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### Exploring the Linkages Between E-Waste Trade, Globalisation, and Protection of the Environment in Nigeria<sup>1</sup>

Summary. The paper examines the linkages between e-waste trade, globalisation, and the protection of the environment in Nigeria. In order to effectively analyse issues pertaining to the topic of the discourse, I have relied on primary and secondary materials. The paper argues that e-waste is a challenge in Nigeria because the country is its highest producer among West African countries because of globalisation. The study reveals that the challenge of e-waste in Nigeria seems to be at odds with the provisions of the 1999 Constitution of the country as set out under the Fundamental Objectives and Directive Principles of State Policy. This challenge in the country can be mitigated by the operationalisation of the Take-Back and Extended Responsibility Programme provided by the National Environmental (Electrical/Electronic Sector) Regulation of 2011. Also, a state-of-the-art national infrastructure for e-waste recycling that takes into consideration social, economic, and environmental aspects for an effective recycling chain in a system design will contribute to solving the e-waste challenge in Nigeria. The paper starts with an introduction generally highlighting the problem. This is followed by conceptual clarification of terms germane to the paper, as well as, the paper's Theoretical Framework. The paper further dwells on e-waste trade, globalisation, and the provisions of the 1999 Constitution of Nigeria. The discourse concludes with some recommendations.

**Key words**: globalisation, environment, electrical and electronic equipment (EEE), waste electrical and electronic equipment (WEEE/electronic waste (e-waste), used electrical and electronic equipment (UEEE) and end-of-life electrical and electronic equipment (EoL EEE)

<sup>&</sup>lt;sup>1</sup> The views expressed in the paper are that of the author and not that of the Nigerian Institute of Advanced Legal Studies (NIALS).

#### Introduction

Electrical and electronic equipment (EEE) have been instrumental to the revolution witnessed in various sectors of human endeavours around the world: in communications, entertainment, transport, education, and health care sectors. As there appears to be no signs of this revolution slowing down soon, so also the growing concern on the increasing e-waste from the ICT sector.

O. Ogungbuyi et. all.2

The growth in the production and consumption of electrical and electronic equipment products have been exponential in the last two decades due to rapid changes in equipment features and capabilities, product obsolescence, a decrease in prices, and growth in internet use<sup>3</sup>.

This has created large volumes of Electronic waste popularly called (e-waste) or waste electrical and electronic equipment (WEEE), which has become a topical global environmental issue.

E-waste is the fastest growing sector of the municipal waste stream and it is hazardous<sup>4</sup> to human health and the environment. The e-waste rate of growth is put at 50 million tons a year globally<sup>5</sup>.

As new technologies replace old ones, consumers get wider choice of better, and relatively cheaper, range of electronic goods to buy from<sup>6</sup>, hence the large unprecedented volumes of e-waste being generated.

In Nigeria, a survey found that private householders are the biggest consumers of EEE with an installed capacity of 6,400,000 tons comprised of large and small household appliances, IT, telecommunication, and consumer equipment; whilst the institutional and corporate consumers have the installed base estimated at 400,000 mainly constituting of IT and telecommunication equipment<sup>7</sup>. In all, about 1.1 million tons of EEE become obsolete each year in the country with about 440,000 tons ending up as waste<sup>8</sup>.

<sup>&</sup>lt;sup>2</sup> O. Ogungbuyi, I. Chidi Nnorom, O. Osibanjo, M. Schluep, *e-Waste Country Assessment – Nigeria; e-Waste African project of the Basel Convention*, May 2012, p. 10 www.basel.int/Portals/4/Basel%20Convention/docs/eWaste/EwasteAfrica\_Nigeria-Assessment.pdf [19.12.2012].

<sup>&</sup>lt;sup>3</sup> Ihidem

<sup>&</sup>lt;sup>4</sup> S. Lundstedt, *Recycling and Disposal of Electronic Waste: Health Hazards and Environmental Impacts*, Report 6417, Swedish Environmental Protection, Bromma, March 2011, p. 21, www.naturvardsverket.se/Nerladdningssida/?fileType=pdf&downloadUrl=/Documents/publikationer6400/978-91-620-6417-4.pdf [3.10.2012].

<sup>&</sup>lt;sup>5</sup> Conference on Chemical Management, *Background Information in Relation to the Emerging Policy Issue of Electronic Waste*, Second Session, Geneva, 11-15 May 2009, p. 3.

<sup>&</sup>lt;sup>6</sup> H. Gaule, *Recovery of Precious Metals from E-Waste*, www.wasteage.com/ar/waste-computing-damage/ [15.04.2012].

<sup>&</sup>lt;sup>7</sup> See: O. Ogungbuyi, I. Chidi Nnorom, O. Osibanjo, M. Schluep, op. cit., n. 1 at 3.

<sup>&</sup>lt;sup>8</sup> Ibidem.

All this has been made possible by globalisation underscored by the whittling down of former national barriers to the movement of information, finance, goods, services and entrepreneurship where the world has now become a global village<sup>9</sup> and a single market<sup>10</sup>.

Flowing from the above highlighted problem of e-waste and globalisation in Nigeria, the paper kick-starts the discourse by clarifying terms recurrent in the work. It takes a look at propositions that offer some explanations about globalisation and environmental protection in relation to the challenge of e-waste in the country. In addition, it further interrogates e-waste trade, globalisation, and some provisions of the 1999 Constitution of the Federal Republic of Nigeria. A short recommendation concludes the discourse.

#### 1. Conceptual Clarifications and Theoretical Perspectives

The conceptual definitions of the recurrent terms in the paper are as follows:

#### 1.1. Globalisation

'Globalisation' is an unstable term; as such, there is no unanimity of opinion as to its definition. The term means different things to different people. It has been described as a moving target that is not the same from one day to the next, or in different locations, or social situations<sup>11</sup>. Hence, some scholars use the various aspects of the global economy as units of analysis<sup>12</sup>.

<sup>&</sup>lt;sup>9</sup> The concept of 'global village' is made popular by McLuhan in his work – Understanding Media (1964). According to him 'today after more than a century of electrical technology, we have extended our nervous system itself in a global embrace, abolishing both space and time as far as our planet is concerned'. See: M. McLuhan, *Foresees Global Village*, www.livinginternet.com/i/ii\_mcluhan.htm [15.04.2012]. McLuhan whilst extrapolating on the current media likened the latter to an electronics nervous system that is rapidly integrating the planet causing events taking place in one part of the world to be experienced in other parts in real time, in such a way humankind was never able to do when people lived in small villages, however, it needs be noted that Nicholas Testa also made allusion to the fact that the emergence of wireless communication will make the inhabitants of the whole earth able to engage in communication instantly irrespective of distance. Ibidem.

<sup>&</sup>lt;sup>10</sup> Y.B. Usman, *What Exactly is Globalisation?* Keynote Address delivered at the Proceedings of the 40<sup>th</sup> Annual Conference of the Association of Law Teachers held at the Nigerian Institute of Advanced Legal Studies Lagos, May 2004, in: *Globalization, National Development and the Law*, eds. D.A. Guobadia, E. Azinge, NIALS, Lagos 2005, pp. xv-xx.

<sup>&</sup>lt;sup>11</sup> The Anthropology of Development and Globalisation: From Classical Political Economy to Contemporary Neoliberalism, eds. E. Edelman, A. Haugerud, Blackwell Publishing, Oxford 2006, p. 21.

