

THE THIN LINE BETWEEN CLIMATE CHANGE BELIEVERS, CLIMATE CHANGE SCEPTICS AND CLIMATE CHANGE DISMISSIVES

Yusuf Maina-Bukar¹

*Desert Research, Monitoring and Control Centre (DRMCC),
Yobe State University, Damaturu, Nigeria*

Abubakar Ahmed Jajere²

*Department of Geography,
Federal University Kashere, Gombe, Nigeria*

Modibbo Babagana-Kyari³

*Department of Geography,
Yobe State University, Damaturu, Nigeria*

ABSTRACT: *This paper intends to reveal how the residents and professionals in Yobe State, Nigeria truly feel about climate change as a result of skeletal commitment by policy makers and suppression of ideas by administrators officially dedicated to its cause. A sample of the population that consists of academics, clerics, environmental enthusiasts, farmers, forest rangers, policy makers, traditional title-holders, women and youth groups were purposively selected and administered 450 structured questionnaires. Subsequently, correlation of the 'Respondent Category' and their 'Educational Level', frequencies, charts, correlation coefficient and QQ Plots were generated using the Statistical Package for the Social Sciences (SPSS) to emphasise on their perceptions. Key Informant Interview (KII) was also conducted with notable scholars and clerics on prohibitions of cutting down of trees, and encouragement for their planting. It was found out that; majority of the respondents have heard about climate change, understood its concept, believe their environment is changing and knew what is causing it. Although, more than half of them have not heard about the Conference of Parties (COP) annual meetings, the other half are nonetheless sceptical about the outcome of the meetings. They do not believe climate change is a propaganda tool, or whether the treaties and agreements are meant to slow the development of third world countries. Nevertheless, half of the respondents do not consider themselves as sceptics, the majority view themselves as believers. The findings of this research could serve as a subtle reminder to policy makers and administrators that; unless they come to terms with their beliefs about climate change, most policies formulated and programmes initiated could end up becoming a "white elephant" project, a subject that could only please the naysayers. It is the first research that categorised the residents of the study area based on their beliefs and scepticism of climate change.*

KEYWORDS: climate-change believers, climate-change dismissive, climate-change sceptics, climate change, Yobe State

INTRODUCTION

Public opinion polling on the issue of climate change and beliefs is held regularly, and results from such surveys are said to be useful in providing a snapshot of the level of agreement and support to climate related questions and issues from a given population (Milfont et al. 2017, p. 2). Moreover, there is a growing sense that religion has a vital role to play in shaping our responses to climate change (Hulme 2017, p. 14). Religion is practiced strongly in Yobe State and has a direct connection with the way of lives of most residents. Although the study by Sachdeva (2016) defined how several forms of eco-theological relationships can take place across the many religions around the world, for example religions based in Judeo-Christian theology, to religions such as Hinduism and Buddhism (Sachdeva 2016, p. 2), our emphasis and interest in this study is in knowing how the respondents at the study area whose lives are mostly guided by their religious doctrines personally feel about climate change.

Climate-change 'believers' are said to be those whose views align with those of the scientific community, while climate-change 'sceptics' are said to be those whose views are in disagreement with those of the scientific community (Bliuc et al. 2015, p. 226). The concepts climate change scepticism and climate change sceptic are in wide use and refer to a fairly consistent family of arguments and pool of individuals that reject, dispute, or question the mainstream/orthodox thesis that the global climate is changing primarily due to human activities and that these changes will affect severely both ecosystems and human populations if left unarrested (Van Rensburg 2015, p. 1).

According to Anthony Leiserowitz, PhD, the director of Yale University's Project on Climate Change Communication, when he was asked; "why have we - as individuals and as a society - generally failed to reduce our greenhouse gas emissions in the face of such serious consequences?" He relied by saying; it's because "you really couldn't design a worse fit for our underlying psychology" than climate change. He described the "dismissive," [as those] who are certain that global warming is not happening and may think it's a hoax." (Winerman, 2014). Additionally, Katharine Hayhoe argued that calling people deniers is "a good way to end the conversation," and that it's actually more accurate to use the word "climate dismissive." (Atkin, 2017).

