to sell it to the middlemen that demanded for it in the farm. When those middlemen eventually brought the rice to the market, they will sell it in a very exorbitant price to the buyers. This in turn discourages some of the rural people that will ever think of engaging in rice production. Even some of them that had been involved in it are now been discouraged because of their inability to

transport the rice directly to the market where they will sell it and make enough profit and cover all their cost of production.¹²

Absence of an Irrigational System: Another central challenge that has hampered rice production in Ikwo is the absence of an irrigational infrastructure. Irrigation is the artificial application of water to the land or soil. It is used to assist in growing of agricultural crops, maintenance of landscapes, and re-vegetation of dry areas particularly during the periods of inadequate or absence of rainfall. Due to the absence of an irrigation system, the rice farmers in Ikwo find it extremely difficult to cultivate rice all year round. Even the upland rice that does not need too much water, still need some quantity of water to thrive.¹³

Inadequacy of Storage Facilities and other Appropriate Technologies: The inadequacy of storage facilities and other vital technologies for post-harvest processing and packaging infrastructures is another challenging factors that leads to wastage and underpricing of the commodity. Significant post-harvest losses ranging between 15-40 percent are reported on rice fields due to the use of rudimentary technologies and poor practices. This constraint has reduced possible income small holder farmers could have made from rice cultivation in Ikwo. Storage of produce is almost as important as growing of crops because when crops are harvested and not stored properly, they are prone to storage pest and disease which reduces the quantity and quality of the farm produce, thus reducing the income of the farmers.¹⁴

Communal Clashes and Insecurity: Communal conflicts that often occur in Ikwo as a result of land tussle especially in communities that share border with other non-Ikwo communities such like, Ofenakpa Mgbabu in Ikwo with the neighbouring Nsobor of Cross River State, and Enyibichiri, Echialike, Noyo Alike in Ikwo with the neighbouring Enyigba in Abakaliki LGA has also contributed to insecurity and land challenges in Ikwo as farmers stay away from the crises zones for the fear of being killed. Okechukwu Nwode narrated how he and his community lost hundreds of lives and millions of property as a result of the Enyibichiri-Enyigba communal crisis. The quest for good land for rice production has been the reason why Ikwo people usually move from one village to another such like the neighbouring Cross River State in search of land for rice production. This sometimes often turned to be detrimental to them when conflict occurs in the area where they bought or leased land and cultivate their rice as they always lose all their rice either to some local thieves or the rice farms being allowed to become waste for the fear of insecurity.¹⁵

Ikwo Insecurity emanating as a result of series of attacks by the Fulani herdsmen is another challenge facing rice farming in Ikwo. Several farmers have been allegedly kidnapped and killed by the herdsmen and many rice farms being destroyed by the Fulani cattle. What must have emboldened the spates of attacks by the Fulani herders is the nonchalance of the state and federal governments despite the international classification of these herdsmen as terrorists. The source of the boldness of the Fulani herders is linked to the open support of their socio-cultural organizations, notably the Miyetti Allah Kautal Hore, Miyetti Allah Cattle Breeders Association of Nigeria and Fulani Nationality Movement as well as the tacit support of the government of president, Muhammadu Buhari. Despite the perception of Nigerians that the presidency is shielding the herder-killers and their sponsors, the government has not done anything substantial to controvert this perception (International Crisis Group, 2017; Amnesty International, 2018; Ilo et al, 2019). In 2015, one popular rice farmer, Nwokora Ede from Ndiofia village in Enyibichiri community was reported to have died as result of the shock on seeing that his rice farm that worth millions of naira has been destroyed by the Fulani cattle. All these contribute to security threat challenging rice production in Ikwo.¹⁶

Climate Change: : This is caused by the release of greenhouse gases, carbon dioxide, water vapour and nitrous oxide into the atmosphere due to human activities, such as fossil fuel burning, gas flaring and deforestation. Climate change is one of the most critical challenges ever to face humanity; it can cause the worst forms of economic and food security problems for humanity. World Bank in 2010 reported that developing countries are expected to be hit the hardest with climate change which Nigeria is not excluded. The effects of climate change are higher temperatures, changes in precipitation patterns, rising sea levels, and more frequent weather-related disasters such as flood, drought, etc all pose risks for agriculture, food, and water supplies.¹⁷

