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DOWNTREND OF CERAMICS PRACTICE IN NIGERIA AND EFFORTS AT ITS RESUSCITATION

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Abstract

The ceramic industry in contemporary terms has undergone strategic transformations thereby making it a prospective catalyst for the potential growth and development of the Nation's economy. The basic rudiments of ceramics development, which are raw material research, identification, characterization, exploitation, and formulation of bodies and glazes, are necessary for contemporary ceramics practice. Nigeria has some deposits of solid mineral resources that could hasten the growth of ceramics activities largely but there are constraints in the attainment of the set goals. Technical and managerial knowledge to adopt, replicate and simplify imported processing technology by the functioning ceramic industries seems to have no end in sight. The market potentials of ceramic products such as tableware, electrical insulators, refractories, and tiles (wall and floor) are very promising. The upgrading of the existing ceramic plants in order to achieve cost-effectiveness and competitiveness in terms of quality and reliability is a much-needed factor. Therefore, the gap in refractories and advanced ceramic production can be harmonised. Concerted efforts should also be geared towards the revamping of ailing ceramic industries by provision of funds and material processing technologies within their reach to ensure the much-anticipated growth.

Keywords: Contemporary Ceramics, History, Development, Ceramic Industry

Introduction

Pottery products in Nigeria before the introduction of modern pottery were only fired to earthenware temperature and yet served the purposes for which they were made. Before the introduction of modern ceramics in Nigeria, the art of stoneware ceramics was neither practiced nor known to any potter at that time. Traditional clay potters, therefore, had limited techniques for the use of their abundantly available clay resources. Therefore, their wares were produced for low-temperature firings and their present economic needs.

In the 1980s, the ceramic industry was a strategic enabler of growth, innovation, and

sustainability. Ceramic manufacturing enterprise was among the earliest achievement of Nigerian entrepreneurs to take a sneak peek. Our contemporary ceramics in modern times incorporate design and innovation as strategies for meeting our contemporary needs for ceramic utilities and fittings.

Contemporary ceramics practice is bedevilled with a myriad of challenges ranging from a shortage of skilled manpower and facilities to processing raw materials needed for the production of ceramics in the country. This situation has led to stunted growth witnessed so far in the ceramic sector. This situation has forestalled the creation of millions of job opportunities through direct or indirect jobs targeted at the unemployed youths on the streets, who would have had a source of income from the ceramics business to keep them afloat and contribute to Nation building.

Origin of Contemporary Ceramics in Nigeria

Michael Cardew was a promising scholar who studied Classics at Oxford University in1919 and graduated with a first-class, a feat, which was gradually positioning him to pursue a career as a professor in Classics. Rather than pursuing his ambition, he rather opted for his passion, which is pottery practice, inspired by Williams Fishley pottery in 1921 at Braunton, North Devon. Cardew went to St. Ives to join the prolific potter of the 20th century, Bernard Leach in 1942 as an apprentice. Cardew was then invited by the head of the Achimota College in Ghana in 1942. The head of the Achimota School in Ghana is a man by the name of Herbert Vladimir Meyerowitz, a sculptor and wood carver who conceived the idea of total unity of art and technology.

Vladimir insisted that technology is simply the making of things. He further posited that things properly made are beautiful by nature

and the time for unifying art and technology is long overdue. After the First World War, development and local industries became accepted and respectable currency in the world of colonial administration. The then Nigerian Colonial Government advertised a position for a potter in 1949 and Cardew being a civil servant came to Nigeria in 1950. He wrote a proposal on pottery prospects in Nigeria for the Department of Commerce and Industry.

After successfully convincing the colonial Government, Cardew was awarded the job of a potter, serving the Government. In April 1952, the Abuja Pottery Training Centre was opened with its first six trainees. Although the history of contemporary ceramics in Nigeria will not be, complete without mentioning the efforts of D. Roberts who attempted to introduce modern pottery at Ibadan in 1904 and met a Waterloo in his attempt due to two reasons. Firstly, he attempted to train the men folk whereas pottery tradition rests in the hands of the women. Secondly, the trainees were unable to cope with the technological complexities of pottery production.

Introduction of Contemporary Ceramics in Nigeria

The coming of the colonial masters to Nigeria has made many Nigerians to be aware of many additional techniques and uses of their locally available clay materials. It has also led to other discoveries such as new methods of making clay products that are very appealing to the eyes as well as serve certain professional needs.

