

**THE CONCEPT OF SUSTAINABLE DEVELOPMENTS
THE CORE TO ENVIRONMENTAL PROTECTION IN NIGERIA^{*}**

Abstract

This paper examines the twin concepts of sustainability and development, and observes that the right of a state to develop is subject to a corresponding duty to make such development sustainable by allowing environmental concerns shape its development policies. It examines also the principles of international environmental law and observes that all of these principles are encapsulated within the concept of sustainable development. It further examines Nigeria's sustainable development efforts and notes that these efforts though laudable have been largely only on paper and yet to be translated into concrete actions. It submits that every principle that has guided multilateral efforts to protect man and his environment from the harmful effects of substances introduced by man into the atmosphere are encapsulated in the principle of sustainable development, thus the concept of sustainable development should underline every action on development.

^{*} Gina Elvis-Imo, Lecturer, Faculty of Law, Niger Delta University, Bayelsa State.

Introduction

Environmental concerns did not acquire international dimension until relatively recently. The United Nations Conference on Human Environment held in Stockholm in 1972 placed the relationship between economic development and environmental protection in the international agenda. This was followed by the establishment of the United Nations Environment Program. The setting up in 1983 of the Gro Harlem Brundtland led World Commission on Environment and Development (Our Common Future), espoused the urgent need for a well rounded development, beneficial for both the Environment and human beings. The Commission in its Report, tagged the Brundtland Report 1987, brought the principle of sustainable development to the front burners of international politics. The Report defined sustainable development as development that meets the needs of the present generation, without compromising the ability of future generations to meet their own needs.

The above definition contains two key concepts: the concept of ‘needs’ and in particular the essential needs of the world’s poor to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organisation on the environment’s ability to meet present and future needs.

The primary goal of the World Conference was to agree on an approach to development that would protect the environment, while ensuring economic development and to lay the foundation for a global partnership between developing and more industrialised countries based on mutual needs and common interests to ensure a healthy future for the planet.¹ The Report observed that if natural resources continued to be used at the current rate, if the plight of the poor was ignored, and if pollution and wasting of resources continued, a decline was to be expected in the quality of life of the world’s population. It therefore called upon wealthy nations to make changes in their lifestyle by recycling wastes and conserving energy and land. The outcome of this Report culminated in the United Nations Conference on Environment and Development (UNCED) held in Rio De Janeiro in 1992.²

¹ Okonkwo, T. *The Law of Environmental Liability* (Lagos, AEDE Second Edition 2010) 708

² The Earth Summit

The Earth Summit

The United Nations Conference on Environment and Development 1992 (The Earth Summit) produced the following outcomes:

- The declaration on Environment and development (The Rio Declaration);
- A global action plan for all states on development and the environment (Agenda 21);
- Two multilateral treaties: the Convention on Biological Diversity³ and the United Nations Framework Convention on Climate Change,⁴ and were signed by representatives of more than 150 countries.

Principle 1 of the Rio Declaration puts Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature. Principles 3 and 4 seek to strike a necessary balance between economic development and environmental protection. The right to development must be fulfilled so as to equitably meet developmental needs of present and future generations.⁵ In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.⁶ Principle 3 acknowledges the right to development, which developing countries had been arguing for, while Principle 4 moves environmental protection to the core of developmental policies, reflecting the wishes of the developed world.⁷

Principle 8 states that:

To achieve sustainable development and a higher quality of life for all people, states should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.

³ United Nations Convention on Biological Diversity, June 5, 1992 Rio de Janeiro, 31 I.L.M. 822

⁴ United Nations Framework Convention on Climate Change, May 9, 1992, New York

⁵ Principle 3 of Rio Declaration

⁶ Principle 4 of Rio Declaration

⁷ Thornton, J and Beckwith, S *Environmental Law* (London, Sweet and Maxwell, 2004) 36

The Rio +10 and Rio +20 (Earth Summit)

The World Summit on Sustainable Development (The Earth Summit) 2002⁸ was a follow up to the UNCED (Earth Summit) 1992. A major outcome of the Rio +10 Summit was the Johannesburg Declaration. It laid out the Johannesburg Plan of Implementation as an action plan.

The United Nations Conference on Sustainable Development (The Earth Summit) 2012⁹ was the third international conference on sustainable development and a twenty year follow up on the Earth Summit 1992. Rio +20 had three objectives:

- Securing renewed political commitment for sustainable development;
- Assessing the progress and implementation gaps in meeting previous commitments; and
- Addressing new and emerging challenges.

A major outcome of this conference was the non-binding document tagged *The Future We Want*, a 49 paged Work Paper in which the heads of states of 192 governments in attendance renewed their political commitment to sustainable development and declared their commitment to the promotion of a sustainable future. The document also reaffirmed previous action plans like the Agenda 21. Another outcome was the development of Sustainable Development Goals (SDGs), a set of measurable targets aimed at promoting sustainable development globally. It is thought that the SDGs will pick up where the MDGs leave off, closing the gap left by the MDGs in failing to address the role of the environment in development.

