

Bridging the Gap Between Land Resource Exploitation and Sustainable Development in Nigeria

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Key words: sustainability, development, Estate Surveyor, land resources

SUMMARY

This is a paper on the role of the Estate Surveyor and Valuer in Nigeria in ensuring the sustainability of the nation's land resources. Development in order to be long-term sustainable, must respect the constraints set by the environment and natural resources. If environmental constraints are violated, development will ultimately lead to its own destruction. Sound development of human settlements requires consideration of environmental and resource limitations throughout the whole process of planning and management. It is therefore, imperative that development planners and decision-makers be aware of the limits, put by the environment. In most countries, including Nigeria, public awareness has galvanised around the theme 'sustainable development' – wide disciplinary area indeed. This paper however focuses on the role of estate surveyors and valuers in the search for sustainable development. The paper proceeds from clarifications from relevant concepts such as sustainability, sustainable development, as necessary preliminary to understanding of materials in later parts of paper. This is followed by an overview of Nigeria's land or natural resources. Next the paper examines the roles of the Estate Surveyor and Valuer (the manager of land and people) in sustainable development of land resources in Nigeria. These include land use control and town planning, land acquisition, land development, land reform and settlement, land management and land valuation. Finally, the paper encapsulates the general problems of sustainable development in Nigeria and identifies the challenges facing the nation in our search for sustainable development of the environment.

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1. INTRODUCTION

Today, issues bordering on effective management of the environment continue to dominate international discourse. The complex nature of today's environment across the globe has called for more effective environmental policies, based on the well-accepted principles of a sustainable global environment. "Sustainable development" has become the new slogan of development experts. Questions of ecological sustainability are arising on every continent. The scale of human activities has begun to threaten the habitability of the earth itself. The concept of sustainable development recognizes the basic obligations of the current generation to future ones. Perhaps there is no area in which the sustainability of development is more important in terms of human welfare than in the area of agriculture and land development. Sustainable development focuses on economic prosperity, effective environmental management and social responsibility. What this is about is meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.

The foundation of sustainable development lies in the idea that people or social groups can and will alter their environmental ethics when they realize that it will make things better. The assumption is also that such people/social groups can work together for common goals when they need to. Sustainable development of the environment is related to protective, rational use of natural resources. It is conservation in the face of development and quite essential, for the welfare of future generations to be guaranteed. As a concept, it calls for efforts to increase human welfare and halt the destruction of the world's ecosystem capacity to support life – the giant global ecosystem being made up of smaller local home environments. In doing this, it is essential to secure a widespread and deeply committed adherence to new environmental ethics even at the micro-levels. This will occur when principles of environmental conservation are upheld. In this way, conservation is blended with development in a manner that development goes on within the carrying capacity of the environmental resources-air, water, vegetal, animal etc. which when allowed to deteriorate, leaves nothing to meet our needs over time (Adenikinju, 2000).

Increasingly, people in all walks of life are being confronted by a few questions as they strive to assert their activities within the environment: is the activity sustainable? What does the action portend for those who wish to act likewise in the future? These are some of the emerging posers as consciousness of the fragility of the earth's ecosystems increases. The questions are fundamental to securing a symbiotic interaction between man and his environment.

Taken from the first principle, experts say an activity is sustainable if, for all practical purposes, it can continue forever. Incidentally, several combinations of the term are now being employed including sustainable development, sustainable economy, sustainable society, sustainable use, etc. to broaden its meaning. Experts now also speak of sustainable agriculture, sustainable business ethics etc. indeed, many people are beginning to fret that the issue of

sustainability vis-à-vis environmental protection is turning to a colossus now bestriding all spheres of human endeavour, and requiring that every sector thereof yield to it (Ibekwe, 1995).

For a country like Nigeria which has been yearning for development in the agricultural and industrial sectors, and which has almost totally neglected environmental consideration until recent years, the need for sustainable development is imperative (Aderiye, 1997). The concept of sustainable development involves the successful integration of environmental considerations into development management. The idea of development that was used when the global community initiated the development decades was based on increase in per capita national income with some notions of equity and cultural vigour added on. Then, development was presumed to be sustainable and the principal problem was to achieve it not sustain it.

The fact that it has been necessary to add the concept of sustainability to development indicates the changed circumstances of the last four decades. Most importantly, there have been very real achievements in both economic and political terms. Development has been the reality for many countries, which were formerly politically and economically dependent. In this sense, the addition of sustainability at this stage emerges from the success of the last three decades. It reflects a growing awareness of the potential for interrupting the process of development because of constraints that were well-known but not perceived before as preventing development.

