# Tourism and Agro-Processing Industries: A Qualitative Study of Abakaliki Rice Mill

Emeafor, Obinna F.; Pat Uche Okpoko

Department of Archaeology and Tourism, University of Nigeria, Nsukka.

Abstract— The study examined Abakaliki Rice Mill from agro-tourism perspective. Adopting the qualitative posture to gaining knowledge and relying on in-depth interviews and field observation as primary data gathering strategies, it was found that Abakaliki Rice Mill has the capacity to be a viable agro-tourism destination providing tourism activities such as rice processing demonstrations (parboiling, sieving, drying, raking, de-stoning, milling and packaging), the picturesque sights of rice husk pyramids and the beehive of activity ever present. For this to reach fruition, however, there is the need to mitigate certain threats which exist in form of lack of basic tourism infrastructure (electricity, clinic, fire-fighting services, water shortage) together with certain challenges confronting rice production and processing such as inadequate knowledge on soil fertility management, use of herbicides and pesticides, and lack of appropriate rice farming and processing tools. While acknowledging the giant strides being made by Ebonyi State government to place the state among the top echelon of rice producers globally, the study recommends that government should at the same time consider agro- tourism as a complementary part towards diversifying state and rural economies. This is one way of increasing the multi-functionality of agroprocessing industries.

Keywords— Agro-processing Industries, Food Processing, Agro-tourism, Multi-functionality, Abakaliki Rice Mill, Ebonyi State.

## I. INTRODUCTION

Agro-processing industries refer to a subcategory of the manufacturing sector which process agricultural produce (including those of horticulture, forestry, fishery etc.) so that they are usable to consumers. The capacity of agroprocessing industries to foster development includes ensuring food security, creation of jobs, generation of income, minimizing post-harvest losses, promoting price stability, increasing demand for local agricultural produce in addition to serving as catalyst for agro-tourism development. Agro-processing industries are classified into the food and non-food industries.

Food processing industries and tourism can be mutually beneficial. This is true because food "represents approximately one-third of all tourist purchases" (Belisle, 1983), and it is "a 'non-optional' component of the tourism experience" (Reynolds 1994:191). Viewing and taking part in the processing of food which is a physiological need of people including tourists are interesting points for agrotourists and those who seek new and novel experiences. Rice mills are well-positioned to serve as agro-tourism attractions since they are situated at the entry point in the upstream of the post-harvest rice marketing chains. As a food-processing industry, the ancient Abakaliki Rice Mill holds enormous potential in the development of agrotourism in Ebonyi State. In view of this, it is imperative to study the rice milling enterprise from tourism perspective, so as to understand how the milling industry can be repositioned as a viable agro-tourism destination. This is one way of increasing the multi-functionality of foodprocessing industries. The precise objectives of the study include:

- 1. To describe the stages of rice processing in Abakaliki Rice Mill.
- 2. To conduct a survey of basic infrastructure for agrotourism development in Abakaliki Rice Mill.
- 3. To ascertain the challenges of developing Abakaliki Rice Mill as an agro-tourism destination.

The study adopted the qualitative research approach of which in-depth interview was the main data gathering technique. Secondary data sourced from books, journals and public library were used to support empirical data. The writers are optimistic that the outcome of the study will be meaningful to agro-tourism development in Nigeria.

## II. LITERATURE REVIEW

Agro-processing industries are classified into the food and non-food industries. The food processing industries are more homogeneous when compared to the non-food industries because their products serve the same end use consumption. Conversely, non-food industries serve multifarious purposes where a good number of them combine artificial substitutes (synthetics) with natural raw materials in production.

Two forms of processing exist within the agro-based industries – primary and secondary processing. Primary processing includes the simplest of processes such as washing, peeling, chopping, milling of wheat for flour production and the processing of sugarcane etc. (Agricultural Research Council (ARC), 2015:34-35). Secondary processing involves the conversion of primary processed products into more complex food products and includes procedures such as mixing, depositing, layering, extruding, drying, fortifying, fermentation, pasteurization, clarification, heating etc (Agricultural Research Council (ARC), 2015:34-35).

