

Review

Escalating cost of cement a threat to a sustainable housing development in Nigeria

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Abstract

Housing, like food clothing, is a basic human need. It is a complex package of goods services which include basic shelter living space, access to amenities, access to work, social services personal security. It saddening disheartening that housing development is now been threading by like in the cost of cement, it could be noted that cement is one the materials used in housing development. The study examines an escalating cost of cement, a threat to a sustainable housing development. It derives date from secondary sources employs production cost values, market price theory labour theory taxes subsidies theories as bases of its theoretical underpinning. The study looks into various factors responsible for cement like offers possible recommendation for its reduction.

Keywords: Cement, cost, sustainable development.

INTRODUCTION

Meaning concepts

Nigeria's economy is highly reliant on cement for the development of basic infrastructures such as roads, water supply, hospitals, schools, houses ports. Although, the domestics dem for cement in Nigeria been exping rapidly, local production continued to fall short of the dem hence, price of cement in the cement time been increasing daily.

The word cement according to Britannica Encyclopedia (1990) defines as 'adhesive substances'. It is derived from the Latin cementum, which meant stone chippings such as were used in Roman mortar, now the binding material used. In its general sense, it covers a wide variety of binding materials used for many different

purposes, but more commonly, it implies the binding materials used in building civil engineering construction. These constructional cements, which will set harden under water, are often called hydraulic cement. The most important of these is Portl cement. Others are the slag-containing cements high alumina cement.

Cement are finely ground powders that, when mixed with water, set to a hard mass. Setting an hardening result from the hydration of the cement compounds, giving submicroscopic crystals or a gel-like material with a high surface area. Cement may be used alone but, the normal use is in mortar concrete in which cement is mixed with inert materials known as aggregate. Mortar is cement mixed with s or crushed stones in size.

History of cement

The origin of hydraulic cement goes back to classical

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Table 1. Cement Price in the last five years

Cement Price	Year
N2,500	2012
N1,900	2011
N1,600	2010
N1,350	2009
N1,300	2008

Source. Researchers' Survey (2012)

Greece Rome (Sada,1984). The materials used were lime a volcanic ash that slowly reacted with it in the presence of water to form a hard mass. This formed the cementing materials of the Roman mortars concrete of 2,000 years ago, of subsequent constructions work in Western Europe. Portl cement is successor to hydraulic lime first developed by John Smeaton in 1756 (American Encyclopedia, 1980), when he was called in to erect the Eddystone lighthouse off the coast of Devon, Engl. The next development about 1800 in Engl France, was a material obtained by burning nodules of clayey limestone later in the U.S, of what was called "cement rock". These materials belong to a class known as natural cement, allied to Portl cement but more lightly burned not of controlled composition. The invention of Portl cement usually is attributed to Joseph Aspdin of Leeds, Yorkshire, who in 1824, took a patent for a material produced from a synthetic mixture of limestone clay, the manufacture of Portl cement rapidly spread to other European countries about 1870, to the United States of America.

Cement as an ingredient in housing development

Housing according to Agunbiade (1983), is a product in which man seeks shelter, security, comfort dignity. Good housing therefore, implies, not only structurally sound shelter, but, also the availability of adequate living space, in a secured environment. It could be noted that despite, the fact that housing is good everybody desires it, the roles of cement in housing development could not be overstressed. The price of cement determines in no smaller way, the number of houses that may be constructed or built hence, the lower the price of cement, the higher the number of houses that will be built.

Cement is needed both in construction building of industries. For example, in the area of provision of infrastructural facilities such as roads, water supply, (construction of dams, reservoir), hospitals, schools, houses ports. The roles of cement cannot be over-

emphasized. Also, in the construction of bridges, culverts, drainages, cement availability is highly essential.

Despite the invaluable roles of cement in development, the unprecedented increase in the price of cement, a major staple required in the building construction industry, in the last couple of months, no doubt, remained a source of concern to all stakeholders, considering the ripple effects this is already having on the economy.

It could be noted that the much anticipated price reduction of the commodity to the initial price of N1,450, which it sold at long before the ultimatum issued by the Federal Government is yet to materialize, as the price currently oscillates between N2,100 N1,900 as against N2,800 N2,600 which it sold for about a fortnight ago. Below shows the price of cement in the last five years.

From the table above, it could be seen that the price of cement needs attention.

Theoretical background literature review

In analyzing the escalating cost of cement, a threat to a sustainable housing development, the theory of cost of production of value is applied. In economic term, the cost of production theory of value is the theory that the price of an object or commodity is determined by the sum of the cost of the resources that went into making such commodity. The cost comprises any of the factors of production (such as labour, capital or I) taxation.

