

THE GREEN STATE CONCEPT AND ENVIRONMENTAL SUSTAINABILITY IN NIGERIA: PATH TO SUSTAINABLE DEVELOPMENT

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ABSTRACT

The environment of a state plays a major role in its development. It also determines the political behaviour of a state. It has been argued that an environmentally endowed state has the tendency of utilizing its environmental potentials towards recording a higher level of development over states that are environmentally disadvantaged. Nigeria has most of her valuable national assets in the environment. And these assets have to be harnessed in order to achieve the targeted level of development. Utilizing the secondary form of data, the paper examines Nigeria's efforts in attaining a green economy that is meant to improve the standard of living of its citizens and the development of the state at large for the present and the future. The paper argued that an environmentally friendly ecosystem is a lead way to attaining sustainable development. The issues of oil spillage, gas flaring and resource exploitation were examined vis-à-vis its environmental impact. The green and environmental theories were used as a theoretical base for the study. Finally, some hindrances to achieving environmental sustainability were teased out and measures needed to be taken to address issues affecting the attainment of suitable environment that can sustain development were recommended.

Key words: Development, Environmental Sustainability, Green State, Sustainable Development.

Introduction

The concept of development globally, attracts requisite attention as states around the world are at their various stages of development. Though the concept over time has been slippery since what it entails varies slightly among scholars, it can however be taken to be a general improvement in the life of an individual, group or a country. This is regardless of scholars' delineation of the term when they saw it as historical construction (Escobar 1995:5), as economic improvement,

(Todaro and Smith, 2009:14) and as holistic improvement, (Rist, 2010:13), even as a field of study.

The prospects for development in a state are intertwined with its environment. The human, material and natural resources necessary to drive development are found in the environment of the state. Therefore, it is safe to say that the environment of a state plays a key role in its developmental strides. However, the task of development and good

governance has been so gargantuan and seemingly intractable (Ikelegbe, 2013:1). This is because the world we live in is faced with various environmental problems. Despite the importance, environmental issues started to gain attention in international relations from the 1980s. Environmental concerns such as acid rain, global warming, soil erosion, food shortages and resource depletion are global concerns (Adesina, 2011:93), that have retarded the growth of many states and eroded development already attained. Global environmental change is a worldwide phenomenon which is evident in Nigeria today. And this is causing considerable damage as well as threatening human security, natural environment, and sustainability of the country.

The global environmental change (climate change) today is generally used to refer to change in our climate as has been observed since the early twentieth century and these changes are thought to be mainly due to human behaviour rather than natural changes in the atmosphere (Ngene, 2012:41). The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods”. The harmful environmental practices by the state have the tendency of undermining its development and developmental strides. This is in terms of resource exploration i.e. oil exploitation, gas flaring and oil spillage with demonstrable negative impact on the environment. To evade the mirage of development, environmental sustainability is as important as it is crucial if the quest for sustainable development in Nigeria is to be a reality rather than a myth. With the related but slightly different conceptualization of development mentioned

above, it is evident that what is desired is an improvement in the society. What is however not given adequate recognition at the conceptual level of the term development is the aspect or question of sustainable development. Therefore, the conventional wisdom today is that the Green state concept has to be integrated into the development process in Nigeria.

The paper examines the possibility of Greening the Nigerian state with emphasis given to environmental sustainability as a panacea to lack of sustainable development. The paper begins with a conceptual and theoretical discourse that examines environmental sustainability, sustainable development and the Green state. Thereafter, the Green state concept is examined within the context of the Nigerian state. Also, resource exploration and the Nigerian environment are analyzed alongside the prospects for sustainable development. The paper also explores some issues and challenges of the Green state concept in Nigeria and concludes by suggesting ways they could be addressed.

Conceptual and Theoretical Discourse

For a study of this nature, the clarification of concepts relevant to the discourse with a view to drawing associated lessons is highly imperative. These include environmental sustainability, sustainable development and associated concept of ‘greening the state’. The next paragraph briefly gives a conceptual clarification of the concept: environmental sustainability.

