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Factors that Underscore the Strength of Religious Organisations to Boost the Fight Against Climate Change

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Climate change or global warming is rapidly threatening human survival, which makes addressing climate change a moral issue. UN Secretary-General Antonio Guterres cautions that there are currently more frequent, deadly, and destructive climate-related natural disasters that are causing more human and financial losses. The UN Secretary-General has attributed this scenario to negative human behaviour and completely inadequate efforts by the international community to reverse the current trend of carbon emissions. Using largely secondary data, this study has explored factors that underscore the relevance or power of world religious organisations to influence public policy reforms and boost positive behaviour for a successful transition to carbon neutrality by 2050. These factors include (1) a high number of their followers; (2) ecological principles of the world religions; (3) galvanising power, penetrating and holistic analysis of events, (4) the ability to educate and create awareness on significant issues like the need to drastically cut carbon emission (i.e., climate change sensitive lifestyles or responsible consumption of natural resources), and (5) leverage the 4 factors mentioned above to mobilise financial resources to support activities (e.g., subsidies) toward carbon neutrality, especially in the poor developing countries; thereby influencing effective public policy reforms and political will toward climate change action. In conclusion, this study strongly calls for the active engagement of world religious organisations (as key stakeholders) to work seriously for a successful transition to carbon neutrality by 2050.

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INTRODUCTION

As climate change is rapidly threatening human survival, which makes efforts to address climate change a moral issue. According to the United Nations (UN) Secretary-General Antonio Guterres, there are currently more frequent, deadly, and destructive climate-related natural disasters that are causing more human and financial losses. This scenario is attributed largely to negative human behaviour (which Antonio Guterres described as a *war against nature*) and completely inadequate efforts by the international community to reverse the current trend of carbon emissions (UNFCCC, 2019). The primary objectives of the world religious organisations are to ensure not only the spiritual enrichment of the people but also to protect human life, promote quality of life, particularly in the most vulnerable societies, and instil self-discipline in using ecosystems or natural resources. The ever-increasing carbon emissions leading to climate change poses a dire threat to achieving these objectives.

Making reference to the UN's Intergovernmental Panel on Climate Change (IPCC), UN Secretary-General Antonio Guterres urged member countries to keep temperature rise within 1.5 degrees Celsius by working assiduously to reduce carbon emissions by 45% from 2010 levels by 2030, which would facilitate reaching carbon neutrality by 2050 (UNFCCC, 2019). Deforestation is continuing at an

alarming rate, which worsens the CO₂ situation. Incidentally, in its sustainable development goal (SDG), 15 UN urged member countries to manage forest resources sustainably, tackle desertification, and halt biodiversity loss, among others. However, many studies (Albers and Robinson 2013; Pfaff et al., 2013; Corbera and Schroeder, 2011) have outlined many challenges confronting the United Nations Framework Conference on Climate Change's (UNFCCC) initiative to address deforestation (i.e., the REED+ initiative (Reducing Emissions from Deforestation and Degradation).

It is against this backdrop that Antonio Guterres asked member countries for a "demonstration of increased ambition and commitment showing accountability, responsibility and leadership" as they met in Madrid for the Chile Conference of Parties (COP) 25 (UNFCCC, 2019). Consistent with SDG 13, which emphasised the urgent need for global partnership to tackle climate change and its impacts, this study explored factors that underscore the power of world religious organisations (as significant global partners) to influence public policy reforms and boost positive behaviour toward achieving carbon neutrality by 2050.

The Moral Basis for Transition to Carbon Neutrality

Global warming or climate change is a reality which has serious repercussions. Erratic climate

conditions threaten livelihoods and raise human security concerns. It is true that the level of carbon dioxide has recently increased astronomically. It is also a fact that humans and ecosystems are inextricably linked. This article argues that virtually all the essential resources for human survival (e.g., air, water, food, shelter, clothing, etc.) emanate from the natural environment. If human survival depends so much on environmental or natural resources, then it is an ethical duty of humans to maintain and enhance the ability of the ecosystems to continually support livelihoods for both current and future generations. Therefore, Nelson and Vucetich (2012) argued that the “ethical dimension of sustainability is inescapable though under-treated”.

