Boston Research Journals

RESEARCH ARTICLE

OPEN ACCESS

The Charcoal Trade Conundrum in Climate Emergency in Nigeria

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ABSTRACT

Trade in charcoal made from wood yields millions of dollars to developing states exporters every year. Regrettably, felling trees to produce charcoal eats up thousands of hectares of fertile land in such states annually harming humans, flora and fauna. This work found that the high demand of charcoal in the international market has made the trade in charcoal very attractive. The economic gains from this trade which has resulted in high numbers of traders of this article has reckoned beyond the adverse affects of the trade on the environment. Adopting the doctrinal methodology this work posits that charcoal trade is counterproductive, offends national commitments to addressing climate change, and prejudicial to the international community's effort at dealing with climate change. It therefore, made useful recommendations towards addressing the problem, which include but not limited to a call for urgent review of extant global environmental governance regimes with the view to making charcoal trade unattractive.

Keywords: climate change, climate emergency, global warming, environmental governance, charcoal trade, paris agreement.
Accepted: 15 November 2021
Published: 1 February 2022
Language: English
Research ID: BRJ_2818

The authors declare that no competing interests exist. The authors contributed equally to this work.

Read Online: **https://bit.ly/3JteC5j**

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I. INTRODUCTION

Human health, sensitive coastal and low-lying areas, small Islands and oceans have begun to feel the impact on our climate of temperature rise up to 1.5˚C. Loss of livelihoods, food insecurity, population displacement, health effects[1] and many other associated impacts of global warming would be on the rise as increased heat in the upper layers of the ocean continues to drive more intense storms and greater rates of inundation in low-lying regions of the world. The prediction is that the impact would be more devastating and irreversible on our climate when temperatures rise beyond the 1.5˚C limit specified by the Paris Agreement; and the poor and most vulnerable populations would be the worst hit.

Although the scientific understanding, the technological capacity and the financial means to tackle climate change are available,[2] the political will appears to be insufficient. Many developing states evince grave deficiency in the political will to institutionalize concerted actions necessary to keep global temperature below 1.5˚C. Whereas, the states of the global north are seemingly working assiduously on climate change mitigation and adaptation assigned targets, in manners and timelines that are seemingly consistent with extant global environmental governance legal frameworks, the same cannot be said of the states of the global south. Besides being assigned minimal basic responsibilities, many developing states of the global south are working on climate change mitigation and or adaptation in manners and timelines that are inconsistent with extant global environmental governance legal frame works; and in manners that rather depict an absence of a conviction of the existence of climate emergency or indifference to it.

Irrespective of scientists', scholars and climate activists' claim that changes in the earths climatic conditions are getting to the tipping point[3] many states are yet to be encouraged to effectively contribute to the global efforts at arresting critical changes in the condition of our climate. Abysmally low responses to legal regimes, frameworks, treaties, agreements, soft laws, as well as best practices relating to climate change mitigation and adaptation have warranted the recent drive towards declaring state of emergency on climate change.It is against this background that this article sets out to explore the prevalence of global charcoal (charred wood, bio-charcoal, wood charcoal) trade, and how the trade, in contravention of the legal architecture on climate change, is negatively contributing to climate change in disregard of the growth of the concept of climate emergency.

The article is divided into seven parts, introduction, climate emergency, global environmental politics, charcoal trade and carbon footprint in Nigeria, complicities in the charcoal trade, responses to climate emergency and conclusion.

II. CLIMATE EMERGENCY

State of emergency is usually activated in situations of war, insurrection and extreme disasters. The intent is to mobilize, deploy and channel adequate critical and essential state resources towards warding off the issue that threatens the state. Under such circumstance, accrued rights and privileges may be

[1] See V Masson-Delmotte, et al "Global warming of 1.5°C An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty" eds (2019) Intergovernmental Panel on Climate Change. See also K Levin '8 things you need to know about the IPCC 1.5˚C Report'(7thOctober 2018) https://www.wri .org/blog/2018/10/8-things-you-need-know-about-ipcc-1 5-c-report. Accessed 5th April 2020.

[2] See JT Houghton, GJ Jenkins & JJ Ephraums "Climate Change: The IPCC Scientific Assessment" (eds) Intergovernmental Panel on Climate Change (Cambridge University Press 1990).

[3] See WJ Ripple, *et al* 'World Scientists' Warning of a Climate Emergency' (2020)70 (1) BioScience. <https:// academic .oup.com/bioscience> Accessed 5th April 2020

suspended. Similarly, economic and political considerations are relegated.

Choice of "Climate Emergency"[4] as the Oxfords Dictionary's word of the year 2019 - a year dubbed the warmest year of the warmest decade on record[5] is not only a reflection of the importance of Climate Emergency in the field of international law but also a reflection of the severity of climate change[6] on humanity in that decade. Consequently, the declaration of state of emergency on climate change by many states of North America and Western Europe[7] is a reflection of their desire to arrest critical changes in the condition of our climate before they cripple humanity and existence of life on earth. A desire that is borne out of the understanding that climate change has equaled the situation of war, insurrection or extreme disaster.

Similarly, out of scientists perceived moral obligation to warn humanity of impending catastrophic threats, well over 11,000 scientists affirmed that "planet Earth is facing a climate emergency."[8]Their concern is that rapidly rising Green House Gas (GHG) emissions are increasingly damaging the Earth's climate[9] at a rate that the potential for irreversible changes in our climate is headed for a point of no return - a point where nature's reinforcing feedbacks could lead to a catastrophic "hothouse Earth" well beyond the control of humans. [10]Further more, that uncontrolled GHG emissions could orchestrate climate chain reactions that would cause significant disruptions to ecosystems, societies, and economies and leave large areas of the Earth uninhabitable.

[11]Unfortunately, some disturbing climate chain realities have already been recorded. The World Meteorological Organization [12](WMO) records have it that:

I. Climate change has been locked in when the carbon dioxide concentration in the atmos- phere hit a record level of 407.8±0.1 parts per million in 2018 and continued to rise in 2019. This is due to the fact that CO2 lasts in the atmosphere for centuries and in the ocean for even longer
II. increased concentration of GHG in the oceans have induced widespread marine heat waves
III. increased concentration of CO2 in the world's oceans are changing the chemistry of the oceans and causing Ocean acidification
IV. Sea water that is 26% more acidic than at the start of the industrial era is damaging vital marine ecosystems
V. over 820 million people suffered from hunger in 2018 occasioned by climate variability and weather extremes
VI. climate variability and weather extremes are driving economic shocks and conflict in 26 countries
VII. climate change induced Tropical Cyclone made landfall in Mozambique on March

[4] from amongst many other environment inclined words such as "climate action," "climate denial," "eco-anxiety," and "extinction" See https://www.nytimes.com/2019/11 /20/ arts/word-of-the-year-climate-emergency.html.

