

# The Ceramics Industry as a Veritable Tool for Economic Empowerment in Nigeria

Ogunmola, Michael Olusola (Ph.D)

Department of Design and Fine Arts,
School of Vocational and Entrepreneurial Studies
College of Technology
Bamidele Olumilua University of Education, Science and Technology
Ikere-Ekiti, Ekiti State, Nigeria
E-mail: Ogunmola.michael@bouesti.edu,ng

ORCID: 0000000302024076

#### **ABSTRACT**

This paper explores the current state of the Nigerian Ceramic industry. With a focus on the trends, opportunities and challenges facing the industry using data from the National Bureau of statistics of Nigeria and other sources, the paper provides a comprehensive overview of the industry, including the key players, the market size, and the of the industry, on the economy. The paper also highlights the potential for innovation and growth in the industry and makes recommendations for policy makers and industry stakeholders

Keywords: Ceramics, Industry, Economic Empowerment, Nigeria, Growth, Market, Innovations

## Aims Research Journal Reference Format:

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## 1. INTRODUCTION

The Ceramic industry has been an important sector of the Nigeria economy for many years, and it has the potential to play an even greater role in economic empowerment Ceramics are used in a wide range of applications, including construction, engineering and manufacturing, and they offer a number of benefits, such as durability, affordability, and ease of production. However, there are also a number of challenges that must be addressed in order to maximize the potential pf the ceramic industry. This paper will explore the benefits and challenges of the ceramic industry in Nigeria, with a focus on it role in creating employment opportunities, promoting economic growth, and reducing poverty, It will also explore the various factors that are affecting the development of the ceramic in Nigeria. Such as access to raw materials government policies for how and infrastructure development. The paper will make recommendations for how to overcome these challenges and maximize the potential of the ceramic industry for economic empowerment in Nigeria.



On the other hand, Ceramics has attained a golden image in the field of art today as a means of economic empowerment. In the modern day society, products of ceramics industries are commonly used by people of different social classes depending on their taste choice, and purpose. Hence, no household utensils are complete without the acquisition of ceramic products which range from earthen ware to glazed articles. These are commonly found in the homes both the poor and bourgeoisie. The situation stresses choice in determining societal values rather that considerations of comfort and aesthetics by employing the available raw materials useful for industrialization and development of the nation as a whole.

Clay as one of the sediments that ranges in size from 1-10 microns are composed mainly of clay mineral that serves as raw material for the manufacture of ceramic products. With the importance of clay in the ceramics industry, it is necessary to understand its origins and characteristics. Since clay is mixed with water, it forms a coherent sticky mass that is readily moldable. If dried, it become hard and brittle and retains its shape, but can again be made soft by the addition of water. If baked in a red heat it becomes harder and then is no longer susceptible to the action of water. The clay structural family mineral emerged in the 19th and 20th centuries and it was established with the aid of x-ray diffraction (XRD). The three types of clay are montmorillonite (smectitie), kaolinite and elite (Mode and Amobi 2005). To determine the characteristics of clay, scientific fluorescence (XRF) in macro or micro (electron microprobe samples and infrared spectral analysis and thermo-pondera) analysis are very useful.

## **Types of Clays**

Two types of clay can be distinguished viz: The residual and sedimentary clay. The residual clays are those transported by natural agencies and are fond with altered igneous/metamorphic rock. The sedimentary clays are those which have been removed from their place of origin and deposited elsewhere by natural agencies. So sedimentary clays were subjected to persistent mechanical abrasion during transportation which reduced their particle size and cause irregularities. The difference between them is that the residual is full of kaolinite group while sedimentary clay is of smaller particle size and less formed crystals.

The major raw materials used in ceramic industry are feldspar, quartz-sand, iron-oxides, alumina, glass and cement etc. The modern ceramics products include: non-organic and non-metallic materials whose manufacturing process required heating at high temperature while the common products from the factory include: tile, clay pipes, re-factory bricks. Pottery, porcelain articles, enamels and ferrites in computer memories. The method specified as follows dust-press and handmade tile-slip casting method (Mode and Amobi 2005).

