The Journal of Sustainable Development Law and Policy

Journal homepage: https://www.ajol.info/index.php/jsdlp

ISSN: 2467-8406
Online ISSN: 2467-8392
Volume 17, Issue 1
Uche, Olujobi, Agboola and Kabano 2026.

LOCAL COMMUNITIES IN ERA OF CLIMATE CHANGE: ADDRESSING CHALLENGES THROUGH THE LENS OF SUSTAINABLE DEVELOPMENT GOALS 2015

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Article Information:

Article Type:
Research Article

Manuscript Received:
31 April 2025

Final Revision Received:
24 June 2025

Published Online:
10 July 2025

Keywords:
Local Communities, Climate Change, Era, Challenges, SDG 2015.

Climate change effects posed global threats and problems especially for local communities. In response to these challenges, many countries have implemented legal frameworks aimed at addressing its effects in rural areas in line with Sustainable Development Goals 13 of 2015. These frameworks typically involve combinations of regulations, incentives, and support mechanisms capable of assisting community's adaptation along with the mitigating effects of climatic change. Examining international case studies and analyzing data on the implementation of these frameworks offers reasonable insight into what strategies are most effective in helping communities respond to the harmful effects of climatic change. The paper revealed that the legal frameworks that prioritized community engagement and participations appears to be more effective in assisting local communities in addressing climate change. The paper argued that a better understanding of the efficiency and effectiveness of the existing regulatory frameworks is also crucial for informing future policy decisions and ensuring that communities are adequately equipped to confront the challenges posed by a warming planet. In order to achieve the research objectives, the paper adopts doctrinal research methods that analyzes global and domestic legal documents. The primary legal sources includes global treaties, decisions of court, municipal legislations along with relevant academic works. Most significantly, the article highlights best practices and identifies areas for improvement in current climate change policies in local communities and makes recommendations for policymakers on how to strengthen legal frameworks to protect, support and enable vulnerable communities to address the challenges of climatic change. Ultimately, the legal frameworks and principles regulating climate change should be reviewed to reflect the whole essence of the regulatory frameworks that guarantees safety and security of the local communities as well as creating a more resilient communities.

Cite this article: Uche Nnawulezi, Olusola Joshua Olujobi, Yusuf Hammed Agboola And Jacques Kabano(2026). Local Communities In Era Of Climate Change: Addressing Challenges Through The Lens Of Sustainable Development Goals 2015. The Journal of Sustainable Development, Law and Policy. Vol. 17:1. 246-275. DOI: 10.4314/jsdlp.v17i1.9

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1. INTRODUCTION

Basically, issues of climate change have become a pressing concern for local communities around the globe, as they are often the most vulnerable to its impacts. In addressing this, several countries have come up with some regulatory frameworks as measures capable of handling the harmful effects of climatic change. These frameworks emerged to address climatic change effects on local communities arising from serious weather conditions, rise in sea levels, along with food and water insecurities. There exists connections between habitat degradations and human environment especially when one takes cognizance of the fact that the individuals who are adversely affected by the environmental degradations are those most vulnerable to climatic change challenges and effects.[1]

Human beings, like any other living creatures, have had an impact on the habitat in several ways through deforestation, combustions of gas; inappropriate disposals of waste materials as the case may be. These appear to pose greater threat and challenges to undeveloped regions and localities around the globe especially for the African continent which is already acknowledged as economically weak and most vulnerable to climatic change challenges and effects.[2]

According to Ruddiman, research work on climate in the prehistoric era[3] revealed that human activities that impacts on planet's climate has been an age-long activities traceable as far back as 8000 years ago, when human beings started clearing of forests for agricultural purposes. It should be noted that these activities engaged in by humans at that material time did not impact greatly on global climatic change as the evolution of industrial era turned out to be of harmful effects to the climate. Climate Change evolved with burnings of fossils fuel used domestically along with

[1] R Picolotti and J D Taillamt (eds), *Linking Human Rights and the Environment* (Univ. of Ariz. Press 2003) 14.
[2] W Egbewole, *Law and Climate Change in Nigeria* (University of Ilorin Press 2011) 30.
[3] WF Ruddiman, *Earth's Climate: Past and Future* (WH Freeman & Co 2001) https://doi.org/10.1016/SO921-8181(01)00108-4.

manufacturing processes, burnings of biomass, productions of greenhouse gasses, along with aerosols that alter atmospheric compositions.[4]

In this sense, actions that contributed to climatic change are amongst the biggest issues faced by our generation and they require proactive measures. Currently, few of the age-long projected impact of climatic change are on the increase with the attendant consequences to human life across all regions of the world[5] ranging from droughts, floods, melting of sea ice, and increasingly severe heat waves. The concentrations of greenhouse gasses in the weather has increased due to several activities engaged by humans in recent years, but there seems to be no way to reduce the extent of concentrations that was already there destroying the atmosphere.[6] The analysis of the paper shows that the resulting consequences of climatic change are more harmful to developing Countries along with the poorest sectors in most countries around the globe, with a great impact in their health sectors, clean water; lack of access to sufficient food supply, along with other related matters.[7] It is pertinent to note that rise in temperture along with intensity of extreme weather conditions remained major causes of climate crisis.[8]

Considering the global impact of this crisis today, the paper observed that aside the global perceptions of climatic change, its harmful effects is unevenly felt across regions and nations depending on the adaptive capacity of each one. In addition, the findings from our review of extant

[4] W Ruddiman, 'The Anthropogenic Greenhouse Era Began Thousands of Years Ago' (2003) 61 Climatic Change 261–293 https://doi.org/10.1023/B:CLIM.0000004577.17928.fa.

[5] K Abass and others, 'A Review of the Global Climate Change Impacts, Adaptation, and Sustainable Mitigation Measures' (2020) 29 Environ Sc & Pollut Res 42539-42559 https://doi.org/10.1007/sll356-022-19718-6.

[6] OF Oluduro, 'Climate Change, A Global and National Perspective: The Case of Nigeria' (2012) 5 Jour of Pol and Law 33–38 https://doi.org/10.5539/jpl.v5n3p33 accessed 23 June 2024.

[7] See UKDID, *Degrees of Separation: Climate Change, Shared Challenges, Shared Opportunities* (Futerra Sustainability Communications 2008).

[8] See UNGA, *United Nations Framework Convention on Climate Change*, A/RES/48/189 (20 January 2024).

literature shows that human along with State activities have not only posed a great challenge to the fragile ecosystem, but to the entire humanity as well as to the future generations to come.[9] When the world are faced with serious habitat problems such as climate change, all nations must also work together in synergy to address those threats through decisive adherence to existing Conventions offering comprehensive approach to wide range policies effective enough to handle it. Thus, United Nations Framework Convention on Climate Change (UNFCCC) 1992 offers a platform because it was created as a unifying platform of several States around the globe to collaborates in monitoring challenges of climatic change.