The 2011, 2012 and 2013 floods which occurred in Nigeria was one of the most devastating in the country which Ikwo is one of the mostly affected part of Ebonyi State by washing away vast farm lands and rice plantations. The 2012 flood was the highest flood that has recently witnessed by rice farmers in Ikwo and it caused hardship to the local farmers in the area so much that they cried to the government

to come to their aid. And the then government under Governor Chief Martin N. Elechi distributed N15,000 each to every Ikwo farmers that suffered losses from the flood in that year, Over flooding always occur whenever the river overflows its bank, it washes away the rice farms. The absence of a good drainage system in Ikwo has exacerbated the problem of flood. This had led to food insecurity amongst the Nigerian populace and that has negatively affected the income of farmers, especially as the people of Ikwo largely depend on rice for both food, occupation and revenue generation.¹⁸ Apart from the destructions caused by the flood, the aftermath of the flood constitute another issue as it introduces different rice insects and diseases that cat up the remnant of rice crop left by the flood.

Pest and Diseases: Most of the local varieties of rice are vulnerable to pest and diseases. The common diseases associated with rice in Ikwo include blast, Rice Yellow Mottle Virus (RYMV) and brown spot. These diseases are generally known to local Ikwo rice farmers as "nshe ereshi" while common rice pest include Diopsis species, African rice gall midge, short horned grasshopper, birds, rice and grain sucking insect pests, etc, apart from bird known as "nwenu", others are commonly known as "ovu" to an average Ikwo rice farmer. Pest and diseases could come as a result of flood or brought. The pre-harvest pest and disease attack is always more devastating than post-harvest attack, and its post-harvest attack and effect could result to total loose of rice farm if not tackled on time.¹⁹

Soil Salinity: Ebonyi State is popularly known as "Salt of the Nation", Nigeria. The slogan came as result of the amount of salt content in the State' s soil. The salt content negatively affects rice production in some part of Ikwo where it is higher. The value of crops and yield of soils with high contents of salts are reduced significantly, thereby causing serious socioeconomic and environmental problems in the long term. The amassing of salts from inappropriate soil and water management is a very serious problem. To stop the loss of arable land due to salt accumulation it is necessary to use appropriate soil and water management practices.²⁰

Prospects of Rice Production in Ikwo, Ebonyi State

Despite the above challenges of rice production in Ikwo, there are still prospects that those problems can still be surmounted, judging from the available records on the performances of Ikwo people in the agricultural sector. According to Oliver N. U. Eze, *Before colonization, Ikwo was the largest producer of yam in Nigeria.*²¹ That is to say, Ikwo maintaining the centre stage in food production did not just start with rice production, it has been an age long phenomenon. However, it is on record that since rice was introduced to the Southeastern Nigeria by the Colonial Department of Agriculture to swampy areas of Abakaliki in 1942, and was subsequently introduced in Ikwo in 1943, Ikwo has always maintained the highest rice producing local government not only in Ebonyi State but entire South Eastern Nigeria, and widely known as one of the highest rice producing LGA in Nigeria.²² All these combined together gives more prospects to rice production in Ikwo. All the same, the following also constitute our hope above the illusions that rice production is growing with prospects in Ikwo.

Ikwo has abundant natural and human resources. It is a very large area covering about 5,900 square kilometers, which made it the largest LGA in Ebonyi State, and one of the largest in South East Nigeria, a population of 214,969 (excluding ages 0 to 9) as per the 2006 National Population Census. About 50% of this actually population is within their productive ages of 20 to 50 years.²³

The Prediction for the demands of rice remains very strong. By 2035, it is expected that an additional 116 million tons of rice will be required to feed growing populations. Rice is the most rapidly growing source of food, about 30 million tons more rice will be needed in Africa by 2035 which represents an increase of 130% in rice consumption from 2010. Nigeria alone will require one-third of this extra rice. Nigeria has witnessed an increase in rice production in recent years, nonetheless, the increase is not sufficient enough to match our increase in consumption. The Nigerian government has been interfering actively in its rice economy for more than forty years, due to the strategic importance of the commodity. But these policies have not been consistent due to change in regimes and priority. Example, between 1986 and 1990s imports were declared illegal, but imports were allowed at 100% tariff in 1995. The tariff was subsequently reduced to 50% in 1996, then it was increased again in 2001 to 85%. This increase and reduction in tariff continued till 2015 when the government of Muhammad Buhari came in and decided to ban the importation of rice altogether, due to forex scarcity and economic recession, which made rice farming a priority to many business men in the country. Although rice is still imported through illegal trade, but the federal government through the Nigerian customs are currently taking the right measures to tackle that. If this policy is sustained, Nigeria can be self-sufficient in rice production

and even export to other countries in nearby future, and this will continue to skyrocket rice production in Ikwo.²⁴