Therefore, strategies designed to address climate change (i.e., to enhance the resilience of the ecosystems to support livelihoods, especially for vulnerable people, and to mitigate human-induced causes of climate change or reduce carbon emissions) should incorporate ethics or what ought to be. For example, the former Prime Minister of Australia, Kevin Rudd, argued that the climate crisis is ‘the greatest moral challenge of our time’. ‘What we do today about climate change has consequences that will last a century or more... We are ... making choices today that will affect our own lives, but even more so the lives of our children and grandchildren (UNDP, 2007). Former US Vice President Al Gore once remarked in US Congress that climate change was a planetary emergency. A crisis that threatened the survival of our civilisation and the earth as our habitat (Nagle, 2008). For God’s sake, let us address the global climate crisis (Krznaric, 2007).

Incidentally, religion is a primary source of ethics, morality, and what ought to be. Religion nurtures and sustains spirituality—which is explained as the ability of an individual to practice the principles of his/her religion in a way that guides and enhances his/her development toward holiness, insight, and a *responsible lifestyle* (Ferguson, 2010) (italics are used in this current study for emphasis). Finucane

(2009) pointed out that one of the effective approaches to address climate change was for policymakers to work not only with scientists but also with other stakeholders such as “cultural leaders, theologians, philosophers, and community groups”. Adopting this approach can bridge the gap between climate change science and the general society, thereby bolstering practices toward carbon neutrality.

MATERIALS AND METHODS

This study is typically qualitative in design and used largely secondary data gleaned from documents of the 17th Conference of the Parties to the United Nations Framework Convention on Climate Change held in Durban in December 2011 and the compilation of faith-based declarations on climate change by Whitney & Whitney (2012). These sources, by far contained significant religious documents on climate change. The study used the documents of 22 religious organisations and denominations

Firstly, the author used an intuitive technique in this study to determine factors or characteristics of the world religious organisations that can enhance global efforts to mitigate carbon emissions. Intuitive inquiry refers to a “hermeneutical research method that joins intuition to intellectual precision” (Anderson, 2004). Secondly, the author used content analysis which is generally divided into conceptual and relational analyses (Busch et al., 2012). (i) In the conceptual analysis, the author looked for the presence and frequency of anthropogenic activities mentioned in the religious documents, and (ii) in the relational analysis, the author examined the extent to which each anthropogenic activity is emphasised as a contributor to global carbon emissions (i.e., climate change inducing power of each activity).

RESULTS

Mitigation and adaptation are the two main strategies that scientists and policymakers recommend to respond to climate change. Without effective mitigation measures, the world would not “avoid dangerous climate change” (UNDP, 2007). Moreover, effective climate change mitigation is contingent upon available information and technology and the prevailing socio-economic and environmental factors. More importantly, “changes in lifestyle and behaviour patterns and management practices can contribute to climate change mitigation across all sectors”. (UNFCCC, 2013)

Effective education, knowledge sharing, and management are key contributors to successful climate change adaptation practices (UNFCCC, 2019), which are possible through vigorous and sustained multi-stakeholder engagements. The following factors underscore the power or relevance of the world religious organisations in global partnership to work for a successful transition to carbon neutrality: (1) a high number of their followers; (2) ecological principles of the world religions; (3) galvanising power, penetrating and holistic analysis of events, (4) ability to educate and create public awareness on the need to drastically cut carbon emissions (i.e., climate change sensitive lifestyles or responsible consumption of natural resources), and (5) leverage the 4 factors mentioned above to mobilise financial resources to support activities (e.g., subsidies) toward carbon neutrality, especially in the poor developing countries; thereby and influence effective public policy reforms and political will toward climate change action.

High Number of their Followers

The world religious organisations together draw a mammoth number of followers. This number is more than three-quarters of the total world population. An estimated 5.8 billion people, representing 84% of the total world population, have religious affiliations. Out of this total figure,

2.2 billion are Christians (32%); 1.6 billion are Muslims (23%); 1 billion are Hindus (15%); 500 million are Buddhists (7%); and Four Hundred million are people (representing 6%) practising other traditional religions (Harper, 2012). These figures could be increasing as these religions continue to attract more followers.