Many nations, whether economically advanced or at some stage in the process of transforming themselves now find that the growth of their economies and development of their societies was being stunted or destroyed by costs associated with their natural resources, for example, reductions in agricultural productivity through soil fertility; increases in disease through release of pollutants into the air and water and losses from reduced productivity of hydro/electric/irrigation scheme through soil run off sand salutation of dams. Sustaining development means preventing these costs from destroying the gains of the past and preventing further gains in the future.

Development, in order to be long-term sustainable, must respect the constraints set by the environment and natural resources. If environmental constraints are violated, development will ultimately lead to its own destruction. Development planners and decision-makers must, therefore, be aware of the limits, put by the environment. Paradoxically, development is a source of environmental deterioration in the country. The major aspects of development that have occasioned environmental problems include urbanization and urban development, manufacturing industry development and extractive industry exploitation. The real issue in sustainable development is not just “protecting the environment” parse but how to optimally manage the environmental resources to acquire sustainable social, economic and physical development.

After several decades of emphasis on rapid economic growth, there is now a growing awareness in Nigeria that development is not just higher and higher growth of national income. Rather there is a shift which sees economic successes as a means of achieving basic human needs and development, particularly those related to collective and individual well being. The published national profile on the Nigerian environment by the Nigerian Environmental Study/Action Team (WEST), Nigeria’s threatened environment, states the extent of this problem as it relates to many sectors of Nigeria’s life. Indeed, the vast scale and rapid growth of the Nigerian economy within her fifty years of nationhood need be saluted as a major achievement. However, rapid economic growth has also increased the pace of population growth, social

dislocation, moral decay, and environmental deterioration in the country. In parts of the country, environmental threats and other social and human problems are beginning to act as constraints to some economic activities as well as the well-being of the people. In spite of the expanded economic output and the high hopes for a better economic future expressed daily in public pronouncements by influential and powerful Nigerians, studies of the state of the Nigerian environment tend to indicate that the environmental condition are worsening. These trends are rooted in the structure and pattern of our national development process and the development models which we have adopted up till now. They are also embedded in our collective perception and utilization of development as separate from, or antagonistic to the environment.

There has been lodged within the choice of our national development strategies vested interests that, either through ignorance or because of a misperception of more fundamental goals and ultimate development objectives, often work against environmental protection and sustainable development.

The dominant philosophy and ideology of “progress” that have guided economic development in Nigeria’s history have often seen “development” in terms of the conquest or exploitation of nature and natural forces. Environmental protection and conservation which define a different relationship with nature and natural forces are often seen as not being in harmony with “progress” and economic growth as perceived by these interests. However, some events in our recent history along with world-wide trends have brought out the need for a strategy of sustainable development which involves the articulation of environmental and other elements of human needs and rights with the economic growth and development objectives.

In the light of the above exposition, this paper focuses on options for sustainable development in the noble task of rebuilding Nigeria.

2. THE CONCEPT OF SUSTAINABLE DEVELOPMENT

Efforts aimed at ensuring that the environment continues to sustain human life have been complicated and confused, owing to the ambiguity and vagueness of the concept “sustainability”. The concept of sustainable development was popularized through the publication of the UN sponsored report “Our Common Future” (often called the Brundtland Report). The commission has shown that the very substantial advances in living standard that had been enjoyed by countries since the Second World War have arisen from processes that cannot be sustained into the future underdeveloped nations will seek to improve the lot of their inhabitants. The way such improvements had been made in the past, for example, had been to clear forests so that the area may become farmland and to use increasing amounts of energy to sustain the requirements of improving economies. The commission has also pointed but that it is impossible to separate economic development issues form environmental issues. It said economic development issues must be dealt with as package with environmental issues. It also draws attention to the fact that many present development trends leave increasing numbers of people poor and vulnerable while, at the same time, degrading the environment.