Opportunities abound in the agro-processing sub-sector. Kindness and Gordon (2001, cited in Kuwornu, Bashiru and Dumayiri 2014:191) submit that agro-processing creates jobs with little capital investment and makes good use of local resources. It also creates vertical linkages when small farmers supply inputs to the value chain (Overseas Development Institute 2005 in Kuwornu, Bashiru and Dumayiri 2014:191). Agro-processing industries also have a number of beneficial feedback effects on agriculture. The most glaring could be the spur it provides for increase in agricultural production as a result of market expansion. This is true because market expansion in terms of establishment of processing industries stimulates consumer demand for processed items and in turn, supply of raw materials.

Notwithstanding their vital contributions to development, agro-processing industries also impact negatively on the environment especially where sustainable practices are not adhered to. Environmental hazards associated with agroprocessing include: emission of dust and gases that pollute air quality, discharge of organic wastes into water bodies and production of noxious substances etc.

With the emergence of agro-tourism, greater link is being made among tourism, food and the food processing industries since food is a fundamental element in tourist experience. Pine and Gilmore (1999) have argued that increasing competition in consumer markets is driving a shift from the former service economy towards an "experience economy". In this sense, food has become one of the most important arenas of experience production (OECD 2012). As noted by Greg in Hjalager and Greg (eds. 2002:3), "food is central to the tourist experience and has become a significant source of identity formation in postmodern societies". Food processing is equally interesting to the adventurous tourist who seeks novel experience in terms of observing and taking part in the processes that bring about the food consumed while away from home. Little wonder why processing demonstration is an agro-tourism activity.

As a staple food around the world, rice processing industries present opportunities for the development of agro-tourism activities. In the Caribbean island of Dominican Republic, Efe-Epa Cotui (2017) reports that efforts are underway to transform the rice industry into a tourism resource through the rice route initiative. Rice Route is an ecotourism proposal to complement the country's traditional leisure offerings of sun and beaches. Taking advantage of the rice industry and the natural surroundings, the Rice Route is one of the pillars of the strategic plan aimed at improving the living conditions for residents. The Rice Route takes visitors on a tour of the entire production process from preparing the paddies to processing the grain.

Be that as it may, the capacity of food processing industries such as the rice mill to boost agro-tourism activities is a function of how well challenges in the sector are dealt with. In a paper on 'Rice Processing Challenges and Prospects in Ebonyi State' delivered on the occasion of 2016 NEST-FUNAI conference, the following challenges were identified in the rice processing industry: poor quality and insufficient paddy rice, equipment constraints and use of outdated milling technology, poor branding, pitiable marketing infrastructure, financial constraints, inconsistent government policy on rice import and lack of well trained machine operators and committed staff. These and many more contribute to the poor quality of local rice.

Furthermore, in a paper titled 'Adding Value to Rice through Processing in Nasarawa State,' Allahnana (2014) regretted that although local farmers produce the bulk of the rice farmed in Nigeria, they suffer from poor revenue due to the poor quality of rice produced. He blamed the situation on lack of knowledge, equipment and technique for the processors to improve on rice milling. He identified value addition which can be achieved through improved rice milling technology as the means by which local rice can compete favourably with imported rice. Similarly Ajala and Gana (2015) identified the need to improve the quality of indigenous rice to compete with foreign rice through selection and adaptation of modern rice technologies to ease labour in production and enhance nutritional qualities in rice processing and production. They also concurred that government has a central role to play in forming strong policies that will favour production of local rice as it is being practiced in the advanced world.