Environmental Sustainability

Environmental sustainability is one of the goals (seventh) of the Millennium Development Goals (MDGs) initiative of the United Nations. The target of the goal is to amongst other things integrate the principles of sustainable development into states’

policies and programmes and reverse the loss of environmental resources, reduce biodiversity and achieve a significant improvement in the lives of at least 100 million slum dwellers (MDGs, 2000 cited in Ghaus-Pasha, 2004:35)

Morelli (2011:5) defines environmental sustainability as:

“meeting the resources and service needs of current and future generations without compromising the health of the ecosystem that provide them...and more specifically as a condition of balance, resilience, and interconnectedness that allows human society to satisfy its needs while neither exceeding the capacity of its supporting ecosystem to continue to regenerate the services necessary to meet those needs nor by our actions diminish biological diversity”

It involves practices that minimize energy use, pollution and water consumption, and promoting a healthy and friendly environment for human activity; as well as the ability to maintain things or qualities that are valued in the physical environment (Sutton, 2004:1). That is, efforts made at removing threats to human well-being and the ecosystem. Environmental sustainability pays attention to the physical surrounding where the resources that help in meeting human and societal needs are found. In other words, it is concerned about the preservation and protection of the system that supports and maintains human life (Goodland, 1995:7).

Goodland (1995) sees it as “the unimpaired maintenance of human life support systems, saving the remnant of the only environment we have.” Environmental sustainability is all about protecting the environment which plays host to the resources that are needed to support human life against harmful environmental practices and destructive substances. The aim of

environmental sustainability is for the environment to continue to function properly and indefinitely (preventing it from extinction) and to halt degradation (Stutton, 2004; Ezeabasili, 2009).

Sustainable Development

The concept of sustainable development according to the World Commission on Environment and Development (WCED, 1987) literally means “the process of change in which exploitation of resources, the direction of investments, the orientation of technology development, and institutional change are in harmony and enhance both current and future potential to meet human needs and aspiration.” It practically refers to *future oriented development; that is, a development which meets the needs of the present without compromising the ability of future generations to meet their own needs* (United Nations General Assembly, 1987). For Allen (1980) cited in Ikelegbe (2013), sustainable development is a development that is *likely to achieve lasting satisfaction of human needs and improvement of the quality of human life*. It is the management of development in which there is continuous and sustained growth in improved livelihood and per capital income both now and in future, without depleting the national capital asset stock or the environmental asset stock.

Sustainable development according to Sutton (2004:13) is “development that does not undermine the environment, society or the economy, locally or globally, now or in the future, and that delivers genuine progress socially, environmentally and economically.” The definition of sustainable development emphasizes the conservation of resources for future generation and long-term stability of the economy and environment. For sustainable development to be achievable, Emas (2015) averred that the integration of economic, environmental and social objective

across sectors is a basic requirement. That is, in the decision-making process, economic concerns, environmental issues and social considerations should be treated jointly. In other words, attention should not be given to one dimension or aspect at the expense or to the detriment of the other.

The concept of sustainable development feature prominently in the United Nations discourse. The Millennium Development goals declared by the largest ever gathering of heads of state in September 2000, is based on sustainable development (Ikelegbe, 2013). An issue at play in sustainable development believed to have birthed the 'green state' is that of environmental sustainability. The idea is simply to achieve the ability to improve the quality of life within the confines of all that it takes to preserve the ecosystem. Having a healthy environment i.e. clean air and water serve to guarantee and not compromise the ability of future generations to meet their needs. The need to promote eco-friendly development paths has broadened the very concept of sustainable development leading to the green state movement which Meadowcroft (2006) said "promotes social and environmental values congruent with ecological democracy."

Theorizing the Green State

Jean Bodin argued that the decisions reached by policy makers in the international political arena were greatly influenced by environmental factors. He explained that the climatic conditions go a long way in influencing the national characteristics of a state even to the extent of determining its foreign policies (cited in Dougherty & Pfaltzgraff, 2008). The problem of climate change which the world is clearly experiencing is largely responsible for several environmental disasters. Harmful environmental substances are being released into the environment and this threatens

human existence, growth and the prospects for development. To mitigate the impact of climate change on the environment, the green state/economy concept came into being.

The green state concept involves the calculated and conscious efforts aimed at reducing greenhouse gas emissions and switching to cleaner energy sources. It is one that results in improved human well-being and social equity, while significantly reducing environmental risk and ecological scarcity (UNEP, 2011 cited in Adamu, 2012). Basically, the green state concept focuses primarily on states' conscious efforts at sustainable production and consumption through adopting 'renewable energy', green building, clean transportation, sustainable water land degradation management practices. The concept is viewed as a model for managing society that not only provides needed development, but places premium on the sustainability of the ecosystem.