Ecological Principles of the World Religions

There is much literature on the ecological teachings or principles of world religions. For this reason, the intention of this section is to reiterate some of the commonalities among the ecological teachings of world religious organisations. The main theme that runs across the majority of the ecological principles of religious organisations has been that of caring for the ecosystem. This is because some of these religious organisations have regarded the earth with its natural resources as divine, while others have regarded the earth and natural resource as present (or blessing) given by God for mankind to sustain itself (Religions for Peace 2011)

Despite their fundamental differences in some aspects, world religious organisations have advocated the need for humans to use natural resources in a manner that seeks to improve them. The following are some examples of the common ecological themes endorsed by world religious organisations:

- (i) *The problem of climate change (increasing carbon emissions) has partly resulted from human greed and a culture of over-consumption;*
- (ii) *By damaging the environment, humans have sinned or acted immorally in the eyes of God or the cosmic order; and*
- (iii) *Religious believers have a religious responsibility to take action* (Krznicar, 2007).

Sullivan (2003) is of the view that religious principles, particularly those on creation, have become an integral part of the ecological system.

And our understanding of the ecological system will be bolstered if we understand world religions.

Galvanising Power, Penetrating and Holistic Analysis of Issues

Religion has the power to galvanise its followers into powerful forces to confront many challenges. In looking at the galvanising power of religion, Sullivan (2003) has observed that religious beliefs, due to their primordial nature, draw the willpower and direct the power of labour to ‘purposive transformations’, which is because ‘primordial ideas are prime movers’. For this reason, religion provides moral insight on issues confronting humanity (e.g., climate change) by suggesting value frameworks to figure out who is responsible for the consequences of the issues (e.g., carbon emissions, unsustainable utilisation of natural resources) and the way they should act to fulfil their responsibilities

Ability to Educate and Create Awareness of the Need to Mitigate Carbon Emissions.

In addition to their mitigation and adaptation activities such as reducing their carbon footprints, for instance, greening their buildings, publications, and personal lives of their members, the world religious organisations can contribute immensely to bolster strategies to mitigate carbon emissions through public education and behavioural change. There are numerous personal health benefits associated with climate change-sensitive consumption lifestyles (UCL, 2013). And this message could be conveyed effectively by these religious organisations to their teeming followers.

Moreover, the relationship between understanding climate science and the role of religion is essential in ‘creating the moral and political will to address climate change’ (Grazer, 2011). Grazer argued that it is the duty of science to provide verifiable information about climate change, especially on the anthropogenic causes of climate change on the one hand. On the other hand, it is the duty of religious

organisations, based on its power to galvanise and perform holistic analysis on issues, to “reflect on these realities and provide a larger frame of meaning and moral vision to help society develop the moral and political will to address the concerns science raises”, and the strategies to effectively reduce carbon emissions.

For instance, Svoboda (2012) argued that *religious terminologies like “saviour, prophet, priests, heretic, dogma, crusade” had been used repeatedly by both sceptics and proponents of climate change to alter public policy and public attitudes toward climate change or carbon neutrality. To demonstrate the extent to which the use of religious language affects public understanding of climate change and the need for climate action, the Yale Forum analysed more than 250 op-eds, blog posts, and books published from 2005 to 2011. The findings showed that using religious language is the most effective way for people to strengthen their opinions, either positively or negatively, about the mitigation of carbon emissions. In other words, a religious language is an effective tool for those using it to either promote acceptance of climate change and the need to mitigate carbon emissions or to enhance scepticism about climate change.*

With such language power, the world religious organisations collectively, through world interfaith organisations, could publish more books on the ethical or moral basis for citizens to manage natural resources sustainably and boost global efforts to mitigate carbon emissions. Such materials can be used as teaching materials in academic institutions. Furthermore, the language barrier to effectively communicate mitigation strategies could be reduced drastically through the diverse languages used by religious organisations. Mustelin et al. (2013) argued that the majority of the mitigation and adaptation research findings are found in the English Language, which poses a challenge to citizens and researchers in the most vulnerable societies where English is not the first language.