[5] See World Meteorological Organization (WMO) Provisional Statement on the State of the Global Climate in 2019, *2019 concludes a decade of exceptional global heat and high-impact weather* (Madrid, 3rd December, 2019. Press Release Number: 03122019). Evidence in support of global warming include ferocious forest fires both in the Amazon and in areas of Australia, extreme drought, pestilence, flood induced displacement, etc.

[6] See WJ Ripple, et al (n 3)

[7] See M Hulme, 'Climate Emergency: politics is dangerous,' in "Issues in Science and Technology" (2019) Perspectives, Fall.

[8] WJ Ripple, et al (n 3), 8

[9] Ibid; see also Intergovernmental Panel on Climate Change [IPCC] Global Warming of 1.5°C: An IPCC Special Report, 2018.

[10] See W Steffen, etal. 'Trajectories of the Earth System in the Anthropocene. Proceedings of the National Academy of Sciences' (2018) 115: 8252–8259.

[11] WJ Ripple, etal (n 3).

[12] World Meteorological Organization (WMO) Provisional Statement on the State of the Global Climate in 2019 (n 5)

2019 resulting in many casualties and widespread devastation[13]

VIII. Delay in the start of the seasonal rains in Southern Africa lowered the cereal output by about 8 percent below the five-year average consequently exposing about 12.5 million people in the region to severe food insecurity up to March 2020

IX. Deterioration of food security in states like Ethiopia, Somalia, Kenya and Uganda due to poor long rainy season (overall, about 12.3 million people are food insecure in the Horn of Africa region. Between October and November 2019, Somalia was further affected by intense flooding)

X. more than 10 million new internal displacements occurred between January and June 2019 (7 million being triggered by disasters such as Cyclone Idai in Southeast Africa, Cyclone Fani in South Asia, Hurricane Dorian in the Caribbean, flooding in Iran, the Philippines and Ethiopia, associated with acute humanitarian and protection needs)

XI. Flooding, farmers and headsmen conflict over grazing land were the most commonly cited natural hazard contri- buting to displacement in Nigeria, followed by storms and droughts.

These unfortunately support dealing with climate change as an emergency and demanding international cooperation in that regard. They also cast aspersion on the potency of extant international legal architecture in relation to climate change.

III. GLOBAL ENVIRONMENTAL POLITICS

Does climate change warrant the conduct of climate affairs under the restrictive and dangerous conditions a state of emergency demands? When compared with other equally essential human conditions, one tends to agree with Mike Hulme that it does not. But in terms of providing opportunity to mobilize attention and funds towards addressing climate change, because of its dire consequences, one would say it does. However, it is conceded here that actions in relation to climate change for the future well-being of humanity should rather be by a broader approach close to a proliferation of policies so as to avoid the danger of neglect attention to one concern usually brings on others.[14]

However, whereas an earth running on near zero carbon emission would not solve all human problems, it is expected that global temperatures not exceeding 1.5°Cabove pre-industrial levels would at the least avert climate crisis[15] (which crisis will render other human conditions such as antimicrobial resistance,[16] economic inequality, and poverty inconsequential) by saving further deterioration of human ecosystem and securing basic human needs, or at least, do them no harm. But the greater problem is that international law that ought to be the driving force behind the classification and elevation of climate change as a global emergency is not exactly positioned to achieve that. At this point in the developmental history of climate change, the legal architecture in support of dealing with climate change as a global emergency is yet to be essentially codified, and undertaken as a legal obligation (opinio juris). They are yet to find a niche in customs and the general principles of law, judicial decisions of international courts relating to climate change, and academic writings. They are also yet to be truly accepted and

[13] Tropical Cyclone Idai. Idai contributed to the complete destruction of close to 780 000 ha of crops in Malawi, Mozambique, and Zimbabwe, further undermining a precarious food security situation in the region. The cyclone also resulted in at least 50 905 displaced persons in Zimbabwe, 53 237 in southern Malawi and 77 019 in Mozambique.

[14] M Hulme, 'Climate Emergency: politics is dangerous,' (n 7)

[15] See<https://www.wri.org/blog/2020/02/greenhouse-gas--emissions- by-country-sector>

[16] a threat that for many health scientists exceeds that of climate change - see M Hulme, 'Climate Emergency: politics is dangerous,' (n 7)

considered as state practice[17] by all relevant sections of the international community.[18]

The fortune of the legal framework for climate change is predetermined by environmental politics or its restricted sense - climate change politics. The rationale is that politics or political considerations shape the content of laws. However, while it may be easy to navigate through the many intrigues and political horse-trading at the municipal level to arrive at laws, at international level, it is more profound and complex. It goes beyond mere party lines as in democracies (such is nonexistent in non-democracies) to critical intrigues in the protection of national interests of about 195 sovereign nations that are weaved into the process. National interests of sovereign states, global institutions, global political economy, global powers, norms and ideologies that are instrumental to political choices tend to stifle the setting up of robust global environmental governance architecture and regimes. The centripetal force in global environmental politics[19] is however, the disregard that the dynamics of contemporary environmental problems such as economic recession, migration crisis, armed conflicts, energy security, climate change, and environmental pollution have for electoral outcomes, political interests, ideological leanings, geographic boundaries, colour, and world views.

While political[20] intrigues make environmental politics an odious venture, unwieldy, increasingly incoherent, cumbersome, and less effective in dealing with the serious challenges climate change presents[21] they are however necessary for normative,[22] creation of principles of law, and in the determination of what becomes laws and the respect accorded to them. The barrage of compulsion, attention and reception have inadvertently successfully elicited certain obligations from the members of international community, global institutions, non-state actors, and the civil society that have encouraged the elevation of climate change to the status of global emergency. But it is yet to compel all states to show high legal interest in climate change as well as make climate change obligations erga omnes, to which all states must have a legal interest in their fulfillment[23].