What then is “sustainable development”? In the words of the Brundtland Report, it is development that “meets the needs of the present without compromising the ability of the future generations to meet their own needs. “Sustainable development is a notion, a movement, and an approach which has developed into a global wave of concerns, study, political mobilization and

organization around the twin issues of environmental protection and economic development. Perhaps, the most recent popularization of the notion of “sustainable development” can be found in the report of the World Commission on Environment and Development (WCED) titled Our Common Future. The report elevated the notion of sustainable development to the level of an operational concept which embodies the principles, ideals, and values seen as desirable and necessary if the world is to deal effectively with current global problems of the environment and the development process. The approach embodied the notion and ideal of a development process that is equitable and socially responsive, recognizing the extensive nature of poverty, deprivation, and inequality between and within nations, classes and communities. It also seriously advocates that the world be seen as one ecosystem and advocates that the economic development process should include ecological and environmental issues as an essential component. According to the report:

Sustainable development seeks to meet the needs and aspiration of the present without compromising the ability to meet those of the future. It is a process in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspiration” (Nigeria’s Threatened Environment, 1991 Pp. 282-283). The environment and development literature is full of definitions of the notion of “sustainable development”. The movement constitutes a paradigm and it is in the nature of paradigms to contain different currents while sharing a broadly similar platform on methodology, philosophy, epistemology, ideology, politics and practice.

Certain key elements of sustainable development are important. They are:

- (a) Ecological integrity and sustainability.
- (b) Equity and distributive justice at all levels (global, national, community, household and intergenerational).
- (c) Socially-relevant economic productivity and technological development.
- (d) Popular participation and collective autonomy.
- (e) Prevalence and institutionalization of human and democratic rights.

Proceeding from these elements, it is clear that Nigeria’s development history does not totally lack recognition of some of these. Although, implementation might have failed, there is some evidence of a recognition of this direction as can be found in the five National Objectives of Nigeria as declared in the Second National Development Plan, 1970 -74. These objectives are to establish Nigeria as:

- (a) A united, strong and self-reliant nation
- (b) A great and dynamic economy
- (c) A just and egalitarian society.
- (d) A land of bright and full opportunities for all
- (e) A free and democratic society for all.

In the light of the above stated objectives, their realization from the point of view of the key elements of sustainable development listed earlier constitutes the core of our contemporary development challenge. Attaining these objectives within the context of a changing world that emphasizes ecological integrity and sustainability, distributive justice and equity, popular participation, socially relevant economic productivity and the institutionalization of human rights

will in essence open the door to the transformation of Nigeria, something that has remained as elusive but worthy dream of all our patriotic and committed citizens since we attained independence in 1960.

3. AN OVERVIEW OF NIGERIA'S LAND/NATURAL RESOURCES

Nigeria is large country that covers an area of 923,768 sq km (356,669 sq mi). At its greatest expanse, it measures about 1,200 km (about 750 mi) from east to west and about 1,050 km (about 650 mi) from north to south (Stock, 2007). About 75 percent of this land can be brought under cultivation. Thus, Nigeria has one of the highest ratio of usable agricultural land to total land area in Africa. The total arable land area in Nigeria is about 70million. With proven reserve of three billion metric tonnes of iron ore, Nigeria should be one of the world's largest suppliers of the mineral. Yet every year, Nigerian industries import at least 4.5 million tones of iron-ore concentrates because the huge reserves in the country are yet to be commercially exploited. In fact, of the 31 major minerals available in the country, only few have been developed of the local market. A 1995 Study by the Raw Material Research and Development Council, RMRDC, showed that of the 19 mineral-based raw materials identified in the country, only eight have been developed and exploited.

For instance, while the estimated national demand for limestone is nine million tonnes yearly, only five are sourced locally. This is against a proven reserve of 800 million tonnes. There is a million tonnes of proven reserve of tin ore. However, only 3000 metric tonnes of tin is sourced locally while the national demand is put at 30,000 metric tones. The recourse to import raw materials in place of developing locally available reserves costs Nigeria at least N5 billion yearly (Newswatch, 27/3/95).

A Study by the RMRDC (also reported by Newswatch) identified some of the areas where foreign exchange is expended unduly. For instance, Nigeria's annual consumption rate of lead and zinc is put at 33,000 and 56,000 metric tonnes respectively. At the 1995 price of N1000 per tonne for lead and N30,000 for zinc, RMRDC says that Nigeria spends N33 million and N168 million respectively to import both minerals. Another area is hydrated lime used for treating water for human consumption. RMRDC says that each state of the federation spends an average of \$2 million to import hydrated lime. RMRDC claims that the nation's reserve of limestone, the primary raw material for hydrated lime, can accommodate at least 15 plants, saving the nation \$ 30 million yearly. According to the council, Nigeria spends more than N600 million yearly to import starch derivatives such as glucose, syrup, and modified starches used in the confectionery, bakery and pharmaceutical industries. The irony is that these derivatives could be produced locally from maize and sorghum according to the council. Developing and pointing attention to the raw materials in the country is the primary responsibility of the RMRDC established by the government in 1987. Already, the council has concluded a techno-economic survey of Nigeria's natural resources and their industrial potential as well as the auditing of indigenous technology for the processing of agricultural and mineral-based raw materials. This is in addition to a number of research and development projects. These projects range from seed multiplication projects, the canning of bonga fish, development and production of fruit juice concentrates, dyestuff and intermediate derivative products of coal and petroleum.