<sup>&</sup>lt;sup>12</sup> N. Woods, *Editorial' Introduction Globalisation, Definitions Debates and implications*, "Oxford Development Studies" 1988, Vol. 26, No. 10; D. Tussie, *Globalisation and Word Trade* 

Globalisation however, refers to the increasing integration of economies around the world, particularly through movement of goods, services, and capital across borders; it also refers to the movement of people (labour) and knowledge (technology) across international borders<sup>13</sup>. Globalisation can further be conceived as a process or set of processes which embodies transformation in social relations and transactions expressed in transcontinental or interregional flow of networks of activity, interaction, and power, characterized by stretching of social, political, and economic activities across frontiers, regions, and continents; leading to intensification of interconnectedness and flows of trade, investment, finance, immigration, and culture, as well as, the speeding up of global interactions with the effect that distant events can be significant elsewhere and specific local developments can have global consequences<sup>14</sup>.

Yet for many anthropologists, globalisation signifies accelerated flows or intensified connections – across national, and other boundaries, of commodities, people, symbols, technology, images, information, and capital, as well as, exclusions, marginalization, and dispossession<sup>15</sup>. Generally therefore, globalisation includes various meanings and refers to the several discrete areas of economics: rationalization of production on a world-wide basis, increase levels of international trade, and unrestricted capital flows and modern migration patterns<sup>16</sup>. It is in this context that the term is used in this work.

From Multilateralism to Regionalism, "Oxford Development Studies" 1994, No. 26(1); P.G. Cerry, The Dynamics of financial globalisation technology, market Structure, and policy response, "Policy Sciences" 1994, Vol. 27; P. Krugman, A.J. Verables, Globalisation and the inequality of Nations, "Quarterly Journal of Economics" 1995, Vol. 110; H.M. Tebin, M. Estabrooks, The globalisation of telecommunications: study in the struggle to control markets and technology, "Journal of Economic Issues" 1995, Vol. 29, No. 2; T.J Biersteker, Globalisation and the models of operation of major institutional Actors, "Oxford Development Studies" 1998, Vol. 20; J.M. Devet, Globalisation and local and Regional competitiveness, "St. Louis Review" 1993, Vol. 13; M. Kahler, Multilateralism with small and large numbers, in: Materialism Matters: The Theory and practice of an Institutional form, ed. Riegie, Columbia University Press, New York 1993; J.H. Dumming, Globalisation and the new Geography of foreign direct investment, "Oxford Development Studies" 1998, Vol. 26; T. Obadina, Globalisation, human rights and development, "Africa Today" October 1998; E. Madunagu, Globalisation and its victims, "Guardian", 26 July 1999; R. Colle, Information and Communication Technology for Africa, "Africa Notes" February 2000; Mazi S.I. Ohuabunwa, The Challenges of Globalisation to the Nigerian Industrial Sector, "Nigerian Tribune", 14 December 1999; E. Otokhine, Internet Stengthens Cultural Imperialism, "The Comet", 23 August 2000 - cited in: S.T. Akindele, T.O. Gidado, O.R. Olaopo, Globalization, Its Implications and Consequences for Africa, http:// globalization.icaap.org/content/v2.1/01 akindele etal.html [21.05.2012].

<sup>&</sup>lt;sup>13</sup> See: *Globalization: A Brief Overview* by IMF Staff, May 2008, https://www.imf.org/external/np/exr/ib/2008/053008.htm [21.05.2012].

<sup>&</sup>lt;sup>14</sup> D. Held, A. McGrew, *Globalization*, www.polity.co.uk/global/globalization-oxford.asp [21.05.2012].

<sup>&</sup>lt;sup>15</sup> The Anthropology of Development..., p. 22.

<sup>&</sup>lt;sup>16</sup> H.H. Lentner, *Power and Politics in Globalisation: The Indispensable State*, Routledge, New York 2003, p. 35.

#### 1.2. Electrical and Electronic Equipment (EEE)

Electrical and Electronic Equipment (EEE) means equipment which is dependent on electric currents or electromagnetic fields in order to work properly and includes equipment for the generation, transfer, and measurement of such currents designed for use with a voltage rating not exceeding 1000 Volts for alternating current (AC) and 1500 Volts for direct current (DC)<sup>17</sup>.

Within the scope of this work, EEE refers to electrical and electronic appliances like refrigerators, air conditioners, mobile phones/ handsets, washing machines, microwave ovens, television sets, stereo equipment, computers, accessories, and so forth.

# 1.3. Waste Electrical and Electronic Equipment (WEEE)/Electronic Waste (e-waste)

Waste electrical and electronic equipment (WEEE), electronic waste or 'e-waste' is the term that embraces the various types of electrical and electronic equipment that have become useless to their owners. It is noteworthy that in the meantime, there is no standard definition. In this work the terms 'WEEE' and 'e-waste' are used interchangeably in accordance with the EU WEEE Directive<sup>18</sup>.

#### 1.4. Used Electrical and Electronic Equipment (UEEE)

Used Electrical and Electronic Equipment (UEEE) are electrical and electronic equipment that are abandoned by their owners after use. Such equipment can still be used without repairs or may need to be repaired before use. UEEE is made up of functional and non-functional equipment.

#### 1.5. End-of-Life Electrical and Electronic Equipment (EoL EEE)

This is EEE that is in its end of life phase starting from the time when the last user disposes of it, or intends to dispose of it<sup>19</sup>; it may still be functional or can be repaired to be functional or out right, subject to the waste regime.

<sup>&</sup>lt;sup>17</sup> See: Directive 2002/96/EC of the European Parliament and of the Council, 27 January 2003.

<sup>18</sup> Ibidem

<sup>&</sup>lt;sup>19</sup> O. Deubzer, *E-waste Management in Germany*, http://isp.unu.edu/publications/scycle/files/ewaste-management-in-germany.pdf [27.05.2012].

# 2. Theoretical Perspectives on Globalisation and Environmental Protection

Under this segment of the paper, the undertaking is to look at propositions that offer some explanations about the phenomenon of globalisation and environmental protection in relation to the challenge of e-waste. This is because theories play a critical role in our understanding of a reality and in our ability to cope with problems<sup>20</sup>. Thus, the discussion is to provide explanation for the problem of e-waste. First, I present the theory of globalisation and then, that of environmental protection.

#### 2.1. Theorizing Globalisation

The starting point here is to note that no debate is ever completely self-contained, and as such, 'inputs' into the globalisation debate come from a variety of different traditions in the sciences, Sociological theory, International Relations theory and Comparative politics<sup>21</sup> in an attempt to conceptualize the notion of globalisation.

Thus, different perspectives to analysing the issue of globalization is undertaken here using a theoretical framework that situates the argument into three theoretical positions that may be termed the globalist, inter-nationalist, and the transformationalist<sup>22</sup>.

According to the globalists, changes in the economic sphere that have profound consequences for both the economic and political sphere are taking place to the effect that production and regulation are becoming internationalized, capital and know-how become more mobile, and there is convergence in some policy areas across states<sup>23</sup>. This, it is argued, presents a global capitalist system which is drawing almost all regions of the world into arrangement of open trade, harmonious economic institutions, and a reduction in the political systems' room to manoeuvre<sup>24</sup>.