The current state of global environmental politics and governance is responsible for unending negotiations driven more by political feasibility than by science.[24] It is responsible for the prominence of withdrawal clauses and discretion as to whether to be bound in many Environmental Agreements that provide no credible enforcement mechanisms. It is also

[17] See Y Simbeye, *Immunity and International Criminal Law* (Taylor & Francis Ltd 2004).

[18] See the scope of International community in this regard in the Fifth report on State responsibility [1976] 2 Y.B. International Law Commission, pt. 1, at 3, Quoted in P Weil 'towards relative normativity in international law?' The (1983) 77 American Journal of International Law

[19] This is defined as "the art of horse-trading in the manner of exploration, exploitation, and distribution of global environmental commons that constitutes the infrastructure of international treaties, agreements, and domestic legislations in sovereign states." See details in C V Odoeme, 'Global environmental politics and environmental law in Nigeria' (2019) 1 (2) Nile University Law Journal

[20] There are well over 43 UN Environmental Management Groups, over 30 UN Agencies and programs, multiple international "environmental" institutions (e.g. the Commission on Sustainable Development (CSD), United Nations Development Programme (UNDP), the World Bank Group, the World Trade Organization (WTO), Multilateral Environmental Agreements (MEAs), multiplicity of epistemic communities (non-state actors, civil society actors, and networks of community-based organizations) etc.

[21] A Najam, M Papa & N Taiyab *Global Environmental Governance: A Reform Agenda* (International Institute for Sustainable Development, 2006).

[22] See P Weil, 'towards relative normativity in international law?' (1983) 77 (n 19) The American Journal of International Law.

[23] This is the position of the International Law Commission as relates to the dictum in the in the 1970 *Barcelona Traction* matter. See details of the observations in this regard in P Weil (n 19).

[24] A Najam, M Papa & N Taiyab *Global Environmental Governance: A Reform Agenda* Adil Najam (n 22)

responsible for the perceived dwindling interest in the implementation and or enforcement of agreed environmental standards. Unfortunately, it is within this milieu that the international community determined and apportioned emission targets, responsibilities, mechanisms and responses under the UNFCCC and the Paris Agreement.

IV. CHARCOAL TRADE AND CARBON FOOTPRINT IN NIGERIA

Nigeria is not known exactly for her forest spaces,[25] so it is understandable when she is not mentioned among tropical states losing hectares of tree covers as primary rainforest losses hit new record highs between 2016 and 2018; and even as some African states Côte d'Ivoire, Ghana, Democratic Republic of the Congo, Madagascar, Cameroon, Angola, Liberia, Tanzania, and Mozambique appear in data sets. [26] Nigeria's absence in that roll calls of states losing forests and tree covers in large scale may be primarily because it was only states with more than 100,000 hectares of primary forest that were included in that list.[27] This perhaps accounts for her relatively low scores in recent global data sets on CO2 emission - beyond that emanating from petroleum related activities. However, this does not in any way signify that Nigeria does not contribute substantially to global warming or meets her UNFCCC responsibilities. Indeed, something sinister contributing to global warming is going on in Nigeria. "Old growth,"[28] trees that can be hundreds or even thousands of years old, are continuously butchered to make Charcoal.[29]

Whereas many other developing states essentially lose significant forests spaces more for mining, agriculture, fuel wood or to conflict induced displacement, Nigeria is literally intentionally burning her own forests and tree covers.[30] Consequently, Nigeria occupies a prominent position among the many states trending in the wrong direction in forest and tree cover management for the purpose of adaptation or mitigation of climate change; not on track to meet the climate change goals; and dealing with the required urgency to prevent the irreversible biodiversity loss being ushered in by runaway climate change.

Global CO2 emissions rise to a record high in 2019 is at odds with the deep cuts urgently needed to respond to climate emergency.[31] Nigeria contributes significantly to that. Blamed on unavailability of foreign exchange, hike in exchange rate, dwindling oil revenue, job losses (massive sacks in various sectors such as oil and gas, banking and business

[25] Nigeria's well-endowed forest resources have been explosively exploited due to Population growth, growing demand for land - see Federal Republic of Nigeria. First Biennial Update Report (BUR1) under the UNFCCC, March 2018; and an annual deforestation rate (a 4%) that is higher than the Western and Central African average - See Table 7 "Forest Characteristics 2010" in FAO's Global Forest Resources Assessment, Global Tables, 2010. Details are available in the UN FAO Global Forest Resources Assessment 2010 (main report), and UN FAO Global Forest Resources Assessment 2015 (Desk Reference).

[26] See 'Top 10 Countries Losing the Most Tropical Primary Rainforest in 2018' World Resources Institute 2019, in M Weisse&E D Goldman, 'The World Lost a Belgium-sized Area of Primary Rainforests Last Year' (2019) <https://www.wri.org/blog/2019/04/world-lost-belgium-sized-area-primary-rainforests-last-year> Accessed 8th April 2020

[27] ibid

[28] M Weisse&E D Goldman, 'The World Lost a Belgium-sized Area of Primary Rainforests Last Year' (n 27)

[29] Charcoal is a pure carbon made by cooking wood in a low oxygen setting to burn off volatile compounds like water, methane, hydrogen, and tar. See S Edom 'How to Start Exporting Charcoal from Nigeria to International Buyers' 11thMay 2018 <https://startuptipsdaily.com/charcoal-suppliers-in-nigeria-africa-exporters/> Accessed 8th April 2020.

[30] More than half of the world's felled wood is turned into firewood or charcoal (according to the UN). Three-quarters of the charcoal production takes place in Africa. See 'Nigeria is one of the world's largest exporters of charcoal,bought by Europe' 25thDecember 2017 https://www.businessamlive.com/nigeria-one-worlds-largest-exporters-charcoal-bought-europe/Accessed 8th April 2020.