The principle of sustainable development encapsulates the twin concepts of development and sustainability.

⁸ Also known as Rio +10, held in Johannesburg in 2002. That is ten years after the UNCED 1992 in Rio de Janeiro

⁹ Also known as Rio +20, held in Rio de Janeiro, Brazil

Development

Development according to the United Nations Declaration on the Right to Development is:

A comprehensive economic, social, cultural and political process which aims at the constant improvement of the wellbeing of the entire population and of all individuals on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting therefrom...¹⁰

It describes development as a comprehensive process that involves political freedom and equality of opportunity for all in their access to basic resources, education, health services, food, housing, employment and the fair distribution of income. Each human being is entitled to participate in, contribute to and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realised. The Declaration further asserts that the right to development involves the interest of developing countries to control and enhance their own development (including the right to exploit its natural resources), the right to of all people to enjoy the right of self-determination and an individual's right to enjoy a minimum quality of life.¹¹

Development is the process by which a country provides for its entire population, all the basic needs of life such as health, nutrition and housing, provides everyone with opportunities to contribute to the very process through gainful employment as well as scientific and technological innovations.¹² It is also a process by which the national government authorities facilitate the construction and maintenance of the infrastructure and mechanisms which diversify and perpetuate the productive base of the country, such as agriculture and industries, so as to ensure that the society overcomes the pressures and necessities of the national and related economic systems for the present and all future times.¹³ In a broader

¹⁰ Resolution 41/128 Annex of the United Nations Declaration on the Right to Development 1986.

¹¹ Ibid.

¹² Amokaye, G.O. *Environmental Law and Practice in Nigeria* (Lagos, UNILAG Press, 2004) 15.

¹³ Ibid

international perspective, development encapsulates the concepts of peace and security; economic development; social development; and national governance that secure peace and development.¹⁴

Section 91 of the Nigerian Urban and Regional Planning Act¹⁵ defines development as:

The carrying out of any building, engineering, mining or other operations in, on, over or under any land or the making of any environmentally significant change, in the use of any land or demolition of buildings, including the felling of trees and the placing of freestanding erections used for the display of advertisements on the land...

Section 2 (1) the Town and Country Planning Law¹⁶ define development as follows:

Development in relation to any land includes any building or re-building operations and any use of land or any building thereon for a purpose which is different from that which the land or building was last being used. Provided that the laying down by the occupier or farmland to fallow or any change of crops grown or to be grown or in the method of their cultivation by the said occupier shall not be deemed to be development, save in so far as the Governor, Authority or Local Government Council may determine.

Development is the sum total of all socio-economic and technological indicators used to measure the advancement of society and individual's

¹⁴ Ibid 16

¹⁵ Cap 138 LFN 2004

¹⁶ Cap 123 Laws of Western Nigeria 1959

state in the society; standard of living, life expectancy, self regulating social institutions, industrial base, etc.

The right to development is an aspect of states' sovereignty recognised by international law. The principle of permanent sovereignty over natural resources expressed in the United Nations Assembly Resolution of December 14, 1963 states:

The right of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised in the interests of their national development and the well being of the people of the state concerned.¹⁷

The sovereign rights of all countries freely to dispose of their natural resources for the benefits of their national development was reaffirmed by Resolution 88 of the United Nations Conference on Trade and Development (UNCTAD) 1972.

Thus, states may exercise the following rights:

- The right to the possession, use and freedom to dispose their natural resources;
- The right to the free determination and control of the prospecting, exploration, development, exploitation, use and marketing of their natural resources; and
- The right to the management and conservation of the states' natural resources pursuant to their national development and environmental policies.

Limitations on the Right to Development

By Principle 2 of the United Nations Conference on Environment and Development 1992¹⁸

¹⁷ Resolution 1803 of the United Nations. See also Article 1 of the Convention on Economic, Social and Cultural Rights of December 16, 1966; Article 1 of the Convention on Civil and Political Rights 1966, and the Charter on Economic Rights and Duties of States adopted in 1964.

¹⁸The Earth Summit (Rio Declaration); see also Principles 21 and 22 of the United Nations Conference on the Human Environment (Stockholm Declaration) 1972.

States have in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

While the above provision allows a state to carry out activities to develop its territory, it must however ensure that such activities do not adversely impact the environment outside its jurisdiction.

Article 192 of the United Nations Convention on the Law of the Sea (UNCLOS) 1982, recognises the rights of states to exploit their natural resources subject to their obligation to protect the marine environment. States are required to put in place measures to protect, reduce and control cases of pollution of the marine environment using the best practicable means of disposal. Such measures must include those designed to minimise to the fullest possible extent pollution from installations and devices used in exploration or exploitation of natural resources of the seabed and subsoil, and pollution from other installations and devices operating in the marine environment.¹⁹ Measures adopted must include those necessary and expedient to protect and preserve rare or fragile ecosystems as well as the habitats of depleted, threatened or endangered species, and other forms of marine life.²⁰

The Convention on Environmental Impact Assessment in Transboundary Context 1999, affirmed the interrelationship between economic and developmental activities and their environmental consequences. And parties to the convention are enjoined to individually or jointly take appropriate steps to prevent, reduce and control significant transboundary environmental impacts from their activities.