According to Kuh, the UNFCCC remains an international regulatory framework on climate agreements that has provided a formidable basis for the rise of other climate agreements around the world, including the *Kyoto Protocol* along with the *Paris Agreement.*[10] The compelling need to address challenges of climatic change conditions remained a source of concern to most governments and policy makers, hence, several Protocols on climate change alongside certain amendments continue to emerge.[11] More importantly, several questions arise as to the adequacy or otherwise of the existing regulations in addressing the unabated harmful effects of climate change especially in local communities around the globe. Also, why are the violators not brought to book? Are the violators more powerful than the states? Can international law nip in the bud the increasing threats to climate change? In responding to these questions, the paper revealed that not all the states are parties to the Conventions, and some that are parties thereto lack adequate domestic level mechanism for combating the challenges along with the resultant consequences of climatic change in their respective jurisdictions.

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[9] W Ajayi, 'Achieving Environmental Protection through the Vehicle of Human Rights: Some Conceptual Legal and Third World Problems' (1995) 2 UBLJ 1.

[10] KF Kuh, 'The Law of Climate Change Mitigation: An Overview' (2018) 2 Encyclopedia of the Anthropocene 505-510 https://doi.org/10.10161B978-0-12-809665-9.10027-8.

[11] *Ibid*.

Indeed, problems arising from climatic change cut across national boundaries. Therefore, its proper management remains a major concern to governments around the globe in terms of responses, mainly because of global and districts human rights obligations of imposed on states in protecting both the habitat and persons living in those habitats.[12]

Given the symbiotic relationship between humans and the environment, when the habitat is adversely affected, the sources of human livelihood along with other creatures becomes challenging necessitating struggles for survival. It suffices to say that a friendly habitat is a bedrock of human survival along with other living creatures thereby underlining the need for robust legal frameworks capable of effectively addressing the harmful challenges and effects of climatic change on local communities around the globe given their general vulnerability. These frameworks can provide guidelines and regulations to address climate change challenges, promote sustainable climate practices, protect vulnerable communities and make them resilient to current and future climate and other environmental challenges.

2. CONCEPT OF CLIMATE CHANGE

Basically, a normal atmospheric conditions in a particular region of the world is thus referred to as "climate". Here, climate is understood with respect to the expected historical measurements of wind, temperature and precipitations. Any change or variation arising from the average climatic conditions which persists for a period of time is termed as climatic change. However, UN understood climatic change as a situation which last for a long period of time with variations of weather patterns along with atmospheric temperatures.[13] The fluctuations appear to be natural as a result of differentials in the sun's activities or huge volcanic eruptions. Moreso, ever since 1800s, the conduct of man around his habitat is noted as major sources of climatic change, as well as the combustions of fossils

[12] See *Universal Declaration of Human Rights* (adopted 10 December 1948) UNGA Res 217A(III); *International Covenant on Civil and Political Rights* (ICCPR) (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171.

[13]United Nations, 'What Is Climate Change? United Nations'. Available at: <https://www.un.org/en/climatechange/what-is-climate-change>. Accessed 20 June 2024.

fuel like gas, oil along with coal[14] released greenhouse gases and carbon dioxide into the atmosphere, causing rising global temperatures due to trapped heat. Undoubtedly, understanding climate change is dependent on the peculiar effects on the individual concerned which may well be defined by its harmful effect on a person resident at different locations within a given region of the world.[15] It is therefore incontrovertible that a study on the mutual coexistence between human conduct in his habitat along with the nature of climate does not suggests a mere intellectual discourse, but a fundamental issue in the management of the current and future habitat.[16]

Adger *etal* posited that climatic change remained an obligations on states as well as a global phenomenon which has caused several destructions of the habitat, ecology and related human resources.[17] For Kashif Abbass *et al*, climate change is a worrisome situation which evolved from accumulated temperatures, precipitations trends along with related atmospheric issues like pressures or humidity levels in the habitat.[18] Interestingly, the earth's climate has always been altered resulting to several destructions in the orbital, sun's energy outputs, volcanic activities; geographic distributions in the land mass, along with related inward and outward procedures that have all contributed to the potential influence on the climate. This kind of long-lasting atmospheric conditions is thus regarded by scientist as "natural climatic conditions". It is remarkable that in time past, natural climatic change caused regular periods of cold (or ice ages), resulting to enveloping of glaciers. In a similar vein, geologists refers to it as Holocene, which noted as one in which human civilization thrives. In light of several understandings along with interpretations of the

[14] *Ibid.*

[15] M AI-Zu'bi and others, 'African Perspectives on Climate Change Research' (2022) 12 Nat Clim Change 1078-1084 https://doi.org/10.1038/s41558-022-01519.x.

[16] See Nature Guardian, 'Understanding Climate Change: An Academic Perspective' (12 November 2023) https://www.natureguardian.org accessed 21 June 2024.

[17] WN Adger and others, 'Successful Adaptation to Climate Change Across Scales' (2005) 15(2) Glob Environ Chan 77-86 https://doi.org/10.1016/j.gloenvcha.2004.12.005.

[18] K Abbass and others, 'A Review of the Global Climate Change Impacts, Adaptation and Sustainable Mitigation Measures' (2022) 29 Environ Sc & Pollut Res 42539-42559 https://doi.org/10.1007/s11356-022-19718-6.

concept, it may be argued that climate change engagements are likened to the engagement in transformations.[19]

Admittedly, reviews of several interpretations of the concept of climatic change shows that in so far as there is no specific interpretation, various reasoning along with understanding continues to evolve amongst states and experts.[20] While detailed analysis seems to focus on wider interpretations of the concept of climate change as a threat to humanity arising from perennial destructions of natural endowment along with human systems, the existing mitigation framework for confronting these challenges remain inadequate or weak.[21] However, data from scientific models and observations revealed that human activities otherwise known as "anthropogenic climatic change" contributes to climatic change conditions underlined by greenhouse gases.[22]

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[19] G Hochachka, 'Finding Shared Meaning in the Anthropocene: Engaging Diverse Perspectives on Climate Change' (2022) 17 Sustain Sci 519-539 https://doi.org/10.1007/s11625-021-00965-4.

[20] A De Witt, 'Climate Change and The Clash of Worldviews: An Exploration of How to Move Forward in a Polarized Debate' (2015) 50(4) Zygon 906-921 https://doi.org/10.1111/zygo.12226.