The theory makes the most sense under assumption of constant return to scale the existence of just one non-produced factor of production. Also, these are the assumptions, of the so-called non-substitution theorem. Under these assumptions, the long-run price of a commodity is equal to the sum of the inputs into the commodity, including interest charges. Invariably, whatever the deciding price of the commodity is transferred to the ultimate consumers. Further disaggregation of the cost of production theory of value as conceived by the neo-classical economists' are as follows: (i) The Market of Price theory: Market price is an

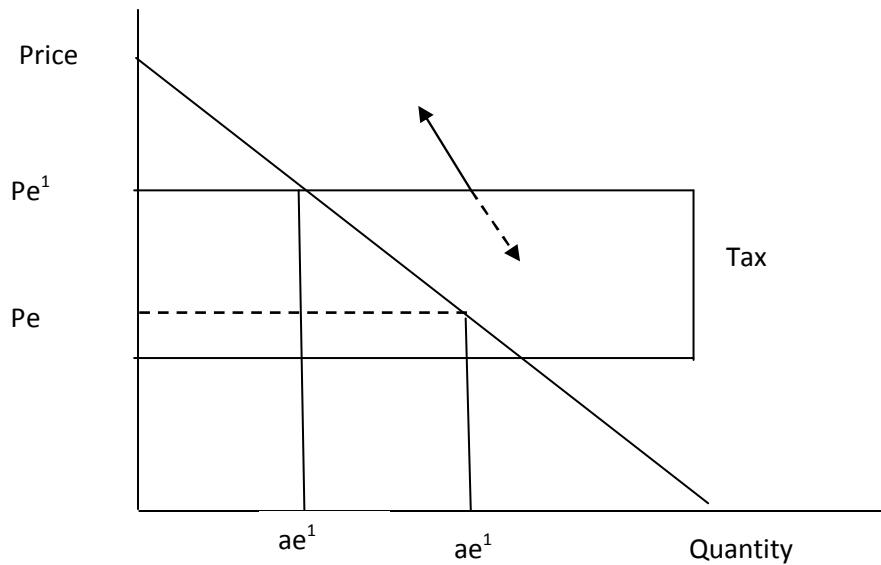


Figure 1. Taxes and Subsidies Effects

economic concept with the common place familiarity; it is the price that a good or service is offered at, or will fetch, in the market price.

Under the assumptions of the cost of production theory of value, market value market price are equal only under conditions of market efficiency, equilibrium rational expectations. Also, returns to scale economics of scale are related terms that described what happens as the scale of production increases. In other words, according to the theory, the consumers of any product are market price driver, which is determined by cost of production.

Moreover, the labour theory of value could be applicable. Under this, labour theories of value are theories in economics according to which the true values of commodities are related to the quality quantity of labour needed to produce them. There are many different accounts of labour value, with the common element that the value of an exchangeable goods or services, or ought to be, or tends to be, or can be considered as equal or proportional to the amount of labour required to produce the raw materials machinery used in production. Both quantity quality of labour can also determine the level of manufacturers' responsibility towards, production of goods or services to their numerous consumers.

Different labour theories of value prevailed amongst classical economists throughout the mid-19th century. It is especially associated with Adam Smith David Ricardo. Since that period, it is most often associated with Marxian economists while among modern mainstream economists, it is somehow considered to be superseded by the marginal utility approach.

In addition, taxes subsidies theories offer more useful

explanation to the high cost of cement in Nigeria. Under this, the effects of various taxes subsidies on price of commodities. Taxes subsidies change the price of goods services. A marginal tax on the producers or sellers of a good will shift the supply curve in the figure 1 below to the left until the vertical distance between the two supply curve is equal to the per unit tax; when other things remain equal, this will increase the price paid by the consumers decrease the price received by the sellers in terms of decreased dem. Marginal subsidies on production will shift the supply curve to the right until the vertical distance between the two supply curves is equal to the per unit subsidy; when other things remain equal, this will decrease price paid by the consumer increase the price received by the producers, in terms of increased dem. In other words, taxes subsidies are capable of determining the behavior of consumers towards achieving their utility value for goods services.

Review of literature shows that the interest rate paid by the manufacturers of cement in Nigeria is unbearable hence will have an effect on the price of cement (Ekarika, 2011). Also, according to one of the major distributors of Dangote bred cement in Nigeria he attributed to the hike in cement price by so called retailers to the rising cost of operational expenses. Further, the hike of cement could be traced to the market expediency as well as labour expenses relating to loading off-loading of the commodity.

According to Lafarge Cement (2009), the poor state of infrastructure continues to be the bane of the industry – high cost of power, fuel, transportation water security incurred by manufacturers add to the cost of production

therefore, push the price of cement up. The pricing system in the Nigerian market of the imported cement bagged at the port, costs almost the same as locally produced bagged cement. The ex-factory price for a bag of cement according to industry players is approximately the same as that of imported cement.

Factors responsible for cement hike in the recent times

Although, the Nigerian cement industry consist of five main producers namely: Lafarge WAPCO, Obajana Cement Limited (Obajana Cement), Benue Cement Company (BCC) Plc, Cement Company of Northern Nigeria (CCNN), Ashaka Cement Company (Ashaka Cement) Plc. The Lafarge Group with majority stakes in Lafarge WAPCO (2.2mnt) Ashaka Cement (0.8mnt) an estimated 30% share of the market. Its main rival in locally produced cement, the Dangote Group, which is a majority stakeholders in Obajana Cement (with capacity of 5.5mnt) Benue Cement (with capacity of 1.5mnt) an estimated 50% share of the Nigerian cement market. Cement Company of Northern Nigeria (CCNN) estimated production capacity of approximately 0.5mnt.