¹⁹ Jimoh, A. Ehizogie, E. "A Review of International Conventions on Environmental Pollution Applicable in the Petroleum Industry" *Modern Practice Journal of Finance and Investment Law*, 2001, Vol. 5 No: 4, p. 548 & 549

²⁰ Ibid.

Sustainability

Sustainability is concerned with ensuring the dynamic equilibrium between man and nature for the co-evolution of both within the earth surface. It involves the conservation and maintenance of the ecosystem, including the preservation of genetic diversity and sustainable utilisation of species and ecosystems for the present and future generations of mankind. It is thought that sustainability of the ecosystem would be attained if man exercises some restraint and reasonableness in the exploitation of the ecosystem for his developmental needs.

Sustainability refers to the ability to sustain, and to sustain means to maintain or endure. Thus sustainability refers to the endurance of systems and processes. Global warming, environmental degradation, consumption pattern (over consumption), population growth and the pursuit of indefinite economic growth by societies pose severe threat to environmental sustainability. Sustainability refers to the ability to improve the quality of human life, while living within the carrying capacity of supporting ecosystem. This presupposes that sustainability has quantifiable limits. Achieving sustainability require responsible and proactive decision making and innovation that minimises negative impacts, while maintaining a balance between ecological resilience, economic prosperity, political justice and cultural vibrancy to ensure a desirable planet for all species now and in the future. Sustainability embraces three pillars, viz economy, society and environment. Economy and society are constrained by environmental limits.

The Earth Charter

The Earth Charter²¹ is an ethical framework for building a just, sustainable and peaceful global society in the 21st Century. It seeks to inspire in all people a new sense of global interdependence and shared responsibility for the wellbeing of the whole human family, the greater community of life, and future generations. It is a vision of hope and a call to action.

The Earth Charter is centrally concerned with the transition to sustainable ways of living and sustainable human development. It has as its major

²¹ The Earth Charter Project began as a United Nations initiative, but it was carried forward and completed by a global civil society initiative and was finalised and launched as a People's Charter on June 29, 2000 by the Earth Charter Commission, an independent international Entity in a ceremony at the Peace Palace in the Hague. It has been endorsed by over 6,000 organisations, made up of governments and international organisations. The Earth Charter is an important expression of a soft law document, like the Universal Declaration of Human Rights, which is morally but not legally binding on state governments that agree to endorse and adopt it. Soft laws often form the basis for the development of hard law.

theme, ecological integrity. It however, recognises that the goals of ecological protection, the eradication of poverty, equitable economic development, respect for human rights, democracy and peace are interdependent and indivisible. It provides therefore a new inclusive, integrated ethical framework to guide the transition to a sustainable future.

The Earth Charter is a universal expression of ethical principles to foster sustainable development; it therefore speaks of a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. The Earth Charter challenges us to examine our values and to choose a better way. It encourages us to search for common ground in the midst of our diversity and to embrace a global ethic that is shared by an ever-growing number of people throughout the world.

The purport of sustainable development is the ability to meet human development goals while at the same time sustaining the ability of natural systems to continue to provide the natural resources and ecosystem services upon which the economy and society depends. The Brundtland Report defines sustainable development as:

A process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are made consistent with future as well as present needs.

Sustainable development is the organising principle for sustaining finite resources that are necessary to provide human needs on earth, so that both the present and future generations can have use of it. It ensures that living conditions and resource-use continue to meet human needs without undermining the integrity, stability and beauty of natural biotic systems. Sustainable development ties together concern for the carrying capacity of natural systems with the social, political and economic challenges faced by humanity. The present generation has the responsibility to regenerate, maintain and improve planetary resources for use by future generations. The principle therefore requires that environmental criteria be incorporated into the planning and implementation of any public policy. This entails the reconciliation and integration of environmental and developmental concerns at all levels of decision making.

Sustainable development is a systems approach to growth and development and to manage natural, produced, and social capital for the welfare of their own and future generations. It embraces four interconnected domains: ecology, economics, politics and culture.²²

The ecological sustainability of human settlements is part of the relationship between humans and their natural, social and built environment.²³ In this regard, sustainable development includes human health, fundamental human needs, such as the availability and quality of air, water, food and shelter.²⁴ Daly Herman²⁵ suggested three broad criteria for ecological sustainability:

- Renewable resources should provide a sustainable yield, that is, the rate of harvest should not exceed the rate of regeneration;
- For non-renewable resources there should be equivalent development of renewable substitutes; and
- Waste generation should not exceed the assimilative capacity of the environment.

Environmental Sustainability deals with the natural environment and how it endures and remains diverse and productive. Environmental sustainability requires society to design activities to meet human needs while preserving the life support systems of the planet.

