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Sustainable Development in the Nigerian Construction Industry and the Effects on Her Economic and Political Stability

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Abstract :
Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. In the construction industry, sustainable construction has been defined as the construction needs of today being compatible with and not compromising the needs of future generations. It includes construction practices that strive for integral building quality, in addition to economics, social and environmental performances. This paper is an attempt to evaluate the effects of sustainable construction on economic and political stability of Nigeria. Field survey was carried out using structured questionnaire. A total of eighty questionnaires were distributed among construction industry professionals, out of which sixty were returned. Data was analysed using percentage frequency table. Result of the study showed that the attainment of sustainable construction will help greatly in the nation's economic and political stability. It is recommended from the results that all the stakeholders in the construction industry must put concerted efforts to do all their works in a sustainable manner so that the economic and political stability of our country can be achieved.

Keywords: Construction industry, economic, Nigerian, political stability, sustainable development

1. Introduction

The importance of the environment to sustainable development cannot be overstated. It is the bedrock on which our survival lies. Any global programme of development created without taking the environment into account will truly be a house built on sand. The philosophy of sustainable development was borrowed from the science of environmental economics. There is the basic recognition of a relationship between environmental issues and economics in general the one affects the other (Ashworth, 2004). In Building a Better-Quality life (2000), the government has outlined its view on sustainable development strategy as outlined in these four broad aims:

- Social progress which recognizes the needs of everyone.
- Maintenance of high and stable levels of economic growth and employment.
- Protection and if possible, enhancement of the environment.
- Prudent use of natural resources.

However, achieving sustainable economic development (particularly in Nigerian Construction Industry) is critical to the future of the society and this has been recognized in 2004 by United Nations (UN) who has announced their Decade of Education for Sustainable Development. The need for tertiary institutions to address the issue has been pointed out firmly by the "Sustainable Development Commission" who recommended that sustainability be embedded in higher and further education, and appropriated interdisciplinary studies and research are promoted (Sustainable Development Commission (SDC), 2004). However, within the UK, Universities have been slow to take up the challenge of producing graduates capable of meeting the needs of a sustainable society (Lewis et al, 2005).

This seeming lack of ability by Higher Education to produce graduates with the skills and knowledge base required to facilitate a more sustainable society is also recognized by the Higher Education Funding Council for England (HEFCE), who in response to the emergency agenda have made the embedding of sustainability within educational practice their Objective1 (HEFCE, 2002).

One of the key barriers to the development of a sustainable society is the limited understanding of the concept of "sustainability", other than from a single environment-focused perspective and the consequences of this need to be explored. Within the built environment this mono-focused approach is exacerbated by limited communication across the professions and between professionals and the wider community of stakeholders who use the buildings that we create and manage. Higher Education presents a unique opportunity to change this by initiating and encouraging communication between different cultural and professional fields and breaking down perceived silos of discrete professionalisms and disciplines.

However, this opportunity is generally under-exploited and professional barriers remain, as subject specialisms are taught in relative isolation (Spence et al, 2001)

Ashworth (2004) opined that in recognizing the importance of sustainable building development, the construction industry is challenged to provide built assets that:

- Regenerates and revitalize town centres and other urban areas where decay has taken place.
- Plan communities to place less reliance on the motor car.
- Use energy more efficiently.
- Minimize mineral extraction.
- Cause minimum damage to the natural and social environments
- Provide training through schemes such as Welfare to Work and the New Deal.
- Enhance the quality of life.
- Will be acceptable to future generations.

Sustainable construction in Nigeria can be one of the important areas where cost studies can play a significant role for the long term. The part that whole-life costing has to play in this context is considerable. Sustainable construction practices offer the opportunity to create environmentally sound and resource-efficient buildings by using an integrated approach to design.

