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Evaluation of Comprehension and Views on Green Cities and Sustainable Urban Environment: A Developmental Perspective

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Abstract
Green cities and the sustainable urban environment have gained popularity worldwide, both in literature and in practice. It is, however, indicative that, it is still unpopular among Nigerians. Otherwise, the popularity could have translated to a green environment and sustainable urban development, lessening the rate of continual urban environmental degradation. Thus, this paper reviews the critically needed key to enhancing the green city, eco-friendliness, and sustainable urban environment in Nigeria. The design is an exploration of the literature on the knowledge and attitude of the evolution of the urban green environment, needed green environmental policy, benefits of going green, and strategies to go green for the sustainable urban environment. The finding reveals that environmental knowledge of a green environment alone is not enough to influence positive environmental required changes; rather, with attitudes, a combination of thinking and action as an essential tool to a sustainable environment, encourages people to avoid harmful behavioural practices to the environment. Therefore, this paper recommends that knowledge and attitude are necessary keys to going green in Nigeria.

Key Words: *Green City, Eco-Friendliness, Sustainable Urban Environment*

1.1 Introduction

Going toward a Green environment vis-a-viz eco-friendliness has gained popularity in the contemporary urban environment worldwide (Rizwan *et al.*, 2014). Agyeman (2002) argued in his study that environmental knowledge per se is not a prerequisite for pro-environmental behaviour. Jansson, et al. (2010), reported that attitude has been found to successfully predict an individual's willingness to adopt eco-friendly innovations. As such there will be no chance to act in an environmentally friendly way without actionable behaviour (Saripah *et al.*, 2013). Schultz and Zelezny (2000), an actionable behaviour are behaviours rooted in a person's concept of self and the degree to which an individual perceives him or herself to be an integral part of the natural environment. Thus implying that understanding of and self-involvement in the protection of the environment by going green may prevent one from engaging in activities that are not eco-friendly (Wiener & Sukhdial, 1990).

The continual excessive use of natural resources arising from rapid economic growth is damaging the environment, raising many environmental concerns (Hua-hung *et al.*, 2015). Human-beings are the most dangerous threat to the green environment in terms of their thinking and way of their behaviours and actions (Watson & Halse, 2005; Negev *et al*., 2010). This is in affirmation to the United Nations Environmental Programme (2014) that reported "*never in Earth's history has one species changed the planet so dramatically and as quickly as man, leading a growing number of scientists to define the current geological era as the 'Anthropocene'* "Age of Humans".

The pervasive dominance of man over the green environment is partially reflected in some of the changes occurring from the effects of climate change, local and on the global scale such as global warming and climate change. These phenomenons according to Inter-governmental Panel on Climate Change (IPCC) are linked to carbon dioxide CO_2 and greenhouse gas emissions from human activities. The consequences or failure to reduce emissions could exacerbate food insecurity and result in flooding of major cities in nations. This could cause further refugee crises, mass extinction of plants and animals, and a drastically altered climate that might change life as we know it today for hundreds of millions of people. However, in contrast knowledge and attitude toward the green environment can change the narratives.

The emerging population growth in urban centres in Nigeria are seriously worrisome, and have been rapidly increasing since 2010 and are expected to grow from 200 million to almost 300 million inhabitants in no distance time (URBANNET, 2018). This resultant urbanisation process has been argued to increases myriads of problems such as poor security, extreme crime rates, high unemployment, high poverty rate, slums, insecurity and further environmental degradation among others (Agbola, 2004; National Planning Policy, 2012), and gradually will continue declining the existing green quality of the Nigerian urban environment and the quality of life vis-a-viz pollution and most steeply rising greenhouse gas emissions (Ekong, 2017).

Studies have shown that the knowledge of green environment alone is not enough components to influence positive environmental changes (Hungerford & Volk, 1990; Jensen, 2002). This is on the premises that Environmental knowledge is the number of information individuals having concerning environmental issues and their ability to understand and evaluate their impact on society and the environment. On the other hand, attitude is a set of emotions, beliefs, and behaviours toward a particular object, person, thing, or event (David, 2021). Implying that behaviour is often the outcome of interest in both persuasion and practice visa-a-viz thought that affect behaviour, and is a central focus of persuasion and have a powerful influence over behaviour. Thus Attitude leads to behaviour and a good predictor of behaviour as well as a factor that influences the behavioural change toward an action.