<sup>&</sup>lt;sup>20</sup> D.R. Monette, T.J. Sullivan, C.R. DeJong, *Applied Social Research*, Brooks/Cole, Cengage Learning, Belmont 2008, p. 26.

<sup>&</sup>lt;sup>21</sup> A. Busch, *Unpacking the Globalisation Debate: Approaches, Evidence and Data*, in: *Demystifying Globalisation*, eds. C. Hay, D. Marsh, Palgrave Macmillan, London 2000, p. 28.

<sup>&</sup>lt;sup>22</sup> A Globalising World? Culture, Economics, Politics, ed. D. Held, Routledge, London 2004, p. 22. Andreas Busch distinguishes in his analysis how the process of globalisation can be judged by three theoretical positions: 1. a liberal position which primarily points out the welfare gains that more efficient international division of labour and increase in trade will bring; 2. a sceptic position which states that globalisation has negative effects both in economic and political sphere; and 3.a moderately optimistic position which agrees with the sceptic position on the potential dangers of globalisation but does not subscribe to the view that there is nothing that can be done politically about these. See: A. Busch, op. cit., n. 20 at 30.

<sup>&</sup>lt;sup>23</sup> Ibidem at 29.

<sup>&</sup>lt;sup>24</sup> Ibidem.

The result of the foregoing, it is further posited, is that national cultures, economies, and politics are subsumed into a network of global flows, producing a more homogenous culture and economy whilst bringing new rules of how countries, organizations, and people operate, raising living standards and improving the quality of life, as well as, making globalisation the inescapable trajectory of development<sup>25</sup>.

However, this position of the globalists is rejected by the internationalists who are skeptical about globalisation. They argue that the 'newness' of the current situation has been grossly exaggerated and that the world economy was more open and more integrated in the half century prior to World War 1 (that is, 1870-1914) than it is today<sup>26</sup>.

Corollary to this, Friedman argues that,

there is an emergent consensus that the world is no more globalised than it was at the turn of the century [...] foreign direct investment which was a minor phenomenon relevant to portfolio investment reached nine percent of world output in 1913, a proportion that was not surpassed until the early 1990s. Openness to foreign trade was not markedly different in 1993 than in1913. In the 1890s the British were very taken with all the new products that were inundating their markets [...] indeed in some respects the world economy in the late 19th century was more integrated than it is today<sup>27</sup>.

Thus, the internationalists are of the view that the exchange of goods and cultures date back to early times; in the 19<sup>th</sup> century open trading and liberal economic relations were in place world-wide; what remains presently is rather a continuation of earlier world trading links, as in the majority of economic and social activity being regional rather than global in spatial scale<sup>28</sup>. Yet the transformationalists approach the discourse from the same angle as the internationalists though only to the effect that the globalists have exaggerated their position; accordingly they argue that the consequences of global interactions between nation-states are complex, diverse, uneven, and unpredictable thus warranting study and concern; globalisation should not be seen as inevitable or a fixed end point but a complex set of connecting relationship that may be reversible based on new structures for democratic accountability of global system of governance that gives nation-states power for framework in policy formulation<sup>29</sup>. From the above discourse, we submit that there are on-going changes in the economic, social, political, and cultural relations of nation-states, their corporate citizens, and the ordinary people.

This is presently due largely to constant innovation in technology, especially information and communication technology (ICT). The result is that the develo-

<sup>25</sup> Ibidem at 23.

<sup>&</sup>lt;sup>26</sup> P. Dicken, *Global Shift: Reshaping the Global Economic Map in the 21st Century*, 4th edition, Sage Publications: London 2003, p. 10.

<sup>&</sup>lt;sup>27</sup> J. Friedman, *Globalization*, *Dis-integration*, *Re-organisation*, *The Transformation of Violence*, in: *The Anthropology of Development...*, p. 161.

<sup>&</sup>lt;sup>28</sup> See: n. 74 at 23.

<sup>&</sup>lt;sup>29</sup> Ibidem.

ped countries of the world benefit more in the above mentioned areas, because often times, they are the ones that invent the technology and the innovation that come after it.

But according to Rosenberg, the globalisation theory as it is being presented reflects a systematic flaw which entails the supplementary addition to and displacement of the sociological explanation of spatio-temporal phenomena with an attempted spatio-temporal explanation of social change<sup>30</sup>. For Rosenberg, globalisation theorists ought to be analyzing conjectural character of the historical moment termed globalisation, rather than seeing the moment in epochal shift in the character of human society<sup>31</sup>. Thus, no new society is emerging; rather, the organic tendencies of the old society are asserting themselves in a new situation and on a new unprecedented scale<sup>32</sup>.

No matter the context or prism from which the on-going process of globalisation is being viewed, it involves several sets of uneven and developed processes over space and time which are complex, social, cultural, political, and economic. In this way, any account of it that presents one 'moment' or 'epoch', whether social, cultural, political, or economic, can but only fail to capture the complexity and contingency of the contemporary change<sup>33</sup> that is encapsulated in the process.

#### 3. Theories of Environmental Protection

'The protection and preservation of the environment is now perceived as being of crucial importance to the future of mankind'<sup>34</sup>.

In the last two decades, there has been a remarkable theoretical flourishing in the field of environmental philosophy coming with the development of green ecology, biocentric ethics eco-feminism, ecocentric theories, indigenous peoples' rights and theories drawing on ethics of political theory, religious and cultural traditions. The development of these theories has helped immensely to explore the intellectual and moral causes for the environmentally destructive practices of human beings. It has equally helped in proposing alternatives that might prevent these practices<sup>35</sup>.

The theories arguably tend to explain the commonality of the usage of the environment and the consequences of degradation that result from it because of exploita-

<sup>&</sup>lt;sup>30</sup> J. Rosenberg, Globalisation Theory: A Post Mortem, "International Politics" 2005, No. 42, p. 28.

<sup>&</sup>lt;sup>31</sup> Ibidem at 41.

<sup>32</sup> Ibidem

<sup>&</sup>lt;sup>33</sup> Introduction, in: Demystifying Globalisation..., p. 3.

<sup>&</sup>lt;sup>34</sup> Per Lord Geoff (House of Lords), *Cambridge Water V. Eastern Counties Leather Plc* [1994] 1 All E R 53.

<sup>&</sup>lt;sup>35</sup> O. Fagbohun, *The Law of Oil Pollution and Environmental Restoration – A Comparative Review*, Odade Publishers, Lagos 2010, p. 69.

tion. In fact, the 'Tragedy of the Commons' has been used to explain the challenges inherent in everyone's supposed selfish exploitation of the environment to the detriment of the collective interest of all. Notwithstanding, the variety of theories proposed about the mankind-environmental relationship, theories of environmental protection can be summarised in three categories: (a) the school of economic growth, (b) the school of 'deep' ecology, and (c) the school of sustainable development<sup>37</sup>. I propose under this segment of the discourse to articulate these aforementioned theories on environmental protection, but in no particular order.