Sustainable Agriculture consists of environmental friendly methods of farming that allow the production of crops or livestock without damage to human or natural systems. It involves preventing adverse effects to soil, water, biodiversity, surrounding or downstream resources as well as those working or living on the farm or in neighbouring areas. The concept of sustainable agriculture extends intergenerationally, passing on a conserved or improved natural resource, biotic and economic, as opposed to one which has been depleted or polluted.

²² James, Paul; Magee Liam; Scerri Andy; and Steger Manfred B *Urban Sustainability in Theory and Practice: Circles of Sustainability* (London, Routledge 2015); Scerri, Andy and James, Paul “Accounting for Sustainability: Combining Qualitative and Quantitative Research in Developing Indicators of Sustainability” *International Journal of Social Research Methodology*, vol. 13, No.1 pages 41-53; *Prototype Global Sustainable Development Report* UN Dept of Economics and Social Affairs, Division for Sustainable Development, (New York, UN 2014)

²³ Scerri, A and James, P *supra*

²⁴ White, F.; Stallones, L.; Last, J.M. *Global Public Health: Ecological Foundations* (London, Oxford University Press, 2013)

²⁵ Daly, H.E. “Towards Some Operational Principles of Sustainable Development” *Journal of Ecological Economics* 1990, Vol 2 page 3

Sustainable Transport is also key to achieving sustainable development because transportation is a large contributor to greenhouse gas emissions. Transportation is said to produce one-third of total greenhouse gas emissions.²⁶ Some of the measures to attain sustainable transport include use of fuel efficient vehicles, provision of more reliable and responsive public transportation network, encouraging walking through the provision of wider pedestrian pathway, increasing the cost of car ownership and gas taxes through increased parking fees and tolls.

Sustainable Energy is also crucial to the quest for sustainable development. Sustainable energy is the provision and use of clean energy that lasts for a long period of time. Unlike fossil fuel, renewable energy produces little or no pollution. They include solar and wind energy.

Ecological economics focuses on nature, justice and time. Issues of intergenerational equity, irreversibility of environmental change, uncertainty of long-term outcomes, and sustainable development guide ecological economic analysis and valuation. The economy and the existence of legitimate and protected property rights affects the environmental quality, because they enable the effective practice of personal responsibility and the development of mechanisms to protect the environment. That is the state can create conditions which encourage the people to save the environment. The decision by the state whether to give freely to particular citizens the entitlement to pollute or buy the right to pollute will affect the quality of the environment.

The principle of sustainable development envisages the integration of environmental and developmental concerns at all levels of decision making. It requires that environmental considerations be taken into account in the formulation and implementation of public policies. The principle also requires that before any important technical intervention on the environment is done, a study of its environmental impacts must be carried out. The tenets of sustainable development is in line with the polluter pays principle, which requires that at all times the polluter should bear the cost of his polluting activities. This is also in line with the economics approach to environmental pollution, which advocates the internalisation of the externality challenge.

²⁶ Buehler, R. and Pucher, J. "Sustainable Transport in Freiburg: Lessons from Germany's Environmental Capital" 2011 Int'l Journal of Sustainable Transportation, 10.

The principle of sustainable development requires that environmental considerations must shape economic and political policies, it is therefore necessary that states reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.²⁷ An unsustainable situation occurs when natural capital is used up faster than it can be replenished. Sustainability requires that human activity only uses nature's resources at a rate at which they can be replenished naturally. The long term result of environmental degradation is the inability to sustain human life.

Sustainable development requires that geopolitical policy makers promote and manage essential planetary ecological resources in order to promote resilience and achieve sustainability of essential resources for the benefit of future generations.

There is a close correlation between economic growth and development on the one hand and environmental degradation on the other hand, because as societies grow in terms of population and economic development, the environment declines. Abbey²⁸ compares unsustainable economic growth to the malignant growth of cancer, in these words: "*growth for the sake of growth is the ideology of the cancer cell*". This is so because like malignant cancer, unsustainable economic growth eats away at the earth's ecosystem services, which are its life-support system.

Conventional economics is concerned largely with economic growth and the efficient allocation of resources. Ecological economics on the other hand, is concerned with sustainable scale (rather than continual growth), fair distribution and efficient allocation, in that order. There is concern that unless resource use is checked, modern global civilisation will follow the path of ancient civilisations that collapsed through over exploitation of their resource base.²⁹ Ecological economics includes the study of societal metabolism, the throughput of resources that enter and exit the economic system in relation to environmental quality.

Ecological economics has often used the term, *decoupling* which refers to the ability of an economy to grow without incurring corresponding increases in environmental pressure. An economy that is able to sustain the growth of Gross Domestic Product (GDP) without having a negative impact on the environment is said to be *decoupled*.