The green state is a concept that has assumed different expressions but have the same meaning. One of such expressions is what Duit et al. (2015) referred to as environmental state. According to them an environmental state is one that possesses a significant set of institutions and practices dedicated to the management of the environment and societal-environmental interactions. This practically involves developing institutions, structures and processes dedicated to addressing environmental problems within the state; where the state is firmly rooted in particular societal practices, coalition, discourse and norms aimed at articulating and realizing specific environmental goals (Duit et al., 2015).

Theories as foundational blocks of academic writings help provide empirical underpinning for a written piece. It provides differing view to explain a phenomenon. According to Silver (1983), theory is "*a unique*

way for perception of reality, expressing someone's prominent insight about a nature's aspect in addition to a fresh and new understanding about a world aspect" while Leedy and Ormrod (2005:4) held that theory is "an organized body of concepts and principles intended to explain a particular phenomenon". To clearly understand the concept of sustainable development and the green state concept in Nigeria, this study made use of the Green and Environmental theories.

Green Theory:

The desire for ultimate enjoyment and comfort has led to the exploitation of the natural environment by humans to the extent of reducing its capacity for self-stabilization. Because of these activities on the natural processes, numerous environmental problems have arisen. Humans, either through ignorance or shortsightedness, often interferes with the balance of nature - the resulting phenomenon is pollution of the environment (Horsfall and Spiff, 2013). Green theory represents a fundamental challenge to the issue of problem solving to the environment. Green theorists argue that the relationship between human beings and nature largely explains the current environmental crisis the world is facing, and that the various facets of this relationship need to be fundamentally restructured if the earth and its inhabitants are to enjoy a secured future (Adesina, 2011). They are concerned that human interference in the natural world is currently threatening the survival of both humankind and other species. The idea of Green theory arose after World War II when world economies were booming and new technologies began to require greater energy consumption, in turn leading to increases in pollution and as technology progressed and man's appetite for a stress-free life expanded, the environmental problems become more complex and difficult

to alleviate (Graham, 2012; Horsfall & Spiff, 2013).

Green theory criticizes liberalism and socialism both as two different version of the widely accepted ideology of industrialism which ignore the ecological and social cost of their actions. One of the variants of Green theory is that it believes that cooperation and interaction can lead to mitigation of the global environmental crisis. Green theorists argue that the industrial revolution of the nineteenth century, and the increasing concentration of people in cities, as well as the explosion in the use of technology are some of the factors responsible for environmental degradation. As a result, humanity is now faced with nuclear weapon, greenhouse gases, and holes in the ozone layer, posing environmental threats ranging from nuclear winter to acid rain, to global warming and skin cancer (Adesina, 2011). Green theory therefore, demands for a radical restructuring of the various facets of human organization from everyday practices to the contemporary world order built on the exploitation of the natural world and the oppression or marginalization of specific social goals.

Environmental Theory:

This theory states that the environment of a state has a key role to play in its development. And that the environment determines the political behaviour of a state. This theory made man's relationship with the environment as the focal point of analysis. Writers and scholars of the theory argue that an environmentally endowed state has the tendency of utilizing these potentials towards recording an important level of development over states that are not as endowed. Nigeria's vision of being one of the most developed economies of the world by the year 2020 is (to a reasonable extent) hinged on her ability to properly harness her resources while maintaining environmentally friendly

practices. In realization of the importance, the United Nations Development Programme whose aim is to foster sustainable human and national development by helping and assisting national government of states, made environmental sustainability one of the Millennium Development Goals. Nigeria's most valuable national assets are found in the environment. If Nigeria can protect her environment and ensure its sustainability, the sustainable development goal would be a reality.

While environmental theory is concerned with the role the environment plays in the development of a state, Green theory focuses on the problem-solving approach to the challenges of the environment. The environment needs to be protected from the enormous threats that bedevil it so that a state can harness its full potentials for societal growth and development. The Green theory on its part seeks to proffering solutions to the problems facing the environment such that the state can enjoy a secured future. It is geared towards environmental protection and its sustainability for the benefit of mankind. Here the role of government in achieving this is usually brought to the fore.