#### 3.1. Deep Ecology<sup>38</sup>

The central idea of Deep Ecology is that we are part of the earth, rather than apart from it; this idea is in contrast to the dominant individualism of our culture, where seeing ourselves as separate from our world makes it easier not to be bothered by what is happening in it<sup>39</sup>. Deep Ecology is the study of the inter relationship between species and their planet; it also highlights ourselves as part of the living earth and finding our role in protecting the planet<sup>40</sup>. The Deep Ecology School

<sup>&</sup>lt;sup>36</sup> The *Tragedy of the Commons* holds that holding valuable resources in common presents a collective problem even when the resources are renewable ones. This is because any renewable resource has a carrying capacity, that is, a maximum of individuals that can utilize the resource indefinitely without permanently damaging the ability of the resource to replenish itself. As long as the number of the individuals exploiting a resource remains below carrying capacity, the resource will continue to exist and provide benefit. Once the carrying capacity is exceeded, then, the resource will totally be consumed by the present user and yield no future benefit. When a resource is held in common, the individuals utilizing it gain 100 percent of the benefit of their activities themselves, but share the cost of their activities with other users of the resource. Because of this, it is in individual's rational self-interest to continue to expand his or her use of the resource, despite the fact that if all do so, the carrying capacity of the resource will be exceeded and the resource destroyed. This is the tragedy of the commons. See: J. Hasnas, *Two Theories of Environmental Regulation*, "Social Philosophy and Policy" 2009, Vol. 26, http://faculty.msb.edu/hasnasj/GTWebSite/EnvironPDF.pdf [7.09.2012]. See also: G. Hardin, *The Tragedy of the Commons*, "Science" 1968, Vol. 162, No. 3859, pp. 1243-1248.

<sup>&</sup>lt;sup>37</sup> O.G. Amokaye, *Environmental Law and Practice in Nigeria*, University of Lagos Press Akoka, Lagos 2004, p. 11.

The term 'Deep Ecology' was first introduced by Norwegian activist and Philosopher Arne Naess in the early 1970s, when stressing the need to move beyond superficial response to the social and ecological problems we face. The activist proposed that we ask 'deep questions' looking at the 'why and how' of the way we live and seeing how this fits with our deeper beliefs, needs, and values. Asking questions like 'how can I live in a way that is good for me, other people, and our planet? may lead to making deep changes in the way we live. See: Ch. Johnstone, *What is Deep Ecology?*, www. rainforestinfo.org.au/deep-eco/johnston.htm [11.10.2012].

<sup>39</sup> Ibidem.

<sup>40</sup> Ibidem

is of the view that nature and the eco-system are biotic having intrinsic worth; humans are morally obliged to respect plants, animals, and every other thing in nature that has right to existence and fair human treatment. Humans are a part of the natural environment and are subject to ecological laws; therefore, human beings and their environment are partners in progress rather than nature existing for man's selfish interest<sup>41</sup>. The school of deep ecology as a theory of environmental protection places emphasis on evolution, eco-systems, and conservation of species. As industrial society has encircled the earth requiring massive disruption of ecological processes and threatening to disrupt atmospheric conditions fundamental to the whole biosphere, deep ecology emerges as a theory that has become a benchmark in defining environmental philosophies<sup>42</sup>. This is a rejection of anthropocentrism, and an assertion that human and non-human life, and nature should flourish. 'Life' and 'nature' in this context are broadly inclusive of rivers, landscapes, and eco-systems<sup>43</sup>. The eco-system is seen here as the main fulcrum of any man-made system. Thus, the main essence of the Deep Ecology theory of environmental protection, so to speak, is the belief that humankind has to share the planetary living space on the basis of equality with other plant and animal species, which have as much right to flourish as humans do<sup>44</sup>.

#### 3.2. Economic Growth<sup>45</sup>

The evolution of the growth theory from the 1950s has since passed through two main stages, with the basic feature of the first stage positing that technical change in the economy is exogenous, and as such, government policy can affect key variables namely: capital, income, consumption, and environment, but not growth rates which are exogenously determined<sup>46</sup>. On the other hand, the main feature of the second stage of the economic growth theory that emerged in the 1980s is

<sup>&</sup>lt;sup>41</sup> See: O.G. Amokaye, op. cit., n. 36 at 13.

<sup>&</sup>lt;sup>42</sup> *Deep Ecology: An Introduction*, www.uwmc.uwc.edu/geography/350/deep-ecology.htm [12.10.2012].

<sup>&</sup>lt;sup>43</sup> Ibidem.

<sup>&</sup>lt;sup>44</sup> See: *Paths to Deep Ecology*, http://deepgreenweb.blogspot.com/2010/11/paths-to-deepecology.html [12.10.2012].

<sup>&</sup>lt;sup>45</sup> Economic Growth is an increase in the production and consumption of goods and services, and it occurs with increasing population or decreasing per capita production and consumption. See: B. Czech, *Prospects for Reconciling the Conflict between Economic Growth and Biodiversity Consumption with Technological Progress*, "Conservation Biology" 2008, Vol. 22, No. 6, p. 1390, http://steadystate.org/wp-content/uploads/Czech Technological Progress.pdf [14.10.2012].

<sup>&</sup>lt;sup>46</sup> A. Xepapadeas, *Economic Growth and the Environment*, www.researchgate.net/profile/Anastasios\_Xepapadeas/publication/222681604\_Chapter\_23\_Economic\_growth\_and\_the\_environment/links/0912f51435a437b871000000.pdf [14.10.2012].

that technical change in the economy is endogenous in such a way that economic growth is associated with an endogenous outcome of the economic system rather than with exogenous forces and in that way, growth rates can be affected by government policies<sup>47</sup>.

But in fact, the relationship between economic growth and the environment could be controversial<sup>48</sup> and complex. Since the 1990s, there has been rapidly expanding empirical and theoretical literature on the Environmental Kuznets Curve (EKC)<sup>49</sup>, which suggests that the relationship between economic growth and the environment could be positive, and hence growth is a prerequisite for environmental improvement<sup>50</sup>. Arguably however, the theory of economic growth is anthropocentric in nature and has its root in the biblical concept of human dominion over nature and its exploitation for exclusive human ends<sup>51</sup>.

Consequently, the basic components of the physical environment are subject to the influence of man, and of institutions of the society in the process of economic growth and development<sup>52</sup>. Yet there is also the argument that mankind has the responsibility to maintain and care for the environment<sup>53</sup>. The problem of improving the quality of the environment is basically economic, which follows the failure of the market system to allocate environmental resources efficiently<sup>54</sup>.

Be that as it may, there are other alternative theories describing the relationship between economic growth and environmental quality; hence the 'limit theory' defines the economy-environment relationship in terms of environmental damage hitting a threshold beyond which production is so badly affected that the economy shrinks<sup>55</sup>. Again, there is a theory that questions the existence of turning

<sup>47</sup> Ibidem.

<sup>&</sup>lt;sup>48</sup> H.H. Lee, *On the Relationship between Economic Growth and the Environmental Sustainability*, https://dfedericos.files.wordpress.com/2012/02/eg\_es.pdf [13.10.2012].

<sup>&</sup>lt;sup>49</sup> The Environmental Kuznets Curve (EKC) represents the hypotheses that there is a basic conflict between economic growth and environmental protection, but this basic conflict is resolved when enough economic growth occurs. Thus, it is posited that when enough financial wealth accumulates, especially in per capita terms, society successfully refocuses on solving environmental problems. However, the EKC may hold some grain of truth in micro economic scenarios, but as for economic growth generally, which takes into consideration production and consumption of goods in the aggregate, there is no evidence of macro economics EKC. See: B. Czech, op. cit.