²⁷ See for example Principle 8 United Nations Convention on Environment and Development 1992 (The Earth Summit)

²⁸ Abbey, E. *Dessert Solitaire* (Ney York, Ballantine Books 1968) 12

²⁹ Diamond, J. *Collapse: How Societies Choose to Fail or Succeed* (New York, Viking Books 2005) 17

In 2011, the International Resource Panel, hosted by the United Nations Environment Program (UNEP), warned that by 2050 the human race could be devouring 140 billion tons of minerals, ores, fossil fuels and biomass per year – three times its current rate of consumption – unless nations and the global community at large can make serious attempts at decoupling.³⁰ The Report notes that citizens of most developed countries consume up to 40 or more tons per person per year of those four key resources, whereas the average person in India consumes about four tons per year. Sustainability studies analyse ways to reduce resource intensity (the amount of resources such as water, energy or minerals) needed for the production, consumption and disposal of a unit of goods or services whether this be achieved from improved economic management, product design, or new technology.³¹

While it is possible to argue that improvements in technological efficiency and innovation will enable a complete decoupling of economic growth from environmental degradation, but efficiency experts claim that resource use intensity (energy and material use per unit GDP could in principle be reduced by at least four or five fold, thereby allowing for continued economic growth without increasing resource depletion and associated pollution.

The above reasoning finds support in the fact that there are practical limits to all efficiency improvements. For instance, there are certain minimum unavoidable material requirements for growing foods and there are limits making automobiles, houses, furniture and other products lighter and thinner without the risk of losing their necessary functions.³² Since it is both theoretically and practically impossible to increase resource use efficiencies indefinitely, it is equally impossible to have continued and infinite economic growth without a concomitant increase in resource depletion and environmental pollution. That is, economic growth and resource depletion can be decoupled to some degree over the short run but not the long run.

Bindewald³³ proposes the *Restore* approach as a fourth component to the common *reduce, reuse, recycle* motto, to partially decouple economic

³⁰ “Decoupling: Natural Resources Use and Environmental Impacts of Economic Growth” International Resource Panel Report, 2011

³¹ Daly, H. *Beyond Growth: The Economics of Sustainable Development* (Boston, Beacon Press, 1996) 18

³² Huesemann, M.H. and Huesemann, J.A. *Techno-fix: Why Technology Won't Save Us or the Environment* (Gabriola Island, Canada, New Society Publishers, 2011) 111; Cleveland, C.J. and Ruth M. “Indicators of Dematerialisation and the Materials Intensity of Use” *Journal of Industrial Ecology* Vol 2 of 1998, pages 15-50

³³ Bindewald, L. “An R of Sustainability that can tame the Conundrum” <http://www.doi:10.7287/peerj-preprints.46v1>

growth from environmental degradation. This proposal encourages participants to voluntarily donate towards nature conservation, a small fraction of the financial savings they experience through a more frugal use of resources.

Principles of Sustainability

The principle of sustainable development encapsulates other key principles of international environmental law.

The Principle of Intergenerational Equity: is expressed in Principle 3 of the Rio Declaration as:

The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.

This principle deals with the need to preserve natural resources for the benefit of future generations. It calls on the present generation when making decisions about the use and enjoyment of resources in the present to take into account the needs of future generations of mankind. It deals with the preservation of natural resources for the benefit of the future. Each generation receives a legacy from the generation before and it must in turn hold same in trust for future generations.

The Principle of Sustainable Use: is expressed in Principle 8 of the Rio Declaration as follows:

To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.

This principle discourages unprincipled pursuit of economic development. Achieving sustainable development requires that states should exploit natural resources in a prudent and sustainable manner. States must therefore strive to protect not only their domestic environment its people as well by ensuring the sustainable exploitation of natural resources and consumption patterns.

The “No Harm” Rule: is captured in Principle 2 of the Rio Declaration as follows:

States have in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

The “No harm Rule” seeks to regulate the activities of states in relation to transboundary pollution. While states have the right to carry out activities in line with their environmental and developmental objectives, such activities must not be allowed to injure the environment of other state. The principle therefore strikes a balance between territorial integrity of a state on the one hand and the wider responsibility not to allow its activities harm the environment of other states. This principle is also captured in Principle 21 of the United Nations Conference on the Human Environment 1972.

The Precautionary Principle: is contained in Principle 15 of the Rio Declaration as follows:

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

This principle advocates prevention instead of remediation. It requires that precautionary measures in proportion to potential damage be taken promptly. Policy makers must take measures to curtail activities that may likely have adverse impacts on the environment. Such potential harm

could be identified during the Environmental Impact Assessment stages and adequate preparation must be made to address them. This principle is akin to the tort law concept of reasonable foreseeability of harm. It urges national governments and global policy makers to be forward looking and where there is reasonable foreseeability of environmental harm, cost effective measures must be taken to tackle it at an initial stage instead of waiting for scientific proof or allowing the harm to occur before taking action. The principle embodies the idea that states should err on the side of caution when taking steps to prevent environmental damage.³⁴ States must therefore anticipate, prevent and attack the causes of environmental degradation. This principle has been endorsed in many international treaties.³⁵

The Polluter Pays Principle: is referred to in Principle 16 of the Rio Declaration as follows:

National authorities should endeavour to promote the internalisation of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