The negligence of the solid minerals sector has been attributed to the over-reliance on the oil sector. The non-exploitation of the solid mineral sector in the past is a vivid testimony to the neglect that this sector has experienced as a result of the over-dependence on oil. This neglect of the solid minerals has also stunted the nation's industrial growth because if they are exploited, plants will be set up to produce intermediate industrial raw materials which are critical inputs for many downstream industries. Perhaps, the Federal Government was thinking in that direction when it established a Ministry for Solid Minerals in January, 1995.

With its programme on "catalytic model factories" all over the country to produce intermediate industrial raw mineral sector, this goal is to be realized through joint-venture projects with private investors who have been shying away from investing in research and development projects. It was hoped that the establishment of the model factories would promote the utilization of local raw materials, demonstrate the viability of the investments, ensure progress in these areas and consequently entrepreneurial confidence. On completion of each project, the council would divest by selling its shares to make funds available for new projects.

From the above review, it could be seen that the nation is abundantly endowed with natural resources.

4. THE ROLE OF THE PROFESSIONAL

Environmental awareness and liabilities have become very topical making it imperative for the Estate Surveyor and Valuer and other members of the surveying family, to be abreast with developments concerning the environment if he must render worthwhile professional services to his clients. There can be few areas covered by Estate Surveyors and Valuers that do not, in one way or another, have anything to do with the environmental issues that affect property, towards achieving sustainable development.

The Estate Surveyor and Valuer is primarily a manager concerned with the economics of land resource development, utilization and management. Based on his knowledge of the legal, social, economic and technological environment of land resources, the Estate Surveyor and Valuer attempts to secure maximum benefits from the ownership or occupation of land resources commonly referred to as real estate. In his academic training, he must master the fundamentals of land law, economic and social analysis, and the primary technologies of agriculture, forestry and building science which equip him to handle a wide range of activities. Some of these activities which are relevant to new town development include land use control and town planning, land valuation, and management, land reform, land settlement, land acquisition and land development (Commonwealth Association of Surveying and Land Economy). While the Town Planner strives to know as much as he can about land uses and land users, the Estate Surveyor and Valuer is more interested in the economic aspects of development. The special skills include practical knowledge of the values and potentialities of land and buildings and the laws relating thereto and hence Estate Surveyors make positive contribution to the work of town planning and development.

4.1 Land Use Control and Town Planning

This requires a synthesis of many professional skills. The concern of the estate manager here is with administrative and financial aspect including the viability of schemes or projects and

their implementation. An appreciation of these matters is fundamental to the production of sound plans for land use and development, and to their practical realization and this emphasizes the vital contribution which the professional Estate Surveyor and Valuer in the developing countries can make to positive planning and the best of land and natural resources. Planning is not a mere exercise in aesthetics at one end of the scale or in traffic engineering at the other as a prominent planner once pointed out:

“The tendency of real estate to develop is the only raw material that applied town planning knows. If that tendency to develop be killed, all plans will become valueless because there will be nothing to plan” (quoted in a CASLE Prospectus). The mechanism of land tenure and development lie at the heart of planning and an understanding of them is inherent in the Estate Surveyor and Valuer’s skill.

4.2 Land Acquisition

Land Acquisition, by compulsory process, is essential to many public activities including new town development, land reform and settlement, public works and development, and the rationalization and consolidation of ownership patterns. The focus of the estate surveyor in performing this activity is to secure at an affordable cost to the project, that site that is most suitable of the proposed legal, social and economic attributes. This gives problems of compensation and reinstatement, on which the professional land economist is competent to advise. Through his acquaintance with these problems he is also equipped to advise on the legal and fiscal bases for such activities and on the implementation of schemes. It is the duty of the estate surveyor and valuer to ensure that land required for urban or regional planning is not only quickly assembled but to correctly advise the governments or acquiring authorities concerned, the amount of fair compensation to be paid as stipulated by our law. The planner cannot work in isolation, the land to be planned whether vacant or occupied as to be “set aside” before effective urban planning can ensure that these are done.

