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Tackling climate change in Africa through corporate social responsibility.

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Chapter 6: Tackling Climate Change in Africa Through Corporate Social Responsibility

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1. Introduction

Society and economy are threatened by climate change, which refers to “a statistically significant change in the mean state or the temporal variability of the climate due to natural variation of external forcing, anthropogenic changes in the atmosphere's composition, or changes in land use” (Intergovernmental Panel on Climate Change, 2007). In other words, it is the increase in the atmospheric composition, known as greenhouse gas emissions, induced by human activities leading to the depletion of the ozone layer. Besides water vapour, other primary greenhouse gases include carbon dioxide (CO₂), nitrous oxide (N₂O), halocarbons or CFCs (gases containing fluorine, chlorine, and bromine), and methane (Ramanathan and Feng, 2009). By burning fossil fuels such as coal and oil, CO₂ (the most important global warming gas) is released into the atmosphere. A single CO₂ molecule can remain in the air for hundreds of years (Revelle, 1982). CO₂ and other greenhouse gases heat the globe by absorbing the sun’s energy and preventing heat from escaping back into space (El Zein and Chehayeb, 2015). Thirty-six billion tonnes of CO₂ are emitted annually (Nejat et al., 2015).

While Africa’s contribution to carbon emissions could be termed minor, it has been recognized as the world’s most vulnerable region to climatic changes and global warming (Masipa, 2017; Tacoli, 2009). Africa is likely to be more impacted than other continents due to its economic exposure to climatic variation. Over the past few decades, it has experienced more frequent and intense climate extremes than any other region in the world (Shepard, 2018). Changes in the climate have health and physical consequences, including severe weather events (e.g., droughts, storms, floods, and heatwaves) and disrupted water systems. These consequences accentuate Africa’s perennial developmental problems by especially harming agriculture, one of the mainstays of the region’s economy (Abay *et al.*, 2021; Branca *et al.*, 2021; Oluwatayo and Ojo, 2016). It is estimated that Africa’s GDP exposure and vulnerability to changing climate patterns would likely grow from \$895 billion in 2018 to about \$1.4 trillion by 2023 (Dahir, 2018). However, this impact is expected

to vary widely across the region, with southern Africa predicted to get hotter and drier and eastern Africa to get wetter.

Globally, the devastating effects of climate change have caused the emergence of movements and the adoption of actions, principles, and conventions to tackle the destruction of the natural environment (Hulme and Mahony, 2010). Prominent among them is the United Nations Framework Convention on Climate Change (UNFCCC)¹. Several agreements including the Montreal Protocol (aimed at protecting the stratospheric ozone layer), Kyoto Protocol (aimed at limiting greenhouse gases emissions), Cancun Agreement (aimed at addressing the long-term challenge of climate change and particularly helping developing nations deal with climate change), and the Paris Agreement have been signed and adopted to implement the principles and goals provided by UNFCCC. The Paris Agreement, which is the most recent and most significant international climate change pact signed in 2015 to limit the average rise in global temperatures to 2°C above pre-industrial levels and keep the increase below 1.5°C, has prompted many African countries to commit towards transiting to low-carbon economies. Moreover, the UN sustainable Development Goals (SDGs), which most African countries aspire to achieve, capture the need for urgent action to combat climate change and its impacts.

Despite efforts by the international community to tackle climate change, progress has been slow. Some works have cited poorly designed, weakly incentivized and unmonitored transnational climate change mitigation initiatives (Michaelowa and Michaelowa, 2017; Rosen, 2015) as well as the limited consideration of the role of regional and local governments in global climate change policies (Galarraga, Gonzalez-Eguino, and Markandya, 2011) as main causes of the slow progress. Others have acknowledged the lack of leadership and commitment in mitigating climate change, with countries backtracking or unwilling to accept far-reaching climate measures (Gupta, 2010). This low commitment arises from either the limited institutional capacities of national governments to implement the measures (Rabe, 2007) or the realization that full implementation of the measures could create international competitive disadvantages for domestic industries especially when other countries are not adhering to measures. For instance, President Donald Trump withdrew the United States (U.S) from the Paris Agreement because he saw it as an obstacle