#### Conceptual Framework

Ceramics has become one of the products in Nigeria that represents an industrial growth. Tukur (2005) stresses that ceramics is the art and science of pottery wares in any non-metallic and vitreous enamel which is exposed to high temperature become hardened. Ceramics covers a variety of both domestic and industrial products like sculptural, architectural, sanitary, engineering and technical wares made from fired clay. Looking at the ages of these wares, it was traced to the Greek time hence, Ada (2005) in his views refers to ceramics as a clay product assisted by other colouring agents that have been made permanent or hardened through the heat treatment.



Fatima (2002) observes that ceramics has become a characteristic symbol almost of a settled life, adding that its appearance and development mark one of the important stages and development of evolution of man.

## 2. THE ROLE OF CERAMICS AND POTTERY IN VOCATIONAL ENTERPRISES

It is an in debatable fact that the ceramics industry provides job opportunities in Nigeria. One who learns ceramics or pottery can earn his or her living through self-employment and self reliance in many Nigerian communities. Since the ceramics field offers independents and interdependent careers, that is the reason while Wurika (2004) stresses that pottery/ceramics product provides necessary learning and skills development of an individual, adding that the field of ceramic offers mainly independent careers including occupational opportunities. Also, the industry equally aids educational and cultural development and the promotion of people in the industrial sectors.

In National Bureau of Statistics report (2023) found that the ceramic industry in Nigeria accounts for 70% of the country' GDP and employs 40% number of people The report also noted that the industry faces challenges such as a lack of investment, poor infrastructure, and a limited skilled workforce. Reports have been made on the African continent, that there was no writing before the Arabs' or the Europeans' arrival to the continent. Fage (1971) explained that as a result, it was not possible to leave document in describing life activities and programmers of the past except in Egypt where hieroglyphics type of writing was found and later rock document. This presented obstacle to knowledge of the past of many early societies, including Nigeria.

According to Nigeria ceramic industry report (2022). The county's ceramic industry is still in its early stages of development, with only 70% of the population having access to ceramic products. The report identified key opportunities for grown, including, expanding the domestic market, increasing exports, and investing in research and development. However, from archeological digging into the life of preliterate societies, good information about man started unfolding and among the materials that provide such useful information about man's past were pottery wares. Ceramics cannot perish but it has yielded good information about the early society through archeological findings, According to. Economic Community of West Africa State report (2023), the ceramic industry has the potential to play a major role in regional development, particularly in terms of job creation and poverty reduction. The report also highlights the need for regional cooperation and integration in order maximize the industry's potential.

Ceramics as a vocation reduces rural or urban migration. Since raw materials are naturally provided by God, it allows every apprentice to learn from various areas where there is abundance of materials while in other places vehicles are used to collect the raw material to their locations. According to the report on regional development and economic Growth (2023), the ceramic industry can contribute to economic growth and development by increasing exports creating jobs and promoting skills development . such as roads and power , to support the growth of the industry. While Tukur (2005) stresses that ceramics or pottery as one of the small scale industries for Nigerians are of great and valuable importance as it helps in the reduction of rural/urban migration, improvement in the standard of living through poverty reduction, creation of job opportunities, better improvement and promotion of local resources in Nigeria.



Furthermore, pottery or ceramics wares have shown people another dimension of decorating the vases with the use of floral or geometrical motifs and others which have not been used in the olden days. Modern methods have been introduced to beautifying human needs. Ever since man has been living and congregating in urban clusters of towns and cities, he has used ceramics/pottery to commemorate important civic events and glorify worthy personalities such as depicting the culture of an area through 'giant pots and other small pottery wares (Ogunmola 2002).