[31] Global carbon project <https://www.globalca-rbonpr-oject.org> 2019. Accessed 8th April 2020.

conglomerates),[32] affordability,[33] land degradation and droughts,[34] Nigerians resort to the ubiquitous charcoal. Besides providing affordable source of energy for domestic cooking for the urban poor,[35] charcoal is a "profitable" export commodity in Nigeria. The export industry (black-dust-stain business)[36] is a multi-billion dollars industry. A United Nations Environmental Program (UNEP) 2014 report has it that Africa had an official charcoal production of 30.6 million tons in 2012, worth approximately USD 9.2-24.5 billion annually at the point of sale. In that business, directly following behind Mozambique is Nigeria. In 2004, a total sum of N9.889 billion in form of Negotiable Credit Certificate (NCCS) was disbursed to 115 charcoal exporters from January to September.[37] For that purpose, huge areas of tropical rainforest were destroyed to make charcoal for barbecues.[38]

Besides the direct contributions to global warming of the charcoal productions process in Nigeria is its contribution to desertification. This stems from the fact that most of the tree cutting activities for charcoal production in Nigeria are carried out in the north, a part of Nigeria that is already suffering from tree cover deficit, and desert encroachment. However, charcoal is not only produced in northern Nigeria. It is produced in commercial quantities in many states of Nigeria including but not restricted to Kaduna State,[39] Plateau State, Oyo State (Ibarapa North Local Government), Kogi State (Ogbe)[40] , Nassarawa State (Kokona Local Government Area), [41]Federal Capital Territory (FCT) Abuja, Delta State (Edumanom Forest Reserve),[42] Bauchi State, Enugu State (Obimo in Nsukka Local Government Area of Enugu State; Ikem in Isi-Uzo Local Government Area).[43] Very large quantities of charcoal are also produced in Ekiti State, Benue State, and Taraba State.[44] In states such as Niger State (Minna, Jebba), and Cross River charcoal is produced, but it may not be in commercial quantity.[45] Nigeria lost 36% of her forests between 1990 and 2005, and charcoal production alone ate up about 350,000 hectares of fertile land every of those year. Between 1990 and 2000, Nigeria lost an average of 409,700 hectares of forest per annum, at an average annual deforestation rate of 2.38 percent, amounting to a loss of 35.7

[32] A Bhadmus 'Charcoal Export in Nigeria: The Multi Billion Dollars secret Business' 13thJune 2018<https://www.linkedin.com/pulse/charcoal-export-nigeria-multi-billion-dollars-secret-business-abiola/>Accessed 8th April 2020

[33] Charcoal has been the most preferred fuel in the country, because gas is costly, kerosene is scarce and power supply is erratic in Nigeria'. See S Goswami, 'Growing appetite for charcoal destroying Nigeria's tropical forests' 12thFebruary 2018 <https://www.downtoearth.org.in/news/energy/global-charcoal-needs-are-eating-up-nigeria-s-tropical-forests-59655>Accessed 8th April 2020

[34] Ibid

[35] C Omeje, 'Special Report: Charcoal … feeding the poor, killing the environment' (International Center for Investigative Reporting, ICIR) 31st January 2018 <https://www.icirnigeria.org/special-report-charcoal-feeding-the-poor-killing-the-environment/>Accessed 8th April 2020

[36] U Abubakar, 'Deforestation: The Charcoal Trade Mission' 6th September 2009<https://www.dailytrust.com.ng/deforestation-the-charcoal-trade-mission.html>Accessed 8th April 2020.

[37] The Punch, Thursday, 8th April, 2004, page 22.

[38]'Charcoal'<https://www.dw.com/en/charcoal/av-50155336>Accessed 8th April 2020.

[39] A Abutu & CC Okeke, 'Charcoal Use: To Be Or Not To Be' Daily Trust Thursday (9th April 2020).

[40] C Omeje, 'Special Report: Charcoal … feeding the poor, killing the environment' (International Center for Investigative Reporting, ICIR) (n 36).

[41] VA Yusuf 'Making Cool Cash Through Hot Charcoal Business' Daily Trust (Nigeria, 9th April 2020) <https://www.dailytrust.com.ng/making-cool-cash-through-hot-charcoal-business.html> Accessed 8th April 2020

[42] 'Nigeria is one of the world's largest exporters of charcoal, bought by Europe'(n 31).

[43] 'NESREA Seals Company for Illegal Charcoal Export' (14thMay 2019) <https://www.nesrea.gov.ng/nesrea-seals-company-for-illegal-charcoal-export/> accessed 10th August 2019.

[44] 'NESREA Seals Company for Illegal Charcoal Export' (14thMay 2019) <https://www.nesrea.gov.ng/nesrea-seals-company-for-illegal-charcoal-export/> accessed 10th August 2019 .

[45] See 'How to Start Charcoal Export in Nigeria' <http://www.3timpex.com/2017/09/22/how-to-start-charcoal-export-in-nigeria/>Accesses 12th April 2020.

percent of its forest cover and about 6,145,000 hectares of forest cover.[46]

Current illegal trade in charcoal is worth almost three times as much as the trade in illegal drugs. [47]Between 2010 and 2015, wood Charcoal production in Nigeria increased by 30 per cent to about 4 million tons per annum.[48] Nigeria exported 80,000 tons of charcoal for approximately €25 million ($29 million) in 2007, which makes her one of the biggest exporters of charcoal in the world.[49] As at 2011, wood charcoal production quantity in Nigeria was put at 4022763 tons, according to the World Bank collection of development indicators, compiled from officially recognized sources.[50]

[46] See FAO, Global Forest Resources Assessment of 2005
[47] Charcoal (n 39)
[48] 'UN estimates' See also S Goswami, 'Growing appetite for charcoal destroying Nigeria's tropical forests' (n 34)
[49] 'Nigeria is one of the world's largest exporters of charcoal, bought by Europe'(n 34).
[50] See figure 1 below "Nigeria - Wood charcoal production quantity (tonnes) - actual values, historical data, forecasts and projections were sourced from the World Bank on April of 2020"

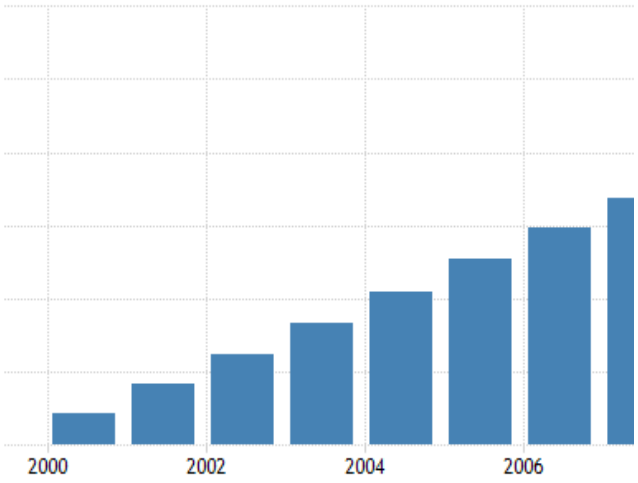

Figure 1: Nigeria - Wood Charcoal Production Quantity (tons) - actual values, historical data, forecasts and projections were sourced from the World Bank on April of 2020[51]