¹ <https://unfccc.int/>

to his vision of revitalizing the U.S economy with fossil fuel production. He also viewed it to be unfair to his country's economic competition with other countries like China and India which, unlike the U.S, are free to use fossil fuels.²

Peering into national-level implementation of climate change policies and measures, it is important to acknowledge that climate change outcomes are a function of climate change politics between vested interest groups, including State and non-State actors (Beeson and McDonald, 2013; Broto, 2017; Dubash, 2013; Hale, 2010; Hochstetler and Viola, 2012; Newell, Pattberg, and Schroeder, 2012). Interest groups, including businesses, non-governmental organizations, civil society organizations, and communities have stakes in climate change, and often lobby governments to ensure that their preferences are considered in final decisions. One of the interesting things about the politics of climate change is that it brings the multifaceted role of business in climate change to the fore (Wright and Nyberg, 2016). First, businesses are often defensive about maintaining the climate status-quo and are dominant in advocating short term self-interests over long-term low-carbon policies (Carter, 2014). Second, governments are wary of imposing new regulations and taxes, two critical tools for addressing climate change, due to the power of businesses to affect the economy through job cuts, offshoring and relocations. In this sense, businesses can limit the powers of national governments to implement climate change measures (Eberlein and Matten, 2009; Hale, 2010; Jones and Levy, 2007; Vesa, Gronow, and Ylä-Anttila, 2020). Consequently, market mechanisms for dealing with climate change may run afoul of low political will or self-interested market imperatives such as the tendency to focus on profit maximization rather than emission reduction (Gupta, 2010).

Notwithstanding the complicity of businesses in perpetuating climate change, it is worth noting that some firms are offering innovative solutions to decarbonize economies (Wright and Nyberg, 2016). Increasingly, businesses are coming under pressure to respond and contribute to combating the challenge of climate change. This has caused them to treat the environment as a business agenda (Pinkse and Kolk, 2009; Begg, Van der Woerd and Levy, 2018), often approaching ecological problems as a responsibility imposed by regulation. Other businesses approach climate change as an economic opportunity for serving new markets with “green” goods, services and

² <https://www.bbc.co.uk/news/science-environment-54797743>

practices (Kolk and Pinkse, 2004; Roman Pais Seles *et al.*, 2018). As innovators, investors, experts, polluters, manufacturers, employers and lobbyists, businesses are obviously significant players in environmental issues and environmental governance (Jones and Levy, 2007). Yet, though recent climate actions in the private sector are encouraging, business response to climate change continues to lag promise and potential. As societies are beginning to hold businesses responsible and accountable for their contribution to, and impact on the environment, there is an increasing awareness and expectation for businesses to play more effective roles in curbing climate change (Wright and Nyberg, 2017; McIntyre, Ivanaj and Ivanaj, 2018).

In Africa where the climate change discourse is still gaining traction, it has become important to amplify why and how businesses can join efforts to arrest carbonization of the African economy. To this end, this chapter focuses on discussing climate change challenges in Africa and how businesses operating in Africa could address these challenges through their CSR activities. Using Carroll's corporate social performance model (Carroll, 1979, 1998), this chapter explores how climate change is a CSR issue along the ethical, philanthropic, economic and legal dimensions of corporate citizenship. In doing so, it provides suggestions and highlights potential climate change actions that businesses could integrate in their CSR initiatives.