# III. BACKGROUND ACCOUNT OF THE STUDY AREA

Ebonyi State is one of the highest producer of paddy rice and "highest rice processor in Nigeria with over 2,080,000MT/annum installed capacity" (NEST-FUNAI Conference Paper 2016). Much of the state's feat in the rice industry can be traced to the Abakaliki Rice Mill. Established in 1957 with its current location at Invimagu community, Abakaliki Rice Mill covers an expanse of land measuring 1,938.464 square metres (Ujorha, 2014). The Rice Mill Owners' Association is the body in charge of the rice industry. The association is an amalgam of a number of smaller clusters of businesses which co-exist peacefully. The groups include the rice blowers, the rice millers, the rice blenders, the rice de-stoners, the dust/rice husk carriers, the bag 'stitchers', the barrow pushers, the loaders and offloaders, the vehicle owners/drivers, and the market traders.

The rice mill complex is made up of three sections; each of the sections contains 40 buildings with about 400 persons working in each section. The mill has 4,500 milling machines, 50 de-stoning centres, and 10 polishing machines. According to the Chairman, Joseph Ununu, the rice mill owners association is made up of 248 members. There are about 1,500 workers at the mill, and about 500 casual workers. Each milling machine can produce over 140 bushels of rice in four hours. A bushel of rice, which is a hundred cups, weighs 20kg and a tax of N10 is paid on each bushel of rice sold.

While going about its business, the rice mill association has not overlooked its social responsibility to the host community. For instance, the rice mill association pays a certain percentage of tax collected to the community. The association also contributes to community development projects such as construction of town hall and community initiated school buildings.



Fig.1: Map of Abakaliki L.G.A. Showing the Location of Abakaliki Rice Mill

#### Findings

Rice cultivation in the Abakaliki area begins around the month of May when rice grains are planted in nursery beds. The germinated grains stay in the nursery for between two weeks to a month depending on the specie before they are transferred to swampy land. Fertilizer application is usually carried out in the month of July to improve yield, while harvesting is often done around December. Paddy rice is usually harvested when the grains have a moisture content of between 20-25%. In Abakaliki as well as Nigeria where rice production is nearly entirely in the hands of smallholder farming, harvesting is manually done. After harvesting, what follows is threshing. Threshing has to do with separating grains of rice from the plant by using a machine or by beating rice plant with objects such as stick. After the grains are successfully separated from the rest of the plant, what follows is processing.



Plate.1: A Rice Field at Edda Community, Abakaliki, Specie: Faro 44.

# International journal of Horticulture, Agriculture and Food science(IJHAF) <u>https://dx.doi.org/10.22161/ijhaf.2.2.2</u>

# [Vol-2, Issue-2, Mar-Apr, 2018] ISSN: 2456-8635

At harvesting, the paddy is enveloped by an outer layer known as husk and the bran which covers the grain seed. The removal of the outer layers constitutes the milling process. Rice processing, thus, refers to every activity involved in transforming raw paddy rice to consumable form. According to Johnson and Ajibola in Kwabena, Johnson, and Takeshima (Eds.) (2016:111), the various critical steps of processing and cleaning tasks before reaching final consumers constitute the process of adding value and thus the competitiveness of domestic rice.

**Parboiling:** Parboiling of paddy is the first stage in rice processing. Parboiled rice refers to subjecting the paddy rice to a thermal treatment which makes it to gelatinize before milling. The parboiling process has one advantage of helping to conserve the nutritious content of rice grain. Large metal drums or barrels are positioned on rims of heavy duty trucks which serve as stands for the drums leaving spaces for firewood to be inserted underneath. The barrels or drums are filled with paddy and water. After soaking the paddy in water for about 30-60 minutes, heating of the paddy begins until boiling point is reached. The fire is then put out and the barrels are covered with sacks or mats as the paddy is left to soak in hot water for the rest of the day. The following day, the water with which the paddy was hit is drained or the paddy is sieved and little amount of fresh water poured into the barrel for steaming the paddy for about an hour. After steaming, the paddy is drained and spread on mats for sun-drying. For faster drying, the paddy is raked at intervals to expose every side of the grains to heat emanating from the sun.