[21] Atefeh Ahmadi Dehrashid, 'Perspectives of Climate Change: The Social and Scientific Construct' https://doi.org/10.1007/978-3-030-86290-9_21.

[22] The collateral implication thereof is that "Greenhouse gases" are released into the atmosphere by human activities through burning of fossil fuels (coal, oil, and natural gas) in order to generate electricity, use automobiles; cutting of forests trees so as to create ways for farming, along with raising of livestock. Importantly, methane, nitrous oxide, halocarbons, and carbon dioxide are said to be primary greenhouse gases. These gases are built up in the atmosphere thereby allowing solar energy to enter, but retain part of the heat that the earth emits back into space. It may be argued that the reasons that informed the understanding of "greenhouse effect" arose from the idea that it is comparable to that of a greenhouse where the glass roof allows light in, but retains heat for the purposes of plants growth. In a similar vein, it must be emphasized that the harmful effects of greenhouse gases emitted may be construed as a major contributor to the astronomical increased in temperature that impact on human living along with the habitat. Regrettably, greenhouse gas emissions take many years to manifest their warming effects and by the time the threat becomes obvious, it will be too late to take action See Deirdre Bannam *et al* "Local Perspectives on Climate Change, its Impacts and Adaptation: A Case Study of the Westfjords Region of Iceland," (2022)10 Climate, 11: 169.

The aggravated greenhouse effects contributed to the development in the normal temperatures that leads to "global warming"[23] which is sometimes used interchangeably with "climate change" even though "climatic change" refers to larger range of documented developments in climate change that includes global warming. According to Anthony Giddens,[24] sociologists query why the society continuously disregards the threats of climatic change. This query underlines the "Giddens Paradox" which seems to create an impression that several individuals are not bothered about the effects of climatic change especially when they are not directly affected.

3.1 NOTABLE FACTORS RESPONSIBLE FOR CLIMATE CHANGE

The major human and natural contributors to climatic change issues acknowledged by the United Nations[25] include:

3.1.1 Heat and Power Generation

Most global emissions were as a result of burnings fossils fuel in order to generates heat and power, while others arose from burnings of coal, oil, along with gas that later emits carbon dioxide along with nitrous oxide. These remained notable greenhouse gasses which covers the planet along with trapping solar radiations that produces electricity. Worldwide, solar and wind as sources of renewable energy, particularly provides a little above 25% of the electricity supply, and unlike fossil fuels, these sources releases tiny or no pollutants or greenhouse gases in the atmosphere. Thus far, emissions of gas from electricity power generations arising either from

[23] This kind of climatic change affects rainfall patterns, the frequency along with the distributions of meteorological events such heat waves, storms, floods, and droughts, amongst other aspects of the climate.

[24] A Giddens, 'The Politics of Climate Change' (2015) 43(2) Policy and Politics https://doi.org/10.1332/030557315X14290856538163.

[25] United Nations, 'Causes and Effects of Climate Change' https://www.un.org/en/climatechange/science/causes-effects-climate-change accessed 23 June 2024.

individuals or industrial sectors contribute to an increased level of CO2 used by trees.[26]

3.1.2 Production and Manufacturing of Goods

Thus far, the industrial and manufacturing sector remained notable contributors to greenhouse gas emissions. Emissions are generated from industrial and manufacturing processes arising from the burning of fossils fuel in order to produce energy use in producing plastics; electronics, textiles; iron & steel as well as cement. Also, the construction sector contributes to the released of gaseous materials, as well as mining industries.

3.1.3 Deforestation

Roughly twelve million hectares of forest are lost annually. When trees are felled for pastures, farming or other purposes, the carbon stored in them are released and cause emissions. The destructions of forests inhibit nature's capacity to check atmospheric emissions because of its absorptions of carbon dioxides. In this regard, the resultant effects of destructions of forest known to be a natural filters of carbon dioxides absorptions situated in the atmosphere arose from the conduct of man or from the emitted gaseous materials from the industrial activities are construes as contributory factors to the change in climatic conditions.[27] In general terms, issues of deforestation contributes to the discharged of large quantities of carbon conserved over the years, arising from the trees along with forest lands that later became a major threat to humanity and to the habitats.[28] Also, in as much as certain activities that are harmful to human race and to the habitat are universally condemned, it has been

[26] M Filonchyk and others, 'Greenhouse Gases Emissions and Global Climate Change: Examining the Influence of CO2, CH4, and N2O' (2024) 935 Science of The Total Environment https://DOI.org/10.1016/j.sitptenv.2024.173359.

[27] N Haghipour and Jean-Pierre Burg, 'Geomorphological Analysis of the Drainage System on the Growing Makrana Accretionary Wedge' (2014) 209(2) Geomorphology 111-132 https://doi.org/10.1016/j.geomorph.2013.11.030.

[28] D Ellison and others, 'Trees, Forests and Water: Cool Insights for a Hot World' (2017) 43 Global Environ Chan 51-61 https://doi.org/10.1016/j.gloenvcha.2017.01.002.

widely noted that several destructions on forest directly affect the Earth's temperature due to interactions between water and energy.[29]

3.3 Use of Old or Un-serviced Vehicles for Transportations or Personal Use

Fossil fuels powers majority of vehicles, machines, airplanes, ships and trucks giving rise to significant gas emissions; hence, the transportation sector accounts for nearly 25% of global carbon dioxide emissions. Unfortunately, this trend is not gaining significant reduction considering the large number of rickety and subserviced vehicles plying the roads in many rural communities and emitting carbon monoxide in form of black carbon particles resulting from burning of fossils fuel, especially from developing nations.[30]

3.4 Manufacturing of Food Products

While the world is faced with several challenges arising from climatic change along with certain developments in habitat, it must be emphasized that several emissions of gas from industrial sectors in the course of manufacturing processes are found to be a contributory factor that increased the global normal temperatures.[31] Emissions from carbon dioxide along with methane or other greenhouse gasses occurs in the food and beverage manufacturing, distributions and packaging sector. It suffices that food production plays a significant role in climate change.

3.5 Energy Supply to Residential Homes

Household and residential energy use and consumption account for almost half of global consumption. This source relies on oil, coal and natural gas for cooling and heating and therefore produces significant amounts of greenhouse gases emitted. Also, energy-related carbon dioxide

[29] See Inter-governmental Panel on Climate Change (IPAC) Report, 2020.

[30] See United States Global Climate Change Impacts in the United States, In Thomas R Karl and others (eds), *Global Climate Change Impacts in the United States* (CUP 2009).