METHODOLOGY

A sample of the population that consists of academics, clerics, environmental enthusiasts, farmers, forest rangers, policy makers, traditional title-holders, women and youth groups were randomly selected and administered 450 structured questionnaires. Out of the ones that were returned, 403 were valid, while 47 were invalid. Subsequently, correlation of the 'Respondent Category' and their 'Educational Level', frequencies, charts, correlation coefficient and QQ Plots were generated using the Statistical Package for the Social Sciences (SPSS) to emphasise on their perceptions. QQ plots are said to be an easy-to-visualize representation of the relationship between any two distributions (Andersen and Dennison 2018, p. 4). Also, purposive sampling is often

used when a diverse sample is necessary, and sometimes when the opinion of experts in a particular field is the topic of interest (Martínez-Mesa et al. 2016, p. 328). Additionally, KII has been conducted particularly in order to get deep information (Kidemu et al. 2020, p. 44). Hence, the justification for the involvement of notable scholars and clerics who were interviewed specifically on the prohibitions of cutting down of trees and encouragement for their planting. This was done due to the fact that trees have a great role to play because; ongoing climate change has already generated heat waves, droughts and precipitation events of unprecedented intensity and frequency (Hansen, Sato, & Ruedy, 2012) in (Sáenz-Romero et al. 2016, p. 304). The interview was also conducted so as to understand the psyche of those who indiscriminately cut down trees, and the society that once-in-a-while advocate for their planting.

Figure 1 depicts how the authors used the information deduced from the questionnaire to arrive at the categorisation, that is, from the two questions that sealed their views.

They are:

- Do you consider yourself as a climate change sceptic? and
- Do you consider yourself as a climate change believer?

FINDINGS/RESULTS

Respondent Category		
	Frequency	Percent (%)
Outright Believers (OB-1)	152	37.7
Partial Believers (PB-2)	170	42.2
Sceptics (SC-3)	29	7.2
Dismissives (CD-4)	52	12.9
Total	403	100.0

Categorisation Based On the Respondents' Perception of Climate Change

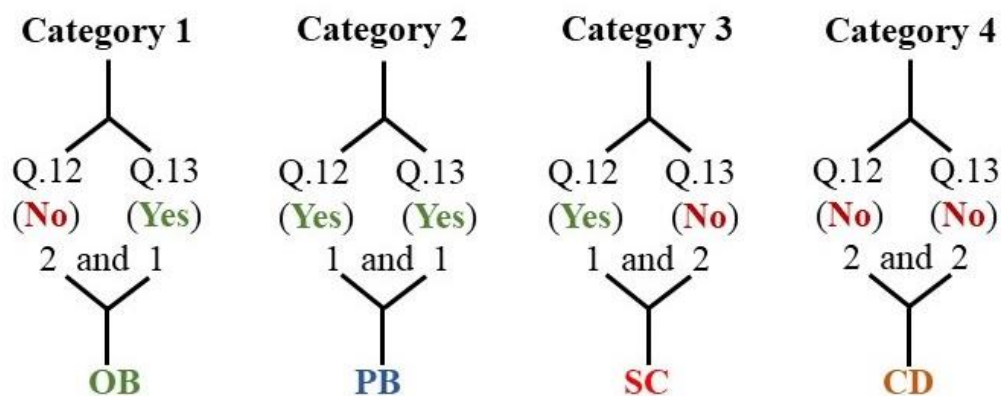
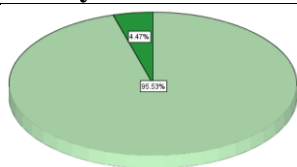


Figure 1: An illustration depicting categorisation based on the respondents' perception of climate change

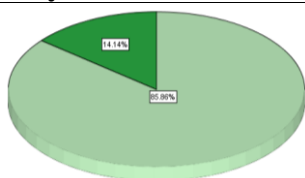
Respondent Educational Level			
Code	Qualification	Frequency	Percent (%)
1	None	2	.5
2	Not Provided	24	6.0
3	Primary	4	1.0
4	O Level	79	19.6
5	Diploma/NCE	82	20.3
6	HND	26	6.5
7	1 st Degree	152	37.7
8	Master's Degree	29	7.2
9	Ph.D.	4	1.0
10	Informal Education	1	.2
	Total	403	100.0

Have you heard about climate change?