The principle requires the polluter and not the society at large to bear the cost of his pollution. This may include the cost of carrying out measures agreed by public authorities as necessary to restore the environment to an acceptable state. This may encompass the polluter paying the cost of pollution abatement, cost of environmental rehabilitation and damages for victims of harm. This can also be achieved by internalising the cost of environmental protection measures into the prices of goods and services which caused the pollution. There are however two possible difficulties in the application of this principle: first, is the difficulty of ascertaining the appropriate person to be regarded as the polluter; and the second is the difficulty of ascertaining the extent to which the polluter has degraded

³⁴ Thornton, J. and Beckwith, S. *Environmental Law* (supra) 43

³⁵ Article 3 of the United Nations Framework Convention on Climate Change 1992; Article 3 of the United Nations Convention on Biological Diversity 1992; etcetera.

the environment, and this must be given a precise monetary value. This principle is also reiterated in section 27 and 28 of the National Environmental Standards and Regulations Enforcement Agency (NESREA) Act 2007.

The Principle of “Common but Differentiated Responsibility”: is expressed in Principle 7 of the Rio Declaration as follows:

States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth’s ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities.

The principle recognises that although global environmental problems such as ozone layer depletion and global warming are caused by human activities, there are however disparities in the contributions to such problems between developed and developing countries. Thus in the assignment of responsibilities for meeting the challenges and addressing those environmental concerns, consideration must also be given to the levels of contribution to such environmental challenges. Furthermore, the priorities of developed and developing countries in relation to environmental problems differ. While environmental problems of the developing countries are directly linked with poverty, environmental problem of the developed countries is associated with industrialisation and high consumption patterns. This principle was re-affirmed in Article 3, paragraph 1 of the United Nations Framework Convention on Climate Change 1992.

The Principle of State Co-operation: is expressed in Principle 27 of the Rio Declaration as follows:

States and people shall co-operate in good faith and in a spirit of partnership in the fulfilment of the principles embodied in this Declaration and in the further development of international law in the field of sustainable development.

The importance of this principle cannot be over emphasised in view of the fact that some environmental problems cut across borders and regions and therefore global in nature. Examples include Transboundary air pollution, and the present global warming phenomenon. No individual nation or region can solve these problems on its own. It must be met by joint co-operative action, requiring global and regional partnerships. The importance of this principle is underscored by the fact that the need for co-operation is mentioned seven times in the Rio Declaration.³⁶

Sustainable Development In Nigeria

Nigeria has kept pace with the international community on the necessity to achieve sustainable development, at least in terms of policy formulation.

The Agenda 21 for the Nigerian Environment

The Agenda 21 for the Nigerian Environment is the local version of Agenda 21, the Blue Print of Action for sustainable development by Governments from the United Nations Conference on Environment and Development in Rio 1992 into the 21st Century and beyond. It is an action Agenda for the United Nations, other multilateral organisations and National governments around the world that can be executed at local, national and global levels. Participating countries were required to fashion out a local version of the document to suit their respective peculiar situations and environmental conditions.

The Agenda seeks to integrate in holistic manner environmental policy into development planning at all levels of government and the private sectors; intensify the transition to sustainable development; address sectoral priorities, plans, policies and strategies for the major sectors of the economy and simultaneously foster regional and global partnerships. The implementation of this Agenda is co-ordinated by the Federal Ministry of Environment.

The National Policy on the Environment

Nigeria formulated a National Policy on the Environment in 1989. This Policy was revised in 1999 to accommodate new and emerging

³⁶ See for example Principles 5, 7, 9, 12, 13, 14 and 27

environmental concerns and to bring it up to date with current and emerging environmental realities.

Nigeria is committed to a National Policy on the Environment that will ensure sustainable development based on proper management of the environment. This demands positive and realistic planning that balances human needs and carrying capacity of the environment. This requires that a number of complementary policies, strategies and management approaches are put in place, which should ensure among others that:

- Environmental concerns are integrated into major economic decision making processes;
- Environmental remediation costs are built into major development projects;
- Economic instruments are employed in the management of natural resources;
- Environmental friendly technologies are applied;
- Environmental Impact Assessment is mandatory before any major development project is embarked upon;
- Environmental monitoring and auditing of existing major development projects are routinely carried out.

The National Policy on Environment declares that in order to succeed, the policy must be built on sustainable development principles, like, the Precautionary Principle, the Pollution Prevention Pays Principle, the Polluter Pays Principle, the User Pays Principle, the Principle of Intergenerational Equity, the Principle of Intragenerational Equity and the Principle of Participation (already discussed above).

The goal of the National Policy on the Environment is to achieve sustainable development in Nigeria and in particular to:

- (a) Secure a quality of environment adequate for good health and well being;

- (b) Conserve and use the environment and natural resources for the benefit of present and future generations;
- (c) Restore, maintain and enhance the ecosystems and ecological processes essential for the functioning of the biosphere to preserve biological diversity and the principle of optimum sustainable yield in the use of living natural resources and ecosystems;
- (d) Raise public awareness and promote understanding of essential linkages between the environment, resources and development and encourage individual and community participation in environmental improvement efforts; and
- (e) Co-operate in good faith with other countries, international organisations and agencies to achieve optimal use of transboundary natural resources and effective prevention or abatement of transboundary environmental degradation.