2. The Climate Change Challenge in Africa

In diverse ways, climate change poses a significant challenge for Africa. Its foremost impact is on agriculture, a source of livelihood for most people living in the region (Alobo Loison, 2015; Milder *et al.*, 2014; Shiferaw *et al.*, 2014; Sissoko *et al.*, 2011). The effect of climate change on agriculture occurs through various mechanisms, such as changes in temperature and precipitation (Toulmin, 2009; Somorin, 2010). Globally, mean temperatures have risen by 1°C compared to pre-industrial levels (Hawkins *et al.*, 2017). Accordingly, higher temperatures have been recorded in Africa. For example, Collier, Conway, and VENABLES (2008) argue that Northern and southern Africa will become much hotter (4°C or more) and drier, with precipitation falling by 10–20 per cent or more. West and Central Africa will particularly experience large increases in the number of hot days. Temperatures are expected to rise by 2°C in Southern Africa, while southwestern African countries such as South Africa, Namibia and Botswana expected to experience the greatest increases in temperature (Shepard, 2018). The Sahel region in West Africa is regarded as a climate change

hotspot where maximum temperatures can be as high as 40°C³. Climate change is expected to make this region even hotter. High temperatures make farmlands drier and difficult to till, thus affecting agricultural output.

Higher temperatures are often associated with intense rainfall. Indeed, Africa records torrential rainfall due to high temperature levels in the region. However, the rains do not fall over a long period. In other words, the wet seasons are short, often lasting three months in most African countries. Consequently, Africa is more prone to drought than any other region in the world. The Sahel region is particularly characterized by repeated dearths, i.e., low, poorly distributed, and extremely variable monthly and seasonal random rainfall (Slegers and Stroosnijder, 2008). Some researchers earlier predicted that eastern Africa, the Horn of Africa, and parts of central Africa will experience an increase in rainfall by 15 per cent or more (Shepard, 2018). However, others have countered these predictions with the “East African paradox” regarding how rains may start later and end sooner, thus leading to an overall decrease in rainfall. In Central Africa, home to the world’s second largest rainforest system, decline in rainfall is fast approaching the minimum level required to sustain the forests⁴. In southern Africa, precipitation is projected to decrease by about 20% (Shepard, 2018). South Africa is especially positioned geographically within a drought belt with a typically warm temperature ranging between 0°C and 35°C with a mean rainfall of only 464 mm to a world average of 857 mm (United Nations Development Programme (UNDP), 2021).

Low rainfall, longer dry spells, and drought cause land degradation – i.e., the reduction (or loss) in land's ability to produce the expected associated economic gain, e.g., ecological degradation (Kassas, 1995). Obviously, one of the areas where land degradation is most felt is agriculture. Drought makes land unsuitable for crop farming (Mbah, Ezeano and Saror, 2016). Crops die and when they do not, harvest yields are low. Similarly, drought impacts livestock production by obliterating grazing fields (Douglas et al., 2008). Conclusively, drought causes agricultural collapse (Toulmin, 2009), as it poses challenges for food security and sustenance of the Africa population. Already, farmers in some African countries have noticed the ramifications of climatic

³ <https://eros.usgs.gov/westafrica/node/157>

⁴ <https://www.bbc.co.uk/news/world-africa-50726701>

changes (Kabubo-Mariara and Karanja, 2007), but they may not know how to respond because the required mitigating strategies are likely beyond their expertise.

To put the scale of this challenge into context, it is worth highlighting that hundreds of millions of people in Africa depend on rain to grow food. Put differently, Africa is largely dependent on rain-fed agriculture (Shepard, 2018), which accounts for around 97% of total crop land (Calzadilla *et al.*, 2013). With agriculture the main source of livelihood, especially in rural Africa, as well as a major source of export revenue for African countries (Binswanger and Townsend, 2000; Shiferaw *et al.*, 2014; Sissoko *et al.*, 2011), climatic impacts on agriculture will cause devastating socio-economic consequences, ranging from hunger and malnutrition to economic recessions. According to Dahir (2018), African countries' GDP exposure and vulnerability to changing climate patterns is likely to grow from \$895 billion in 2018 to about \$1.4 trillion by 2023. This projection recognizes how agriculture supports about 80% of employment in Africa, contributes about 30% of Africa's GDP and 40% of Africa's exports, and supports the livelihoods of about 90% of Africa's population (Commission for Africa, 2005; Mukasa *et al.*, 2017).