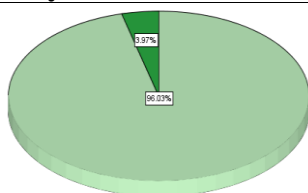
95.53% of the respondents have indicated that 'Yes' they have heard about climate change. While 4.47% showed that they have 'No' knowledge of it.

Do you understand the concept of climate change?



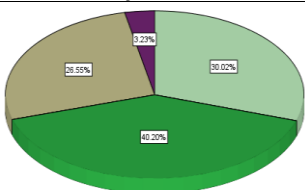
85.86% of the respondents have understood the concept of climate change by choosing 'Yes', while 14.14% believe otherwise by choosing 'No'.

Do you believe that the climate of your environment is changing?



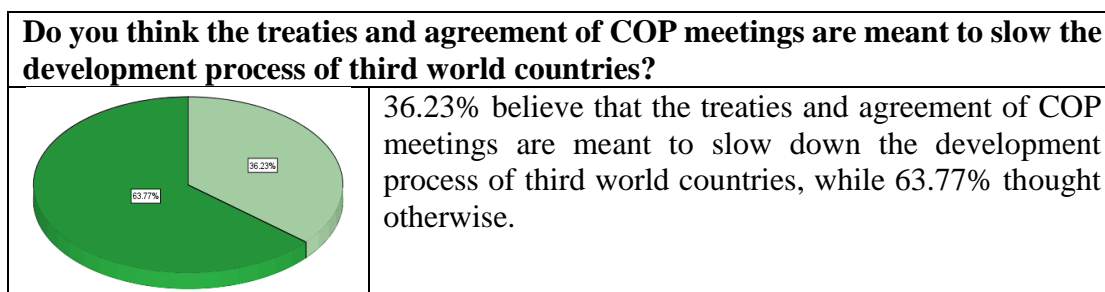
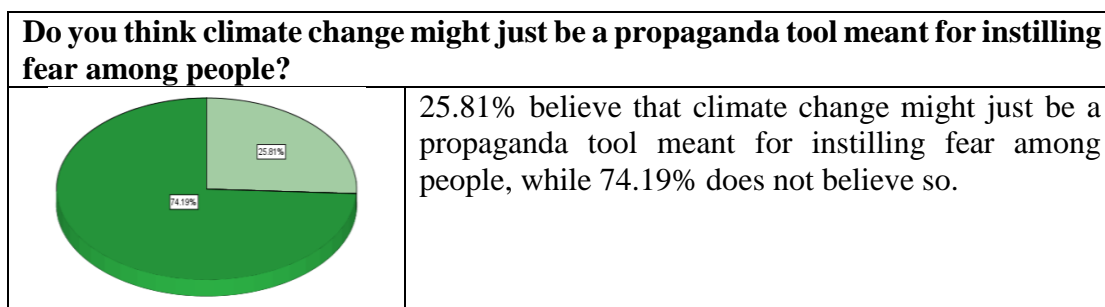
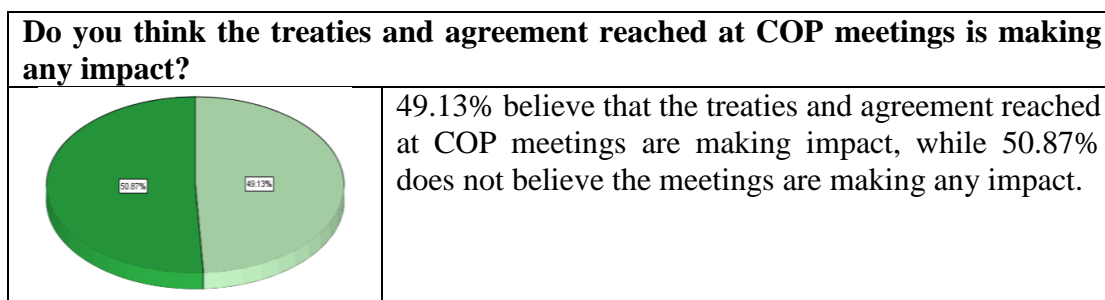
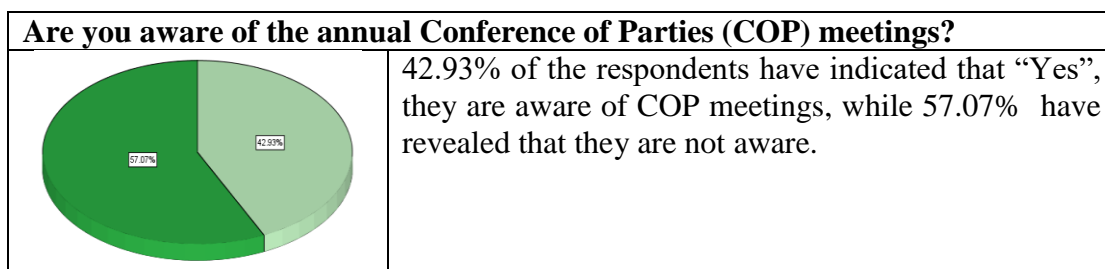
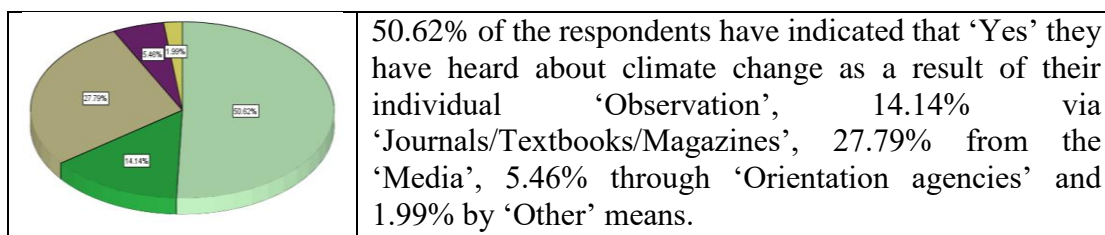
96.03% believe that the climate of their environment is changing, while 3.97% do not.