Mobilise Financial Resources, and Influence Effective Public Policy Reforms Toward Climate Change Action

Climate change financing forms an integral part of the whole attempt to address climate change, but it is not without challenges (Tippmann et al., 2013). This is because mitigation, for instance, reducing emissions from heavy emitters of greenhouse gases and adaptation to climate variability, requires large-scale financing. This large-scale financing can be realised when the world religious organisations call on their congregation to contribute, for instance, 25 cents or 50 cents per month (i.e., one-third or half of one US dollar) in all denominational religious organisations in the country concerned. Through this religious approach, a substantial amount of money can be raised to support mitigation activities. For instance, supporting the public subsidy systems in the poor and vulnerable communities in developing economies, thereby influencing public policy reforms.

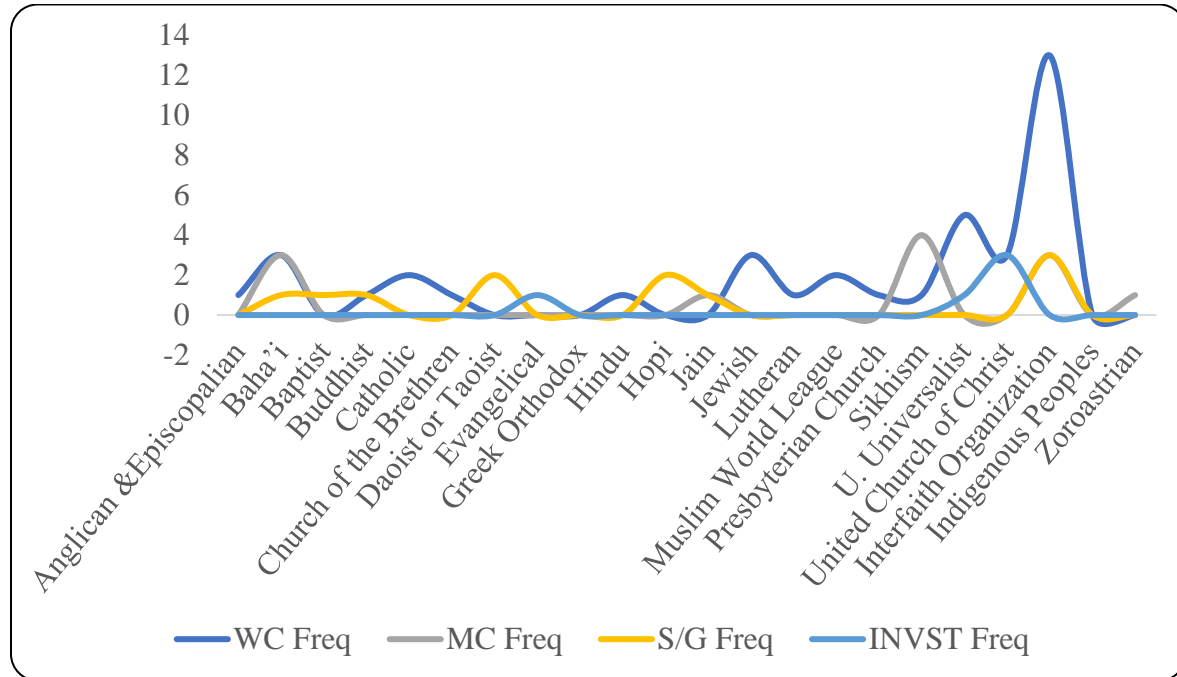
In addition, a regional and global interfaith fund for climate change or mitigation of carbon emissions could be initiated by an interfaith world religious organisation to mobilise colossal financial resources to finance adaptation and mitigation practices in the most vulnerable communities in the least developed countries, especially in the agricultural sector which requires massive technological investments (Vermeulen et al., 2012). To ensure food security. The role of religious organisations in nation-building processes has been significant since time immemorial. For example, religious organisations played a significant role during the formative years

of the United States of America by influencing public policy direction and providing both tangible and intangible resources for nation-building. (Abdulai, 2012)

Factors Identified by the World Religious Organizations as Contributing to Increasing Global Carbon Emissions that Must be Tackled Head-On