Due to the agriculture industry's importance to Africa, it is seen to be central to poverty reduction in the region (Christiaensen and Demery, 2007). In sub-Saharan Africa, poverty in rural areas where farming is the main source of sustenance for 80% of the poor accounts for 90% of total poverty in the region (Dixon, Gulliver, and Gibbon, 2001). Hence, any negative effects of climate change on the industry could perpetuate destitution and hamper poverty alleviation efforts. This problem is accentuated by high population growth in sub-Saharan Africa (especially in the rural areas). According to the United Nations, African countries could account for half of the growth of the world's population by 2050⁵. This would increase pressure not only on agricultural production but also on natural resources such as water (Calzadilla *et al.*, 2013). In 2006, the Food and Agricultural Organization (FAO) of the United Nations estimated Africa's population to double by 2050 and projected this would increase agricultural consumption by 2.8% annually until 2030, and by 2% between 2030 and 2050. Yet, in 2018, FAO reported that agricultural productivity is lagging in Africa⁶. To paint a clearer picture, agriculture has consequences for other facets of

⁵ https://population.un.org/wpp/Publications/Files/WPP2019_Highlights.pdf

⁶ <http://www.fao.org/3/mv737en/MV737EN.pdf>

Africa's socio-economic development, which makes its vulnerability to climate change a concerning challenge for policymakers, development practitioners and some businesses.

Besides impacting agriculture and poverty, climate change also poses challenges for health and sanitation. Due to drought, the availability of freshwater in Africa is projected to decrease, impacting between 75 and 250 million people by 2020 (Tacoli, 2009). Drawing attention to the dire challenge of water shortages on the continent, Climate Watch (2019) asserts that less than 40% of the Nigerian population has direct access to potable water. Hence, Nigerians are at risk of water stress attributed to the escalated inconsistency in rainfall resulting in a decrease in surface water resources and droughts in some part of the country. Water shortages leads to water poverty. For instance, in rural Kenya, 80 per cent of the population experience dehydration (FAO, 2011). Water shortages can also have health effects, especially when people drink dirty water. Several diseases related to the consumption of contaminated water, such as cholera, diarrhea, dysentery, typhoid, and polio, have been recorded in Africa (Adelodun *et al.*, 2021; Ashbolt, 2004; Bordalo and Savva-Bordalo, 2007; Glass *et al.*, 1991; Tumwine *et al.*, 2002; Yang *et al.*, 2020). In fact, Africa contributes a significant proportion to the total global cholera and diarrhea cases reported to the World Health Organization (Mengel *et al.*, 2014). For instance, 54% of all cholera cases recorded in 2016 occurred in Africa⁷. Between 1996 and 2018, Africa recorded about 280 cholera outbreaks across several countries⁸. These cases, besides causing the loss of human life, puts pressure on the already fragile and burdened healthcare systems in African countries (de-Graft Aikins *et al.*, 2010; Kiriga and Barry, 2008).

Furthermore, there is a growing acknowledgement that climate change poses security challenges in Africa (Gleditsch, 2012; Salehyan, 2008). Some scholars have found that rainfall deviations and temperature variations are associated with conflict in Africa (Hendrix and Salehyan, 2012; Koubi, 2019; Nordas and Gleditsch, 2007; Raleigh and Kniveton, 2012). Fighting among pastoral communities, or between pastoral communities, herders and farmers over access to water and grazing lands are common in eastern Africa (Adano *et al.*, 2012; van Baalen and Mobjörk, 2018). The migration of people in search of lands that can support their livelihoods (through farming or animal husbandry) increases the likelihood of ethnic and communal clashes, most of which are

⁷ https://www.who.int/gho/epidemic_diseases/cholera/en/

⁸ <https://www.who.int/csr/don/archive/disease/cholera/en/>

violent due to the competition for resources and the chances of displacement (FAO, 2011). Furthermore, drought induces conflict through its downward effect on livestock prices (Maystadt and Ecker, 2014). Africa is already grappling with conflict and its ramifications for socio-economic development (Salehyan *et al.*, 2012). The role of climate change in exacerbating this problem is a great concern and challenge for the region (van Weezel, 2020; Witsenburg and Adano, 2009).