Environmental consciousness is a cognitive behaviour that awaken one's psychological propensity to be pro-environment in action (Ogunbode & Arnold, 2012; Sharma & Bansal, 2013).This cognitive behaviour is determined by the environmental knowledge, which is referred as knowledge concerning issues and solutions to the environment whereas Environmental attitude

is defined as "learned tendencies in the form of consistent behaviours toward the environment either positive or negative" (Perlstring, 1997). Kağıtçıbaşı (1998), reported that attitudes are not only tendencies or feelings but a combination of thinking and feelings. Bradley *et al.* (1999), asserted that the most important factor that affects individual behaviour is attitude. Therefore, it imply that Environmental Knowledge and attitude are essential tools toward a sustainable and liveable environment, and also encourage people to avoid harmful behaviours to the environment (Jacqueline *et al*, 2004), i.e. "Eco-friendliness" most commonly refers to behavioural products that contribute to green living or practices that help conserve resources like water and energy.

Darko and Chan (2017) in their study on barrier to greening adoption for sustainable city development in developing nations Nigeria inclusive, reported that, lack of awareness, knowledge and education are barriers to green city and sustainable development. Similarly, Debrah *et al*. (2020), in their study of barriers to green cities development in developing countries Nigeria inclusive, found out that lack of awareness, knowledge and education of the benefits of green city development are great hindrance to positive attitude toward environmental actions. Ogunbode and Arnold (2012), found out that, in Nigeria, educational attainment of an individual, is a major factor that hinders environmental inclination to engage in pro-environmental behavior. As such, inadequate knowledge and positive attitude toward information and understanding of the green environment is standing as a barrier to the success of delivering a sustainable green urban environment in Nigeria. According to Ekong (2017) knowledge of green city and sustainable urban environment In Nigeria, remains essentially a concept. This is only discussed in seminar and conference papers for academics exercises and little definitive actions. Also there is no defining policy response either at national or state levels to implement the green city agenda. This is in spite of the obvious climate change effects – excessive flooding and the environmental challenges that are manifesting in failed refuse disposal systems in cities across the country, lack of open spaces, overcrowding and development of unplanned neighbourhoods. "Going green" means to pursue practices that will lead to more environmental friendliness and ecologically responsible decisions and lifestyles, which will help to protect the environment and sustain its natural resources for current and future generations (Babour & Deakin, 2013). Green means making lifestyle decisions and engaging in practices that reduce the negative impact on and promote the health of the planet and its creatures (Jamie, 2020). Thus going green means a gradual process in changing of lifestyle by using products that are considered to be green and ensuring that it reduce the imprint the individual and families leave on the environment.

Greening impacts in environmental development by three sub-categories: environmental responsiveness, resource efficiency, and community and cultural sensitivity (Levy, 2011). Environmental responsiveness respects the intrinsic value of nature, and minimizes damage to an ecosystem. Resource efficiency refers to the use of fewer resources to conserve energy and the environment. While, community and cultural sensitivity recognize the unique cultural values that each community hosts and considers them very necessary in urban development.

Raheem and Adeboyejo (2016), reported that, urban green areas are strategic to the quality of life in the cities. Evidence of the benefits and importance of these are the aesthetics environmental sceneries and the ecological good views. Other benefits include air and water purification, wind filtration, noise pollution mitigation and microclimate regulation, besides the social services such as socialization, recreation and crime prevention. Little of priority for greening in the development agenda of urban areas in Nigerian cities will hinder the growth of green urban spaces. This is because studies have clearly shown that in developed nation's knowledge and attitude toward the environment has led to some positive behaviour, from improving, to enhancing critical thinking skills, in developing personal growth and life-building skills toward ensuring conserving, preserving, and sustaining the environment. Therefore this study attempts to review knowledge and attitude of green concept to enhance eco-friendliness for sustainable development of urban Nigeria to suggest policy direction

1.2 Effects of Human's Activities on the Environment and Sustainable Development

Urban Heat Island.