Wood carbonized by partial combustion or application of heat from an external source. It is used as a fuel or for other uses. Figures are given in weight (MT).[52]

[51] See 'Nigeria - Wood Charcoal Production Quantity (tonnes)' <https://tradingeconomics.com/nigeria/wood-charcoal-production-quantity-tonnes-wb-data.html> accessed 8th April 2020
[52] Ibid

V. COMPLICITIES IN THE CHARCOAL TRADE

Made in Nigeria wood charcoal and those made in many other developing states find their way seamlessly into the European market, and markets in many other countries. For instance, Nigeria exports charcoal to over 10 countries including - Ukraine, USA, the UK, China, Poland, Germany, France, Niger, Cameroon and Benin Republic.[53] A bulk of the shipment - over 100,000 tons goes to Europe every year. Germany alone imports about 250,000 tons (50 million pounds) of charcoal per year. This makes Germany the biggest importer of charcoal in Europe. Charcoal from tropical forests in Nigeria make up 15% of the Germany imports, or even more.[54]

Charcoal still finds its way into European markets in spite of the presence of the European Timber Regulation (ETR) 2013.[55] The charcoals are sold at gas stations, supermarkets and hardware shops across Germany in sacks with sketchy information or outright lies about the origin of the products;[56] or labelled incorrectly as "sustainably cultivated."[57]

As recorded by the United Nations COMTRADE database on international trade, 2020 updates, in 2018, charcoal exports from Nigeria to the United States of America (of charcoal whether or not agglomerated) was up to US$13.23 thousand.[58]

A significant quantity of the world's felled wood is turned into charcoal. About three-quarters of the global charcoal production process take place in Africa. Also, about 12% of the charcoal produced through that process leaves the African continent for the European Union and America. Charcoal exports from Nigeria lead the park in Africa.[59]Indonesia[60] led the entire global charcoal export trade in 2018 followed at a far distance by Nigeria.[61]

The EU and United States' demand for charcoal from wood sustains the charcoal trade in Nigeria and elsewhere around the world where charcoal production from wood is endemic and still attractive. Supply follows demand. Therefore, it is only natural that a reduction in the EU and United States' demand for charcoal made from wood would add to the reduction of tree depletion and deforestation in Nigeria in particular, and consequentially climate change mitigation in general.

The chance that the absence of any provision for the regulation of tropical woods entrance into the EU in the ETR 2013 being by omission is very remote. Regardless of the EU (and the US) love and preference for charcoal grills and barbecues over those by electricity, the very ugly nature of international environmental politics raises its ugly head again in global

[53] S Goswami, 'Growing appetite for charcoal destroying Nigeria's tropical forests' (n 34)

[54] As observed by Tropical Forest Trust (TFT), Germany imports about 34% of her charcoal from Poland. But the problem is that Poland sales repackaged charcoal, Ibid

[55] Although made for the purpose of stopping illegal wood and paper products from entering the EU, the ETR 2013 regulates tropical woods but not charcoal made from tropical woods.

[56] Credited Johannes Zahnen from the World Wide Fund for Nature (WWF) in S Goswami, 'Growing appetite for charcoal destroying Nigeria's tropical forests' (n 34); See also *'Nigeria is one of the world's largest exporters of charcoal, bought by Europe'* (n 31)

[57] S Goswami, 'Growing appetite for charcoal destroying Nigeria's tropical forests' (n 34)

[58] 'Nigeria Exports to United States of Wood charcoal, whether or not agglomerated' <https://tradingeconomics.com/nigeria/exports/united-states/wood-charcoal-agglomerated> Accessed 8th April 2020

[59] 'World - Wood Charcoal - Market Analysis, Forecast, Size, Trends and Insights' <https://www.indexbox.io /store/world-wood-charcoal-market-report-analysis-and-forecast-to-2020/> Accesses 12th April 2020

[60] Brazil had the highest volumes of wood charcoal production in 2018. It however did not occupy a very significant position in terms of export. See 'World - Wood Charcoal - Market Analysis, Forecast, Size, Trends and Insights' ibid

[61] 'World - Wood Charcoal - Market Analysis, Forecast, Size, Trends and Insights' (n 60)

charcoal trade control. The Messiahs of climate change have an unholy appetite for wood charcoal grills / barbecues. A love that extends to the use of charcoal from wood for sundry domestic heating. The contribution to climate change and the immediate negative consequences of tree and forest cover depletion in the developing states of the global south, charcoal production from wood, and use of charcoal made from wood have not been considered significant enough to trigger desirable adjustments in national and regional environmental governance regimes.

Courtesy of the exclusion of charcoal products from the ETR 2013, Companies using and or selling charcoal in the EU are under no obligation to furnish details about where and how they source / procure charcoal. Nevertheless, in spite of the absence of any obligations, charcoal industry's labeling of paper sacks of charcoal products as "sustainably cultivated" is regrettable and dishonest. It contravenes Principle 10 of the Rio Declaration on Environment and Development[62] – for it rubs the public access to information that are essential components of citizens and public participation in decision making in environmental matters.

These in themselves do not evince an inwards desire to deal with climate change as an emergency, particularly after an outward expression of climate change as a global emergency.

VI. RESPONDING TO CLIMATE EMERGENCY

Many developing states do not deal with their environment with the understanding that responding to climate change has become a matter of emergency. Governments of many developing states have shown remarkable indifference to responsible responses to matters relating to the environment. Their indifference is remarkably higher with regard to the need to reduce charcoal production from wood – even in the face of demands placed on them by the Sustainable Development Goals (SDGs). In particular SDG Goal 15 that stressed the urgency of sustainable management of forests and, SDG Goal 13 that demands critical responses to address climate change.