4.3 Land Development

Simply, development is the application of capital, labour, managerial skill and entrepreneurial ability to improving its productive capacity. The estate surveyor and valuer is involved in the promotion and design of schemes for land improvement and the investment of capital for their realization. These processes require a knowledge of the land market and of the relationship between capital investment and revenue, and an appreciation of estate engineering and building science, as well as the economic, legal and sociological factors affecting the proprietary interests involved.

On account of the estate surveyor’s familiarity with real estate markets and his analytic skills, he is admirably qualified to play an important role in the property development process. The estate surveyor’s role is crucial in the following areas:

1. Identification and preliminary evaluation of opportunity for development.
2. Assessment of viability of proposals and their implementation.

4.4 Land Reform and Settlement

This function is fundamental to new town development. These are essential to the dynamic evolution of any society and are directed to achieving the best use of land, the best locations for human settlements, and the best deployment of human resources. Land settlement and the reallocation of proprietary land units under programmes of land reform normally include in their objects the improvement of production and the development of natural resources. The estate surveyor and valuer, by virtue of his education and training in land administration can play a major role in planning and implementation of any such project.

4.5 Land Management

This is concerned with the administration of urban and rural estates, on behalf of their owners, whether government authorities, business institutions, or private individuals. Management includes the negotiation of lettings, the management of farms, the construction and maintenance of buildings, the promotion and execution of development, forestry operations, and the development of mineral resources; together with advice on the incidents of ownership such as land taxation, land improvements, land consolidation, the relationships of landlord and tenant, and the law affecting the construction and use of building.

4.6 Land Valuation

Valuation is at the core of services provided by Estate Surveyor and Valuer. This is because value and value-related issues play a dominant role in the use and ownership, and administration of real property. By valuation is meant the art of determining the value of all description of real property and various interests therein, for all purposes. These purposes include sale and purchase, leasing, mortgage, insurance, development, extraction of minerals, expropriation, taxation, betterment or injurious affection by public works, and the appraisal of planning and development projects. The Valuer's skills also extend to measurement and analysis of market and social values and cost, and the influence on the planning process. These skills are also relevant to any programme of economic development, land settlement on the reform and to the management of land resources.

It is submitted that the Estate Surveyor and Valuer, by understanding the mechanism of development and the social value of his work, can make a vital contribution to efficient land use and the success of environmental planning and new town development. It is his duty to develop policy frameworks to address the economic, social, legal and institutional aspects of urban land management and indicate options for making urban land markets more responsive to the demand of urbanization.

In August 1997, surveyors in the country's construction sector took a look at their roles in the global struggle for sustainable development and suggested the formation of an environmental policy to guide their initiatives. At a one-day forum organized by the Royal Institution of Chartered Surveyors (RICS) (Nigeria Group) under its Continuous Professional Development (CPD) lecture series, the experts emphasized that the policy would show clearly how they (as a body) wished to deal with the environmental impacts of new and existing projects. For instance, surveyors may be barred from rendering their services to owners of landed properties or projects which are sources of serious pollution to the society. The forum added that as a complementary

step, an “action plan” should be implemented which detailed specific objectives and priorities and how they can best be achieved and sustained.

Basically, the gathering which comprised Estate, and Quantity Surveyors, listed their roles in averting adverse consequences on the environment to include mapping, provision of controls, data, information management, environmental management and land development. They, however, stressed the need to provide the organization, staffing and resources toward implementing the action plan noting that this should start with the top management and allocated to those involved as well as resources required to enforce environmental standards in consultancy operation. The surveyors also believed that setting up a data bank and looking on the internet would ensure that firms have access to global information which would ultimately expose them to new business opportunities from emerging environmental issues worldwide.

Further, they declared that immediate steps need by taken to ensure that sustainability is fully integrated into the cost-benefit analysis and/or feasibility/viability analysis of all project appraisals. It was emphasized that the financial profitability of projects should not be allowed to be prejudicial science and technology (to achieve improvement in processes and products) would go a long way in improving the environment.