An urban heat island is an area of higher temperature relative to the surrounding landscapes, which is formed when industries, vehicles, domestic heating and cooling units, and built structures produce and retain heat in urban areas. Much of the solar energy that reaches urban areas is absorbed by buildings and asphalt; leading to higher surface temperatures due to the absence of vegetation that usually consumed the heat by the evaporation of water from the ground surface.

Water Quality.

A large urban population causes eutrophication in bodies of water. Rainfall in large cities dissolves the air pollutants such as CO_2 and other greenhouse gases onto the ground below. These pollutants are subsequently washed directly into rivers, streams, and finally to oceans, causing a decline in water quality and damaging the aquatic ecosystems by disrupting the natural balance of aquatic ecosystems. Eutrophication causes algal blooms to produce dangerous toxins that are detrimental to the survival of aquatic life. The harmful algal overtake surface water, making it difficult for other organisms to receive sunlight and obtain nutrients. Furthermore, algal blooms cause environmental acidification by producing CO_2 during their decomposition. Changes in water pH inhibit the proper formation of calcium carbonate that maintains shells or exoskeletons, which are a crucial component for many marine organisms (Russoa et al., 2017).

Habitat Fragmentation.

Is a division of habitats and thereby alienation of species, which is referred to as habitat fragmentation. Habitat fragmentation breaks habitats apart as a result of the construction of water canals, roads, railways, etc. Splitting habitats may affect animals' ability to sustain life by separating them from the areas where they easily access food, and shelter.

Health and Social Effects.

Urbanization in developing countries does not translate into a significant increase in life expectancy. Rather it may lead to increased mortality from non-communicable diseases that are related to lifestyle, such as cancer and heart disease, etc. Poor residents in urban areas who live in

slums and informal settlements suffer disproportionately from contagious diseases, injury, and premature death. The rise in population density of urban areas has negative effects on air quality. The number of people affected by asthma increases in urban societies as a result of exposure to traffic-related air pollution and exposure to environmental allergens found in urban areas (Wang et al., 2019; Chaolin, 2020).

Mental Health.

Some urbanization factors contribute to mental health, social disintegration and disorganization. It creates perceived insecurity due to problems with the physical environment, personal safety, loss of positive self-concepts from negative events or other problems with the social environment. Perceived insecurity increases stress, a common individual psychological stressor. Urbanization leads to changes in social organization and leads to reduced social support, increased violence, and overcrowding.

1.3 Evolution of Urban Green Environment for Sustainable Development

The concept of urban green environment is traced back to the urban open space planning concept of western cities during the industrial revolution era (Solomon *et al.*, 2017). The evolutionary trend attached much importance in the earmarking of open spaces deep within existing human settlements through ages from medieval agora to renaissance city squares and baroque avenues as the green environment (Solomon *et.al.*, 2017). Occasioning that the history of civilization was developed around the urban open space concept that was inclined to the existing socio cultural needs of the society. One major remarkable issue of the evolution, transcends down into modern city planning as "aesthetic". The aesthetic outlook of modern cities is connected to the availability of urban open space that depicted its green areas.

The concept was demonstrated in the design of the city park movement in New York, USA (Mumford, 1961). The emergence of the city park movement was seen as an environmental remedy to the problems that emanated from the industrial revolution of the eighteenth and nineteenth centuries from the rapid urban congestion, depressed slums, pollution, and diseases and some of the notable problems of then, the city park movement focus to tackle. The entire concept allowed nature to co-exist inside the densely populated cities and the pre- urban township of America. The organized open spaces and the existing natural recreation spaces were earmarked as escape exits. In Nigeria, it is noted by the traditional concept characterized by the following features; City Wall, Gate, Central Square, Market square and Religion grounds (Achi, 2004). However, formally not organized as a green space rather, seen as an isolated essential urban feature viewed as part of the natural farm land that makes up the general environment to balance between economic prosperity, environmental quality and social welfare for the benefit of humans wellbeing.