**Milling:** This is the process of separating the husk from the rice grain. "When rice is processed, the husk is removed, exposing the bran. Rice at this stage is known as 'brown rice'. The fibrous bran of brown rice is rich in oil; protein; B vitamins: thiamin, riboflavin, and niacin; and the minerals: iron, phosphorus, and potassium" (Microsoft Encarta, 2009). The milling machine has two channels for discharging what has gone through it. The front outlet is where milled grains are released into metal buckets, while the rear outlet takes care of the rice husk. Broken bits of rice are discharged together with rice husk from the rear outlet.

In all, Abakaliki rice has sweet taste, high nutritional value and does not have black or broken bits of rice. It does not have to be polished while being processed as often occurs with foreign rice. It can be grown more than once a year, this ensures that there is regular supply of fresh rice in the market. Different types of rice are processed in the mill such as: 306, R8, R5, Faro 44, Mandela, Brown rice and Geisha etc. It is of relevance to note that the broken bits of rice are not left to waste as women take the husks behind the milling industry to salvage the broken bits which they use to support their families. The heaps or piles of husk which accumulate as the women sieve broken bits of rice have turned into a fascinating sight. The amazing sight of hills formed by heaps of rice husk is popularly referred to as 'Abakaliki Greater Rice Husk Hills'.



Plate.2: Parboiling of Paddy



Plate.3: Sieving Paddy



Plate.4: Raking paddy under the sun



Plate.5: A woman pouring paddy into milling machine



Plate.6: Inside Abakaliki Rice Mill

#### Abakaliki Greater Rice Husk Hills

Behind the rice mill industry, there is a fascinating scene of what resembles the ancient pyramids of Egypt; these are the massive heaps of rice husks now popularly referred to as 'Abakaliki Greater Rice Husk'. Rice husk is a typical dry or membranous outer covering of the rice. When compared to other agro residues, it has higher ash, higher potash content, crude protein, crude fat and carbohydrates (Barbieri and Mshenga 2008). Poor women from within and neighbouring communities have found succor on the 'husk hill' as they come to the site on daily basis to sieve chaff in search of rice grains (mostly broken bits of rice) which the milling machines discharged alongside the husk. A symbiosis occurs between the millers and the women since the women assist the millers to dispose the husks by conveying the husks to the hilly dump site at no cost, and in return, the women pick rice grains to help themselves and their dependants. The women can be seen at various points of the 'hills' as they dutifully climb the husk hill with bags of rice husks on their heads; and while on top of the 'hills', the activity of sieving the rice husks while conversing in folk language is quite captivating. The rice husk has various uses such as providing heat for cooking, as a raw material in animal feed production and as manure. It is also speculated that the husks produced in the Abakaliki rice mill can as well be used for electricity generation.

The rice milling industry presents a good setting for agricultural tourism experience. Tourists who want to observe, experience and probably take part in various fascinating stages (parboiling, sieving, drying, raking, destoning, milling, and bagging etc) involved in local rice processing will definitely be satisfied if the rice mill is developed for agricultural tourism. Succinctly put, Abakaliki Rice Mill is like:

> An open-air factory involving hundreds of frenzied men and women. The sound, the smoke, the aroma and beehive activity is something never to be forgotten. The rice pyramids employing hundreds of peasant women is one of the most touching, picturesque sights in the country (Ebonyi State Ministry of Information 2001:29).



Plate.7: The women as they convey bags of rice husks to the hilly dump site.



Plate.8: The women as they sieve rice grains on the husk hill.



Plate.8: Abakaliki Greater Rice Husk Hills

# A Survey of Basic Infrastructure for Agro-Tourism Development

A survey of basic infrastructure for tourism development in Abakaliki Rice Mill reveals that there is no electricity, clinic, hotel and fire-fighting services in the milling industry. The promise by the state ministry of health to build a clinic for the women who inhale a lot of dust while sieving rice still remains a fantasy. The availability of an adequate clinic is very important because visitors may be exposed to certain risks such as barrow and automobile accidents since the milling industry is always a beehive of activities. The non-availability of hotel or restaurant within the area is somewhat surprising, however, it was learnt that people are not allowed to cook inside the mill to avoid fire hazard, because rice husk can easily catch fire. A security outfit known as 'triumph' provides security within the rice mill premises. There is a borehole drilled by the rice mill owners' association, nevertheless, this does not serve the industry adequately. Additionally, the rice mill has good access road and toilet facility, though the toilet facility requires expansion and upgrading for agro-tourism purposes.