Other steps the chartered surveyors believe should be adopted if they are to effectively partake in sustainable development include:

- Educating and training employees in green issues via workshops, seminars and short courses which will add to employees’ understanding of and skill for tackling environmental problems and issues.
- Monitoring, auditing and reporting, which are management strategies aimed at ensuring that new systems are functioning effectively and that predicted outcomes are being achieved;
- Monitoring and adjusting to changes in the green agenda, a process which involves keeping up with, and adjusting to, continual changes in the environmental agenda and
- Contributing to environmental programmes and “bridge-building”, which relates to offering help with a wide range of projects and programmes, through sponsorship or direct involvement, and helping to make links between business, government and environmental interest.
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A surveyor who has been commissioned to value a property should have enough environmental education and experience to offer professional advice on matters that may affect the property. It should no longer be good enough to exclude comment on environment matters by the inclusion of a caveat in the report. He should be able to make first line assessments as to whether further investigations into specific environmental matters are warranted as is done in the case of structural condition. The implications of contamination, even after cleaning up, should be considered. The Valuer should qualify valuations of contaminated land to reflect the implications. A contaminated land cannot be as valuable as a non-contaminated one. If the subject property adjoins a contaminated one, the Valuer should allow for the risk of the subject property becoming contaminated and thus incurring cleaning up costs in the future. If such costs are of a continuing nature occasioned by continuing liabilities such as groundwater treatment or

gas monitoring, such costs should be capitalized over the period for which the liabilities are likely to endure. An environmental audit of the site will enable the Valuer provide a more reliable asset valuation. The cost of clearing up may impose negative values on some company's assets. A project which ordinarily would have been feasible and viable may be adjudged otherwise by reason of environmental legislation. This may be a building which has been specifically constructed to accommodate plant and machinery which have become obsolete by reason of pollution control.

5. CONCLUSION

This paper has provided an overview of the Nigerian's land resources and how the concept of sustainability can be built in to the professional practice of Estate Surveyors and Valuers in order to bridge the gap between theory and practice. The Research Committee of the Nigerian Institution of Estate Surveyors and Valuers needs to be reinvigorated to meet the unfolding challenges of sustainable land development in Nigeria particularly from a multi-disciplinary approach. A comprehensive set of environmental taxes, designed as part of a broader restructuring of fiscal policy, could do much more to move economies quickly onto a sustainable path. Most governments raise the bulk of their revenues by taxing income, profits, and the value added to goods and services. These are convenient ways of collecting money, and ones that often serve an important redistributive function, but such taxes distort the economy by discouraging work, savings, and investment. Substituting taxes on pollution, waste, and resource depletion for a large portion of current levies could improve both the environment and economy, and be done in a way that keeps the total tax structure equitable.

Movement toward a sustainable world thus requires practical economic reforms at both the national and international levels. At the national level, a key challenge is to go beyond regulation as the primary approach to environmental protection. To be sure, regulations have reduced damage from air and water pollution, pesticides, toxic contamination, and other environmental laws and regulations to protect natural systems. Being able to visualize a sustainable world is the first step toward building one. Meeting that challenge requires profound political, social, and economic reforms involving all major segments of human activity-including businesses, religious organization, civic groups, activists, governments, and voters. If successful, the struggle for a sustainable world will transform many facets of society, from politics and economics to cultural values and human rights. According to Sir Geoffrey Howe, in agreement with classical economic parlance "the objective of any good government worth its salt should be the pursuit of economic growth, full employment, the maintenance of price stability, creating a favourable balance of payments and improvement of the standard of living of its citizenry". Since this paradigm seeks to define what the universal objective of governance should be, it follows that any government which fails to achieve any or all of these primary goals of good government has failed in its objectives and calling to the nation. A government should therefore aspire to harness its resources towards sustainable development on a permanent basis, failing which it would put into grave jeopardy the prospects of its citizens.

In establishing a comprehensive incentive structure to promote sustainability, governments might now consider one overarching guideline: no net environmental damage. This

would preclude projects that destroy forests, add carbon to the atmosphere, or pave over croplands unless additional investments were made to compensate for the damage done. For example, developers proposing to build a shopping mall that would destroy a parcel of woodland would need to reforest an equivalent area elsewhere. While obviously not a complete compensation at least some of the ecological benefits of the original forest would be recaptured. Applying this criterion to both public and private investors would ensure that those who profit from “development” plough some of their expected proceeds back into safeguarding the natural systems they place in jeopardy. It is no more radical a notion than that of requiring investors to pay back their creditors. In this case, the creditor is the global ecosystem.