Thus, seen as sustainable development in addressing the need of the present without jeopardizing the ability of the future generations to meet their needs (WCED, 1987). The baseline for sustainable development is the need for proper integration of knowledge and attitude of going green in the quest for efficient economic development across all sectors. The environmental component of sustainable development is a major concern for urban stakeholders amid the rapid

urbanization trend in third world countries of sub-Saharan Africa. “Environmental sustainability” as a concept is defined as a condition of stability, resilience, and linkages that enable human society to meet its needs.

1.4 Analyses of Knowledge on the Adoption of the Green City and Sustainable Development Concept

Table 1: analysis of countries on the adoption of green cities and sustainable development globally. Green Economy Coalition (GEC, 2012), analysed countries’ responses to the draft of the Río-20 meeting (Zero Order Draft) on the concept of greening on 4 criteria; actively engaged; Luke warm; opposed or highly dubious and No mention of the green city and sustainable urban environment.

The result revealed that 19 countries globally have actively adopted the concept of greening in principle including Nigeria, 2 have Luke warmed attitude about the concept, 2 opposed or are highly dubious about the concept and only a country has no mention of the concept at all. While Stakeholders Forum for Sustainable Development (2012), used 3 criteria; fully supportive, unsure, and generally sceptical.

The result revealed that 10 countries are fully supportive of the concept, 9 are unsure of the concept and only 4 countries are generally sceptical of the concept. However, Nigeria wasn’t mentioned at all. While in Quiliconi and Peixoto's (2013) analysis, were based on 3 criteria optimistic, sceptical and critical. The result revealed that 4 countries are so much optimistic about the concept for sustainable development, 2 are sceptical of the concept and also are critical of the position of the concept for sustainable development.

The implication of the finding by each country or their remarks suggests significant differences across their stances. Some nations are particularly optimistic about the utility of this "greening" of the environmental discussion, while others see the phenomenon as frankly negative. Indicating that, the global attempt to overhaul and craft a more operational term for sustainable development, it emerges that the concept of the “green city” may not necessarily lead to “green growth,” and in turn, does not automatically mean “green development if actionable behaviour will be absent or not put into practice. Perhaps it is appearing that the notion of the concept of "green city" is far more frequent than the "green growth “and sustainable development.

The analysis is implying that the “green” concepts are tied into the broader knowledge of economic growth and the environment. Whereas studies believe that the solution to the environmental impact on the planet is to reduce the level of economic activity. Beyond the differences in the terminology employed and the points of view concerning "green" words, there is no doubt that lasting development will require working toward concrete actions rather than just defining concepts.

Table 1: Position of Countries on the Adoption of Green City and Sustainable Development

S/N	Sources	Criteria of Assessment	Countries
1	Green Economy Coalition (2012)	Actively Engaged	China, Coasta Rica, Botswana, Brazil, Ethiopia, EU, Ghana, Indonesia, Japan, Kenya, Thailand, Nepal, Nigeria, Philippines, Russia Federation, South Africa, United State of America
		Luke Warm	Argentina, Egypt
		Opposed/Highly Dubious	Bolivia, Venezuela
		No Mention	Honduras
2	Stakeholders Forum for Sustainable Development (2012)	Fully Supportive	Barbados, China, EU, Indonesia, Norway, South Korea, Senegal, Sweden, Switzerland, United States of America
		Unsure	Argentina, Australia, Colombia, Ecuador, Egypt, G77, and China, Mauritius, Mexico, Uruguay
		Generally Sceptical	Bolivia, Brazil, Cuba, Japan
3	Quiliconi and Peixoto (2013)	Optimistic	Brazil, Mexico, Coasta Rica
		Sceptical	Argentina, Peru
		Critical	Venezuela, Ecuador

1.5 Need for Green Environmental Policy

Going green growth and Sustainable development policy is a course or principle of action to be adopted or proposed to address climate change, promote resource circulation, and ensure chemical safety, preservation for the regional environment and biodiversity conservation. This is because the global economy has continued to face complex challenges as a result of man's action on the environment (World Bank, 2012). Resolute policy action is urgently needed to restore confidence and put the economic recovery onto a sustainable growth path (UN ESCAP, 2010). This is to ensure that economic growth is sustainable over the long-term. Unless countries move to greener growth paths - characterised by economic growth and human development that better conserves natural resources continuing environmental degradation will lead to significant negative impacts on human well-being. This can result in more air pollution and water scarcity, bottlenecks in the availability of scarce natural resources, and the risk of more frequent extreme weather events and dramatic climatic change (World Bank, 2012).