[31] See IPCC, *Summary for Policy Makers on Climate Change, Impacts, Adaptation, and Vulnerability, Contributions of Working Group 11 -Fifth Assessment Report of the IPCC* (2014).

emissions from residential homes continue to increase as a result of use of electronic appliances such as air conditioners, lighting, heating, cooling, and allied devices.

3.6 Individual Activities

Large amount of the greenhouse gas emissions worldwide are also caused by private residences especially with respect to mobility, power usage, food intake, housing and waste disposal. Factors such laundry and clothing electronic equipments and plastics are also contributory thereto, hence it is said that the way we live impact the earth we live in.

4. CONCEPTUALIZING "LOCAL COMMUNITIES" IN ERA OF CLIMATE CHANGE

Inspite of the significance of global, districts along with local regulations aimed at curbing the menace of climatic change conditions, there are findings that local climate actions can build stronger legitimacy than global and national actions.[32] Elinor Ostram also argued that local actions on climate is dependent on the particular circumstances and opportunities available in a community that have the capability of dealing with the challenges of climatic change than stereotype international along with national approaches.[33] In addition, community engagement in climate action through local level initiatives encouraged local actors or practitioners in participating on decision-making, than that applicable at the national or global levels of engagement. The paper observed that Australia has engaged local practitioners in policy, planning and implementation of climate change actions which are considered as essential components of strengthening effective and inclusive climate mitigation and adaptation strategies.[34] Similarly, decisions negotiated and agreed collectively by the local community and local practitioners will have

[32] J Wiseman and others, 'Community Engagement and Climate Change: Learning from Recent Australian Experience' (2010) 2 IJCCSM 2 https://doi.org/10.1108/17568691011040399.

[33] E Ostram, 'A Polycentric Approach for Coping With Climate Change' (2009) 15 SSRN Electronic Jour 1 https://doi.org/10.2139/ssrn.1934353 accessed 23 June 2024.

[34] Ibid.

greater legitimacy than would occur when taken at the national or global levels. This approach naturally offers better and more reliable opportunities in making the responses to climate change as it directly connects to the rural dwellers everyday lives.[35] In this wise, it is necessary to respect the opinions of local stakeholders and to factor them in all decisions likely to affect them rather than over reliance or dependent on the views of scientists, government, agencies along with decision makers.[36] Moreover, local communities are usually the first to be impacted by the consequences of climatic change, this implies that their active involvement in any collaborative efforts and implementation of adaptation measures are therefore consequential.

These arguments underscore the need to listen to local practitioners or actors that makes up the inhabitants of the communities and rural governments when addressing climate change issues.[37] It is therefore plausible that United Nations Sustainable Development Goals (UNSDGs) 2030 clearly relied on the views of the local practitioners or actors in drafting or executing sustainable decisions along with procedures with the knowledge that they are individuals adversely impacted by climatic change.[38] Furthermore, when viewed through the lens of local knowledge system, it must be emphasized that the responses to the effects of climatic change on rural dwellers are predominantly local measures

[35] G Punzo and others, 'Assessing The Role of Perceived Values and Felt Responsibility on Pro-Environmental Behaviors: A Comparison Across Four EU Countries' (2019) 101 Env. Sc. and Pol. 311-322 https://doi.org/10.1016/j.envscj.2019.09.006.

[36] J Maldonado and others, 'Addressing the Challenges of Climate Driven Community-led Resettlement and Site Expansion: Knowledge Sharing, Storytelling, Learning, and Collaborative Coalition Building' (2021) 11 J. Environ. Stud. Sci 294-304 https://doi.org/10.1007/s13412-021-00695-0.

[37] L Tiratelli and others, *Communities Vs. Climate Change: The Power of Local Action* (New Local 2021) https://www.newlocal.org.uk accessed 23 June 2024.

[38] United Nations, 'Transforming Our World: The 2030 Agenda for Sustainable Development' (2015) A/RES/70/1 https://www.sustainabledevelopment.un.org/post2015/transformingourworld/publication accessed 23 June 2024.

drawn from the localities that are not adequate enough toaddress the challenges.[39]

4.1 Direct Effects of Climatic Change on Local Communities

It seems impossible to overstate how detrimental climate change is to everyone on the planet. Everyone on the planet is affected by the effects of climatic change. Literature revealed that environmental degradations in itself is not a new phenomenon to rural dwellers as the biological degenerative nature of the effects of climatic change presents several cases of seemingly insurmountable challenges which the paper will discuss below. The unprecedented rise in greenhouse emissions, and temperatures contributed to the catastrophes on the continent.[40] However, the underlisted are few of the impact of local communities around the globe..

4.1.1 Poverty

According to Duvell,[41] high poverty level in the undeveloped nations of the globe undermines resilience of local populations to climatic change challenges.[42] Climate change also causes floods, which has the power to uproot areas inhabited by people without means of maintaining secured and robust lifestyle, destroying homes and livelihoods and plunging people into extreme poverty. The inability of people to work outside their houses in extremely hot weather also contributes to poverty. This is further exacerbated by the reasons that these individuals lack access to adequate resources along with support systems.[43]

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[39] Victoria Reyes Garcia and others, 'Local Studies Provide a Global Perspective of the Impacts of Climate Change on Indigenous Peoples and Local Communities' (2024) 7 Sust. Eart. Rev 1 https://doi.org/10.1186/s42055-023-00063-6.

[40] D Davitti and Anca-Elena Ursu, 'Why Securitizing the Sahel Will Not Stop Migration' (Human Rights Centre FMU Policy Brief No.02/2018).

[41] F Duvell, *Transit Migration in Europe* (Amsterdam University Press 2014) 33-39.

[42] Ibid.

[43] United Nations, 'Causes and Effects of Climate Change' https://www.un.org/en/climatechange/science/causes-effects-climate-change accessed 20 June 2024.

4.1.2 Reduction of Food Security

In recent years, agricultural practices has experienced serious nature effects of high temperature which impacted adversely on those in the tropical regions. This suggests that some plants thrives well in extremely precise temperatures, and when those temperatures fluctuates, so does the production of the plants. Rising temperatures in North America, for instance, may cause a decrease in production of wheat and corn in the Midwest America, but an increase in Canada. For every degree Celsius that the global temperature rises, the productivity of rice, which is the main diet of about a third of the global population reduced by ten per cent.[44] Previously, climatic-related issues have been reduced by significant improvements in rice production along with rising fertiliser usage. However, it is anticipated that in near future there will be an increase in temperatures in Thailand, known as a major exporter of rice in the world, will result in a 25% reduction in production by 2050. Global population estimates predict that by 2050, developing nations will have added 3 billion people, meaning that in order to sustain present levels of food consumption, the producers of food in these nations needs to treble their supply of daily foods.