2. Literature Review

A society is broadly a group of people who share a common culture and distinct entity. In this perspective, societal values are ideals; ways of life, and most times, the expectations of the citizens within any society with regards to the utilization of resource, man's interaction with the ecosystem, and sustainability of the environment. They are basic conceptions of the desirable or "expression of prediction emulated by others, and ultimately used by humans to acquaint them and rationalize their choices" (Sillars and Gronback, 2011, Bosorun and Ayeni, 2013).

In Nigeria, the society and the physical environment fail to reflect much of this reality. The value system is eroding in the face of threatening alien value of Western civilization. Majority of our societies today, are driven here and there by vicissitudes of life; compelled to use land solely by our urges and passions for revenue base, recognition and power with little consideration for environmental sanity. We are living in a world devoid of values, thus, prognosticating our conscious, purposeful and dynamic existence. Restoring societal values at his critical period is expedient to bring sanity to the society and keep it functioning (Shilling, 2007). The environmental planner is required to make impact in stabilizing the various activities across space to improve the quality of our societal value through efficient planning.

The environment is the totality of all external and physical or social resources available to the satisfaction of human needs. It is where man resides and shall his activities take place. Invariably, the environments of our various societies constitute capital assets which unlike other forms of capital are poorly understood, scarcely maintained and in most cases undergoing rapid degradation. It is a common knowledge that "environmental values are products of social constructions" (Hannigan, 2006), needed by people in situation that concern environmental questions (Stan, 2000a).

The problems associated with urbanization especially its effects on the Nigeria's built environment have been widely acknowledged by various researchers (Oduwaye, 2009; Dimina and Omatsone, 2010; Dimuna, 2011; Olujimi, 2011; Ayeni, 2012; Babalola, 2012) to characterize chaos deterioration, decay, poor quality and unplanned developments. Conversely, these have affected environmental planning. Urbanization as defined by Olujimi (2011) is "the process by which urban population increases in absolute number and in proportion to rural population" and simply a process of population concentration (Jiboye, 2011; Tisdale, 2012). The overwhelming increase has caused many of the urban areas in Nigeria to be in shabby states and insanitary conditions.

As population continues to increase at an alarming rate in urban areas in developing countries, unplanned informal settlement and slums continue to grow (Aluko, 2010) which adversely give rise to unpleasant living environment. As urged by Williams (2000); Alam et al (2006), this also leads to inevitable congestion which causes environmental hazards and degradation. Currently, Nigeria is experiencing its fair share of urbanization (Adediran et al, 2012) and rated among urban areas with lowest liveability index in the World (Daramola and Ibem, 2010) The problem as noted by Olujimi (2011) are associated with diversity of functions where various occupations, industries and services are represented; and have caused different environmental damages such as ecological disturbances, destruction of flora and fauna, air, water and land pollution, landscape degradation, environmental decay, overcrowding, congestion as well as crime and violence (Darmola and Ibem, 2010; Jiboye, 2011, Gutti, Aji and Mogaji, 2012). Contrary to the situation in developed countries, urbanization process as observed by Aluko (2010); Jiboye (2011) was as a result of rapid industrialization which subsequently transformed the cities whereas in Nigeria, it is a consequence of "push" from the rural areas and the "pull" to the town, which have posed the challenge of diverse socio-economic, cultural and environmental problems and require effective and good governance in order for the problems to be addressed.

Many factors have been traced to be responsible for the poor state of the environment in Nigeria. The major one is the poor environmental management practices which have lead a poor quality of the environment in the urban areas (Daramola and Ibem, 2010). With the rapid rate of urbanization and constant demand for land for different purpose, Arigbola (2008) argues that adequate planning and control is needed to ensure harmonious development.

However, the world no doubt is now a global Village and whatever happens to it affects every person directly or indirectly. Hence, global problems constitute a serious threat not only to humanity but also to the entire ecosystem (Oyeshola, et al, 2009). In Nigeria, the problems of slum formations and urban degeneration are common occurrence in major cities particularly in Lagos and Ibadan which are probably among the largest cities in the country. Over the years, these problems have constituted major challenges to sustainable urban development. Official response to the situation through urban renewal, slum upgrading and outright clearance has not achieved any success in stimulating any form of sustainability. For instance, the effect of Maroko slum clearance in Lagos in the early 1990s has led to several untold hardship and consequent homelessness experienced by most of the affected victims.