These impacts are predicted to put economic growth and development at risk, with a disproportionately high share of the burden falling on the poor in many parts of the world (World Bank, 2012). This is because the poor, sources of livelihoods are often more closely tied to environmental resources and have limited options for either diversification or coping, this will put them to face adverse impacts of an increase in greenhouse gas (GHG) emissions and a significant worsening of urban air pollution projected to 2050 (OECD, 2012a). The impact on quality of life and human health will be significant, with an increasing economic burden from chronic and costly health problems. The number of premature deaths from exposure to particulate pollutants (PM10 and PM2.5) could double from current levels to 3.6 million people every year by 2050. Global water demand is projected to increase by 55% by 2050, with competition for water intensifies. As a result, it is projected that almost 40% of the world‘s population would be living in areas categorised as suffering from severe water stress in 2050. Over the past 25 years 60% of the world‘s major ecosystems have been degraded or used unsustainably, including through declining soil quality, land degradation and deforestation. By 2050, global terrestrial biodiversity is projected to decline by a further 10% (OECD, 2012a). In agriculture, productivity increases have helped to limit natural ecosystem loss in many countries, but poorly managed intensification has also exacerbated agro-chemical and water pollution, soil exhaustion and salinity (World Bank, 2012a). The costs and consequences of inaction on these environmental challenges are enormous, both in economic and human terms, and could jeopardise further progress in economic prosperity and poverty reduction (OECD, 2008a). Future generations could find themselves significantly disadvantaged and their overall welfare compromised.

In this broader context, inclusive green growth policy can help move towards more sustainable development, poverty eradication and improved well-being for all by promoting concrete, measurable progress in the integration of the economic, environmental and social pillars. This should take advantage of arising opportunities and pay due attention to the costs and risks associated with policies aimed at greening the economy, including the costs of diverting resources from alternative uses. Indeed, addressing these concerns is essential to ensure that green growth is inclusive and leads to sustainable development. For green growth policies to gain acceptance, it is key that they reflect, coherently and cohesively, national environmental, economic and social objectives and recognise that they need to be achieved together. Due attention to the risks and costs of government failure, *e.g.* related to inefficiencies in policy implementation, is also necessary.

1.5 Benefits of Going Green for Sustainable Development

The benefits of the Green concept are numerus in practice. It can contribute to growth through diverse channels. First, it can promote efficiency and help to increase the amount of natural, physical, and human capital: Better managed more productive soil. Healthier environments will result in more productive workers and well-managed natural risks that will result in lower capital losses from natural disasters (Hallegatte, 2011). Secondly, green growth can also stimulate innovation (Johnstone *et al.*, 2010a; OECD, 2010a; 2011b; 2012b), that’s increases trade in clean technologies and supporting their rapid diffusion internationally. Thirdly, green growth can increase resilience to environmental shocks (such as natural disasters) or economic

shocks (such as spikes in commodity prices), thereby reducing natural resource price volatility and bottlenecks (World Bank 2012a). it can also help to diversify the poor source of livelihoods towards more sustainable models and continuing to develop their social safety-nets where they are insufficient, *e.g.* in developing and some emerging market economies; and minimise skill bottlenecks by supporting training and job search for affected workers (OECD, 2012c). Greener growth will per se help reduce poverty or improve the well-being of the disadvantaged, many of whom – small farmers, fisher-folk, pastoralists, and rural women – have lives and are closely linked to environmental resources.