The national Policy on the Environment proposed implementation strategies for the attainment of set goals in the various sectors depending on specific actions directed towards all sectors of the economy and problem areas of the environment. Such actions will establish and/or strengthen legal, institutional, regulatory, research, monitoring, evaluation, public information and other relevant mechanisms for ensuring the attainment of the specific goals and targets of the policy.

It is interesting that the Revised National Policy on the Environment 1999 recognises that sectoral policies, environmental laws and regulations are important, but cannot alone be expected to deal with the problems of environment and development. Prices, markets and governmental economic policies also play a complementary role in shaping attitudes and behaviour towards the environment. It therefore provides for the use of economic instruments and incentives in the management of the environment and natural resources. The Policy lists the strategies to achieve this to include:

- (a) Incorporation of environmental costs in the decisions of producers and consumers so as to reverse the tendency to treat the environment as a “free good” and stop passing these costs on to other parts of society or to future generations;
- (b) Integrating social, environmental and other costs of negative environmental externalities into economic activities so that prices will appropriately reflect the true and total value of resources and contribute towards the prevention of environmental degradation.
- (c) Including, wherever appropriate, the use of market principles in the framing of economic instruments and policies to pursue sustainable development, and in particular, to consider gradually building on experience with economic instruments and market mechanisms by undertaking to reorient policies, keeping in mind national plans, priorities and objectives;
- (d) Institutionalising the “Polluter-Pays-Principle” so that the polluter bears the cost of environmental degradation or pollution; thus providing the positive incentives to limit degradation or pollution of the environment;
- (e) Developing and implementing a mechanism for charging emission fees for all pollutants and effluents (based on quality, quantity and detrimental effects), thereby internalising all costs and other negative externalities into the production process and output prices;
- (f) Imposing penalty taxes, fines and charges for non-compliance to environmental standards and regulations so that violations to such regulation become costly to the violator;

In order to realise its policy goals, the Nigerian government has put in place a number of legislations, notable among which are: The National Environmental Standards and Regulations Enforcement Agency Act 2007 and the Environmental Impact Assessment Act.

The National Environmental Standards and Regulations Enforcement Agency Act 2007

This Act repealed and replaced the Federal Environmental Protection Agency Act, which established the then Federal Environmental Protection Agency. Like its predecessor, the National Environmental Standards and Regulations Enforcement Agency Act established the National Environmental Standards and Regulations Enforcement Agency, which is the enforcement Agency for environmental standards, regulations, rules, laws, policies and guidelines.³⁷ The Agency has the responsibility for the protection and development of the environment, biodiversity conservation and sustainable development of Nigeria's natural resources in general and environmental technology, including co-ordination and liaison with relevant stakeholders within and outside Nigeria on matters of enforcement of environmental standards, regulations, rules, laws, policies and guidelines.³⁸ In addition, the Agency has the specific mandate to:³⁹

- (i) Prepare a comprehensive National Policy for the protection of the environment and conservation of natural resources, including procedure for environmental impact assessment of all development projects;
- (ii) Prepare in accordance with the National Policy on the Environment, periodic master plans for the development of environmental sciences and technology and advise the Federal Government on the financial requirements for the implementation of such plans.
- (iii) Advise:
 - (a) The Federal Government on national environment policies and priorities, the conservation of natural resources and

³⁷ Section 1 (2) (a) National Environmental Standards and Regulations Enforcement Agency

³⁸ Section 2

³⁹ Stipulated by the Revised National Policy on the Environment 1999

sustainable development, and scientific and technological activities affecting the environment and natural resources.

- (b) The President, Commander-in-Chief of the Armed Forces on the utilisation of the Ecological Fund for the protection of the environment.
- (iv) Promote cooperation in environmental science and conservation technology with similar bodies in other countries and with international bodies connected with the protection of the environment and the conservation of natural resources.
- (v) Cooperate with Federal and State Ministries, Local Government, Statutory bodies and research agencies on matters and facilities relating to the protection of the environment and the conservation of natural resources; and
- (vi) Carry out such activities as are necessary for the full discharge of the functions of the Agency under the Act. The Act also confer additional powers on the Agency to:
 - (a) Prescribe standards for and make regulations on water quality, effluent limitations, air quality, atmosphere protection, ozone protection, noise control as well as the removal and control of hazardous substances; and
 - (b) Monitor and enforce environmental protection measures.

The Environmental Impact Assessment Act⁴⁰

Environmental Impact Assessment refers to the process by which changes in the environment as a result of development are assessed to measure

⁴⁰ CAP. E12 Laws of the Federation of Nigeria 2004

how beneficial or deleterious these changes might be.⁴¹ It is a process of identifying, predicting and evaluating the forcible impact of both beneficial and adverse alternatives and mitigating measures with a view also to eliminating or minimising negative impact and optimising positive impacts.⁴² Environmental Impact Assessment is a policy and management tool for planning, decision making and for improving the long term viability of projects as well as an avoidance mechanism against incalculable mistakes that can be expensive and damaging in environmental and social economic terms.