3. Methodology
This research work was done through:

Text books, journals, conference materials and the internet were used to carry out a wide literature review in order to articulate the existing knowledge on the subject.

Field survey: Field survey was carried out using structured questionnaires as the instrument of the study. A total of eighty (80) questionnaires were administered among construction industry professionals. Sixty questionnaires were completed and returned. Attention was paid to only the city of Lagos as most of the construction industry professionals are located there.

3.1. Results and Discussion
Data that were obtained from the field survey are presented below under the following headings.

3.1.1. Details of the Respondents
A total of sixty (60) questionnaires were returned and properly completed which represented 75% of the overall questionnaires distributed. Details of the respondents were as follows: Architects were 10 (16.67%), Builders were 8 (13.33%), Engineers were 12 (20%), Estate surveyors were 6 (10%), Quantity surveyors were 9 (15%), Town planners were 10 (16.67%) and others were 5 (8.33%).

The educational backgrounds of the respondents were as follows: National Diploma holders were 10 (16.67%), Higher National Diploma holders were 20 (33.33%), Bachelor's Degrees were15 (25%), Master's Degree holders were 12 (20%) and Ph.D. holders were 3 (5%).

3.1.2. Capacity Building Framework
The UNEP (United Nations Environment Programme) mission statement is a manifesto for capacity building. The organizations role is "to provide leadership and encourage partnership in caring for the environment by inspiring, informing and enabling nations and peoples to improve their quality of life without compromising that of future generations" The Nairobi Declaration on the Role and Mandate of UNEP further elaborated the existing UNEP Policy mandate as follows
- To provide policy advice based on the best scientific and technical capabilities available.
- To advance the implementation of agreed international norms and policies.
- To serve as an effective link between the scientific community and policy makers.
- To provide policy and advisory services in key areas of institution building to governments and other institutions.

3.1.3. Sustainable Development Process
Sustainable development is the goal; capacity building is the means to achieving it. However, the factors considered in evaluating sustainable development are:
- Development of policy at the National, regional and rural level
- Environmental law development.
- Synergies enhancement between environmental convention and multilateral environmental agreements.
- Capacity building to assess environmental conditions and changes.
- Capacity building to respond to and/or mitigate environmental changes.
- Facilitating technology transfer.
- Disseminating best practices.
- Timely and relevant assessments.
- Undertaking assessments and issue early warning notices.

3.1.4. How Sustainable Development Is Assessed Vis-À-Vis Infrastructural Facilities in Nigeria
Major assessment of sustainable development vis-à-vis infrastructural facilities in Nigeria by respondents using Likert scale. The scales are Poor (P), Fair(F), Average(A), Good(G) and Very Good (VG) and were assigned a value of 1, 2, 3, 4 and 5 respectively.

S/n	Areas of assessment Frequency	1	2	3	4	5	F	FX	Mean(x)
1	Policy development	1	3	5	20	30	59	252	4.27
2	Environnemental Law	1	2	10	28	16	57	227	3.98
3	Synergies Enhancement	9	21	15	5	8	58	156	2.69
4	Environnemental conditions and changes	2	3	4	25	15	49	195	398
5	Mitigation for environmental changes	15	20	5	9	8	57	146	2.56
6	Technology transfer	6	7	10	10	25	58	215	3.71
7	Best practices	4	5	6	22	20	57	240	4.21
8	Timeliness and relevance	8	7	9	27	5	56	182	3.25
9	Early warning notices	3	4	20	18	12	57	203	3.56

Table 1: Areas Where Sustainable Development Was Assessed
Source: Field Survey, 2015

Table 1 above shows where sustainable developments were assessed in Nigeria using the nine (9) factors under areas of assessment. Policy development within Nigeria states is the highest with 4.27 using Likert scale of 5. It shows that development of policies at the national, states and rural areas are not lacking as it is as high as 85.4%. The issue of disseminating best practices is high, which is 4.21 being as high as 84.2%. From table 1 above it is obvious we lack the capacity to respond to and/or mitigate environmental changes as it is lowest with 2.56 on the Likert scale of 5 representing 51.2%. Nigerian governments and her agencies need to do a lot of work to improve on response to changes in our environment.