Both the Environmental theory and Green theory are concerned about environmental sustainability which is in line with the Sustainable Development Goal of the UNDP. These theories are very apt for this discourse because they focus on the relationship between man and nature which is geared towards preserving the environment. The Nigerian government must embark on projects or must seek ways of ensuring that the environment is made conducive to promote development, peace and security.

The Green State Concept and Sustainable Development in Nigeria

The green state concept is by no means, a new one; it embraces the whole gamut of

intellectual discourse many have come to see as an extension of the traditional development narrative. It differs in that it places emphasis on suitable environmental practices that can sustain needed development. In a nutshell, it places the issue of '*environmental sustainability*' at the center of development discourse. While it is possible to achieve healthy environmental practice that can sustain development, existential realities portray a contrary picture. This becomes evident when one considers the issue of resource exploration and attitude of governments to environmental issues in ways that inevitable negative externality of resource exploration, are difficult to avoid.

When this happens, possibility of achieving the 'green state' status which is synonymous with eco-friendly environmental practices that support development is removed. There is therefore, the need to examine relationship between resource exploration and environmental practices and how this impact green state status in Nigeria. Understanding the issue of green state in a resource exploring state like Nigeria, we have chosen to look carefully at two concepts closely: that of *environment and development*. This would enable us put issues of green state in Nigeria in the face of resource exploitation.

Environment and Development

Resource exploration has been linked to adverse environmental impact that negatively affects development. Oil exploration in Nigeria has been associated with notable environmental impact that affects the ecological system in the oil-bearing belt of the Delta in the South-south region of the country. The South-south region comprises mainly coastal terrain, occupying more than 80% of Nigeria's 853km coastline (UNDP, 2006). Consequently, majority of the environment is covered by water. There are visible impacts of oil exploration activities in the region which

not only affect the environment, but also shift timelines of the nation achieving feasible green state status. Ikelegbe (2013b) and Obi (2010) had noted that oil exploitation leads to environmental degradation in the oil belt of the Delta. This distorts the ecological system with established consequences on development efforts. To examine this, two known effect of resource exploration activities which oil exploration represents are considered. These are oil spill and gas flaring carefully considered below to establish their impact on the environment and determine how they shape prospect of the 'green state' status in Nigeria.

Oil Spill

Oil spill entails release of petroleum products into the ecological system to contaminate it. Adati (2012) noted that oil spills in the Delta (see plate 1.1 below) have been occurring for decades. This has resulted in contaminated rivers, streams and acute deforestation of areas surrounded by water. By extension, the ecological system, is degraded, thus making the chances of attaining '*green state status*'; slim. In similar vein, Amnesty International (2013) also observed that the number of oil spills in Nigeria since oil became an economic

resource of note is unknown. This made the issue complex because the extent of damage would be difficult to know. As Olagoke (1996) noted, oil spills pose threat to human health and conceptualized same as "*the release of liquid petroleum products to contaminate the environment*."

A contaminated environment has wide implications on both human health and the physical environment, narrowing the prospect of achieving the green state status. The negative implications range from the degradation of drinking water, effect on crop yields and dearth of aquatic life such as depletion of fishes which serves as natural source of protein across the nation and Delta in particular. In addition, it also causes acid rain with associated public health challenges such as lung cancer and stunted growth in oil bearing region, (Odjugo, 2013). Wolicka et al., (2009) noted that leakages of oil storage tanks and pipelines, oil well blowouts, operational discharges and inefficient terminal loading as well as dry dockings and poor transportation processes, cause oil spillages in the region. According to Ajugwo (2013), cases of oil spill in the Delta captured in the table below, are under reported but its manifest impacts can be seen in the plate below.

Table 1: Statistics of Onshore Oil Spills by Operator

S/N	YEAR	Agip NOSDRA database	Shell NOSDRA database	Shell Shell's website	Total and E&P on NOSDRA database	Overall Oil spilled
1	2007	180	171	320*	3	354/503
2	2008	238	95	210*	3	333/448
3	2009	258	118	190*	2	378/450
4	2010	323	188	170*	1	512/49
5	2011	400	201	207*	1	608/-
6	2012	474	207	192*	7	688/673
7	2013	411**	138*	138*	-	-/-
TOTAL		2,3421	1,124	1,427	17	2,870/2,119

Source: *Amnesty International (2013:10)*

Note: NOSDRA means National Oil Spill Detection and Response Agency.