3. Climate Change and Business: Effect and Response

Climate change has been recognized as a business and management issue (Daddi *et al.*, 2018; Howard-Grenville *et al.*, 2014), mainly as it poses challenges and present opportunities for businesses (Roman Pais Seles *et al.*, 2018; Winn *et al.*, 2011; Wittneben and Kiyar, 2009). From an external focus, works have highlighted how climatic variations expose businesses to material, regulatory, reputational, physical and litigation risks (Amran *et al.*, 2016; Nikolaou, Evangelinos, and Leal Filho, 2015). These variations cause disruptions to organisational activities and operations (Shen *et al.*, 2011), increase insurance cost (Wei and Fang, 2012), and hamper effective service delivery (Allen and Craig, 2016). Preston (2013) observed that by 2050 the increased variability in climate change could cost organizations 3.9 times their current financial commitment.

Moving from an external to an internal focus, Okereke *et al.* (2012) organized climatic effects on organizational activity into four strata, namely capabilities, culture, structure and processes. First, they argue that climate change demands new capabilities throughout organizations. These capabilities are required for not only diagnosing and assessing climatic risks, but for also developing appropriate responses, and may range from science to leadership (Thistlethwaite, 2011). Second, they advance that there is an imperative for organizations to change or adapt their cultures to be able to address climate change, which is not always easy. The need for fundamental changes in behavior, values and routine becomes complicated when employees resist change. Third, they note that organizations are faced with challenges in restructuring their operations to keep up with climate change mitigation pressures. Embarking on a “green culture” may call for new reporting lines, chains of command and even new units or departments. Most of these structural changes have cost implications. Finally, structural changes may require new processes

which, like culture, can be challenging to institutionalize. A combination of the external and internal perspectives threatens business survival and performance, as has been recorded in the tourism industry (Brouder and Lundmark, 2011; Craig and Feng, 2018).

To counter the effects of climate change, several business responses have been proposed and reported (Galbreath, 2011). Among these responses include using climate SWOT as a quicker and cost-efficient way to strategically plan for climate change (Pesonen and Horn, 2014), implementing climate-proof operations and supply chains (Wittneben and Kiyar, 2009), developing organizational resilience to manage environmental change (Linnenluecke and Griffiths, 2010), using a new approach of climate change accounting in order to overcome some important weaknesses of previous environmental accounting methods (Evangelinos, Nikolaou, and Leal Filho, 2015), and improving processes, developing new products or seeking new markets (Kolk and Pinkse, 2004). While of these responses may be proactive and voluntarily adopted to gain competitive advantage or avoid stricter regulation, they could also be reactively undertaken (Eberlein and Matten, 2009). Overall, business response to climate change spans operational and management activities (Jeswani, Wehrmeyer, and Mulugetta, 2008), and can be classified into six categories, namely emission reduction commitment, product improvement, process and supply improvement, new market and business development, organizational involvement, and external relationship development (Lee, 2012).

Synthesizing the literature, it becomes apparent that business response to climate change assumes a “business-as-usual” approach (Andersson and Keskitalo, 2018; Wright and Nyberg, 2016), as businesses act based on climate change being an opportunity or a hindrance. In Africa, this approach is problematic. First, Africa is home to several developing countries and a large proportion of the poor population in the world. Considering that climate change is a lesser concern during economic downturns (Kahn and Kotchen, 2011) or in developing countries, business leaders in Africa are less likely to take measures for tackling environmental challenges. There may be a recognition of human-induced climate change among elites in Africa (Steynor *et al.*, 2020; Steynor and Pasquini, 2019), but interest to address the problem or public appreciation of climate change efforts is low. Second, the innovation and capabilities required to turn climate change into a business opportunity are farfetched for most businesses in Africa. Due to the limited capacity to profit from climate change mitigation, managers are likely to overlook the issue on purely business