In Nigeria, for instance, almost all government efforts to regulate or prohibit Charcoal production from wood[63] have turned out to be "false start."[64] Charcoal related legal regimes (inclusive of laws and regulations relating to the environmental protection in general[65]) including those made by the National Environmental Standards and Regulations Enforcement Agency (NESREA);[66] the Nigerian Federal Government ban on wood and charcoal exportation in May 2016 (following exporters' refusal to adhere to

[62] The United Nations Conference on Environment and Development, 1992

[63] These exclude those made by the States Governments (forestry is on concurrent legislative list in Nigeria) see for instance Kwara State Government ban on the production, transportation, storage and sale of charcoal in any part of Kwara State. See 'Kwara Gov bans charcoal production, trade' 3rd July 2018<https://www.vanguardngr.com /2018 /07/kwara-gov-bans-charcoal-production-trade/>Accesses 12th April 2020

[64]C Uwaegbulam 'FG to ban charcoal export, reviews adaptation plans' 10th February 2020 <https://guardian.ng /property/fg-to-ban-charcoal-export-reviews-adaptation -plans/>Accesses 12th April 2020

[65] The Public Health legislation, Factories Act (1987), Land Use Act 1978, Energy Commission of Nigeria Act 1979, Endangered Species (Control of International Trade and Traffic) Act 1985, Sea Fisheries Act 1992, River Basins Development Authorities Act 1986, Harmful Waste (Special Criminal Provisions, etc.) Act (1988), the Nigerian National Policy on Climate Change.

[66] The National Environmental (Ozone Layer Protection) Regulations 2009, the National Environmental (Control of Vehicular Emissions from Petrol and Diesel Engines) Regulations 2011, the National Environmental (Desertification Control and Drought Mitigation) Regulation 2011, the National Environmental (Control of Bush, Forest Fire and Open Burning) Regulation 2011, the National Environmental (Desertification Control and Drought Mitigation) Regulation 2011, and the National Environmental (Control of Charcoal Production and Export) Regulation 2014.

the directive of cut-one plant-two policy);[67] the National Council on Environment (NCE) recommendation for the ban on the exportation of charcoal in Nigeria[68] never really gained traction. States' governments see wood logging as a source of revenue.[69] Local Governments authorities are consistent in collecting revenue from charcoal producers and traders.[70] The Police and others entrusted with the enforcement of regulations on charcoal trade are too reluctant to do much.[71]

Every day, in contravention of extant regulations, large number of trucks ferry large quantities of wood charcoal into Abuja (the Federal Capital Territory of Nigeria and the seat of the Federal Government; and the Headquarters of the Federal Ministry of Environment (and Forestry Department of the Ministry), and NESREA), without any form of fear, let or hindrance.[72]

[67] See G Oritse, 'FG bans wood, charcoal exportation' 22nd May2016 <https://www.vanguardngr.com/2016/05/fg-bans-wood-charcoal-exportation/>The ban was rolled back two months later as charcoal is the lone energy source to a major Nigerian population. See S Goswami, 'Growing appetite for charcoal destroying Nigeria's tropical forests' (n 34)

[68] Made at the 11th National Council on Environment, who explained that the current Forest Cover of Nigeria is less than 4% as against the expected 25%. See B Oghifo, 'National Council on Environment Recommends Ban on Charcoal Export' 31stOctober 2017 <https://www. thisday live.com/index.php/2017/10/31/national-council-on-environment-recommends-ban-on-charcoal-export-2/>Accesses 12th April 2020

[69] In a Statement credited to the Oyo State, Chief Executive Officer of the Forest Research Institute of Nigeria.See S Goswami, 'Growing appetite for charcoal destroying Nigeria's tropical forests' (n 34)

[70] See U Abubakar 'Deforestation: The Charcoal Trade Mission' 6th September 2009 <https://www.dailytrust.com.ng/deforestation-the-charcoal-trade-mission.html> Accessed 8th April 2020

[71] CV Odoeme 'Environmental Politics and Carbon Footprint Legal Regime in Nigeria: Proposal for Legislative Review' (2019) 2 (1) NILDS Journal of Law Review

[72] See Picture 1

Picture 1: Picture of overloaded Pickup Vehicle conveying Charcoal made from wood into Abuja City, June 2019[73]

Source: Photograph taken by C.V Odoeme on 1st June 2019 at 5:30pm along KM 140, Lokoja - Kaduna Road, Sheda, Kwali Area Council, Abuja. On the average three (3) of these trucks enter Abuja through the Lokoja - Kaduna Road every day since 2013 when this writer started collecting data on charcoal production from wood in Nigeria.

[73] The image was first published in Odoeme 'Environmental Politics and Carbon Footprint Legal Regime in Nigeria: Proposal for Legislative Review' (n 72)

Government policies towards addressing deforestation and charcoal production from wood are skewed against reality. The policies do not take into cognizance the domestic socio-economic and political conditions of the citizens. The policy "designers never had a reason to burn single log of wood into charcoal,"[74] so they do not understand what the problems are, is the popular view among local people. The albatross of the legal regime on Charcoal in Nigeria is that the Federal Government owns the policy[75] and the machinery to enforce the laws, the States Governments own the forests,[76] and the Local Government Areas owns (collect) rents.[77] Meanwhile, the principal officers manning those levels of governance consistently betray the electorates, and are more interested in perpetuating themselves in office so much so that they are too scared to take decisive actions, with regards to saving our environment, that may lead to the masses revolting or backfire at elections.

As per implementation of her commitment to a green growth development pathway in partnership with the UN-REDD program,[78] the Nigerian government has only established a Department of Climate Change (DCC) in the Federal Ministry of Environment.[79] Her other commitments and responsibilities under the UN-REDD program[80] such as development and implementation of Quality Assurance/Quality Control (QA/QC) procedures in line with the IPCC 2006 Guidelines for National GHG inventories, working towards ending gas flaring by 2030, Off-grid solar PV of 13GW (13,000MW), Efficient gas generators, 2% per year energy efficiency (30% by 2030), Transport shift from car to bus, Improving electricity grid, as well as Climate smart agriculture and reforestation are mere dreams.[81] Similarly, all other parts of Nigeria's climate change mitigation plans such as the National Climate Change Policy Response and Strategy (NCCPRS) 2012,[82] the Nigerian National Biofuels Programme,[83] the draft revised National Energy Policy of 2013,[84] the REDD+;[85]the development and establishment of a domestic Measurement, Reporting and Verification (MRV) system

[74] A Bhadmus 'Charcoal Export in Nigeria: The Multi Billion Dollars secret Business' (n 33)

[75] See Section 20 of the Constitution of the Federal Republic of Nigeria 1999 "The State shall protect and improve the environment and safeguard the water, air and land, forest and wild life of Nigeria.