Excessive consumption is identified as the major challenge confronting global efforts to mitigate carbon emissions or tackle climate change. This kind of consumption, as the religious organisations argued, must be reduced as it is unnecessary and overburdens the environment. A closely related factor is materialism, which is described by religious organisations as a material compulsion, attachment, or civilisation. Selfishness or self-interest is the third factor and has been described as a human tendency that is “contrary to creation”, which is the source of ‘exploitation’ and must be discarded completely. Investment has been mentioned with emphasis on the need for adequate investment (which is inadequate currently) in efficient energy industries and technologies, but rejected unsustainable, dirty, or polluting industries and technologies. Sustainable investment in cleaner businesses and technologies is viewed as an effective way to mitigate the increasing global carbon emissions. *Table 1* presents selected quotations reflecting the views and belief systems of religious organisations on the factors fuelling global carbon emissions, which must be tackled head-on to pave the way for successful carbon neutrality by 2050.

Figure 1: Frequency distribution of the factors identified by the world religious organisations.



Key: **WC** = Wasteful Consumption; **MC** = Material Compulsion; **S/G** =Selfishness/Greed; **INVST** = Inadequate Investment in Cleaner Energy and Technologies.

(Source: Author’s research)

Table 1: Selected quotations from the world religious organisations on the identified factors fuelling carbon emissions

The Variables	Selected quotations
Material Compulsion	<p><i>"The influence of greed, materialism, and selfishness blocks the path toward the improvement of our physical well-being"— Interfaith on Climate Change.</i></p> <p><i>"...Christians should practice "life in all its fullness" (John 10:10) in the face of modern materialism that has now been globalised "World Council of Churches.</i></p> <p><i>"The greenhouse and ozone problems reinforce the call to a less materialistic and wasteful style of life" Presbyterian Church.</i></p> <p><i>"Living lives filled with God’s Spirit liberates us from the illusion of finding wholeness in the accumulation of material things...." National Council of the Churches of Christ, USA.</i></p>
Wasteful Consumption	<p><i>"...unprecedented human contribution to climate change is symptomatic of a spiritual deficit; excessive self-interest, destructive competition, and greed have given rise to unsustainable patterns of production and consumption"— Canadian Interfaith.</i></p> <p><i>"...we must work together in transforming cultures of self-interest and unprecedented consumption into cultures of justice for all".</i></p> <p><i>"...we need to change wasteful patterns of production and consumption".</i></p> <p><i>"Religious organisations, public institutions, and businesses all have important roles to play in promoting ethical consumption."</i></p>

The Variables	Selected quotations
	<p><i>“This sacred quality of creation demands moderation and sharing, urgent antidotes for our excess in consumption and waste”</i> National Council of Churches of Christ, USA.</p> <p><i>“...Mindless production and excessive consumption ... led to the continuous desecration of creation, including global warming”</i> World Council of Churches.</p>
Investment	<p><i>The United Church of Christ ... “urges state and local governments to support and invest in energy conservation and calls on business and industry to lead in responses to global warming through increased investments in efficient and sustainable energy technologies that are economically accessible and just”.</i></p> <p><i>“...and urges all segments of the Church to address global warming in their decisions and investments....”</i></p>

Source: Extracted from Religious Documents compiled by Whitney & Whitney, 2012

DISCUSSION

Identifying excessive consumption as driving global carbon emissions seems to have been corroborated by many studies in the climate change literature. In their study on long-term greenhouse gas emissions from the agricultural sector and mitigation scenarios, Hedenus, Wirsenius & Johansson (2014) have argued that reducing consumption and improvements in productivity would mitigate carbon emissions greatly and stabilise temperature below the 2 °C target, that is 1.5 °C “At its core, climate change is a problem of production and consumption. Reducing consumption does not mean sacrificing a good life (Ajil, 2009).

A study conducted at the University College London (2013) found population growth to be a less significant factor in driving climate change compared to consumption. The consumption pattern is the problem rather than the people. Reducing consumption, the study recommended, would be the most effective mitigation strategy. Therefore, strategies that seek to promote climate-sensitive and positive human behaviours and influence policy reforms should incorporate issues of unsustainable

consumption, material compulsion, and self-centredness or greed. Armed with this knowledge, world religious organisations can bolster global efforts to attain carbon neutrality by 2050.