grounds. Therefore, the way forward is for businesses in Africa to see and treat climate change as a corporate social responsibility (CSR). Though CSR can be instrumental and targeted at business profitability, this instrumentality is often tempered with elements of altruism that can go a long way to reduce climate change opportunism. Treating climate change as a CSR issue will also increase the scope of participation for all types and sizes of businesses, as it will no longer be limited to only those capable of exploiting it for economic gain.

4. Climate Change Mitigation as Corporate Social Responsibility

Corporate social responsibility (CSR) has been attributed to organizations' ongoing desire and need to foster social, economic, and environmental change through corporate intervention (Tencati et al., 2004; Lakshman et al., 2014). CSR, which covers a broad range of responsibilities expected of an organization towards society (Osobajo et al., 2019; Morsing and Schultz, 2006), has developed from relatively voluntary and uncoordinated practices to more explicit commitments towards stakeholder needs. The concept has been linked to other concepts like corporate citizenship, business ethics and corporate social performance because they share common themes such as accountability, ethics, morals and community (Schwartz and Carroll, 2008; Carroll and Shabana, 2010). Yet, there is no unanimously agreed definition of CSR due to its multifaceted nature (Clarkson, 1995). As business environments keep evolving, what makes an organization as responsible changes over time (Rivoli and Waddock, 2011). However, understanding the dimensions of social responsibility is a good starting point for businesses to appreciate the dynamic and ambiguous nature of CSR and to better translate this appreciation into practice. In this respect, this chapter builds on Carroll's (1979; 1991) four dimensions of CSR to make a connection between climate change and CSR and to highlight why and how the social interventions of businesses must address environment protection.

The four dimensions of CSR provide a holistic understanding of the scope of corporate citizenship (Carroll, 1979, 1998). They include the economic dimension (i.e., being profitable and fulfilling economic responsibilities), the legal dimension (i.e., obeying the law and fulfilling legal responsibilities), the ethical dimension (i.e., behaving ethically and morally), and the philanthropic dimension (i.e., giving back or making contributions to society). These dimensions have received considerable attention in the CSR literature, and have stood the test of CSR scrutiny over time.

Thus, they provide the theoretical framework for the ensuing discussion. These dimensions allow for a broadening of the need for businesses to be responsible and accountable for their contribution and impact on the environment, beyond the dominant coverage of how economic value propositions are influenced by climate change (Porter and Kramer, 2006) and the imperative for businesses to reconfigure operations to reduce climate change while enhancing their competitive positions (Kolk and Pinkse, 2008). In line with Porter and Reinhardt's (2007) assertion that CSR activities are starting to play a strategic role in climate change related issues, explicating the dimensions of CSR will help to further enhance business responsibility towards the environment and present businesses operating in Africa the opportunity to redefine their activities.

4.1 Economic Dimension of CSR

The fulfilment of an organization's economic responsibility is underpinned by profit maximisation (Johnson, 1971; Carroll 1979). According to Fassin (2009) and Friedman (1962), profit maximisation remains the primary reason why business organizations provide offerings that meet society's needs. Generating profits allows businesses to survive, thus guaranteeing their continuity in the provision of critical and essential products and services to society. Business survival and profitability also has cascading effects on employment and tax revenue – two important lifelines to economic prosperity (Hale, 2010). As businesses expand, they recruit more people, reduce unemployment levels and support livelihoods. With the consequent rise in living standards, people become more likely to care about climate change and the environment (Kahn and Kotchen, 2011). Profit maximization also has ripple effects for other stakeholders such as shareholders and lenders who depend on the returns from their investments to survive. As investors become wealthier, they would care more about climate change. There are also effects on entities within the supply chain whose prosperity and subsequent ability to support livelihoods and combat climate change depends on how much business they get from partners.