[76] See S Goswami, 'Growing appetite for charcoal destroying Nigeria's tropical forests' (n 34)

[77] See the 4th Schedule, Section 2(b) of the Constitution of the Federal Republic of Nigeria 1999 as regards "the development of agriculture and natural resources, other than the exploitation of materials."

[78] E.g. development of a national strategy/action plan on the drivers of deforestation, a Safeguard Information System (SIS), a Forest Reference Level/Forest Reference Emission Level (FRL/FREL) system, and a National Forest Monitoring System.

[79] This is essentially the only evidence of Nigerian Government's commitment to introducing and implementing adaptation and mitigation measures necessary to reduce vulnerability to climate change. See Nigeria's BUR1 p1 & p 11 respectively (n 26). Minor mitigation actions through the Clean Development Mechanism may also count.

[80] i.e. "the actions to be implemented unconditionally using national resources are expected to reduce emissions by 20 % from the Business As Usual (BAU) scenario." See BUR1 p, 11 (n 26)

[81] They were expressed as future efforts in the BUR1. See p 11 of the BUR1 (n 26)

[82] Developed for the purpose of fostering a low-carbon, high growth economic development path and building a climate-resilient society. See UNFCCC 2015. "Nigeria's Intended Nationally Determined Contribution", UNFCC. Available at: <http://www4.unfccc.int/submissions/INDC/Published%20Documents/Nigeria/1/Approved%20Nigeria's%20INDC_271115.pdf>0. Last Accessed 1st June 2019.

[83] Designed to help reduce the nation's dependence on imported gasoline, while reducing environmental pollution

[84] That provided the framework for sustainable energy development in Nigeria with the overall objective of providing clean, affordable, adequate and reliable energy to the nation with the active participation of the private sector

[85] Aimed at generating financial value for the carbon stored in forests

pursuant to the Bali Action Plan,[86] and the establishment of an Inter-Ministerial Committee to provide a "common coordination platform to harness the many relevant climate datasets that are available in different government departments and in private organizations[87] are inchoate.

Generally, many developing states have this selective approach to their climate change responsibilities. Nigeria for instance is focused on the adaptation part of her climate change responsibilities to the detriment of the mitigation part. Meanwhile, her adaptation plans and initiatives (provision of access to energy "electricity" for all Nigerians, increase energy efficiency, significant reduction in the use of household electricity generators, implementation of climate smart agriculture, reforestation[88] etc.) touted as a means of guaranteeing some minimum well-being for the most vulnerable groups including women and the poorest segments of the population are observed in breach. As per climate change mitigation, the intended approach is to, in comparison with Business As Usual (BAU) emission levels, reduce Nigeria's GHG emissions by 20% by year 2030 by improving energy efficiency by 20%, providing 13GW of renewable electricity to rural communities that are yet to be connected to the national electric power grid, and by ending the gas flaring in the Niger-Delta.[89] Unfortunately, however, those beautiful plans to further reduce GHG emissions by 45% within the same year 2030 time frame are predicated upon the receipt of international support, but not on any homegrown efforts.

Meanwhile, in spite of the perceived danger of GHG including carbon emission, for which climate change has become an emergency, Nigeria is yet to enact a specific Carbon Emission / Climate Change legislation. Charcoal trade, Carbon Emission, and Climate Change are managed by sectoral environmental regulations, institutions, policies, plans and programs as contained in the Nigerian National Climate Change Policy Response and Strategy (NCCPRS), 2012.

The consequences of developing state's abysmal approach to climate emergency are experienced in everyday existence. Clean and efficient energy scarcity has deepened national poverty rate. Poverty has brought along forced reversal in the transition to clean and efficient energy forms. It is reported that Nigerians are currently "climbing down the energy ladder - moving from electricity, gas and kerosene to traditional use of wood in open fires"[90] and charcoal. Recent estimates have it that 95,300 Nigerians die annually from smoke emanating from inefficient use of biomass energy, at that rate, smoke has become the next highest killer of Nigerians after Malaria, and HIV/AIDS.[91] Yet about 72 percent of Nigeria's population depend on the traditional "three-stone fire" for daily living.[92] These offend developing states (Nigeria inclusive) UNFCCC and the Kyoto Protocol commitments which is to promote low-carbon development, reducing emissions of GHG consistent with its national

[86] This the BUR1 noted is "a serious challenge to non-Annex I countries as it is a new and additional responsibility within the framework of the preparation of BURs" BUR1 p 15 (n 26)

[87] BUR1 p, 15 (n 26)

[88] See 'Greenhouse Gas Emissions in Nigeria' USAID January 2019. See also 'the Nigeria Intended Nationally Determined Contribution (INDC)', 2014 available at https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nigeria%20First/Approved%20Nigeria%27s%20INDC_271115.pdf. Accesses 12th April 2020

[89] See Nigerian Nationally Determined Contribution (NNDC) 2014

[90] EEO Onuvae, & PO Ugwu, 'Low-carbon energy development in Nigeria Challenges and opportunities' (2013) International Center for Energy, Environment and Development, p 4

[91] WHO. Indoor air pollution: national burden of disease estimates, (2007) WHO/SDE/PHE/07.01

[92] United Nations Development Programme (UNDP) and World Health Organization (WHO). *The energy access situation in developing countries,* Sustainable Energy Programme Environment and Energy Group Report, 2009

circumstances and within the context of poverty reduction and economic growth.[93]

However, developing states believe, with bulldog tenacity, that developed states are primarily responsible for historical GHG emission problems[94] and still have the greater per capita emissions.[95] Therefore, they allege that shifting the burden of mitigation to developing states by the developed states would undermine the core principles of the UNFCCC and Kyoto Protocol. Consequently, African states (including Nigeria) consider the pledges proffered by developed states in the Cancun Agreements as wholly inadequate for the purpose of stabilizing atmospheric concentrations of GHG at a safe level on the grounds that existing pledges would result in global temperature rise from 2.5°-5°C.[96] While this may explain why developing states such as Nigeria are not making enhanced personal efforts to use available local resources to deal with climate emergency, it is indicative of developing states realization of the ugliness of international environmental politics. Whereas international environmental politics may be complicit in UNFCCC and the Kyoto Protocol none assignment of binding obligations (targets) to reduce emissions of GHG to developing states parties, it is certain that it was responsible for the designation of states eligible for financial and technology assistance in support of their national actions for Climate Change mitigation and adaptation. Including Nigeria in that list is one of the most unfortunate developments in the global Climate Change mitigation and adaptation scheme. What it has achieved in the first instance is to increase the visible inertia in Nigeria's response to climate change besides generally weakening developing states commitments and compliance with global and domestic environment governance regimes.