Ewule (1988) stated that the first contact that introduced the art of high-temperature firing of pottery products in Nigeria was in 1918 by one Mr. Robert D. at Abeokuta. According to him, the second contact was in 1951 with Michael Cardew at Suleja (Abuja). Based on a geological survey conducted by Cardew, Nigeria has abundant ceramic raw materials. Cardew operated his Suleja pottery

comprising both male and female trainees in an attempt to vilify his view that abundant local materials suitable for contemporary ceramics and glaze preparation are existent within the locality.

Similarly, O'Brien (1984) revealed that Cardew in his 1950 request to the then Northern Nigeria Government for the need to set up the modern pottery centre at Suleja states that, ''setting the pottery centre in Nigeria is meant to serve the rich and rising middle-class civil servants who have abandoned their traditional lifestyle and adopted western customs''. The foresight and effort made by Cardew to see that there was a need to train Nigerians in the art of modern pottery were not in vain. It has opened the way for many Nigerians to use the abundantly available raw materials for the production of many of their needed utensils for both socio-religious purposes. Nigeria has since included the teaching of modern ceramics in the tertiary education curriculum.

Some Areas of Ceramic Application in Nigeria

Our structural infrastructure would have been in a state of comatose today without the intervention of ceramics. In an attempt to assess the impact and contribution of ceramic production, foresight is needed beyond only the production stage. The long lifecycle of ceramic products shows their durability, resistance to heat, and other properties which contribute to energy and resource efficiency throughout the lifespan of the product and during its use in other phases for several applications. Ceramic products are built to last a long period of time, durability, therefore, is one of the key benefits compared to several similar materials in the market. Investigations have shown that the average lifespan of a brick building is put at a minimum of 150 years.

Ceramics also covers a wide range of applications in the electrical sector. It can be used as an insulator, semi-conductors, super-

conductors, and piezoelectric. Ceramic components are also used in automobiles, boat engines, lawnmowers, cell phones, computers, and several other electronic products. Ceramic high voltage insulators make it possible for the safe transmission of electric current to residential and industrial areas with low risks of electric hazards.

Advanced Ceramics

We have another class of ceramics called "advanced ceramics". It came onto the scene in the 20th century as the materials became more refined and special compounds and processes were developed for structural and electronic applications. These advanced ceramics are distinguished by their high chemical purity, careful processing, and high values of useful properties. Advanced ceramics, also known as engineering or technical ceramics refer to materials which exhibit superior mechanical properties.

The future success of both the traditional and advanced ceramic markets and developing non-traditional United States of America's markets depend on factors such as increasing the quality applied, and reliability of the finished products improving the cost-benefits ratio of ceramic components, increasing research and development, increased supply of domestic, high-quality raw materials and overcoming designer and end-user reluctance to use ceramics. The consideration of scientific, artistic, and creative aspects of those processes and products are important for the functional requirements for the economic development of society.

The development of new materials and applications will eventually touch the lives of everybody. In this era of rapid change in art, design, and technology, there is a need to consider the creative and functional aspects of producing products for the benefit of society and for developmental purposes. Ceramists need to exploit the raw materials and adopt production techniques of modern industries to boost the diversification of our

industrial sectors for economic improvement and development.

Constraints Confronting Local Manufacturers in the Industry and Ways of Addressing Them

Unemployment at the moment is one of the most critical problems facing our Nation from the National to the grassroots level. As was earlier established, the ceramics industry is a major employment generation and wealth creation sector. But the viable and running ceramic industries are not able to contribute significantly in this direction because of the following constraints: a shortage of skillful ceramic practitioners, difficulties for people wishing to pursue a career in ceramics to do so, shortage of experts in the ceramic manufacturing business, confusion in the aspect of training programs for career paths in ceramic science, ceramic engineering and ceramic technology in universities, polytechnics and colleges of education across the country, insufficient knowledge on chemical and mineralogical compositions and nonexistence of ceramic raw materials processing plants to feed the local ceramic establishments.

Since ceramic production involves the extraction of clay and other minerals, a long-term framework to ensure steady raw material supply and investment in the sector by philanthropists should be encouraged. It is pertinent as a means of maintaining balance and promoting biodiversity that excavated sites should be refilled and restored to their natural state. In this regard, therefore, a supportive and reliable legal framework will be essential to mobilise the human and financial resources needed to implement the essential breakthrough technologies. The Nigerian Ceramic industry operates in a competitive global market similar to other sectors of our economy. Therefore, it is essential that adequate legislation should be mapped out to create a level playing ground for the domestic and foreign ceramic products so that the one does not overshadow

the other thereby creating a balance in the system.

Problems of Ceramics Practice in Nigeria

I. High-Rate Mortality of Ceramic Industries: The importance of teaching lies in the fact that knowledge must be passed from generation to generation. Ceramics are our oldest and newest solids. In the 1970s to 1980s many ceramic block industries sprang up in Nigeria, today they are no more. Almost all of them have folded up. The high mortality rate of Nigerian ceramic industries is due to a lack of specialised service industries. In Europe and America, such specialized service industries exist.