1.6 Strategies to Enhance Green environment and Sustainable Development

Green environment refers to the environment-friendly practices that conserve and improved environment and the environmental health. Achieving a green environment has many advantages such as:

conservation of natural resources, mitigation of climate change, reduce energy costs and consumption, reduced pollution, reduced resources consumption and eliminate wastes, and maintain the natural ecological balance on earth so that all living things can survive and thrive in their natural habitat. “Going green” in urban will reduces air toxic pollutants, which makes the air we breathe cleaner (Dipeolu et al., 2021). This can be done by urban green infrastructure or space. Urban green spaces refer to parks, wildlife corridors, and urban forests in the neighbourhoods, cities, and urban regions. While green infrastructure refers generally to a system of natural and man-made green spaces that provide ecological and social functions in urban areas. The urban green spaces may support biodiversity and provide a variety of ecosystem services that are crucial to the wellbeing of urban residence. Urban green spaces also provide habitats for animal species, purify air and water, moderate local climatic conditions, reduce soil erosion and noise pollution. They also increase real estate values, improve and landscape aesthetics, and enhance human physical and psychological well-being (Adegun, 2021; Palliwoda & Priess, 2021; Pamukcu-Albers et al., 2021).

The focus of the green environment is to ensure that natural assets deliver their full economic potential on a sustainable basis. This includes the provision of critical life support services- clean air and water and the resilient biodiversity that is needed to support food production and human health. Natural assets are not infinitely substitutable and green environment policies take account of that therefore, the Green environment needed a strong policy and institutional settings to guide and facilitate a transition to new, more environmentally sustainable livelihoods for the urban poor, for example those that their previous sources of livelihoods relied on unsustainable exploitation of natural resources. Adoption of less polluting and more efficient household energy sources, particularly for the poor, as well as other critical priorities, such as health, education, or infrastructure development. Pursuance of tax expenditure via better-targeted spending measures, in particular to support low-income households, to improved health outcomes through a cleaner environment, that can reduce carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services.

Embedment of green environment in the school syllabus, from as early as pre-school level, early ages becomes much more important in terms of perceiving nature and their relation with nature in a healthy way (Goodall, 1992; Phenice & Grifffore, 2003; Tilbury, 1994). This is to increase the awareness toward and to inculcate values of the green environment among the residents. Once the residents have the environmental values inculcated in them, supposedly they would behave pro-environmentally. While city managers may organize periodical anti-littering campaigns for the public from time to time.

Planting trees is one of the major strategies for creating green spaces in urban environments. Trees are of great importance to the urban environment. Trees provide ecosystem services such as supporting, provisioning, regulating, and cultural services. They contribute to human well-being economically, socially and spiritually (Dieter *et al.*, 2013). Tree canopies intercept a proportion of rainfall. The intercepted portion is often precipitation that would have fallen on an impermeable ground surface in the urban areas that contributes to the bulk of surface runoff, which may create flooding. Also, tree roots create soil macrospores that increase the infiltration of water in the soil. In addition, tree trunks and litters act as obstructions that slow down the speed of surface runoff, thereby increasing infiltration and reduce the chances of flooding and soil erosion. Moreover, the litters and other organic residue improve soil structures that affect the soil's water storage capacity. Consequently, the presence of trees can change the quantity of running water and groundwater and thereby improving the quality of the water in the dams, streams or rivers that may use for domestic or industrial purposes.

Pollution Control Trees play a key role in filtering pollutants from the atmosphere or hydrological system. Many pollutants such as hydrocarbons and heavy metals are washed from soil into the hydrological systems. These pollutants can be used by the trees as nutrients or are stored in the dead wood. In addition large volumes of surface runoff that enter streams and rivers usually carry along eroded materials that result in increased water turbidity and sedimentation especially in dams. Trees can slow down the speed and reduce the volumes of the surface runoff. This action leads to increase water infiltration and the removal of most of the sediments before reaching the streams. Moreover air pollutants from the exhaust of automobiles and dust that arise from the natural storm or moving vehicles can be intercepted by leaves, branches, and stems of trees. The trapped pollutants as dry deposits are later washed off by precipitation. However, the effectiveness of control of air pollution by trees depends on the species, canopy size and architecture, type of air pollutants, and local meteorological conditions (Sim, 2009).