Investments in cleaner technologies and constantly updating scientific data on climate change for credible climate change information require financial resources which can be mobilised through interfaith fund initiatives. Conserving energy and investing in efficient technologies are essential in reducing global carbon emissions. Nevertheless, “changing core values of society [is as significant as] developing more efficient technologies or instituting regulatory systems to limit emissions” (Lin, 2009). For this reason, the mobilisation of effective global response mechanisms to address climate change involves some trade-offs. These trade-offs bear striking semblance to those made during the abolition of the slave trade in the 19th century (see *Table 2*). In which the world religious organisations played a pivotal role. The influencing power of the same world religious organisations is badly needed to tackle this 21st-century carbon emissions challenge.

Table 2: The Similarities between the Abolition of the Slave Trade in the 19th century and the Reducing Global Carbon Emissions in the 21st century and the trade-offs required

Areas	Slave trade/Slavery	Climate change/Reducing Global Carbon Emissions
Economic externalities	Yes, externalisation of the cost of slavery from slave owners, plantation owners, and the elite to the slaves, their families, and communities.	Yes, externalisation of the cost of high carbon emissions from factory owners and industrialised societies to common and powerless individuals in these societies.
Nature of the cost that goes beyond human suffering.	Untold hardship, no liberty, free labour, no economic benefit, and no dignity for the slaves, their families, and communities.	Rising temperatures and sea levels, severe storms and floods, crop failures in vulnerable societies, biodiversity loss, re-emerging climate-related diseases, etc.
Deep-seated personal interests and strong opposition	Yes, mainly from those who were benefiting socially and economically from the prevailing status quo.	Yes, mainly from those who are currently benefiting socially and economically from the prevailing status quo.
The bone of contention	Those who were resisting the temptation of cheap or unpaid slave labour versus those who were fighting to abolish it and replace it with paid labour.	Those who are resisting the temptation of cheap or readily available fossil fuel versus those who are advocating the need for efficiency in fossil fuel use and alternative renewable energy.
The trade-offs	When slavery was finally abolished, Britain's economy suffered a terrible loss of close to 1.8% of its yearly income, which lasted for almost five decades (Lin, 2009).	This is an example of the kind of trade-offs required to reduce global carbon emissions.

Source: Author's research on carbon emissions.

In spite of the counter-arguments, the antislavery movement developed in the 19th century. Britain is a good example of how to value change could help society address pressing issues. The movement galvanised millions across religions and classes for the abolition of the slave trade. The achievement of the antislavery movement has been hailed as “moral progress” due mainly to religious convictions about the unethical nature of the slave trade and slavery. (Lin, 2009) Similarly, achieving carbon neutrality by 2050 will undoubtedly be hailed as moral progress because the increasing nature of global carbon emissions, which threaten human existence is unethical.

CONCLUSIONS

This study explored factors that underscore the relevance or power of world religious organisations

to influence public policy reforms and boost positive behaviour for a successful transition to carbon neutrality by 2050. These factors include (1) a high number of their followers; (2) ecological principles of the world religions; (3) galvanising power, penetrating and holistic analysis of events, (4) the ability to educate and create awareness on the need to drastically cut carbon emission (i.e., climate change sensitive lifestyles or responsible consumption of natural resources), and (5) leverage the 4 factors mentioned above to mobilise financial resources to support activities (e.g., subsidies) toward carbon neutrality, especially in the poor developing countries; thereby influencing effective public policy reforms and political will toward climate change action. The main anthropogenic activities identified as contributors to global carbon emissions include; excessive or wasteful consumption, material compulsion, selfishness, and

lack of investment in cleaner energy and technologies. In conclusion, this study strongly calls for the active engagement of world religious organisations (as key stakeholders) to work seriously for a successful transition to carbon neutrality by 2050.

Recommendations

The world religious organisations should work collectively through a global inter-faith body (e.g., Parliament of the World Religious Organizations) to bolster global efforts toward the transition to carbon neutrality by 2050:

- Intensifying public education to influence positive behaviour and value change towards climate change, which are factors underscored by UNFCCC (2019);
- Establishing national, regional, and global interfaith climate change funds to mobilise adequate financial resources to support the mitigation of carbon emissions and sustainable management of natural resources, especially in developing economies; and
- Influencing policy reforms and political will by offering financial support to public subsidy systems to mitigate carbon emissions.

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