<sup>50</sup> Ibidem.

Above n. 36 at 11, citing Genesis 1, v. 27-30. Psalm 115, v. 16, where it is written that the heaven belongs to the Lord alone, and the earth He gave to human race.

<sup>52</sup> Ibidem

<sup>&</sup>lt;sup>53</sup> See: *Man and the Environment*, www.rickshaus.com/docs/opn/thgts/manvirn.htm [22.10.2012].

<sup>&</sup>lt;sup>54</sup> See: *Short Essay on Man and the Environment*, www.preservearticles.com/201105267122/man-and-the-environment.html [17.10.2012].

T. Everett, M. Ishwaran, G.P. Ansaloni, A. Rubin, *Economic Growth and the Environment*, www.defra.gov.uk/publications/files/pd13390-economic-growth100305.pdf [17.10.2012].

points and considers the possibility that environmental damage continues to increase as economics grow<sup>56</sup>. Yet, there is a further possible relationship between economic growth and the environment in the context of international competition; international competition initially leads to increasing environmental damage up to the point where developed countries start reducing their environmental impact, but also outsource polluting activities to poorer countries in a model known as the 'race to the bottom'<sup>57</sup>.

The foregoing arguably demonstrates that the relationship between economic growth and the environment is complex and multidimensional. As a consequence, economic growth generally may be limited by many issues. These include but are not limited to nature's finite source of raw material, its limited ability to act as a sink for unwanted by-products of human economic activity, and reductions in environmental quality that call forth more intensive clean up or abatement efforts that lower the returns to investment<sup>58</sup>. Further, damage to the ecosystem by humans may make it deteriorate beyond repairs and as such, it settles on a new less productive state<sup>59</sup>. All this may result in environmental pollution which is an important issue in the process of economic growth<sup>60</sup>. Thus, in order to have sustained economic growth, it needs to go hand in hand with environmental performance<sup>61</sup>. This is because as far as economic growth and the environment are concerned, several different drivers come into play, including the scale and composition of the economy and changes in technologies that have the potential to reduce the environmental impacts of production and consumption<sup>62</sup>.

Therefore, in order to achieve sustained economic growth, absolute decoupling of production of goods and services from their environmental impacts will be required<sup>63</sup>. This means that environmental resources should be consumed in a sustainable manner by improving the efficiency of resource consumption or by adopting new production technologies and product design<sup>64</sup>. Moreover, avoiding breaches in critical thresholds beyond which the environment generally can no longer support the desired level of economic activity is a *sine qua non* for sustainable economic growth and protection of the environment.

<sup>&</sup>lt;sup>56</sup> Ibidem.

<sup>57</sup> Ibidem.

<sup>&</sup>lt;sup>58</sup> W.A. Brock, M.S. Taylor, *Economic Growth and the Environment: A Review of Theory and Empirics*, http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan021974.pdf [14.10. 2012].

<sup>59</sup> Ibidem.

 $<sup>^{60}</sup>$  W. Chen, *Economic Growth and the Environment in China*, www.policyinnovations.org/ideas/policy\_library/data/01447/\_res/id=sa\_File1/paper.pdf [14.10.2012].

<sup>61</sup> See: T. Everett, M. Ishwaran, G.P. Ansaloni, A. Rubin, op. cit., n. 54.

<sup>62</sup> Ibidem.

<sup>63</sup> Ibidem.

<sup>64</sup> Ibidem.

#### 3.3. Sustainable Development

Perhaps, the worsening catastrophes and growing environmental consciousness led to the emergence of a new model of development known as 'Sustainable Development'; this is because in the development field, the major shortcoming of mainstream development theories and models is their relative indifference towards environmental concerns<sup>65</sup>.

More so, the schools of economic growth and deep ecology may be considered as being too extreme and one sided. The former, although analytical, isolates human beings from the environment but examines their actions over a relatively short time, whilst the later, although holistic, places emphasis on the ecosystem and ignores the unique qualities that distinguishes human beings from other living things; thus it rejects the co-existence of natural and cultural developments<sup>66</sup>. In light of the above, the environmental discourse has increasingly gained significance under the rubric of sustainable development<sup>67</sup>.

Hence, it is estimated that there are about over two hundred definitions of the concept<sup>68</sup>. Nonetheless, one of the main attractions of sustainable development as a concept is that both sides in any legal argument will be able to rely on it<sup>69</sup>. Thus, the concept holds out as: an 'injunction' that we should not satisfy ourselves by 'impoverishing' our successors<sup>70</sup>; as a relationship between dynamic human economic systems and larger ecological systems that ensure the continuity of human life<sup>71</sup>; as the management of ecological systems for future generations based on open and multiple approaches to the valuation of ecosystems<sup>72</sup>, and as an improvement in deteriorating natural resources<sup>73</sup>. In short, sustainable development re-

<sup>&</sup>lt;sup>65</sup> M.S. Haque, *Environmental Discourse and Sustainable Development: Linkages and Limitations*, "Ethics and Environment" 2000, Vol. 5, No 1, p. 3, http://profile.nus.edu.sg/fass/polhaque/ms%20haque.pdf [14.11.2012].

<sup>&</sup>lt;sup>66</sup> M. Decleris, *The Law of Sustainable development, General Principles: A. Report for the European Commission*, Luxembourg 2000, cited in: O.G. Amokaye, op. cit., above n. 36 at 11.

<sup>&</sup>lt;sup>67</sup> See: M.S. Haque, op. cit., n. 64.

<sup>&</sup>lt;sup>68</sup> J. Thornton, S. Beckwith, *Environmental Law*, 2<sup>nd</sup> edition, Sweet & Maxwell, London 2004, p. 12.

<sup>&</sup>lt;sup>69</sup> P. Birnie, A. Boyle, C. Redgwell, *International Law and the Environment*, 3<sup>rd</sup> edition, Oxford University Press, Oxford 2009, p. 116.

<sup>&</sup>lt;sup>70</sup> R.M. Solow, *Sustainability: An Economic Perspective*, in: *Economics of the Environment: Selected Readings*, eds. R. Dorfman, N.S. Dorfman, W.W. Norton, New York 1993.

<sup>&</sup>lt;sup>71</sup> B.G. Norton, *A New Paradigm for Environ mental Management*, in: *Ecosystem Health: New Goals for Environmental Management*, eds. R. Costanza, B.G. Norton, B.D. Haskell, Island Press, Washington D. C. 1992.

<sup>&</sup>lt;sup>72</sup> T. Page, *Environmental Existentialism, in Ecosystem Health: New Goals for Environmental Management*, eds. R. Costanza, B.G. Norton, B.D. Haskell, Island Press, Washington D. C. 1992.

<sup>&</sup>lt;sup>73</sup> D.W. Pearce, J.J. *Watford, World without End*, Oxford Press, New York 1993; P. Birnie, A. Boyle, C. Redgwell, op. cit., above n. 64 at 4.

fers to a mode of human development in which resource use aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come<sup>74</sup>. Simply put, it is the general principle that human development and the use of natural resources must take place in a sustainable manner<sup>75</sup>. The major environmental concerns or problems in relation to 'sustainability' include depletion of non-renewable resources, an increase in non-biodegradable wastes, a decline in biodiversity<sup>76</sup>, and so forth.