4.1.3 Rising Sea Levels

Climate change affects rising sea level. The rise in sea level increases the flood that flows from the high seas and adversely affects the regions surrounded by high seas such as the city of New York, which experts have said that by the year 2050, several regions in the coastal areas will be adversely affected by the menace of flood, and such will need protective walls as preventive measures from further damage by the flood.[45]

4.1.4 Heavy Downpours and Storms

The effects Climatic change arising from heavy down pours have resulted to several damages to the ecosystem as the specific variables responsible

[44] Climate Change, What is it? Understanding the Basic Facts About Global Warming .

[45] Ibid.

for the cause of precipitation remained unchanged.[46] Notably, these results to constant along with heavy flooding of the areas around the coastal regions. Moreso, as these heavy downpours become more common, infrastructures in flood-prone regions becomes overwhelmed, leading to increased in damage of properties and displacements of residents. In addition, increased flooding sometimes results to the contamination of water sources and heightened risk of waterborne diseases in affected communities.

4.1.5 Increased Droughts

Over the years, change in climatic conditions, drought and extended heat waves have remained a global phenomenon. The rate of temperature rise is exceedingly high, and this does not imply that it has affected the climatic conditions of the inhabitants of the coastal regions. In order words, some regions that were previously temperate and experienced frequent rainfall are becoming much drier and hotter, while hot, dry places gets hotter and drier. In this sense, it suggests that there is a shift in climate patterns causing disruptions to ecosystems and biodiversity.[47]

4.1.6 Hotter Temperatures

The whole ecology is negatively impacted by global warming. Numerous fish species have been observed to travel great distances in order to remain in waters that are the ideal temperature for them. Drier circumstances make it difficult for farmers in temperate zones to cultivate agricultural crops such as maize or wheat, as farm locations are threatened. As a result, food shortages may become more common as agricultural productivity decreases. Additionally, the increased frequency of severe atmospheric pressure increases the destructions of crops along with other infrastructures.[48]

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[46] Ibid.

[47] Ibid.

[48] Ibid.

5.1 NEED FOR A ROBUST REGULATORY REGIME ON CLIMATE CHANGE

Unarguably, climatic change remained a significant issue around the globe today. The consensus amongst scientists is that human activity is negatively affecting the world's climate systems, which will cause global warming. It is a widely acknowledged fact that individuals cannot solely bear the blame for or tackle the problem of climate change. It requires collective action from governments, corporations, and communities to implement environmentally-friendly practices along with guidelines capable of reducing the effects of climatic change conditions on rural dwellers. The paper maintained that as climate change remained a shift in the atmospheric conditions as well as other variables not caused by man attributed to either explicitly or implicitly as anthropogenic activities that affects natural state of atmospheric conditions, there is a compelling need to have a robust regulatory frameworks that will guarantee sustainable protection of lives and properties of the rural inhabitants, particularly those living in the coastal regions. This is known as climate change.[49] In summary, it is regarded as an extraordinary shift in the normal operations of the temperature in the atmosphere at an exceptional speed caused by discharged of gaseous materials known as greenhouse gases responsible for the generations of heat by the sun that has been accumulated over time in the atmospheres. This phenomenon has led to drastic developments in weather conditions, sea levels, along with ecosystems in the world today.[50]

Consequently, climate change is perceived as a worldwide concern that must be tackled as soon as possible because no part of the world is immune to its disastrous effects, hence, several international conventions have been put in place to investigate the dire challenges and effects of climate change with a view to addressing them. The harmful effects of climate change requires that the existing regulatory regimes needs to be overhauled, or where necessary enacts new legislations to compliment the existing ones. These laws will be measures designed to control or reduced

[49] United Nations Framework Convention on Climate Change, Article 1(2).

[50] DS Olawuyi, *The Principles of Nigerian Environmental Law* (Afe Babalola University 2013) 89 https://doi.org/10.21511/pnel.

the harmful effects of greenhouse gasses emitted, promotes renewable energy sources, along with protection of fragile ecosystems. Additionally, global agreements like the Paris Agreement which provided platforms for countries to fight the menace of climatic change conditions should be globally embraced. In light of the compelling need for a robust regulatory frameworks on climatic change, the underlisted global regulatory measures emerged as follows:

5.1.1 Stockholm Conference of 1972

The Stockholm Conference on Human Environment held from 5-16 June, 1972, in Stockholm, Sweden, laid foundations for global environmental policy. It was the first worldwide gathering dedicated to tackling global changes to the environment. This platform discussed needs for common understanding of the protection of habitat along with ideals in inspiring and informing the inhabitants of the world the need to conserve and improve on human habitat. Its introductory part thereof states that both man's man-made along with natural habitations remained crucial to his livelihood and to the preservation of his inalienable rights especially his right of living.[51] Its Principle 1 guarantees human rights of one's liberty, equality, and reasonable standards of living in a safe habitat that promotes dignity and well-being.

5.1.2 Brundtland Conference

In 1983, the UN organized Global Conference on Environment and Development chaired by the then Prime Minister of Norway, Mr Bro Harlem Brundtland. The Conference was made up of both rich and developing nations, and was tasked with addressing the escalating deterioration of human habitat along with natural endowments, and their implications for broad socioeconomic advancement.[52] The Commission sought to ensure development of long-term environmental sustainability through a combined and collective effort of all member nations. Within its

[51] Ibid.

[52] J Drexhage and D Murphy, 'Sustainable Development from Brundtland to Rio 2012' (Background Paper prepared for the High Level Panel on Global Sustainability, 19 September 2010).

first tenure, the Council releases report tagged "*Our Common Future*", that presented global assessment of the habitat and allied challenges. This report popularised the common understanding of sustainable development based on improvements made that satisfies requirements of the present generations, without endangering future generations.[53]

5.1.3 Vienna Convention

The Convention is specifically meant for the preservation of ozone layer established as an international pact for securing the environment. It was approved during the Vienna Conference in 1985, and it became operative in 1988. It provides a structure for global ozone layer protection initiatives. It does not, however, contain binding effects on the reductions in the use of chlorofluorocarbons known as primary chemical agent that caused depletions of the ozone layer. These are outlined in Montreal Protocol which goes along with it. The Vienna Convention focuses on cooperation and research aimed at addressing ozone layers depletions, while Montreal Protocol sets specific guidelines for gradually eliminating the use of ozone-depleting substances. Together, these agreements ensure that ozone layer is adequately protected along with mitigation of environmental damage.