What do you think are the causes of the change?

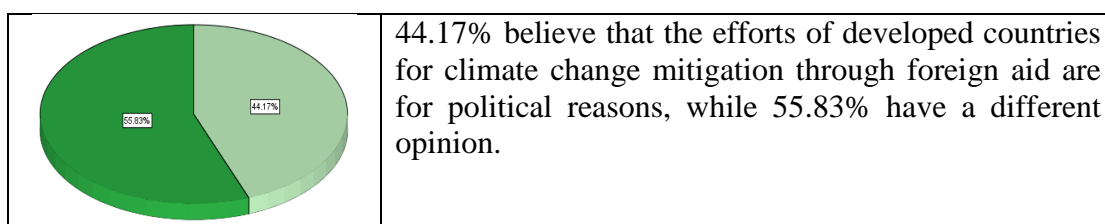


30.02% of the respondents believe that; the 'changes' that occur as a result of climate change is as a result of 'Population increase', 40.20% believed that it is an 'Act of God', 26.55% cited 'Land use change and practice', while 3.23% of the respondents chose 'Other'.

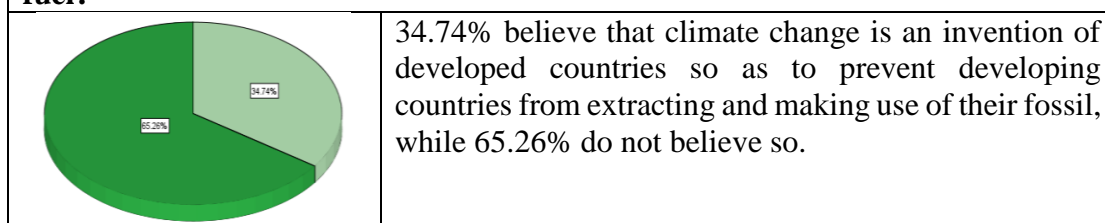
Have you noticed the changing climate through the following medium:



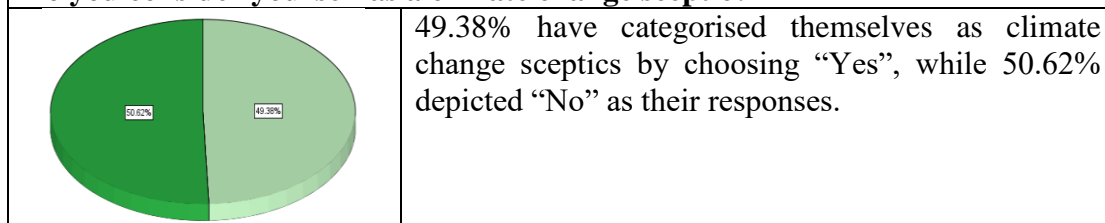
<p>Do you think that the efforts of developed countries for climate change mitigation through foreign aid are for political reasons?</p>



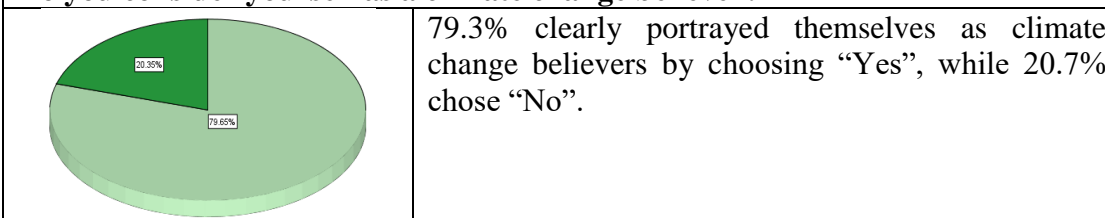
Do you think climate change is an invention of developed countries so as to prevent developing countries from extracting and making use of their fossil fuel?



Do you consider yourself as a climate change sceptic?



Do you consider yourself as a climate change believer?



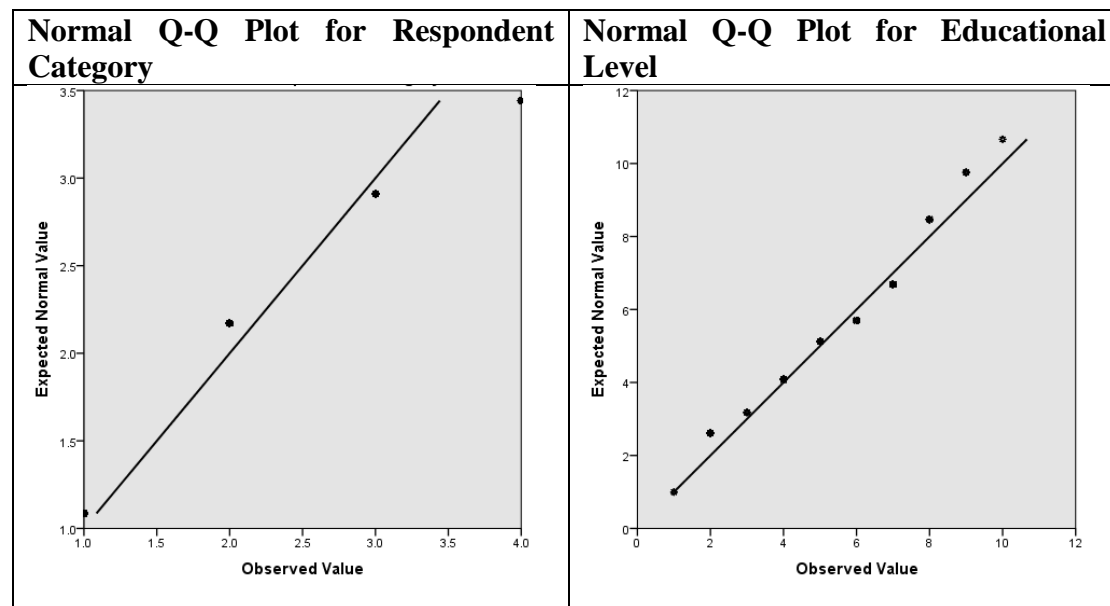
Correlations

		Respondent Category	Educational Level
Respondent Category	Pearson Correlation	1	-.065
	Sig. (2-tailed)		.194
	N	403	403
Educational Level	Pearson Correlation	-.065	1
	Sig. (2-tailed)	.194	
	N	403	403