#### Challenges

Like every association, Abakaliki Rice Mill has some challenges as was deduced from oral interviews held with some members of the rice milling industry. Absence of machines that can help facilitate work is a main challenge. By way of illustration, the lack of drying machines makes rice drying, especially in rainy season difficult and risky, since rice may get spoilt if it fails to dry within 3-4 days. Again, the non availability of parboiling machines means that workers depend on firewood; long hours of parboiling large quantity of rice often results in untold suffering as workers endure the scorching heat from burning firewood. It was also gathered that maintenance of the available machines is a big challenge since machine parts are expensive to acquire. Water scarcity, especially in dry season is another problem. Machines used in the mill have cooling tanks which require a lot of water so that they do not overheat. Although the rice mill association has drilled a motorized borehole, informants concurred that the borehole does not adequately serve the mill. Interview with the chairman of the milling industry, Joseph Ununu, revealed that the greatest challenge faced at the mill is neglect by state government. In addition to the fact that the industry has not received any assistance from government, the rice mill venture has equally not benefited from the much talked about agricultural loans. Furthermore, the promise by the state ministry of health to build a clinic for the women who often inhale a lot of dust while sieving rice still remains a mirage. The only tangible benefit which the mill has received is, perhaps, the construction of the road leading inside the mill which was granted by former head of state, Chief Olusegun Obasanjo, when he visited the rice mill.

#### IV. DISCUSSION

In the view of Cooper, Fletcher, Fyall, Gilbert, and Wanhill (2006:309), 'attractions' offer the single most essential reason for leisure to destinations. Many of the components of tourist trip which include transport and accommodation are demands triggered by consumers' craving to enjoy what a destination has to offer in terms of 'things to see and do'. The aforementioned is an undisputable fact; however, it should be borne in mind that while attractions bring visitors to a destination, the availability of quality infrastructure makes their stay worthwhile. Findings revealed the nonavailability of basic amenities necessary for agro-tourism development in Abakaliki Rice Mill such as electricity, clinic, hotel, fire-fighting service and shortage of water supply. Thus, going by the SWOT (strength, weakness, opportunity and threat) analysis, the absence of the aforementioned amenities are seen as major weakness with the capacity to impact negatively on the rice mill as an agrotourism destination. A major consequence of this is economic leakage. Leakage has been identified as a foremost obstacle to maximizing the economic benefits of tourism in least developed nations such as Nigeria. Christie and Crompton (2001) remark that the magnitude of leakage could be a function of the level of development, and diversification in the destination country as well as a function of the type of accommodation that is most appropriate for the country's natural and cultural resources, together with the socio-economic conditions.

Be that as it may, it is pertinent to note that internal economic leakage also occurs where the tourism host community is deprived of what it should gain from tourism spending as a result of factors such as lack of basic tourism infrastructure. In their study on Exploring Sustainable Tourism in Nigeria for Developmental Growth, Ayeni and Ebohon (2012) found that due to lack of basic infrastructure for tourism, tourists do not stay overnight at destination communities, hence, the income expected to accrue to the local economy in terms of tourist spending is diverted to the city. This may be the case with Invimagu community which plays host to Abakaliki Rice Mill except if basic tourism infrastructure is provided within and around the community. Surely, provision of basic infrastructure will add market value to the rice mill both as an agro-processing industry and as an agro-tourism destination.