5.1.4 Montreal Protocol

This Protocol arose from the Vienna Convention aimed at preventing substances that deplete ozone layer as life on earth should be protected from the sun's damaging ultraviolet (UV) radiations from the stratospheric ozone layer in the atmosphere. The first kind of this depletions occurred in the 1980s. It is this situations that informed the emergence of Montreal Protocol designed to preserve the ozone layer through placing bans on manufacturing of certain hazardous substances known to be contributory factor that caused depletions of the ozone layer.[54] Despite the lack of

[53] Ibid.

[54] It became operative on January 1, 1989, having been made available for signature on September 16, 1987. A special alignment clause in the Protocol enables Parties to respond promptly to new scientific findings and to agree to expedite any necessary reductions in the substances already covered by the Protocol. It has seen roughly six changes since it was first presented, all of which have been made to make sure the objective is met. Furthermore, the

progress in addressing global environmental issues, there is hope for the future with the projected restoration of the ozone layer by 2050. It then suggests that there is urgent needs for states to be more committed and work together to make real change. The success of the Montreal Protocol serves as a reminder that when nations come together for the greater good, significant environmental achievements can be made. It is crucial that the lessons learned from past conventions are applied to future agreements in ensuring an environmentally-friendly heavenly body.[55]

5.1.5 Basel Convention

In the 1980s, toxic and hazardous waste dumps were imported into most African and developing nations from overseas.[56] The public outcry which ensued resulted to Conference of Plenipotentiaries held in Basel, Switzerland that gave rise to the endorsement of the Protocol.[57] This Convention aimed at protecting human's lives along with the habitat from harmful effects of dangerous substances.[58] The Convention provides that it is unlawful to transport or traffic hazardous waste to other countries through an unlawful authorization, or in a way that leads to the illegal dumping of hazardous waste.[59] Therefore, it is contended that in as much as environmental restrictions have increased astronomically in the industrialized nations, while the production of wastes has increased

Protocol's parties convene once a year to make a range of decisions intended to facilitate the efficient execution of this significant legal document.

[55] J Speth, *Red Sky at Morning: America and the Crisis of the Global Environment* (2nd edn, Yale University Press 2004) 30.

[56] *Basel Convention* http://www.basel.int accessed 20 June 2024.

[57] *Basel Convention on the Control of the Transboundary Movements of Hazardous Wastes and their Disposals* (adopted 22 March 1989, entered into force 5 May 1992) UNER Doc IG.80/3 (1989) 28 ILM 657 (1989).

[58] DS Olawuyi, *The Principles of Nigerian Environmental Law* (Afe Babalola University 2013) 98.

[59] ibid 18.

geometrically,[60] the pressure increases with respect to disposal of wastes in under-developed nations. This suggests that states that exports such harmful substances should ensure that it is handled in such manner that it will not pose a threat to human lives and the habitat. That said, it must be emphasized that the essence of the convention amongst other goals is to reduced the extent of hazadous waste produced and encouraged its environmentally sound disposals. In this sense, wherever it may be disposed off, it must comply with sound management guidelines that prescribed procedures for such cross-border shipments and disposals.

5.1.6 1991 Bamako Convention

The Convention emerged as a result of the compelling need to restrict importations of harmful materials in the region of Africa as well as enacting legislations on trans-border movement of dangerous wastes materials in the region of Africa. In 1991, the convention was ratified, It was aimed at establishing guidelines for states on issues bordering on management of waste materials that are dangerous to human health, as well as restrictions on trans-border importations along with shipments of dangerous materials to other regions of the world. The Convention appears to be unique in the sense that it helps to prevent unnecessary dumping of harmful materials in the region of Africa by the western countries either by being dumped in the ocean or at the seabed, and to prevent those who produced hazardous waste products from escaping liability for pollution. The Bamako Convention has been crucial in protecting both the environment and the health of African communities. By establishing strict regulations and guidelines for the disposal of hazardous waste, it has helped to ensure that Africa is not taken advantage of as a dumping ground by more developed nations. Additionally, the Convention holds accountable those responsible for producing hazardous waste, leading to increased responsibility and sustainability practices in industries across the continent.[61]

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[60] DM Hackett, 'An Assessment of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposals' (1990) 5 *Am. U. J. Int Law & Pol* 291 https://doi.org/10.2307/2204021.

[61] NTN, http://www.ntn.org.au accessed 20 June 2024.

5.1.7 United Nations Framework Convention on Climate Change (UNFCCC)

This structure serves as pillar of global responses on issues of climatic change conditions. It was adopted in 1992. In light of its ultimate objective in ensuring stability in greenhouse gasses concentrated in the atmosphere in such a manner that will restrict harmful anthropogenic encounters with climatic systems, UNFCCC emerged as a robust regulatory framework capable of addressing the challenges.[62] Furthermore, as countries around the globe in 1995 realized that the Convention's carbon reductions requirements were insufficient, they initiated talks to fortify the global responses to climatic change which led to the establishment of Kyoto Protocol, two years after. Ecologically, issues of climate variations remained a complicated situation which affects every aspect of life on earth.

However, cutting emissions as a vital component of the responses to climatic change. As a result of this, governments decided in 2010 that lowering emissions was necessary in order to maintain global temperature at less than 2 °C.[63] Many countries have since implemented various strategies to reduce their carbon footprints through transitioning to renewable energy sources and promotions of energy efficiencies. Individuals can also take action in cutting emissions by bringing down the energy consumed, using public transportation, along with supporting environmental-friendly practices. Ultimately, collective action is essential in combating challenges of climatic change along with preserving planet for future generation.

From the foregoing, UNFCCC acknowledged the commonalities and differences existing amongst countries around the globe which also

[62] *United Nations Framework Convention on Climate Change* (1994) art 2.

[63] See UNFCCC, *First Steps to a Safer Future: Introducing the United Nations Framework Convention on Climate Change* http://unfccc.int/essential_background/convention/items/6036.php accessed 20 June 2024.

determines the amount of damages incurred from the effects of climatic change.[64]

5.1.8 Kyoto Protocol

The Protocol is a legally binding modification to the UNFCCC signed into law on February 16, 2005., It underlines the obligations of industrialized nations to mitigate the effects of global warming along with addressing unreasonable increase in temperature that has lasted for a cycle of 150 years of technological advances. This Treaty's primary characteristic aimed at setting up a legally binding objectives for greenhouse gasses emitted, requiring world's most developed nations to cut down the level of gasses emitted to at least 5% reductions in 1990 over the 2008 expected target.[65] In addition, Kyoto Protocol emerged in order to set a formidable basis for developed nations to reduce the volume of greenhouse gases emitted that increased the global warming, known as climatic change.[66] The Kyoto Protocol equally emphsises obligations to curb outflow of six main greenhouse gases arising from methane; carbon dioxide, nitrous oxide; hydro fluorocarbons along with hexafluoride.[67] This treaty is known for its flexibility, thereby allowing individual governments to adopt policies and reforms capable of addressing their specific environmental needs. More importantly, it established three market-based mechanism that will assist in reduction of costs which will lower emissions of gas. This mechanism is regarded as joint enforcement, and clean development measures, along with emissions trading.[68] The paper revealed that under the arrangement, an intending country can

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[64] M Hulme, *A Change in the Weather? Coming to Terms with Climate Change, Global Environmental Issues* (JW and Sons Ltd 2004) 21.