Available evidence do not suggest that developing states, Nigeria in particular, is mindful of keeping to her Paris Agreement commitment of reducing her GHG emissions by 20 per cent relative to a BAU scenario of economic and emissions growth by 2030, as well as the extended 45 per cent reduction target.[97]Climate change adaptation and perhaps mitigation actions, particularly charcoal trade control mechanisms still remain grossly underdeveloped. Generally, developing states should be encouraged by the larger risks associated with being the least prepared to handle climate change impacts,[98] the possibility of being the worst hit by the most insensitive impacts of climate change as well as the grave responsibilities associated with climate change responses to embrace the greater opportunities available for developing states in the climate change conundrum such as clean and efficient energy, good health and long-life, reduction in rate of death from inefficient use of energy (smoke) among many others. Developing states must realize that carbon and other GHG emission and climate change issues have gone beyond apportioning blames and claiming alibi so must wake up to the reality of an impending doom and deal with climate change as emergencies.

VII. CONCLUSION

Climate change's impacts on marine, freshwater, and terrestrial life, from plankton and corals to

[93] EEO Onuvae, & PO Ugwu, 'Low-carbon energy development in Nigeria Challenges and opportunities' (n 91)

[94] See UNFCC

[95]WJ Ripple, et al (n 3)

[96] O Seth, S Anju, & CB Achala, 'Durban Platform for Enhanced Action An African Perspective' (not dated) European Capacity Building Initiative <www.eurocapacity .org>Accesses 12th April 2020

[97] Nigeria's Intended Nationally Determined Contribution. Issued by the Ministry of Environment, Federal Republic of Nigeria, 2015

[98] See Terr-Africa 'Land and Climate: The Role of Sustainable land Management (SLM) for Climate Change Adaptation and Mitigation in Sub-Saharan Africa (SSA)' (2009) Terr Africa: Regional Sustainable Management Publication. See also World Bank 'The cost to Developing Countries of Adapting to Climate Change New Methods and Estimates the Global Report of the Economics of Adaptation to Climate Change Study Consultation Draft' (2010) Washington D. C.: The World Bank Group.

fishes and forests[99] will certainly not be limited to the world's poor and vulnerable. Yet, global charcoal trade has been allowed to incrementally contribute to global warming / climate change and bringing climate change induced disasters closer. Contrary to the global desire to deal with climate change as an emergency, many states' still emphasis, to the detriment of the environment, employment, energy generation, resource extraction, large scale infrastructural development, and expansion of the agricultural frontier due to the returns they bring to governments. It is only a very few states, regions, cities, communities or businesses that have demonstrated willingness (or possibility) to implement programs consistent with 1.5°C pathways and or can currently make a profound claim of keeping to their assigned climate change mitigation and adaptation targets.[100]The worse of this is found in the developing states of the global south.

It is obvious that many states are not at the moment truly working assiduously on climate change mitigation and adaptation with the type of urgency climate emergency demands. Many developed states are as guilty as developing states and would qualify as accomplices and culpable for aiding and abating whenever developing states are pronounced culpable for an offence against nature by their rascally disposition and recklessness towards addressing climate emergency.

Etching developing states responsibilities in UNFCC, Kyoto Protocol, Paris Climate Agreement and other International Environmental Agreements[101] in very liberal terms - without extracting commitments from them for the purpose of enabling them successfully hold their own ends of the bargain on reducing carbon footprint may have alienated them. Consequently, extant International Environmental Governance Regimes and Agreements should be reviewed to empower and encourage developing states respond to climate emergency with the desired dispatch using homegrown resources pending when international support would be readily available knowing that they stand the greater risk of loss to climate change vulnerabilities.

Developed states should cease their patronage of imported wood charcoal to reduce developing states appetite for cutting trees to make charcoal in large scale, as well as reduce the amount of carbon dioxide and other GHG [Methane (CH4) and Nitrous Oxide (N2O)][102] the process of converting wood to charcoal adds to the global warming equation. That would also reduce the damage the process of converting wood to charcoal does to humans, flora and fauna, as well as reduce poisoning of the groundwater and the surrounding soil in the places charcoal is production.[103] Besides immediate health benefits, reduction in the number of deaths owing to indoor air pollution[104] and inefficient use of solid fuels for

[99] IPCC 2018, 2019. See also WJ Ripple, et al (n 3)

[100] H de Coninck, etal 'Strengthening and Implementing the Global Response' in In VP Masson-Delmotte, et al (eds.) *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty,* In Press

[101] See also the Cancun Agreement 2010 and the Aichi Biodiversity Targets 2010

[102] They make up 17% and 6.2% of total greenhouse gas emissions. See 'Carbon Dioxide Makes Up Most, but Not All, Greenhouse Gas Emissions' <https://www.wri.org/blog/2020/02/greenhouse-gas-emissions-by-country-sector>

[103] 'Nigeria is one of the world's largest exporters of charcoal, bought by Europe, (n 31)

[104] The World Health Organization (WHO) noted that 95,300 Nigerians die annually from indoor air pollution. The National Demographic and Health Survey (NDHS) 2013 discovered that approximately 0.8% of neonatal deaths, 42.9% of post-neonatal deaths, and 36.3% of child deaths could be attributed to the use of solid fuels (charcoal, firewood, crop wastes, sawdust, coal, and dung). See C Omeje, 'Special Report: Charcoal … feeding the poor, killing the environment' (n 36)

cooking[105] as well as promotion of natural reforestation, cessation of patronage of charcoal from tropical forests wood would compel governments of developing states to take decisive action towards providing alternative sources of income for the rural poor, cleaner and renewable energy sources for their citizenry.

Governments of developing states should however be made to realize that they owe their citizens duty of care way beyond what has been prescribed by the international community. In that case, they should be encouraged to deal with climate change as an emergency through an enhanced protection and improvement of the environment that extends to safeguarding forests, water, air, land, and wildlife as state responsibility and as fundamental human rights. Ultimately, the entire members of the international community should be encouraged to join the trail and declare climate emergency and deal with climate change as such.

[105] See C Omeje, 'Special Report: Charcoal … feeding the poor, killing the environment' (n 36)