In a bid to promote cement self-sufficiency in Nigeria, boost local production create jobs, the Federal Government of Nigeria banned the importation of bagged cement in 2001. Cement therefore, was imported in bulk only, with import quotas granted in proportion to company's existing cement production capacity planned investment in local cement manufacturing. Although, government regulating efforts have yielded some results over the years as local production capacity has increased from 2.25mnt in 2002 to 10mnt in 2008, the goal of achieving self-sufficiency in cement is yet to be achieved due to a high dem high local consumption.

Moreover, some factors which have limited the growth of the economy include: poor transportation system, epileptic power supply, poor communication system, regulatory institutional environment that are not cost effective for running businesses in Nigeria low access to long term finance.

On transportational problem, the road situation in Nigeria is bad. Most of the roads area in a deplorable situation consists of "king size potholes", much bend they are too narrow. Expatriating further, one of the retailers in cement business have this to say as reported by Ibrahim Agboola (2011). "It is been rather difficult to buy diesel, which powers the heavy duty trucks required to haul these commodities due to artificial scarcity". Even when it is not scarce, it has been priced away from the reach of the common man. Our roads are going from bad

to worse.

Another factor for the escalating cost of cement in the country is the high cost of constructing the cement plant coupled with the unavailability or inaccessibility to loans for the construction of such plants by the manufacturers. Also, the high cost of importation of heavy machines needed for the manufactory of cement is another factor responsible for the hike in the cost of cement. Cement industry is not a small business; banks as well as people are not ready to invest into the business.

Furthermore, inadequate physical infrastructure in the country is another factor responsible for the hike in the price of cement. Such infrastructural facility such as power is a major problem. The power situation is bad most of the cement plants rely on self-generated power with a huge cost to maintain. The poor state of infrastructure continues to be the bane of the industry – high cost of power, fuel, transportation water security incurred by manufactures add to the cost of production therefore, push the price of cement up. The latest factor is a result of removing of oil subsidy by the Federal Government at the beginning of the year, all these have an adverse effects on price of cement eventually serve as threat to a sustainable housing development. This is because with the hike in the price of cement, not many people can afford buying cement for both housing other constructural purposes. The implication is poor housing quality.

Also, poor distribution of the product is one the reasons for its high cost. Most retailer are fond of diverting the products into undisclosed places thereby, creating an artificial scarcity.

Cement prospects way of reducing cost of cement for a sustainable housing development

Housing has the potential of becoming an engine of economic growth. This is because of its high yield on invested resources, a high multiplier effect, a host of beneficial forward or backward linkages in the economy. One way of achieving sustainable housing development is through availability accessibilities to cement. This could be possible through an effective infrastructural development. To this end, pragmatic infrastructural development should be pursued. Roads in Nigeria should be rehabilitated while a state of emergency be declared in the power sector. The current epileptic situation in the power supply should be addressed. Manufacturers spend much money to generate electricity.

Moreover, government should make an easy access to loans by the manufacturers. This should be at a bearable interest rate. It could be noted that most of the machines needed in the plant are imported. Consequently, efforts

should be given to less tariffs on their importation. Also, there should be tax holiday of about three or four years to the cement manufacturers' starters. This is because starting these industries takes time. So, if there is a tax holiday or zero duty on importation, it will of course assist most of the industries. That will be the Federal Government contribution to the cement industry while that of state government contribution be centered on provision construction of roads provision of water plants in the areas where the plants are sited.

In addition, the expected commencement of operation of the new six million metric tones per annum of Ibese Dangote cement Plc will open a vista for the availability of the product raised the hope of price stability. The factory, occupying 2,000 hectares of land for mining of limestone with an estimated 90 years life span, is billed to produce 7,200 tones of cement per day, thereby, helping to reduce import dependence.

CONCLUSION

Cement as a facility plays a significant role in both building construction industries. Without cement, no

decent building or construction could be accomplished. The cement hike in the price of cement is a major concern to all citizenry hence; it must be well addressed if the idea of housing for all by the year 2020 is to be realized.

REFERENCES

- Agunbiade SA (1983). Population Housing. In IO Orubuloye OY Oyeneye (eds); Population Development in Nigeria, Ibadan NISER.
- Ekarika IO (2011). How Cement Firms can survive in Nigeria. The Nation Newspaper, Tuesday Dec. 13, 2011.
- Ibrahim AY, Agboola T (2011). Unending Cement Price War. The Nation Newspaper, June 12th, 2011.
- Lafarge Cement (WAPCO) (2009). Providing Basic Housing Need. A Quarterly Bulletin of the First Securities Discount House, Limited (FSDH).
- Omotoso O (2006): Alleviating Poverty through Housing Development in Nigeria: International Journal of Economic Development Issues.
- The Encyclopedia Americana (1980): Knowledge in Depth Encyclopedia Britanica Inc. University of Chicago.
- The Encyclopedia Britanica (1980): Introduction, Supplement Bibliography. Printed in the Great Britain at the University of Oxford Press, Oxford.