[65] UNFCCC, http:www.unfccc.int accessed 20 June 2024.

[66] S Jolly and V Bajaj, 'Clean Development Mechanism, International Legal Systems Response to Global Warming' (Conference Paper presented at the Thirty-Six Annual Conference, the Indian Society of International Law, 22-25 March 2007) 234-244.

[67] R McKitri, https://www.uoguelph.ca/rmckitri/research/kyoto-commentary.pdf accessed 22 June 2024.

[68] SL Patil, 'Normative Framework of Law Relating to Global Warming' (Conference Paper presented at ISIL, December 2007, New Delhi, India).

invest in any project of choice capable of curbing gasses emitted to other countries, where it seems to be affordable, and can acquire a resulting credit that will protect its own interests as the case may be.[69]

5.1.9 Copenhagen Accord

In light of global campaign to tackle climatic change which began in 2009 that is capable of reducing the gasses emitted around the globe, major emitters such as the US, Brazil, India and China have shown much commitments to all efforts made to reduced their emissions under the terms of the accord. Their actions complied with the calls for global evaluations of the existing guidelines along with policies of advanced and advancing nations on the need of addressing the challenges of climatic change conditions. Also, it is in compliance with Canada's long-standing belief that a global agreement involving all major emitters is necessary to make meaningful progress on climate change.[70] This is another global regulation designed to lessen the harmful effects of climatic change that emerged after Kyoto Protocol. The document recognized these challenges orchestrated by climatic change, and provides for proactive measures capable of maintaining an increase in temperature less than two degrees centigrade.[71] It is worth mentioning that Copenhagen came and went without any impact.

5.1.10 Durban Convention

This is another conference held in Durban, South Africa in 2011 (otherwise known as Durban Convention), and it remained a notable global response to climate change. Among the conclusions was the countries' determination to enact a global CC treaty immediately and not later than 2015. Following the outcome of the meeting, President

[69] A Kaur, 'Threat of Global Warming: Concern and Challenges' (Paper presented at the 5th International Conference on International Environmental Law, New Delhi, 8-9 December 2007).

[70] UNFCCC, http://www.unfccc.int/meetings/Durban_nov2011/meeting/6245.pht accessed 20 June 2024.

[71] OA Yusuf, 'The Legal Profession and Climate Change in Nigeria' (Paper presented at the Faculty of Law Workshop on Law and Climate Change, 2010) 9-10.

Mashabane declared that convention's accomplishments in Durban will be crucial to tomorrow's austerity.[72] The Conference also highlighted the importance of developed countries providing financial and technological support capable of helping undeveloped nations in mitigating and adjusting to the challenges posed by climatic change. The commitment marked a turning point in international cooperation on climate action.

5.1.11 Doha Conference

Doha Conference was held on 26th November to 26th December, 2012 in Doha, Qatar. The achievements made in the last three years in global deliberations on the climate were cemented by governments, providing the way for increased action and ambition at various levels. Among the decisions made were the governments' reaffirmation of intent and establishment of a deadline for the signing of a global agreement on issues of climatic change in 2015,with an implementation date of 2020. They have, among other things, achieved the establishment of the economic and technical supports as well as new frameworks aimed at providing investments in clean energy sustainability in developing countries. They also emphasise the need to ensure that their efforts at greenhouse gas reduction assist vulnerable countries.[73]

5.1.12 Rio Conference

This is another UN Conference on Sustainable Development hosted in Rio de Janeiro Brazil in 20-22 June, 2012. SDGs which replaced Millennium Development Goals (MDGs), was established as a result of the conference. The meeting also saw the elaboration of guidelines for green economy policy and the examination and adoption of the financing

[72] UNFCCC, http://www.unfccc.int/meetings/Durban_nov2011/meeting/6245.pht accessed 20 June 2024.

[73] UNFCCC, 'Doha Climate Change Conference — November 2012' https://unfccc.int/process-and-meetings/conferences/past-conferences/doha-climate-change-conference-november-2012/doha-climate-change-conferencenovember-2012 accessed 20 June 2024.

strategy for the suggested sustainable development.[74] The object of the Conference was to address global issues related to social inequalities, poverties and degradations of the habitat. It brought together leaders from around the world to discuss and commit to a more sustainable future for all. Participants highlighted the need for cooperation amongst governments, civil society organizations and businesses so as to accomplish the expected goals of the SDG. The event was a significant step towards creating a more equitable and sustainable world for current and future generations.

Laudably, Rio Conference was more or less a re-declaration of the guidelines provided in the Stockholm declaration, although with some notable changes. It provides that sustainable development should be the bedrock of all human economic activities, and however, defined Sustainable Development as "advancement which addresses human needs and challenges at any given time devoid of any compromise that will jeopardized the needs of the future generations".[75]

5.1.13 Paris Agreement

The Paris Agreement t has the force of law binding on members who are signatories to it. However, about 196 member States endorsed it in December 12, 2015, while in November 4, 2016 it became operative. With the emergence of this Agreement, nations are expected to be aware of the harmful consequences of greenhouse gas emissions, along with becoming carbon neutral at the middle of the century. However, this appears to be a remarkable agreement aims at keeping global warming at a minimum of 1.5 °C - 2 °C, existed before the industrial revolution.[76] Interestingly, Paris Agreement provided a platform for countries around the globe to undertake aggressive measures aimed at combating along with adapting to the change in climatic conditions that is destroying the entire planet.

[74] See UNCSD, 'Rio+20: Sustainable Development Knowledge Platform' https://sustainabledevelopment.un.org/rio20.html accessed 20 June 2024.

[75] See World Commission on the Environment and Development, *Our Common Future* (1987) 43.

[76] See UNFCCC, 'Paris Agreement' https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement accessed 20 June 2024.

Furthermore, it represents global efforts aimed at curbing the effects of climatic change along with setting precedent for future international cooperation on environmental issues. It demonstrates a collective commitment to protecting the planet for future generations.