Notwithstanding, the foregoing multiple concepts of sustainable development, the most often quoted 'classic' definition of the concept that has commended itself to many is the one put forward by the Brundtland Report 1987. According to the Report, 'Sustainable Development is the development that meets the needs of the present without compromising the ability of the future generations to meet their own needs'77. The definition encapsulates two key concepts within it namely: 1) the concept of 'needs', in particular the essential needs of the world's poor, to which priority should be given; and 2) the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs'<sup>78</sup>. However, sustainable development is a visionary development paradigm that calls for a convergence between the three pillars of economic development, social equity, and environmental protection; although, over the years the concept has often been compartmentalized as an environmental issue<sup>79</sup>. Thus, apparently, the main focus of sustainable development is the challenges being presented by environmental problems. However, there is also the argument that the pursuit of purely 'environmental' values is not what the concept of sustainable development is intended to serve<sup>80</sup>.

Yet this model of environmental protection has some drawbacks. These have to be examined and considered in order to effectively address the environmental problems that the concept seeks to ameliorate. In the first place, the concept still concerns itself with the idea that development is synonymous with economic growth which is the framework that developed countries used in attaining

<sup>&</sup>lt;sup>74</sup> See: *Sustainable Development*, http://en.wikipedia.org/wiki/Sustainable\_development [5.12. 2012].

<sup>&</sup>lt;sup>75</sup> M. Sunkin, D.M. Ong, R. Wight, *Source Book on Environmental Law*, Cavendish Publishing Ltd, London 1998, p. 25.

<sup>&</sup>lt;sup>76</sup> See: W.A. Brock, M.S. Taylor, n. 57.

<sup>&</sup>lt;sup>77</sup> See: Our Common Future, ch. 2: Towards Sustainable Development, Report of the World Commission on Environment and Development, www.un-documents.net/ocf-02.htm [5.12.2012].

<sup>78</sup> Ibidem

<sup>&</sup>lt;sup>79</sup> See: *Sustainable Development, from Brundtland to Rio 2012*, paper prepared for consideration by High Level Panel on Global Sustainability at its first meeting, 19 September 2010, www. un.org//wcm/webdav/Site/climatechange/shared/gsp/docs/GSP1.6\_Bakground%20on%20Sustainable%20Devt.pdf [8.12.2012].

<sup>80</sup> See: P. Birnie, A. Boyle, C. Redgwell, op. cit., at 118.

unprecedented wealth. Also, major and rapidly growing developing countries are following the same course notwithstanding the fact that this approach threatens the biodiversity and the natural environment by exhausting or compromising their quality<sup>81</sup>. Secondly, it is argued that the very principle of 'needs' of the future generation emphasised by sustainable development is problematic because the interpretation of human need often varies between generations and between cultures<sup>82</sup>.

As such, the term 'sustainable development' suffers from definitional ambiguity or vagueness<sup>83</sup>. Furthermore, the consumption oriented view of development delimits the effectiveness of the sustainable development model of environmental protection; likewise, the model is indifferent towards the cultural, ethical, and normative dimensions of development, as well as, existing structures of interclass and international inequalities and/or unequal income distribution that affect the environment<sup>84</sup>. This is mainly because it is the economically privileged class that engages in excessive consumption of industrial goods and thus, account for the exhaustion of non-renewable resources, accumulation of hazardous toxic waste, and the emission of green house and ozone depleting gases<sup>85</sup>.

Despite the shortcomings of the concept of sustainable development in environmental protection, arguably, the concept emphasises the general principle that there should be a commitment to equity and fairness in any developmental initiative such that priority should be given to the world's poorest people while also taking into account the rights of future generations<sup>86</sup>.

Again, it underpins the ideas that the right of development must be fulfilled so as to equitably meet the development and environmental needs of present and future generations<sup>87</sup>; that environmental protection shall constitute an integral part of the developmental process and cannot be considered in isolation<sup>88</sup>; and that in order to protect the environment, precautionary approach shall be 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<sup>89</sup>.

Indeed, the Rio Declaration contains 27 principles of sustainable development<sup>90</sup>. Again, Agenda 21, the non-binding programme of action adopted by the

<sup>81</sup> Ibidem.

<sup>82</sup> Above n.68.

<sup>83</sup> Above n. 76 at 10.

<sup>84</sup> Ibidem.

<sup>85</sup> Ibidem.

<sup>&</sup>lt;sup>86</sup> See: J. Thornton and S. Beckwith, op. cit., n. 67.

<sup>&</sup>lt;sup>87</sup> See: The Rio Declaration on Environment and Development, principle 3, www.unesco.org/education/nfsunesco/pdf/RIO E.PDF [9.12.2012].

<sup>88</sup> Ibidem, principle 4.

<sup>89</sup> Ibidem, principle 15.

<sup>&</sup>lt;sup>90</sup> Above n. 72.

Rio conference also refers in its preamble to the need for a 'global partnership for sustainable development' and most of its other provisions are intended to promote the concept whose implementation is monitored by the Sustainable Development Commission<sup>91</sup>. Apart from the Rio Declaration, the concept of 'sustainable development' has gained near global acceptance, so to speak, as Conventions on Climate Change<sup>92</sup>, Conventions on Biological Diversity<sup>93</sup> and Conventions to Combat Desertification<sup>94</sup> etc, elaborate on global environmental responsibility.

The concept equally has been adopted as a policy by numerous governments both at national and regional levels, whilst it has influenced the application and development of law and policy by various international organizations including the FAO, the World Bank, WTO, and UNDP with the effect that for the first time, the concept makes a state's management of its domestic environment a matter of international concern in a systematic way<sup>95</sup>.

Thus, in the  $Gabcikovo-Nagyamaros\ Case^{96}$ , the International Court of Justice (ICJ) observed that there is a need to reconcile economic development with the protection of the environment aptly expressed in the concept of sustainable development.

In the Nigerian case of *Social and Economic Rights Action Centre and Centre for Economic and Social Rights v. Nigeria* (SERAC v Nigeria)<sup>97</sup>, the African Commission on Human and Peoples' Rights held, inter alia, that Article 24 of the African Charter on Human and People's Rights imposes obligations on the state to take reasonable measures to 'prevent pollution and ecological degradation, to promote conservation, and to secure ecological development and the use of natural resources'; whilst noting 'the destructive and selfish role-played by oil development in Ogoniland, closely tied with repressive tactics of the Nigerian government, and the lack of material benefit accruing to the local population' the Commission further held that the right of people to freely dispose their own natural resources had been violated, as well as, their right to 'ecological sustainable development'.

<sup>&</sup>lt;sup>91</sup> See: *UNGA Res* 47/191.

<sup>&</sup>lt;sup>92</sup> Convention on Climate Change (1992), Article 3.

<sup>&</sup>lt;sup>93</sup> Convention on Biological Diversity (1992), Articles 8 and 10.

<sup>&</sup>lt;sup>94</sup> Convention to Combat Desertification (1994), Articles 4 and 5.

<sup>95</sup> Above n. 68 at 125.

<sup>&</sup>lt;sup>96</sup> International Court of Justice Reports (1997), para 140. See also: Iron Rhine Arbitration, PCA (2005), para 59.