- For the attainment of sustainable development, there are priority challenges facing us a nation. In the first place, there is the need to tackle our backlog of accumulated environment degradation and pollution especially those which pose serious and immediate threat to the health of our fellow citizens and our national economy.
- We must ensure that all new policies and projects are “sustainable” by integrating environment development planning and decision making at all levels of government and the private sector.
- There is the need to harmonize our institutional linkages within and between our different governments and with the private sector and non-government organizations (NGO’s) in support of the priority goals in our new national policy for the environment.
- We should clarify and strengthen our respective legal, technical and financial capacities in order to put our country on a sustainable development path within a few years rather than decades.
- There is need for intensification of efforts on the part of the media both print and electronic concerning the enlightening of the public on environmental issues. The same should apply to non-governmental organizations (NGO’s) on environment such as the Nigerian Conservation Foundation (NCF), the Nigerian Environment Study Society (NEST), the Nigerian Environmental Society (NES), the Nigeria Society of Engineers (NSE) the Nigerian Institution of Estate Surveyors and Valuers (NIESV) and various other NGOs and professional associations who have been addressing key issues of the environment through lectures, symposia, conferences and research.
- There is need for change in habit, rational use of resources, research into and adoption of alternative efficient and environmentally friendly technologies, development of an environmental friendly technologies, development of an environmental conscience realizing that the environments is only held in trust by use for future generations of mankind. Environmentally being technologies can lessen the daily burden on rural women decrease deforestation and soil erosion, help in saving ozone and reduce carbon monoxide emissions. Similarly we also need new technologies that use less energy, less resources and generate less waste. A break-through is also needed in developing efficient renewable sources of energy.
- Our industrialists must develop an environmental conscience and be prepared to pay the full cost of the natural resources they deplete and the environment they degrade in their industrial process.

- Since success in achieving sustainable development requires the support of an aware and informed public, further steps should be taken to prepare and implement systematic programs for improving environmental awareness, literacy, education and training.
- The government must realize and take cognizance of the fact that a relationship exists between poverty and its dehumanizing consequences and the Nigerian environmental problem. As Professor Omuta has once rightly observed, “Poverty and attempts to get out of poverty generate environmental problem. Hence, the crucial issue of mitigating poverty, in all its ramifications, need to be quickly and comprehensively addressed as a sine qua non to the success of the various efforts being made to solve the Nigerian environmental question. Finally, our own policy of self-reliance should also be carefully studies analyzed and cautiously adopted with a view to developing humanized as against tyrannical pattern of development in Nigeria.
- All efforts must be made by governments, communities, business, NGOs, and international agencies to halt the rapid rate of land degradation in Nigeria through increased education and investment in sustainable land use practices and conservation. The land tenure system still remains unwieldy and complex and the Land Use Act of 1978 which constitutes the legal basis requires urgent review to remove the bottlenecks it embodies and the complications and inequities it contains. Government has a major role in halting land degradation in Nigeria by demonstrating an absolute commitment to the 1989 National Environment Policy and other related parastatals, and agencies comply with the provisions of the policy as well as with the stipulation of FEPA and other principal environmental agencies.
- NGOs need to educate farmers and all those who interact with the environment on the appropriate and sustainable use of technology and agro-chemicals in their activities. Greater attention in particular should be paid to the importation of agro-chemical and the monitoring of the transportation and disposal of hazardous and toxic waste. All efforts must be made to ensure that toxic waste is not imported and damped in the country.
- The requirements of sustainable environment demands, Inter-alia, that we must control our population, control our penchant for conspicuous consumption, and tackle the problem of deforestation. The current democratic dispensation should be a desired era of environmental friendliness or “going green”. This policy should be pursued with abiding faith.

Nigeria has lessons to learn from the experiences of other nations, especially those with similar history, geographic and cultural diversities and attributes or resources endowment. Such countries include china, India, Indonesia, Malaysia and South Korea. The essential lesson to be learnt from the experiences of these countries is that with continuous and consistent economic bearing, a nation can achieve success even with resource limitations. These examples are also sufficient to illustrate the importance of a country knowing its economic direction and consistently steering towards it. The critical success factors addressed by countries that have succeeded in this changing environment include the following:

- Organization of political system based on cooperation and consensus;

- Creation of opportunities for their people and support for how growth and development are to be achieved.
- Adaptation to the forces of liberation, technology and globalization and developing a national success formula to take advantage for these forces.
- Designing a vision and committing the people to its success.
- Existence of a strong and effective government working in the national interest and with a focus on better quality of life for all citizens.
- Massive investment in human capital, infrastructure and relevant technology, and
- Equitable distribution of resources and opportunities.