These are a few of the international accords that various countries have implemented in an effort to counteract the threats of climatic change. As we are faced with the threats of climatic change, its repercussions remained severe. Everyone needs to put in more efforts in order to curb the menace of climatic threatening the global community.

6.1 ENFORCEMENT CONSTRAINTS OF THE REGULATORY FRAMEWORKS ON CLIMATE CHANGE ON LOCAL COMMUNITIES

6.1.1 Knowledge gaps about climate change and limited institutional capability are regarded as significant barriers

Knowledge gaps about climate change and limited institutional capability are regarded as significant barriers. It is so because, without adequate knowledge of climate change along with its effects on human, it becomes difficult for local communities to develop and implement effective strategies for mitigating and adapting to its resultant effects.

6.1.2 Non-Identification of Particular Capacity Needs and the Execution of Capacity Building Initiatives for Various Actor Groups

The lack of targeted capacity building initiatives has resulted in a lack of understanding and awareness of climate change regulations among local communities. Without the necessary knowledge and skills, it is difficult for these actor groups to effectively enforce the regulatory framework on climate change. As a result, many local communities are unable to fully comply with the regulations and contribute to climate change mitigation. Furthermore, it is essential to create awareness about climate change adaptation by offering pertinent and user-friendly information products that properly address the needs of various users.

6.1.3 Inability of Laws Addressing Climate Change to Prioritise Social Inclusion

Attempts to adapt to and build resilience to climatic change may be severely hampered by a failure to distinguish clearly between how different social groupings are impacted by it. Communities across the globe must go beyond the gender binary and towards gender and social inclusion in order to effectively adapt to along with building resilience to the impacts of climatic change. This entails integrating all of the various social groups into the mainstream process and making their demands a priority.

6.1.4 The latest strategies and plans addressing climate change lack a workable financing strategy, which has an impact on donor funding pledges:

In addition to attracting and securing more funds, the establishment of a climate change financial structure that fully specifies defined budget costs and projected sources of funding is essential since it will guarantee the implementation of adaption plans. Currently, plans are being created to build a international climate change finance structure.

6.1.5 Donor-Driven Money is a Major Source of Funding for Climate Change Initiatives

There is still lack of finances to carry out climate change action plans. Local communities will need to keep obtaining additional financial supports from the international community, from public money in their different national budget, the business sector, and voluntary organisations, in order to strengthen its plans for implementing climate change. To guarantee that funding for various climate change projects is made available on time, government's proposed International Climate Change Fund should be operationalized.

6.1.6 Weak Institutional Coordination Stymies Climate Change Adaptation Plans:

Strengthening institutional coordination, such as integrating sectoral objectives logically and better coordinating climate change initiatives at

both local and national levels, can help to guarantee that climate change actions are executed effectively.

7.1 SOME UNDERLYING PRINCIPLES OF CLIMATE CHANGE

In this section, the paper examined some of the fundamental principles aimed at mitigating the harmful effects of climatic change on individuals either in the local communities or urban areas These principles of international law encouraged state parties to recognized, protect, and assist people, mostly in the local communities or urban areas, who are faced with the harmful effects of climatic change. Also, this principle tends to balance the development needs with environmental protection embodied in SDGs. In light of the lukewarm attitudes of states to the effects of climatic change on individuals, the treaties and conventions provided in international law have developed bodies of principles such as principles of Trusteeship derived from several spheres of Law of Nations that includes State responsibilities, human rights, laws on habitat ; industrial and economic law; territorial sovereignty; equity; good neighborliness and abuse of rights.[77]

The principles of Inter-generational equity provide for the integration of environmental concerns with development strategies.,[78] While other notable principles, especially in the context of environment includes the principles of good neighborliness along with global cooperation; the principles of preventive actions; the principles of precautionary, along with the polluters pays principle. It must be emphasized that amongst the above principles, the principle of integration is regarded as the strongest in its legal pedigree.[79] Despite the attractive nature of this guidelines, the principles of common, but differentiated responsibility remained more vital to developing countries with respect to the applications of

[77] N Schrijver, *Sovereignty Over National Resources: Balancing Rights and Duties* (CUP 2009) https://doi.org/10.1017/CBO9780511560118.

[78] P Sands, 'International Law in the Field of Sustainable Development' (1994) 65(1) *BYIL* 303-381 https://doi.org/10.1093/bybil/65.1.303.

[79] Ibid.

environmental standards, along with its concerns about socio-economic and other related situations of any country.[80]

8.1 . CONCLUSION AND RECOMMENDATIONS

Without doubt, the entire globe has been impacted by climate change, and will continue to be impacted until nations take the problem seriously. As a result, a notable problem faced by the world today is climate change, which is a proven reality and has been examined in this article. It is an environmental phenomenon that is closely related to the generation and consumption of energy. If greenhouse gas emissions are cut as agreed upon, climate change will vanish from the face of the earth, and nations will have normal weather. However, if the world continue on the current path of neglect and pollution, the consequences will continue to worsen. Within the context of climatic change along with the corresponding impact on local communities, it is our contention that despite the several treaties and principles in place, local communities have continued to be racked with pains arising from catastrophic effects of climatic change. Essentially, the authors have identified notable challenges confronting local communities that arose from the harmful effects of climatic change. Some of these challenges stems from weak enforcement mechanisms, political factors, and lack of recognition of the existence of the local dwellers. Based on the foregoing conclusion, it is certainly timely and expedients for the countries of the world to recognize the harmful impact of climatic change on rural dwellers. Armed with this knowledge, the legal frameworks and principles aimed at regulating climate change should be reviewed to reflect the whole essence of the regulatory frameworks that guarantees safety and security of the local communities.

It is thus suggested that the laws on climate change existing in different countries should not be regarded as same, as other environmental regulations have been rendered ineffective due to non-compliance with the laws. To guarantee that many nations adhere to the regulatory requirements, sufficient oversight of the legislations is necessary. Violators of the regulations should be made to face legal

[80] Asif H Qureshi, International Economic Law (Sweet & Maxwell 1999) 341-342.

consequences for their respective actions. States have an urgent need to comply with the international accords they have signed. Without proper enforcement and consequences for violations, these laws will not have the intended impact on the reduction of greenhouse gasses emitted along with reductions in the harmful effects of climatic change on local communities, and the world at large. It is imperative that all countries work together to ensure that these laws are not only implemented, but also upheld. By holding nations accountable for their actions, then the world can achieve the primary objective of Sustainable Development Goals (SDG) 13 of 2015 that strived towards a sustainable and environmentally-friendly future.