While the impact of oil spills remains debatable, a 2006 UNDP report and a 2013 Niger Delta Environmental Studies report summed up the impact of oil spills on the environment as among other things, high mortality of aquatic animals, adverse impact on human health due to emission of poisonous substance into the atmosphere, loss of biodiversity and damage to crops. All these do not contribute to global warming alone; but also, to derailing efforts at achieving sustainable environment that 'green state' requires development to be built on.

**Plate 1:** Cases of oil spill in the Delta

Source: 1 Ed Kashi and Pix 1; Ed Kashi and Pix 2; Morris Alagoa, 2011 (both showing oil spill in oil bearing communities)

Gas Flaring

To flare gas means the release of associated gas into the atmosphere in areas where oil production takes place. It is usually done to dispose of unwanted gas by-product of oil production and happens where there is insufficient infrastructural investment in petroleum-producing areas that can utilize this unwanted natural gas. The history of gas flaring in Nigeria can be traced to the discovery and exploitation of oil itself in the 1960s (Ajugwo, 2013). Available records show that flaring of gas is a global phenomenon that exists across oil producing states. Asume and Roderick (2005) saw Nigeria as the state that flares the most gas in the world, while at the same time outlining related dangers since this constitutes threat to both humans and the environment. This by extension affects development and possibility of green state effect. Both scholars noted the peculiar situation in Nigeria when they observed that:

"...gas is flared more in Nigeria than anywhere else in the world. Estimates are notoriously unreliable, but roughly 2.5 billion cubic feet of associated gas with crude oil is wasted in this way every day. This is equal to 40% of all Africa's natural gas consumption in 2001, while the annual financial loss to Nigeria is about US \$2.5 billion. The flares have contributed more greenhouse gases than

all sub-Saharan Africa combined. And the flares contain a cocktail of toxins that affect the health and livelihood of local communities, exposing Niger Delta residents to an increased risk of premature deaths, child respiratory illnesses, asthma and cancer." Asume and Roderick (2005:4)

Besides the adverse effect on livelihood, the harmful effect on health of the people is enormous. According to Etekpe (2007) and Ogbigbe (2006), release of poisonous chemicals such as combustible by-products (nitrogen dioxide, Sulphur dioxide) into the atmosphere, pose threat to human in form of threat to public health in communities exposed to the exploration of oil and gas. This Ikelegbe (2013b) noted, is associated with health challenges such as respiratory problems and skin cancer due to acid rain that equally corrode roofs in oil bearing communities. When this happens, host communities which in most cases are not directly impacted with the oil wealth, suffer avoidable hardship. Cases like this abound as seen in Otefe and Ovade communities in Oghara, both oil bearing communities in the Delta. No meaningful development can take place under this situation let alone sustainable environmental practice.



Plate 2: Oil Flame in pictures

Source: Plate 1 by Ed Kashi & Picture 2, Flames of Hell (Oil Report by ThisDay newspaper 2011)

While it can arguably be said that resource exploitation and favourable environmental practice can be achieved, plates 1 and 2 above, leave much to be desired. Excessive oil spill and harmful gas flaring depicted in both pictures, harm the environment. This reduces the chances of any state in achieving sustainable environment and development that the very idea of green environment espouses. The following section will consider impact of resource exploration in Nigeria on the environment.

Resource Exploration and Environmental Impact

From what we have seen above, the overall impact of resource exploration on the environment and development by extension, remains alarming. This is especially so when there are absence or inadequate bio-remediation strategies to nip negative externalities resource exploration in the bud. Table two chronicles how negative environmental practices arising from oil exploration in Nigeria, affect the environment and development by extension.

A pilot study by Eghweree (2016) where environmental impact of oil exploration was considered to know adverse impact of resource exploration on the environment and regional development in Nigeria, confirmed that negative environmental practices arising from resource exploration, negatively affect regional development in South-South and South-West regions of Nigeria respectively. Among those surveyed in both regions, a total of 89% and 79% in the South-South and South-West respectively believed that adverse environmental impacts inhibit development, especially in oil bearing region, while 32% and 29% respectively, attributed impediment of regional development, to other factors other than adverse environmental impact of resource exploration.

What we can be deduced from this is simply the fact that though the negative externality of oil exploration as captured in table 2 below generated from the survey is seen by many in the population to pose challenges to regional development, how it shapes the quest for green state environment, is unclear. Adverse environmental impact can be managed and if appropriate measures are taken.