In addition, to reposition Abakaliki Rice Mill as an agrotourism centre requires that various challenges confronting rice production and processing have to be mitigated. Challenges such as inadequate knowledge on soil fertility management, use of herbicides and pesticides, lack of appropriate rice farming and processing tools which make tasks strenuous and laborious, and the expensive nature of modern farming and processing implements have to be addressed. Where these issues are not addressed, they will surely affect productivity which will in turn affect agrotourism possibilities in and around the rice mill.

Another important consideration is that of safety and risk management measures within the rice milling premises. As was noted earlier, Abakaliki Rice Mill Association is a fusion of a number of smaller clusters of businesses whose activities can result in a couple of risks for people including tourists. Husks are the main by-products of rice milling and they are highly flammable, therefore, fire-fighting services should also be a critical consideration in safety and risk management within rice milling plants. Putting in place adequate safety and risk management measures should be given serious consideration since no visitor would want to revisit a destination with poor safety and risk management system.

Again, occasional workshop should be organized for rice mill operators on good processing practices in order to produce rich, safe and hygienic rice. Such workshop shall lay emphasis on the need to ensure that rice packaging machines are free from contamination of dust and other substances like debris of metal or chemicals such as lubricant and grease generated during maintenance or while the machines are at work. Handling pest infestation through fumigation has to be done with utmost care such that it does not pose a hazard to operators and consumers. Personal hygiene of operators is also very important. They should be tutored to eschew non-hygienic practices during milling operations such as brushing teeth with chewing stick, spitting, smoking and allowing body fluid to come in contact with the product.

Finally, festivals represent a significant force driving tourism as it has become a key component of tourism activities. Abakaliki Rice Mill can be made more robust where cultural festivals of the host community, Invimagu, and nearby communities are packed for the promotion of the rice milling industry as an agro-tourism centre. Through the assistance of projectors, the annual Izzi Cultural Carnival can also provide a platform for 'showcasing' the various activities in Abakaliki Rice Mill, especially those rooted in indigenous practices as part of the heritage of the Izzi people. The Abuja Carnival, for example, illustrates how festivals can serve as catalyst for tourism development. Since its inception in 1999, the Abuja carnival which features cultural displays from the 36 states of the federation and the federal capital territory is now a main source of tourist flow to Nigeria. Festival-induced visits to the study area, no doubt, will lead to stimulation of economic activities through tourist spending in form of local transport, lodging, communication services, and purchase of souvenir, snacks and drinks etc. When packaged well and given the needed sponsorship, festivals can play important roles such as being part of destination planning process for Abakaliki Rice Mill, as well as providing the crucial link between agro- tourism and commerce.

#### V. RECOMMENDATION AND CONCLUSION

Agro-processing industries contribute very significantly to economic development considering the potential to trigger backward and forward linkages within the economy of a place. The food processing arm of agro-processing sector, in particular, is well positioned just like agriculture itself to increase its multi-functionality through agri-tourism because of the centrality of food to tourist experience. Here, multi-functionality indicates that the role of agro-processing industries to society transcends their basic function of transforming raw materials from agriculture to finished products. As tourists seek more and more authentic, rich and novel experiences, providing touristic activities on agro-processing firms is one sure way of increasing the multi-functionality of agro-processing firms. As regards the development of Abakaliki Rice Mill as an agro-tourism destination, there is the need to improve the quality of local rice so as to compete favourably with its foreign counterpart. In line with this, government has a critical role to play in formulating sturdy policies that will give the production of local rice a constructive competitive advantage.

As reported by Yusuf (2017), it is cheering that the incumbent Governor of Ebonyi State, Dave Umahi, is making concerted efforts to lift rice industry in the state to the highest pedestal. Some of the indicators include making the three mega rice mill clusters built by his predecessor functional to complement the Abakaliki Rice Mill by way of providing the necessary equipment. Another is encouraging the consumption of home-made rice, and the introduction of the one-man, one-hectare policy as a way of boosting the scale of rice production. A key recommendation of the study is for the state government to take a more purposeful look at tourism as a complementary part towards diversifying the state and rural economies. As a typical agrarian society, Ebonyi State, through its ministries of agriculture and culture/ tourism can develop the agro-tourism potentials of its agricultural and agroprocessing sectors. The food processing industries are dominated by small and medium enterprises operating in the informal sector. Developing the agro-tourism capacity of such ventures can help these informal sectors in terms of supplementary income accruing from the provision of agrotourism activities in their firms. What is more? Rural employment and economic diversification in Ebonyi State can be propelled though agro-tourism development.