II. Lack of Awareness: The study and knowledge of ceramic and its technology are simultaneously the oldest and the newest technology. Many people are not aware of the importance of ceramics. Not much attention has been given to this discipline in our primary, secondary, and tertiary institutions of learning.

III. Processing of Ceramic Raw Materials: Processing of ceramic raw materials is the most difficult aspect of the production of ceramic products. Processing is the most difficult aspect because all the raw materials require beneficiation before use. Take for example clay arid Feldspar.

Resuscitation of the Ceramic Industry as a Catalyst for Diversifying the Economy

The transition from a non-productive to a resource-oriented economy posits a compounding challenge for the Nigerian ceramic industry. Given the strategic importance of ceramic products and services, a competitive climate is essential to ensure the industry attains the desired global attention. Nigeria is rich with enormous deposits of mineral resources, which can raise the ceramic sector to another goldmine in place of crude oil if the mineral resources are properly utilised for the expected development.

There is therefore an emergency in aspects of adequate, stable and sustainable solid mineral development strategy essential to National security, economic wellbeing, and industrial production of ceramic products to meet domestic consumption and for export.

A step in the right direction is for the Nigerian Mining and Geosciences Society to provide technical support to the ceramic industry through the following:

Mineral intelligence should be provided to potential investors to familiarise them with the locations of ceramic minerals and possible locations to situate ceramic industries in observance of proximity to the source of raw materials. There should also be a mineral policy development action plan that can stimulate the identification and use of ceramic mineral wealth and establish rules of engagement for the mineral market through measurement of the environmental impacts of the mineral sector on National development.

The Need to Look Inward

The time to look inward and utilize what is available became imperative when the Government discovered it was spending a huge amount of foreign investment on things whose substitutes were locally available in the country. The Federal Government then commissioned the Zingg consultants, A.G. of Switzerland to carry out some test analysis of the clay deposits in some selected areas in the country. The measures that were taken by the Government afterward had far-reaching revelations. Part of the measures was the establishment of the Federal Institute on Industrial Research at Oshodi (FIIRO), National Steel Council (NSC) Jos, and Project Development Agency (PRODA) Enugu. These research centres have greatly helped ceramic researchers who work with clay and saw to the setting up of some fired brick industries in Jos, Kaduna, Kano, Ibadan, Akegwe-Ugwu, Maiduguri, and Lagos.

Gukas (1985) stated that through the outcome of the research centres set up by the Government, the ceramic industry received a boost in production and was positioned to compete favourably in terms of its products with the imported ones. The Richware Pottery industry, Lagos was able to replace the use of imported kaolin clay with the local Lisabi clay as well as using the Abeokuta Feldspar and quartz for all its products.

The Government then took a decision on the matter of importation of some items into the country and passed a communiqué stating that, ‘‘ Government would not continue to allow a situation whereby industries accept the importation of raw materials whose local substitutes could be development’’. The Federal Government then directed all her universities and other institutions of higher learning to look inward and conduct research into the use of the locally available raw materials.

Summary

Due to the difficulties of getting the needed equipment’s for the steady expansion of modern ceramic industries and studios and the crude nature of the locally made ones, many of the ceramic industries and studios had to fold up. This trend has made Nigerian ceramics practitioners continue to use locally fabricated equipment, which requires a great deal of effort before wares can be produced with their use and the slow pace of the entire production process. Cardew (1990) observed that the only discernible line of development in Nigerian pottery is in economic rather than technical direction. This, therefore, means that for Nigeria to be able to develop her ceramic sector, Nigeria needs to look inward into ways of developing her needed ceramic resources for self-reliance and the development of the ceramic industries that are on the verge of redundancy through the provision of funds aimed at resuscitating them and to carry out a total overhaul of the

policy documents drafted with the aim of sustaining the ceramic industrial sector from reaching a state of comatose.

Conclusion

Contemporary ceramics in Nigeria has in its effort to march to maturity employed a lot of diverse elements both local and modern. In fact, what started as a mere celebration of Western ideas in the mid-20th century has at the end of the century grown into a revolutionary struggle to achieve and maintain an enduring and more lasting identity. This fact is borne out of the diverse views and techniques of production anchored in the concept of the synthesis of the old and new as amplified in the works of this generation of potters. It can therefore be affirmed that contemporary ceramics in Nigeria has grown and will continue to grow in harmony with the goals, which the creative potters have set for themselves and the society.

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