Table 2: Environmental impact of Oil on Regional basis

S/N	POSITIVE EFFECT	REGIONAL		NEGATIVE EFFECTS	REGIONAL	
		SS	SW		SS	SW
1	Provision of farming and fishing tools	73	35	Deforestation and environmental degradation	89	45
2	Provision of some amenities such as light, water and health facilities	72	45	Oil spillage and bio-chemical land degradation	92	28
3	Building of schools and markets	65	55	Extinction of animal species	79	44
4	Provision of scholarship for locals	65	69	Adverse health effect and noise pollution	87	39
5	Provision of employment opportunities	55	65	Drastic reduction in agricultural yields and stunted plant growth	88	51
6	Introduction of modern farming techniques due to influx of foreigners	67	51	Heightened urban migration and dwarfed rural taste for locally made goods	92	50

Source: Eghweree (2016)

Challenges of the Green State in Nigeria

Besides manifest negative impact of resource exploration seen through the lens provided by gas flaring and oil spill, other activities that also negatively affect the environment are activities that release Greenhouse Gases (GHGs) into the atmosphere. These include unmitigated urbanization, industrialization and unsustainable agriculture Greenhouse Gases (GHGs), adversely affect the environment and result in climate change with a range of consequences for human and environmental health, limiting the possibility of achieving green state status in many states and Nigeria in particular, Climate change which is a global problem, has been linked to environmental menaces such as changes in temperature and precipitation (McMichael et al., 2003; Patz et al., 2005). Nigeria with long coastline of roughly 800km is prone to negative impact of climate change as the sea level rises with time. This could result in weather related challenges such as storms (flooding) and possibility of drought and

desertification in some areas that could pose threat to food security.

In the light of these, we identify some of the issues militating against the achievement of the green state status in Nigeria.

Government's Inaction and Negligence

The limited capacity of the state to manage intricate issues of climate change that encompasses sustainable environmental practices is one of the challenges. As Eckersley (2004) and Meadowcroft (2012) noted, the limited ability of states makes them ineffective and unable to roll-back crushing capitalist interest that will always favour expanded production while global warming rises, thus denying states ability to achieve desired '*green state*' status where development that favour today and tomorrow into calculation (sustainable development) can be achieved.

The limited ability of states such as Nigeria to brace up to the challenges of achieving healthy environmental practices dovetails into failure to build suitable *Green infrastructure*'

as an essential ecosystem service that can birth suitable cities and development in line with what the green state concept and sustainable development espouse. Green infrastructure literally means community's natural life support system, the ecological framework needed for environmental and economic sustainability (Bowler et al., 2010; Dipeolu, 2014). The need for growing communities to upgrade and expand infrastructure such as roads, sewers, and other utilities are yet to be met. This is vital to conserve natural ecosystem to benefit both the people and wildlife. Government has failed to come up with sure steps to achieve sustainable environmental practice that can sustain development.

Green infrastructure as a concept has been traced to the history of development and shared principles in North America. According to Konijnendijk, (2006), it first originated in the 1800s when it was used to describe conservation of urban green spaces and urban forestry. This has developed to full-fledged campaign that seeks to achieve general development that can meet both the need of today and that of future generations. Effort must be made to (besides making environmental laws) build needed infrastructural facilities to arrest unpleasant environmental practices that will not only harm the environment, but impair needed development and achievement of green state status in Nigeria.

Poor Infrastructure

Following from the above, inactivity of the government reflects in apparent failure to develop appropriate technological apparatus needed to meet environmental challenges. Dearth of technological edge needed to nip adverse environmental practice in the bud, remains an issue in Nigeria. Possibility of achieving green state through the pathways of sustainable environmental practice is far-

fetched if the needed infrastructures are not in place as it is in Nigeria now. Government needs to be more proactive on issues of environmental management to strike a balance between resource exploitation and environmental management to birth desired development that will meet the need of today without sacrificing that of future generation.

Achieving Green State: Way Forward

While resource exploitation is expected to generate needed resources that can be deployed for development purposes, it must however be done with attention paid to issue of the environment. Resource exploitation must never be done in a manner that will alter the ecosystem with significant and adverse consequences. No state can achieve sustainable let alone green state status when the ecosystem is eroded due to excessive resource exploitation with zero regards to healthy environmental practice that can sustain development. To this end, the following measures are recommended for government to take to address issues affecting attainment of sustainable environment that can sustain development and aid achievement of the *green state status*.