#### REFERENCES

- [1] Agricultural Research Council (ARC). (2015). *The General Principles of Agro-Processing*. Farmlink Autumn, 1, 34 35.
- [2] Ajala, A.S. and Gana, A. Analysis of Challenges Facing Rice Processing in Nigeria. In Journal of Food Processing, Volume 2015. Article ID 893673.
- [3] Allahnana, A. Adding Value to Rice through Processing in Nasarawa State. In Daily Trust Newspaper of March 6, 2014. Retrieved December 29, 2017 from https://www.dailytrust.com.ng/daily/agriculture/18
- [4] Ayeni, D.A. and Ebohon, O.J. Exploring Sustainable Tourism in Nigeria for Developmental Growth. In European Scientific Journal Vol. 8. No. 20, Pp.126-140.
- [5] Barbieri, C. and Mshenga, M. (2008).*The Role of the Firm and Owner Characteristics on the Performance*

*of Agritourism Farms*. In Sociologia Ruralis, Vol 48, Number 2, April 2008, pages 166-183.

- [6] Belisle, F.J. (1983). *Tourism and Food Production in the Caribbean*. In Annals of Tourism Research, 10(4): 497-513.
- [7] Christie, I.T. and Crompton, D.E. *Tourism in Africa*. In Africa Region Working Paper Series No. 12, February 2001.
- [8] Cooper C., Fletcher J., Fyall A., Gilbert D., and Wanhill S. (2007). *Tourism Principles and Practice*. Harlow, England: Pearson Education Limited.
- [9] Efe-epa Cotui. Dominican Republic, 15 Jun 2017. Retrieved December 27, 2017 from <u>https://www.efe.com/efe/english/life/rice-from-basic-food-to-ecotourism-resource-</u>
- [10] Greg, R. Gastronomy: An Essential Ingredient in Tourism Production and Consumption? In Hjalager, A.M. and Greg, R. (eds.) (2002). London: Routledge.
- [11] Johnson, M. and Ajibola, A. Postharvest Processing, Marketing, and Competitiveness of Domestic Rice. In Kwabena G.B., Johnson, M., and Takeshima, H. (Eds.)
  (2016). The Nigerian Rice Economy: Policy Options for Transforming Production, Marketing and Trade. Philadelphia: University of Pennsylvania Press.
- [12] Kuwornu, J.K.M., Bashiru, M. and Dumayiri, M. (2014). Farm Households' Livelihood Diversification into Agro-Processing and Non-Agro-Processing Activities: Empirical Evidence from Ghana. Information Management and Business Review, 6 (4), 191 199.
- [13] Microsoft Encarta Dictionary, 2009.
- [14] Organization for Economic Cooperation and Development Paper (2012).
- [15] Pine, B.J., II and J.H. Gilmore (1999). *The Experience Economy: Work is Theater and Every Business a Stage*. Harvard Business School Press, Boston.
- [16] Reynolds, P. Culinary Heritage in the Face of Tourism. In Cooper, C.P. and Lockwood, A. (Eds). (1994). Progress in Tourism, Recreation and Hospitality Management. 6, John Wiley: Chichester, Pp. 189-194.
- [17] *Rice Processing Challenges and Prospects in Ebonyi State.* Being A Paper delivered at a Panel Discussion held at FUNAI on Occasion of 2016 NEST-FUNAI Conference.
- [18] Yusuf, V.A. How Ban on Imported Rice makes the Difference in Ebonyi. In Daily Trust Newspaper of July 13, 2017.