<sup>&</sup>lt;sup>97</sup> ACHPR Communication 155/96 (2000), para 52-5. In the cases of *Mayagna (Sumo) Awas Tingni Community v. Nicaragua* (2000) Inter-Am. Ct. H.R. Ser. C, No. 20, *Maya Indigenous Community of Toledo District v. Belize*, Case 12.053, Report No. 40/04, Inter-Am. Ct. H.R., OEA/Ser L/V/II.122 Doc. 5 rev 1, 727 (2000) and *Yanomami Indians v. Brazil*, Decision 7615, Inter-Am. Ct. H.R., Inter American YB on Hum. Rts. 264 (1985), the Inter-American Commission and the Court of Human Rights have interpreted the right to life, health, and property to afford protection from environmental destruction and unsustainable development, and goes some way towards achieving the same outcome as the African Charter Article 24. See: above n. 68 at 274.

In all the foregoing, it needs be noted that although the concept of sustainable development has not yet metamorphosed fully into a legal obligation, it nonetheless represents a policy which can influence the outcome of cases, the interpretation of treaties, and the practice of states and international organisations to the effect that it does appear that states and international bodies should take into account the objectives of sustainable development and employ appropriate processes for doing so<sup>98</sup>.

Consequently, sustainable development remains the metric for the measurement of environmental protection within competing interests by the international community and, in a way, compelling national governments to take environmental protection seriously when planning for economic development.

# 4. E-Waste Trade, Globalisation, and the 1999 Constitution of Nigeria

It has been asserted that globalisation is about an increasingly interconnected and independent world. This has many important dimensions such as economic, social, political, religious, and cultural; it is however worthy to note that the various aspects of globalisation may affect people, institutions, and countries both positively and negatively<sup>99</sup>. According to Khor, the globalisation process is now extended to policies and policy making mechanisms which have been preciously under the control of states and people of a country, but have presently come under the influence of international agencies, big transnational corporations, or financial players<sup>100</sup>. Okon also notes that depending on whether the influence helps in achieving governmental goals, such influence of the globalisation process may be a positive or negative one<sup>101</sup>.

It is therefore in light of the above that the provisions of some sections of the 1999 Constitution of Nigeria as amended are germane and should be highlighted as far as the on-going process of globalisation of e-waste trade is concerned.

This Constitution provides in chapter II the Fundamental Objectives and Directive Principle of State Policy which should be the goal of every government in the country.

<sup>98</sup> Ibidem at 127.

<sup>&</sup>lt;sup>99</sup> J.M. Shishi, Yakuba Isa, A.A. Kana, *Globalisation, Democracy and Good Governance in Nigeria: The Best Practices*, in: *Globalisation, National Development...*, p. 5.

<sup>&</sup>lt;sup>100</sup> M. Khor, *Globnalisation and the South: Some Critical Issues*, Spectrum Books Ltd, Ibadan 2000, p. 3.

<sup>&</sup>lt;sup>101</sup> E.E. Okon, Foreign Investment and National Security in Developing Countries under the Globalised Environment: The Nigerian Perspective, paper presented at the Roundtable on International Trade and Globalisation Challenges for Nigeria, Nigerian Institute of Advanced Legal Studies, Lagos, 18 June 2002, p. 7.

The starting point here is to note that the Constitution recognizes the security and welfare of the people and thus provides that the 'security and the welfare of the people shall be the primary purpose of government' 102. Furthermore, section 16 provides:

- (1) The states shall [...] (a) harness the resources of the nation and promote national prosperity and an efficient, a dynamic and self sufficient economy,
- (b) control the national economy in such manner as to secure the maximum welfare, freedom and happiness of every citizen on the basis of social justice and equality of status and opportunity [...].

Again, section 17 (1) provides that Nigeria's social order is founded on the ideas of freedom, equality, and justice; that the sanctity of the human person shall be recognized and human dignity shall be maintained and enhanced<sup>103</sup>, that the government shall be humane<sup>104</sup>, and that the exploitation of human and natural resources, in any form whatsoever for reasons other than the good of the community, shall be prevented<sup>105</sup>.

Also, section 19(e) provides for the "promotion of a just world economic order" whilst in section 20, the state is obliged by law to protect the environment and safeguard the water, air, land, forest, and wild life of Nigeria.

Moreover, it is provided by the Constitution that the state shall direct its policy towards ensuring that the health, safety, and welfare of all people in employment are safeguarded and not endangered or abused<sup>106</sup>.

However, the question that needs to be answered is whether the on-going process of the globalisation of e-waste trade possesses a threat to the socio-economic and environmental objectives of Nigeria in view of the provisions of the Constitution highlighted here. The answer to this question should be in the affirmative. This is because the globalisation of e-waste trade gives consideration to market concerns only, as it were. It obviates the provisions of the 1999 Constitution of Nigeria that obliges the State to promote 'welfare and security', a 'just world economic order', and to 'safeguard and not abuse the health, safety, and welfare of all persons in employment', and to 'safeguard the water, air, and land of Nigeria.' Popoola's observation in respect of the foregoing is instructive; he posits that,

globalisation has many faces in trade, finance, and investment and production system. It affects developing country's action and thinking, relegating ethical, equity and social concerns behind market considerations and reducing the autonomy of the states<sup>107</sup>.

<sup>&</sup>lt;sup>102</sup> Section 14 (2) (b).

<sup>&</sup>lt;sup>103</sup> Section 17 (2) (b).

<sup>&</sup>lt;sup>104</sup> Section 17 (2) (c).

<sup>&</sup>lt;sup>105</sup> Section 17 (2) (d).

<sup>&</sup>lt;sup>106</sup> Section 17 (3) (c).

<sup>&</sup>lt;sup>107</sup> A.O. Popoola, WTO and Dynamics of International Trade in an Era of Globalisation: Grievance Redress Mechanism in Focus, paper presented at the Round Table on International Trade

Thus, globalisation results in high level trans boundary movement of e-waste into Nigeria in an attempt to bridge the so called 'digital divide' in the absence of basic or state-of-the-art facilities for sound end-of-material and disposal of waste<sup>108</sup>. This is against the provisions of the constitution as stated above, that the government should promote just world economic order among others. The reason for this is because e-waste is mainly generated in countries of the Organization for Economic Cooperation and Development (OECD)<sup>109</sup>, with stringent environmental safeguards, controls, and economic costs<sup>110</sup>. Again, against the obligation of the government to protect the water, air, and land in the country, as well as, the health, safety, and welfare of all persons in employment, and due to lack of adequate infrastructure to manage waste safely in the country, some of this waste is buried, burnt, or dumped in the open air or water bodies<sup>111</sup>.

This may have adverse health effects on people which may involve any organ in the body, depending on the specific chemical(s) contacted, the extent of the exposure, the characteristics of the exposed individual (age, sex, body weight, genetic makeup, and immunological status), the metabolism of the chemical(s) involved, weather conditions, and the presence or absence of confounding variables such as other diseases<sup>112</sup>. All this as a result of the globalisation of e-waste trade.