QQ Plot**Estimated Distribution Parameters**

		Respondent Category	Educational Level
Normal Distribution	Location	1.95	5.67
	Scale	.983	1.688

The cases are unweighted.



KII with notable scholars and clerics on prohibitions of cutting down of trees, and encouragement for its planting

The interview was conducted primarily so as to hear from respected and well followed scholars widely known at the study area. This was done so as understand why a particular hadith is always cited as an excuse by a would-be offender or culprit involved in environmental degradation, whose action will subsequently lead to an increase of the impact of emerging climate change risks.

The saying is: *“It is better for one of you taking his rope and loading upon his back a bunch of woods, bringing and selling them than begging”* as reported by Imam Al-Bukhari in his Sahih Bukhari, Book of Trading:5.

The first response according to an avid follower of the Sufi sect was: “he has no objection because it is a divine injunction. Because it deals with Quran and Hadith. And no any reasonable Muslim will oppose prophetic tradition. There are some odd jobs that are expected to be done as a last resort instead of begging. [An] example [is] cutting down of Trees”

The second response according to a prominent member of the Sunni sect was: “the saying does not directly encourage people to go and cut down trees, or recklessly go after trees as some may wrongly perceive it. However, the ‘saying’ was said by the

prophet when he was warning people about the danger of begging as Islam always encourages self-reliance. The ‘sourcing and selling of woods’ in the above hadith was given by the prophet as a last resort of what a person can do to earn a living than to beg people for no cause as rightly reported in the prophetic saying, and this is apparently the contextual meaning of the saying. The prophet’s wisdom behind the saying was that; sourcing and selling of [fuel] wood in the olden times has lucrative value and it does not require any capital and expertise to start with as a means of livelihoods. The saying does not in any way encourage people to go after trees and shrubs. Islam to a very large [extent] encourages people to plant and preserve trees, and this could be understood in many teachings and sayings of the prophet”

The third response according to a follower of the Shi’i sect was: “The hadith was recorded when a notable person went to the Prophet to beg. He told him that: it is better to protect one’s integrity than to beg, even if it means cutting down a tree in order to sell. That does not mean that the hadith is advising people to cut down trees. Even though God will forever sustain the earth and the entire ecosystem despite man’s consumption habit and environmental degradation”

All the three renowned scholars and Ulama (Clerics) agree with the hadiths listed below that encourages planting of trees and the reward that would be earned as a result:

“Planting Trees serves as: sadaqatil jari’a, that is, deeds and actions that will earn a person a reward in the hereafter.”

“Reward will be earned by any person who has planted a Tree, upon its use as a shade by a passer-by, birds or animals.”

“The prohibition of Cutting down of Trees at conquered territories and during pilgrimage”

DISCUSSION

People are quite aware and have heard about climate change; and understood its concept; as justified by the study of Kabir et al. (2016) which also revealed that knowledge of climate change is a necessary precursor for people to adapt appropriately. That is, the basic understanding of public perception on vulnerability, attitude and the risk in relation to climate change will provide strategic directions for government policy, adaptation strategies and development of community-based guidelines. Because, people who experience extreme weather occurrences such as storms or flooding are 50% more likely to suffer from mental health problems, including stress and depression, for years afterwards as described further by Taylor and Murray (2020). The study by Iniguez-Gallardo et al. (2020) has also shown that for decades, researchers have worried about people's understanding of climate change.