BIBLIOGRAPHY

- ADENIKINJU, J.O. (2000): “Towards Sustainable Development” Proceedings of the National Conference on Populations, Environment and Sustainable Development in Nigeria, Department of Geography, University of Ado- Ekiti, Nigeria.
- ADERIYE, A. A. (1997): “Environmental Impact and Sustainable Development” Proceedings of the National Conference on the Law, the People and the Environment, Malthouse, Ibadan
- AINA E. O (1991): “Nigeria’s Environment Balance Sheet” Statement of Environmental Management Workshop for Socio-Economic Development in Nigeria held in May 1991 in Abuja FEPA, Lagos.
- ANTE. J.M AND LEKAKIS J.N: Agriculture, Trade and the Environment: The Impact of Liberalization on Sustainable Development Edward Elgar Publishing Ltd., United Kingdom. 1998.
- ARROD. G. and WILLIS K. G: Economic Valuation of the Environment: Methods, and Cases; Edward Elgar Publishing Ltd. United Kingdom 1998.
- ASIODU, D.C (1980) “Nigeria and the Oil question in Odu, c.T.I Degradation and Weathering of Crude Oil under tropical Condition. Paper Presented at the Petroleum industry and the Nigeria Environment. NNDC, Lagos.
- BROWN, L. (1983) The World at risk. Quoted in Lester Brown et al (eds) shape of the New world. New York. W. W. Norton and Company.
- BRUNDTLAND REPORT (1987): As cited in the Report of the National Advisory Committee on the Conservation of Renewable Resources (NACCR)
- DRAGUN A. K. and JAKOBSSON K.M: Sustainability and Global Environmental Policy: New Perspectives. Edward Elgar Publishing Ltd., United Kingdom. 1997.
- EKEKWE, E (1981) The funiwa – 5 well blow out in The Petroleum Industry and the Nigeria Environment. Proceedings of the 1981 Seminar (ed) A. A. thomopulos NNDC Lagos.
- FAUCHEUX S. and GOWDY. J: Sustainability and Firms: Technological Change and the Changing Regulatory Environment Edward Elgar Publishing Ltd., United Kingdom 1998.
- Federal Republic of Nigeria (2000) Niger Delta Development Commission Act 2000.
- FEPA Achieving Sustainable Development in Nigeria National report for UN Conference

- on Environment and development. Rio de Janeiro Brazil 1-12, June 1992. Published by FEPA, Lagos.
- FRISVOLD G. and KUHN. B: Global Environmental Change and agriculture: Assessing the Impacts Edward Elgar Publishing Ltd., United Kingdom. 1998.
- IBEKWE K.O(1995) "FEPA, Environment and Sustainable Development" An unpublished paper submitted to *The Estate Surveyor and Valuer*, Journal of the Nigerian Institution of Estate Surveyors and Valuers
- ISICHEI, A. O (1993) Effects of oil industry in vegetation in Nigeria. Presentation of Botany Department. OAU Ile-Ife.
- KOHN. J. and GOWDY. J: Sustainability in Question: The Search for a Conceptual Framework Edward Elgar Publishing Ltd., United Kingdom. 1999.
- KONTAGORA, M. T. (1989) the environment and sustainable development in Nigeria. Proceedings of a Workshop held at Abuja. 25 – 26 April 1989. Published by FEPA.
- MULDER. H. A. J and BIESIDT. E: Transition to a Sustainable Society: A Backcasting Approach to Modelling Energy and Ecology. Edward Elgar Publishing Ltd., United Kingdom. 1968.
- OMISORE. E. O and ABEGUNDE A. A. Land Management and Environmental Degradation: some Preventive strategies in the New Millennium. A text paper presented at the 2000 conference of the National.
- RMRDC(1995) Raw Materials Research and Development Council Invitation for Submission of Research Proposals under the auspices of the Council's Technical Committee on Research Proposals
- STEPHENSON, W. K. (1992) Oil Production Activities: Dictionary of Oil Industry, Published by NNDC.
- STOCK, R. (2007) "Nigeria." Microsoft Student 2008 [DVD]. Redmond, WA: Microsoft Corporation, 2007.

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