Khor also succinctly captures the globalisation process generally as precluding the development of developing countries such as Nigeria. He posits that: 'globalisation'

is a very uneven process, with unequal distribution of benefits and losses. This imbalance leads to polarisation between the few countries and groups that gain and many countries and groups in the society that lose out and are marginalized. Globalisation, polalarisation, wealth concentration and marginalization are therefore linked through the same process [...] the uneven and unequal nature of the present globalisation process is manifested in the fast growing gap between the world's rich and poor people and between developed countries, and the large differences among nations in the distribution of gains and losses<sup>113</sup>.

In light of the foregoing discourse, globalisation and that of e-waste traded in particular, ought to be driven by the provisions of the constitution, ethical and public spirited motives making the process responsive to social costs and the environment.

and Globalisation: Challenges for Nigeria, Nigerian Institute of Advanced Legal Studies, Lagos, 18 June 2002, p. 1.

<sup>&</sup>lt;sup>108</sup> I.C. Nnorom, O. Osibanjo, *Overview of Electronic Waste (E-Waste) Management Processes and Legislations, And their Poor Applications in the Developing Countries*, "Resources, Conservation and Recycling" 2008, Vol. 52, p. 843.

<sup>&</sup>lt;sup>109</sup> See: O. Deubzer, op. cit., n. 18 at 440.

<sup>&</sup>lt;sup>110</sup> Above n. 6 at 6.

<sup>&</sup>lt;sup>111</sup> See: W. Chen, op. cit., n. 59 at 844.

<sup>&</sup>lt;sup>112</sup> I.C. Nnorom, O. Osibanjo, *Electronic Waste (E-Waste): Material Flows and Management Practices in Nigeria*, "Waste Management" 2008, No. 28, p. 1476.

<sup>&</sup>lt;sup>113</sup> See: M. Khor, op. cit., n. 96 at 10.

#### 5. Conclusions and Recommendations

In the foregoing discourse, an attempt has been made at exploring the linkages between e-waste trade, globalisation, and some provisions of the 1999 Constitution of the Federal Republic of Nigeria in relation to environmental protection in the country. It has been demonstrated that a lack of sound environmental management systems to effectively dispose of large volumes of e-waste in Nigeria because of globalisation is contrary to some provisions of the Fundamental Objectives and Directive Principles of State Policy in Nigeria's extant Constitution.

Consequently, to checkmate the uncontrolled disposal of e-waste on the Nigerian environment and ameliorate the risks to human health and the environment, there is the urgent need for the effective operationalisation of the National Environmental (Electrical/Electronic) Sector Regulation of 2011 in Nigeria.

The principal thrust of the Regulation is to prevent and minimize pollution from all operations and ancillary activities of the Electrical/Electronic Sector to the Nigerian environment for both new and used Electrical/Electronic Equipment (EEE/UEEE)<sup>114</sup>.

The Regulation, among others, further provides that manufactures, importers, distributors, or retailers of EEE/UEEE shall partner with the National Environmental Standards and Regulations Enforcement Agency (NESREA) and subscribe to an Extended Producer Responsibility Programme. This is to enable manufacturers and distributors to buy back their sold EEE within two years of the commencement of the Regulation<sup>115</sup>. Also, manufacturers and producers of EEE should set up collection points/centres<sup>116</sup>, and ensure environmentally sound management of e-waste from collection points/centres to NESREA accredited recyclers<sup>117</sup>, whilst consumers are to return end-of-life EEE to the collection points/centres<sup>118</sup>.

Yet there is no Extended Producer Responsibility Programme in place in the country presently as manufacturers, importers, distributors, or retailers have not set up collection points/centres to take back end-of-life EEEs as mandated by the law. More so, there is no formal national infrastructure for recycling e-waste<sup>119</sup>.

Against this backdrop therefore, strict enforcement of the National Environmental (Electric/Electronic) Sector Regulation of 2011 is recommended in order

<sup>&</sup>lt;sup>114</sup> See: *National Environmental (Electrical/Electronic) Sector Regulation*, 2011, Regulation 2(1).

<sup>&</sup>lt;sup>115</sup> Ibidem, Regulation 11 (1), (3).

<sup>116</sup> Ibidem, Regulation 11 (4) (a).

<sup>117</sup> Ibidem, Regulation 11 (4) (b).

<sup>118</sup> Ibidem, Regulation 11 (4) (c).

This information is based on a Focus Group interview with some retailers of EEE/UEEE at the Ikeja Computer Village on June 2<sup>nd</sup> 2013 to find out by the present writer the barriers to the operationalization of the National Environmental (Electrical/Electronic) Sector Regulation 2011.

to effectively put into operation the Extended Producer Responsibility and Take-Back programme provided under the law ensuring environmentally sound management of e-waste in the country.

Corollary to the foregoing, putting in place a state-of-the-art national infrastructure for e-waste recycling that takes into consideration social, economic, and environmental aspects for an effective recycling chain in a system design will solve the e-waste challenge in Nigeria. This is because the national infrastructure will, for instance, provide formal employment for those presently engaged in the informal trade of crude repairing and recovery of metals from e-waste. It will also recover valuable materials from e-waste as effectively as possible in an environmentally sound manner. In this way there will be a balance between globalisation, its effect, and national environmental policy in the country as encapsulated in the provisions of the Fundamental Objectives and Directive Principles of State Policy of the 1999 Constitution of the Federal Republic of Nigeria.

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## Badanie związków pomiędzy handlem elektrośmieciami, globalizacja i ochrona środowiska naturalnego w Nigerii

Streszczenie. Artykuł poświęcony jest badaniu związków między handlem elektrośmieciami, globalizacją i ochroną środowiska naturalnego w Nigerii. W celu rzetelnego przeanalizowania zagadnień z zakresu tematu rozważań autor wykorzystał zarówno źródła pierwotne, jak i wtórne. W artykule dowodzi się, że elektrośmieci są dla Nigerii ważnym wyzwaniem, ponieważ za sprawą globalizacji kraj ten stał się ich największym wytwórcą wśród państw zachodnioafrykańskich. Opracowanie ujawnia, że elektrośmieciowa kwestia wydaje się stać w sprzeczności z zapisami nigeryjskiej konstytucji z 1999 r., wytyczającymi podstawowe cele i kierunki polityki państwa. Problem może złagodzić operacjonalizacja Programu Zbiórki i Rozszerzonej Odpowiedzialności, ustanowionego przez Narodowe Rozporządzenie Środowiskowe (dla branży elektrycznej i elektronicznej). Do rozwiązania kwestii elektrośmieci może się też przyczynić nowoczesna ogólnokrajowa infrastruktura służąca ich recyclingowi, która dzięki uwzględnieniu aspektów społecznych, ekonomicznych i środowiskowych już na etapie projektowania systemu pozwoliłaby stworzyć sprawną sieć recyclingu. Artykuł rozpoczyna się wstępem, w którym ogólnie naświetla się temat. Następnie objaśnia się kluczowe terminy używane w artykule oraz koncepcje tworzące jego warstwę teoretyczną. Wreszcie omawia się handel e-śmieciami, globalizację i zapisy konstytucji Nigerii z 1999 r. Na koniec przedstawiono szereg zaleceń.

**Słowa kluczowe:** globalizacja, środowisko naturalne, sprzęt elektryczny i elektroniczny (EEE), zużyty sprzęt elektryczny i elektroniczny (WEEE, EoL EEE, UEEE), elektrośmieci, elektroodpady