Figure 1:Expressing Twins figure



Figure 2: Giant Pot Expressing the culture of Twins



Figure 3: Pottery /terracotta of the jug



Figure 4: Pottery /terracotta Expressing the flower vase

Ewule (2004) stresses that ceramics as a vocational venture is also a business to both traditional ceramists and technologists. So emphasis should be on earthenware decorations in homes, table wares, flower vases/ vessel baked bricks and tiles of various forms for the beautification of our environment.



The journal of Ceramic Innovation (2023), argues that the Nigeria ceramic industry has a significant untapped potential for innovation and growth, It points to the need for greater investment in research and development and highlights the importance of partnerships between industry government, and academia it also call for greater focus on education and training to ensure that the industry has the skilled workforce it needs to thrive.

Ceramics and pottery become a documentation and aid history of the past: this idea comes into reality through archeological findings and most researchers who involve in the documentation of the antiquities found elsewhere or excavated from the ground. The excavators published books on them and "sold them in a large quantity for other people to purchase in order to enrich their living. Ceramics gives room for skills development and encourage the work of engineering within the scope to be able to utilize the cognitive domain in educational sector. Most artists delve into house roofing with the use of clay tiles instead of iron sheets. The knowledge of these roofing tiles allow the building to be cool always instead of experiencing heat in the room. According to the Regional Development and Economic Community (2023), the ceramic industry can contribute to economic growth and development by increasing exports ,creating jobs. and promoting skills, development it also highlighting the need for investment in infrastructure such as road and so on.

The knowledge has been introduced by engineers through research; it is even lesser than iron sheets in the approach. Since the work of the engineering is to educate and promote economic growth of the nation through contribution of their own quarter knowledge and experience to develop the younger ones in the area of creativity and ceramic production. This would enhance them self-reliance and self-development in the country. In the International Ceramic industry Association (ICIA),report (2023) states t6hat the Nigeria ceramic industry has experienced a period of rapid grown and change over the past decade, and highlights some key point that are chapping the industry, which include the rise of new technologies the emergence of new markets and the increase in sustainability, the report also emphases about the challenges facing the industry, which include completion from overseas manufacturers and need to adapt to consumer preferences while The ceramic times (2020), reports that the Nigerian ceramic industry is facing a number of challenges, including a lack of investment, outdated equipment and shortage of skilled workers. The magazine also highlights some of the opportunities for the industry, such as growth demand for ceramic products and the potential for innovation and new product development. The ceramic Time is a quarterly publication that cover a range of topics.

The methodology used in this study combines qualitative and quantitative approach methods to gain a comprehensive understanding of the ceramic industry in Nigeria The qualitative approach involved a review of relevant literature, including government reports, industry studies, and academic research. The quantitate approach involved the collection and analysis of data on the production, consumption, and trade of ceramics in Nigeria. The data was obtained from government statistics, industry reports and trade organizations. The findings from both approaches were then compared and synthesized to provide a comprehensive understanding of ceramic industry.



In a true Nigeria society, work is a social event and most labour intensive activities are planned and executed in groups. Such work is in fact enjoyed by the participants who regard such work as part of life. The social content of work among our people help to reduce stress and at the same time raises morale and productivity. In Nigerian traditional society, building a house involves the participation of family members, age mates of the owner of the house and other friends and relations. Therefore, for a successful introduction of the roofing tiles technology, there is need for a grass root capacity building fashioned after the experience.

The objectives of the paper is to examine the potential of the ceramic industry in Nigeria for economic empowerment, taking into account the opportunities and challenges facing the industry and the paper will draw will draw on a range of data sources to provide a comprehensive picture of the current state of the industry and also explore possible strategies for maximizing the industry's potential for creating jobs, boosting economic growth, and reducing poverty. The building the foundation for artistic development that would enhance education and economic of any nation will not be possible without building the indigenous capacity for achieving it. In other words, capacity building or pottery and roofing tiles concerned with enhancing the ability of society to perform specific tasks and attain development objectives.