Principle 17 of the Rio Declaration states:

Environmental Impact Assessment as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.

Sustainable development cannot be achieved if the impact of projects on the environment is not given serious consideration.⁴³ Following the recognition in 1990, that environmental impact assessment is an indispensable pre-requisite for effective implementation of the National Policy on the Environment for the purpose of sustainable development, environmental impact assessment was made mandatory for all development projects in Nigeria with effect from March 1991. Environmental auditing was also made mandatory for all existing industries. This was followed in 1992, by the Environmental Impact Assessment Act (now Cap E12 Laws of the Federation of Nigeria 2004), with the following goals and objectives:

- (a) To establish before a decision is taken by any person, authority, corporate body or unincorporated body, including the government of the Federation, State or local government intending to undertake or authorise the undertaking of any activity, those matters that may likely or to a significant extent affect the environment or have an environmental effect on those activities and which shall first be taken into account;

⁴¹ Omorogbe, Y. "Regulation of Oil Industry Pollution in Nigeria" in *New Frontiers in Law*, Azinge ed. (Benin, Oliz Publishers, 1993) 158.

⁴² Amokaye, Oludayo G. *Environmental Law and Practice in Nigeria* (Lagos, UNILAG Press, 2004) 540.

⁴³ Okon, E.E. "The Legal Framework of Environmental Impact Assessment in Nigeria" in *Modern Practice Journal of Finance and Investment Law*, 2001, Vol 5, No. 2, p212

- (b) To promote the implementation of appropriate policy in all Federal Lands (however acquired) States and local government areas, consistent with all laws and decision-making processes through which the goal and objective in paragraph (a) of this section may be realised;
- (c) To encourage the development of procedures for information exchange, notification and consultation between organs and persons when proposed activities are likely to have significant environmental effects on boundary or trans- state or on the environment of neighbouring town or village.⁴⁴

In addition to the national efforts to achieve sustainable development, the various states have their own State Environmental Protection Agencies as well as a host of other environmental protection laws. The State Environmental Protection Agencies have the responsibility for environmental regulation and monitoring in the states within the area of competence allotted to them under the constitution.

Conclusion

Nigeria has kept pace with the international community in the global effort to attain sustainable development albeit in terms of policy formulation. As early as 1989, it formulated a National Policy on the Environment, and set up the National Council on Environment. It also fashioned the Agenda 21 for Nigerian Environment as well as the Environmental Impact Assessment. These are in addition to a plethora of domestic legislations as well as International Conventions on the Environment.

Laudable as the country's efforts at policy formulations has been, the goal of attaining sustainable development is still far from been realised as the Nigerian environment continues to be ravaged by oil industry pollution.

⁴⁴ Section 1 (a) – (c) of the Environmental Impact Assessment Act

The reality is that Nigeria's efforts at sustainable development is still largely only on paper and yet to be translated into concrete action, because the Federal government who owns 60% equity shares in the petroleum industry continues to put pecuniary interest over environmental protection.

Adequate Policies, Statutes and Regulations are crucial to the attainment of sustainable development, but this is only a first step. Even more crucial is the need to put the laws to work as the laws, no matter how comprehensive or well formulated cannot work themselves. What is needed is political will on the part of the Federal government to put the policies to work. This will require a change in attitudes and objectives on the part of the federal government to alter its overall policy of putting pecuniary interest over environmental protection.

The twin concepts of sustainability and development must of necessity be integrated and environmental considerations must shape every development policy. Environmental regulation must move beyond the usual menu of safety regulations, zoning laws and pollution control enactments; environmental objectives must be built into taxation, prior approval procedures for investments and technology choice, foreign trade incentives, and all components of development policy.⁴⁵

There is also a need for proper organisation and co-ordination of the legal and institutional frameworks that would enforce compliance without any overlap of functions among the various institutions responsible for enforcing compliance.

The pursuit of sustainable development would also require that Nigeria diversifies its monocultural economy away from fossil fuel which has been implicated as the chief culprit in the global climate change phenomenon. This calls for a revitalisation of the once vibrant agricultural sector and the exploration of its vast solid mineral reserves.

While States have the sovereign right to exploit their resources pursuant to their own developmental policies, this right must be subject to a corresponding environmental policy. This requires that the exploitation

⁴⁵ Okonkwo, T. *The Law of Environmental Liability* (Lagos, AEDE, 2nd Edition 2010) 748

of natural resources for economic development must be carried on in a manner that guarantees a higher quality of life for the present generations of its citizens on the one hand, while ensuring the conservation of resources without creating ecological debt for its future generations.

Every principle that have guided multilateral efforts to protect man and his environment from the harmful effects of substances introduced by man into the atmosphere, water and soil are all encapsulated in the principle of sustainable development. What is needed is that the concept of sustainable development should underline every action on development. Achieving this goal must be pursued with all sincerity of purpose and breaches must be effectively corrected by prohibiting and deterring criminalising such acts.