The increasing willingness of Ikwo people in agriculture which is an important sector that provides jobs to many individuals in Ikwo. About 70% of Ikwo people gets their sources of livelihood, either as local farmers, traders, labourers, manufacturers of farm tools and its maintenance, etc, is an indication that there is hope for a greater rice production in Ikwo. And it is expected that the teeming population of unemployed Ikwo youths will further get themselves employed with the lucrative rice production in Ikwo.

The untiring Ikwo people's effort in fighting food insecurity. Food security is basically defined as the access to food at all time for healthy life. A country can only be food-secured when more than half of its population have access to food in the required quantity and quality. The food is expected to meet an acceptable level of nutritional standards in terms of the calorie, minerals and required by body, and people have to possess the means to acquire it in a consistent manner.²⁵ By this, Ikwo will continue to maintain the centre stage in riding off food insecurity in Nigeria.

There is eagerness among the Ikwo rice farmers to be enlightened on handling modern implements so that production will be more effective, as this will help them to produce rice in large quantity, thereby increasing their profits while making more food available to the populace, which will in turn reduce the level of hunger and malnutrition that is fastly overtaking the country.

The increasing willingness of government at all levels in rice production through its policies and initiatives such like the introduction of Operation Feed the Nation, Green Revolution, FADAMA Projects, International Fund for Agricultural Development (IFAD), Presidential Initiative on Increased Rice Production, Nigerian National Rice Development Strategy (NNRDS), the National Agricultural Investment Plan (NAIP), establishment of Ebonyi State fertilizer Chemical Co. Ltd., establishment of Rice Mill Industries in Ikwo, etc, which have both directly and indirectly impacted on rice production in Ikwo, are indications of prospects of rice production in Ikwo if government may continue to improve on their policies and initiatives on the sector.²⁶

Conclusion

The most disastrous among the challenges of rice production in Ikwo are pest and flood. Flood which mostly affect rice farmers in the riverine areas most times destroys 100% of the rice crop whenever it occurs. To ensure massive and efficient production of rice in Ikwo, there is need to awaken the sleeping giants in rice production through proper harnessing of available resources and cooperation between government and relevant stakeholders, as that would make Nigeria a self-sufficient rice producer and exporter in no distant time. It is therefore important for government to support the farmers by providing them with incentives such as systemic and functional irrigation, storage facilities and inputs like fertilizers, pesticides, insecticides, herbicides, infrastructures, etc. Moreso, both Federal and State Ministries of Agriculture should endeavour to buy off excess products from the farmers so that they can be empowered to produce as much as they can. Farmers must also be ensured of adequate security by government at all levels, for the primary purpose of every government is to ensure the security and welfare of the people.

There should also be further mechanisation of rice production in Ikwo by establishing a subsidized tractor and equipment hiring unit and repair workshop by governments at all levels and private individuals with the aim of encouraging mechanized farming by peasant rice farmers. Equipment fabrication and distribution at subsidized rate for rice farmers and processors are very important for greater rice production in Ikwo. This includes their standardization by specialized institution like the National Centre for Agricultural Mechanization (NCAM).²⁷ Mechanised rice farming tools is capital intensive and the farmers lack the wherewithal to engage in it. There is great need for farmers to be also enlightened on how to handle these modern implements so that production will be more effective. This will also help farmers to produce rice in large quantity, thereby increasing their profits while making more food available to the populace, which will in turn reduce the level of hunger and malnutrition that has overtaken the country.

It is also very important that Ikwo is made an agricultural city centre of the South East Zone. By this, people will be highly encouraged to engage massively in rice production and will also attract private investors to invest in rice farms, tools, equipment fabrication, seed multiplication, farm inputs,

marketing and research. And importantly, government should make rice production in Ikwo more attractive to investors by providing social amenities such as road, water, recreational centres within the rice producing areas of Ikwo. This will on the other hand reduce youths rural-urban migration that is also affecting rice production in the area. Thus, food insecurity in Ikwo, Ebonyi state and Nigeria at large will be a thing of the past.

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