Respondents have also evidently shown their agreement and believe that the climate of their environment is changing; and have heard and learned about it through observation,

read it in journals/textbooks/magazines, watched and listened to it via media outlets and orientation agencies. Nonetheless, despite the growing scientific consensus about the risks of climate change, the mass media frequently portray the subject as one of great scientific controversy and debate. And yet previous studies of the mass public's subjective assessments of the risks of climate change have not sufficiently examined public informedness, and public confidence in climate scientists (Kellstedt et al., 2008).

In addition, population increase; act of God; land use change and practice; and other reasons were indicated by the respondents as the causes climate change. Similarly, the study by Tvinnereim et al. (2017) has raised the concern that; given the increasing public acknowledgement that climate change is happening, a natural next step is to look more closely at public opinion on response measures such as adaptation and mitigation. As this issue is complicated technically as well as politically, it is inherently interesting to examine which aspects of the debate citizens internalize and make their own.

Furthermore, awareness of the annual COP meetings; whether they think the treaties and agreement reached at the meetings are making any impact; whether they think climate change might just be a propaganda tool meant for instilling fear among people; and whether they think the treaties and agreement of the meetings are meant to slow the development process of third world countries has been depicted clearly by the respondents in this study. The United Nations Framework Convention on Climate Change (UNFCCC's) COPs constitute an arena which attracts both negotiators and "observers" such as intergovernmental organizations and a range of non-state actors including Environmental Non-Governmental Organizations (ENGOS), business and industry, local authorities, research organizations, indigenous people as clarified by Buhr et al. (2014). It has also been described by prominent scholars that, after entry into force of the UNFCCC in 1994, the first COP, that is, its authoritative body made up of all parties to the UNFCCC, and where decisions and new agreements are adopted, met for the first time in 1995. Furthermore, in its first decision, which is the Berlin Mandate, parties to the COP agreed that Annex I countries (industrialized countries) should take the first step in reducing Green House Gases (GHGs), with non-Annex I (developing) countries following suit at a later stage (Kuyper et al., 2018).

Myers (2014) reveals that; adequate ethical reform for an issue like climate change requires a lifeworld shift in values and perception that will compel us to own up to the various adaptation and mitigation efforts demanded by this issue in genuine ways. That, if positive visions for the future end up softening the implications of climate change to a certain extent, they could undermine the need to reform lifeworld sensibilities and norms in more responsible directions (Myers 2014, p. 68).

As previously explained, most residents at the study area are strongly inclined towards their religious and cultural practices, that is, a strict adherence to their scriptures and religion which has a vital role to play with their way of lives. This has also been elucidated by a prominent scholar who explained that; In several places, the Quran mentions that Muslims must look after the environment and not to damage it. The Quran reminds Muslims to regard nature as the property of God and gift from him. Therefore, according to the Quran, a true believer must promote from a personal level preservation

of natural resource including water, seas, air, climate etc., and refrain from acts that damage the eco-system (Duh 2016, p. 5). It has also been revealed by a prominent climate change scientist and evangelical Christian that; her religion inspires her interest in climate change, and find the idea of protecting God's planet to be an effective enclosing when speaking to religious groups. The scientist enlightens further by saying that; "As Christians, we believe that we have been given responsibility over every little thing on this planet, and we believe we are to care for people who are less fortunate than ourselves." (Goldhill, 2019).

The study by Harter et al. (2018) asked some questions: Does it matter what causes climate change or whether or not people subscribe to the notion that the climate is changing? They went further to explain that; it matters in the sense that people are engaged actively in managing their land and forests, and that people are preparing for a hotter, drier future. It also matters because climate change is an issue that no one person can address alone. By accepting that the climate is changing, more and more people can be involved, and new knowledge, skills, and social networks can be leveraged to promote collaborative, cross-ownership management. On the other hand, if people do not believe that people are the cause of climate change, do they believe there is nothing that can be done? (Harter et al. 2018, p. 61). Spiritual leaders at all levels are critical to the success of the global solidarity for an ethical, moral and spiritual commitment to protect the environment and God's creation. These leaders can become observers, make public commitments, share the story of their commitments and the challenges and joys of keeping them, and invite others to join them. In addition, they can display their sustainable behaviours, serving as role models for their followers and the public (UNEP, 2020).

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