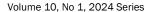
### 3. CONCLUSION AND RECOMMENDATIONS

In conclusion, the researcher has pointed out the raw material for ceramic industries and its component as well as exposing the role of ceramics to modern civilization in the sss nation's economic empowerment and therefore give the following recommendation. Ceramics contributes to the educational, industrial, technological and socio-cultural growth of Nigeria so it should be adequately developing by the government. It is important to note that the paper draw on the range of data sources to provide a compressive pictures of the current state of the industry and will explore possible strategies for maximizing the indust6ry potential for creating jobs, and boosting economic growth and reducing poverty.

It explores the role of innovation and technology in driving growth in the Nigerian ceramic industry and to highlight the importance of investing in R&D and technology transfer.

### **REFERENCES**

- Ada O. P. (2005): "An Appraisal of the Role of Pottery/Ceramics in National development", A paper presented in a National Conference, University of Nigeria, 23-26, March.
- Ahuwan A. M. (2003); "An Analysis of Traditional Pottery as a Viable Vocational in Contemporary Nigeria". A case study of Kastina State and Zaria". The Ceramics Association of Nigeria Conference Paper, presented at the Amadu Bello University, between 26th and 28th November, 2003, Zaria, Nigeria.
- Economic Community of West Africa States (2023). Regional Economic outlook for West Africa: Growth and Development in the 21st century ,Abuja. Nigeria.
- Singh, R & Rao, S (2023), The future of the Ceramic Industry Challenges and Opportunities, Ceramic Today25(2), 45-52





- Ewule, J. (2004): "Ceramics and Plastics: Impacts of Ceramics and Polymers Society. Paper presented at the Ceramics Association of Nigeria (CERAN) Conference Abubakar Tafawa Balewa University, Bauchi between 17th and November 2004.
- Fatima B. (2002):A documentary of Traditional Hausa Pottery: A case study of kano state of Nigeria. A Ph.D Seminar Paper presented at the Department of industrial design, Ahmadu *Bello* University, Zaria 14th November, 2002.
- Mode A. and Amobi J. (2003): "Earth Resource in Archeological/Geological Studies". A paper presented at the National Conference of the Ceramics Association of Nigeria (CERAN) at the University of Nigeria, Nsukka, Enugu State, Nigeria, October 26th-29th, 2005.
- National Bureau of Statistics of Nigeria (NBSN) (2023). The State of the Nigeria Ceramics Industry: A Statistical Overview Abuja, ,Nigeria.
- Ogunmola M. O. (2005): "Monumental Sculptures in Societal Development and General Education in Nigeria" in *Perspectives on Creative Arts Education in Nigeria*, edited by M. Segun Adejemilua with the assistance of Babatope Oyewole. Olukayode 'Lafe Nig. Ent. Ikere -Ekiti.
- The International Ceramic Industry Association (2021), 9<sup>th</sup> Annual International Ceramic Industry Conference Abuja, Nigeria
- The Ceramic Time, (2020), The Future of Ceramics in Nigeria Trends and Opportunities, CeTime, vol,10(5), pp16-23.
- Tukur Z. D. (2005): "The Potentials of Ceramics Small Scale Industries in Kebbi State" Ph.D Seminar paper presented at the Department of Industrial Design Ahmadu Bello University, Zaria 20th July, 2005.
- Wurika E. G. (2004): "Opportunities and Prospects in the Ceramics Industry: An Overview". A paper presented at the CEVAN Conference. Abubakar Balewa University, Bauchi between 17th and 20th 2004.
- Singh, R (2019), The future of the Nigeria Ceramic industry: Challenges and Opportunities *Ceramic Today*, 25 (2) pp 45-52.
- Singh, R & Rao, S (2023), The future of the Ceramic Industry, A review. *journal of Ceramic SInnovation*, 13(1), pp.1-20.

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