Implementation of Environmental Laws

To achieve equilibrium between resource exploitation and environmental sustainability, government must besides making needed environmental laws, implement them. Doing this would enable the state tackle issues related to the environment while exploiting natural resources. In addition, rules and regulations that are available in the statute books can be revamped to tackle unpleasant environmental consequences of massive construction and developmental projects in urban centers capable of pushing up urban temperatures compared to what obtains in rural areas that are often not built up. Striking such balance in the environment would help

prevent the possibility of '**urban heat island effect**' with adverse environment impact that can affect development and sustainable development by extension. If appropriate environmental laws are implemented, this could be handled and the impact averted. For instance, government policy on 'green infrastructure' which encourages tree planting should be rigorously implemented to avert '**urban heat island effect**'. Trees help lower environmental temperatures and absorb the excess carbon dioxide.

In similar vein, applicable laws regulating industrial production in urban centers must be fully implemented. This can be done if there are green infrastructure in place and a plan to achieve carbon sequestration. Overpopulation leads to increased emission of carbon dioxide which is one of the major Greenhouse Gas contributing to depletion of the ozone layers. Adequate regulations aiding needed green infrastructures would help in storage and sequestration of carbon. Bowler et al., (2010) had suggested in a study that forest in urban areas, sequester and store more carbon than what is obtained in the rural areas. Similarly, Richard et al. (2006), confirmed that urban soils sequester substantial amounts of carbon dioxide. It is thus clear that adequate laws and implementation of same, would enable government to provide needed green infrastructures to tackle adverse environmental practices that can affect present and future development.

Conservation of Biodiversity

Related to the point raised above, government needs to come up with feasible blueprints that will help conserve our biodiversity. Though this is reactionary as opposed to proactivity expected of government when we recommended timely enactment of appropriate laws to preserve the environment in the face of resource exploitation, conserving the biodiversity would help

ameliorate adverse environmental impacts. Oil spill and gas flare in the oil bearing region does incalculable damage to the environment. Adequate measures taken to remedy this would help salvage the already battered environment and make it suitable to support development for today and tomorrow. The Bio-systems afford the environment to relate with associated environmental components such as genes, species, and the larger ecosystems to help restore and protect the organisms, species, and various populations which might have been depleted from an environment due to human practices like urbanization, deforestation and bush burning. Successful biodiversity conservation helps enhance habitat connectivity and help negatively affected species survive inevitable hazards from unpleasant resource exploitation activities with negative impact on the environment.

Conclusion

While development is desirable by every state, the need for this and extent to which this is achieved varies among states. While some countries are arguably developed, the extent of sustainability of such development is debatable. That is why focus in the last decade has been on how development can be achieved to meet the needs of today without compromising that of tomorrow or ability of posterity to meet their developmental needs. The concept of green state economy which is the improved intellectual discourse of what sustainable development espouses, seeks to achieve national development that recognizes vital role the environment plays in the development process and take measures to protect the environment for unhindered development. Securing the environment for sustainable development that supports green economy, can only be achieved if there are conscious efforts that can design and support a dedicated administrative, regulatory,

financial, and knowledge structures that to coordinate governmental environment oriented measures to achieve sure development and a green state, Duit et al (2016).

So far, we have been able to examine issues of environmental management in Nigeria and how to make same sustainable as a path to sustainable development and to achieve green state status. Besides careful consideration of salient concepts that helped put issues under focus in perspective, we equally examined slippery issues of resource exploration and environmental sustainability to discover that the nation failed largely to manage her environment and exploits natural resources to birth needed development. Leaning on theoretical guides provided by both Green and Environmental theories

embraced for this study, we examined position of the nation in the management of negative externalities of resource exploitation. Findings reveal little done to achieve suitable environmental practices in the face of resource exploitation that can sustain sustainable development let alone achieving green state status. This includes inactivity on the part of government in addition to limited abilities of states to evolve pragmatic state apparatus to respond to environmental challenges in their bid to achieve sustainable environmental practice. Achieving sustainable development and green economy we noted, needs concerted effort by the Nigerian state to make requisite environmental laws, implement them and ability to create formidable platforms that can help conserve our depleted biodiversity.

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