Regulation of Ambient Temperature Trees regulate the temperature of the environment and thereby combating urban heat islands. Urban areas are usually warmer relative to the surrounding countryside. The urban heat island occurs as a result of absorption, advection, and re-radiation of heat from buildings and tar roads that originate from solar radiation heating. Building materials, such as asphalt, concrete, glass, and steel, have higher thermal capacities to store large amounts of heat in the day-time, which readily dissipated at night, leading to a rise in temperature of the surrounding air and thereby making it hotter. These make the urban areas uncomfortably

hot for humans. Trees moderate the temperature of the urban island by preventing or reducing solar radiation from reaching buildings; reducing the ambient temperature by transpiration; and increasing humidity. Tree shades are of great value for people working, shopping, sharing, and walking in urban areas. Tree shades create more pleasant walking environments; protect pedestrians from little rain, provide beauty and aesthetic of a landscape. Three shades provide pleasing areas for recreation and socio-cultural activities; and enhance property and real estate values (O'Loughlin & Nambiar, 2001).

1.7 Discussion of the Findings

The paper reveals that various studies concurs that the concept of going greening have gained acceptance among many developed nations worldwide. However, it is still unpopular among nations of developing countries Nigeria inclusive. This is affirmed by Ogunbode and Arnold, (2012); Darko & Chan 2017; Debrah et al, (2020). This have continually increased man's pervasive dominance on Mother Earth with some negative consequence locally and on global scale resulting into global warming and climate change. According to Inter-governmental Panel on Climate Change (IPCC), the phenomena are linked to carbon dioxide CO_2 and greenhouse gas emissions emanating from human activities. The consequences or failure to reduce this emission could exacerbate more food insecurity and result in flooding of major cities in the nations of developing countries. This could cause further refugee crises, mass extinction of plants and animals, and a drastically altered climate that might change life as we know it today for hundreds of millions of people.

The paper further reveals that knowledge and attitude toward the green environment and sustainable development can change the narratives. This assertion concurs with Hungerford & Volk, (1990); Jensen, (2002), that knowledge of green environment alone is not enough component to influence desired positive environmental changes for sustainable urban environment on the premises that Environmental knowledge alone is only informing individuals concerning environmental issues without the ability to understand and evaluate its impact on society and the environment as such there is a need for positive attitude. On the other hand, attitude is a set of emotions, beliefs, and behaviours toward a particular object, person, thing, or event (David, 2021). Implying that behaviour is often the outcome of interest in both persuasion and practice viz-a-viz thought that affect behaviour, and is a central focus of persuasion and have a powerful influence over behaviour. Thus Attitude leads to behaviour and a good predictor of behaviour as well as a factor that influences the behavioural change toward an action.

The paper also reveals that there is a need for definitive green environmental policy in Nigeria, this is to restore and ensure chemical safety, preservation for the regional environment and biodiversity conservation and put the economic recovery onto a sustainable growth path in affirmation to UN ESCAP, (2010). This is to ensure that economic growth is sustainable over the long-term. Unless countries move to greener growth paths - characterised by economic growth and human development that better conserves natural resources continuing environmental degradation will lead to significant negative impacts on human well-being. This can result in more air pollution and water scarcity, bottlenecks in the availability of scarce natural resources, and the risk of more frequent extreme weather events and dramatic climatic change in affirmation to World Bank, (2012).

1.7 Conclusion and Recommendation

The environmental consequences of development are apparent on global scale and Nigeria is having its on fair share. Although studies have indicated that numerous initiatives are being advocated and undertaken in developed nations to make Green Cities' projects a reality and move toward environmental sustainability. However, in developing nations Nigeria inclusive the advocacy and green city projects are still a mirage in gearing momentum toward environmental sustainability. As a result of lack of definitive policy, awareness, knowledge and education of the benefits of green city and sustainable urban environment development. Therefore, this paper recommended advocacy of knowledge and attitude are necessary key in going green in Nigeria.

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