S/n	Problem of Nigerian Factors Frequency	1	2	3	4	5	F	FX	Mean(x)
1	Information Technology	10	15	18	6	11	60	173	2.88
2	Public Housing, Land And Development	3	6	15	16	18	58	214	3.69
3	Defence/Security	10	12		8	15	58	180	3.10
4	Care Free Attitude To Government Properties	2	5		20	22	57	226	3.97
5	Corruption	1	3		22	23	59	240	4.07
6	Inconsistent Government Policies	4	5		15	28	58	232	4.00
7	High Cost Of Social Amenities	1	3		18	22	59	234	3.97
8	Justice	4	5		15	18	60	218	3.63
9	Health/Hospital	2	7		20	18	59	222	3.76
10	Education	6	10		15	16	57	196	3.44
11	Transportation	7	8		18	14	59	201	3.41
12	Lack Of Basic Infrastructures	2	8		15	13	58	203	3.50

Table 2: Nigerian Factors Affecting Sustainable Development.
Source: Field Survey, 2015

Table 2 above shows different factors in Nigeria that will affect sustainable development. Top on the list is corruption with 4.07 on Likert scale of 5 representing 81.4% which is the highest in comparison with other factors. The least factor is information technology with 2.88 on a scale of 5 representing 57.60% which is followed by defence/security with 3.10

representing 62%. From the top we have inconsistent government policies which most of the time comes with coming of a new government having 4.00 on Likert scale representing 80%. Other factors range from 3.41 to 3.97 representing transportation and high cost of social   amenities respectively. Details of factors could be seen from table 2 above.

3.1.5. Discussion of Results

From the field survey, it is obvious we still have room for continuous development in all the areas that were assessed. It could be seen that factors assessed ranges from 2.56 to 4.27 on the Likert scale of table 1 which ranges from 51.2% to 85.4%. Our governments need to have a quick respond squad that has the capacity to respond to emergencies so as to mitigate the damages to sustainable development as early warning notices is quite good being 3.56 on the Likert scale representing 71.2%. We need to improve on our synergies enhancement between environment convections and multilateral environmental agreements as it is low as 2.69 representing 53.8%.

On table 2 we could see that corruption top the list with 4.07 on the Likert scale of 5 representing 81.4%. It shows we need a credible leader who must tackle corruption in all facets of our national life. The leader must lead by example in order to impact positive value on the followers. He must not pull down all good policies his predecessors had made as that had led to inconsistent government policies with 4.00 on Likert scale, representing 80%. This must be avoided. The government must try to do something on the issue of information technology as we are not there yet with 2.88 which represents 57.60%.

4. Conclusion

From this research work, it can be established as follows:
- That the governments at different levels need to build the capacity to respond to and/or mitigate environmental changes.
- There is need to develop our environmental laws to be in line with international acceptable standards.
- Corporate organizations like oil/gas industries should fulfil their social responsibilities to the communities they operate without being coerced to do them.

5. Recommendations

From the above study, it is hereby recommended as follows:
- All the stakeholders in the construction industry must put concerted efforts to do all their works in a sustainable manner so that the economic and political stability of our country can be achieved.
- Effective and efficient environmental management strategies should be encouraged in Nigeria as all should cultivate practices that will sustain the environment and abstain from that which will deplete and degrade it.
- Environmental studies should be part of secondary and tertiary institutions curriculum, which will reduce the level of ignorance about environmental issues.
- Corporate organizations are subsystems of the larger society; they should therefore fulfil their social responsibilities by ensuring that their activities cause minimal harm to human and the environment in which they operate.

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