It is worth noting that the economic dimension has further implications for governments and their ability to mitigate climate change. A common fact known to climate change experts and scholars is that African countries lack the financial and institutional capacity to mitigate the harm done to the environment (Collier, Conway, and Venables, 2008; Kumssa and Jones, 2010). For instance, the International Energy Agency estimated that African countries must spend US\$2.7 trillion on

low-carbon technologies by 2030 to meet climate change targets (Adenle, Manning, and Arbiol, 2017). Though raising this amount will be difficult, the collection of taxes from businesses can help. Conventionally and progressively, the more profits businesses make, the more tax they pay. Therefore, the economic dimension of CSR can impact government interventions on climate change by availing the needed funds. Moreover, when businesses are profitable, they reduce calls and pressures for governments to use limited public funds for bailing bankruptcies or providing unemployment benefits to people laid off from work. This avails funds for financing climate change mitigation. In a nutshell, the economic dimension has a multiplier effect on the ability of individuals, organizations, and governments to fight climate change.

While the foregoing shows how the economic dimension can cater for the the natural environment, the reality is quite different. There is a dominant focus on financial performance, but less on improving the quality of life and creating value through sustainable economic-related activities (Allen and Craig 2016). Against this backdrop, some initiatives for African businesses are worth highlighting. First, businesses operating in Africa should integrate targets for carbon emissions in their investment decision planning. Second, as climate change presents individuals and the society at large in Africa with challenges in agriculture, health and sanitation, businesses could embark on social entrepreneurship or social investments by providing “green” products and services. This would entail product innovations that can improve the bottom line while mitigating climate change. Third, businesses in Africa can improve the quality of life of individuals, the community, and society by creating decent jobs and being conscious of the possible harm resulting from their economic decisions (Brei and Böhm, 2013). Even though fulfilling this responsibility could raise costs, it would enhance business legitimacy in society, raise living standards and help draw public attention to climate change.

Conclusively, the economic dimension aligns with Barnett (2007) and Becchetti et al. (2012), assertion that businesses should not overly focus on meeting their shareholders' needs at the expense of the natural environment. As businesses seek economic gain, there is a need to avoid creating environmental problems (Ihlen, 2009). The challenges posed by climate change present businesses with the need to redefine economic views towards sustainable development (Allen and Craig, 2016). Hence, as businesses in Africa pursue profit maximisation as economic

responsibility, they must conduct their operations in a way that respects the concerns and values of the natural environment and society at large to mitigate climate change challenges.

4.2 Legal Dimension of CSR

Business organizations, as legal entities, must follow laws and regulations (Carroll and Shabana, 2010). Laws represent the basic "rules of the game" that govern business relationships with stakeholders, including consumers, employees, the community and natural environment (Carroll, 1998). Therefore, even as organizations fulfil the economic dimension, they must do so within legal frameworks. Proponents of the legal dimension to CSR argue that an organization's legal responsibility constitutes a contract wherein society grants a company a license to operate and in return expects the company to behave acceptably. In recent times, climate change mitigation has become an expectation in society, and governments in African countries have been enacting laws and setting priorities to address the problem. For instance, about all 16 West African countries have, at least, one national policy document on climate change (Sorgho *et al.*, 2020). Businesses are expected to operate and function within these climate policies to guarantee greater good for all stakeholders.

However, while it is obvious that businesses operating in developed countries such as the United Kingdom are bound by stringent climate change requirements, businesses operating in Africa where regulation is either nonexistent or weakly enforced (Liedong *et al.*, 2020b) have more laxity to do what they deem appropriate, which is often inadequate. As environmental dynamism is pushing ecological concerns to the fore of societal concerns (Asrar-ul-Haq *et al.*, 2017), the need for businesses to confer a stakeholder status on the non-human natural environment has become prominent (Starik, 1995; Phillips and Reichart, 2000; Lischinsky, 2015) for legitimacy purposes (Driscoll and Starik, 2004). They can do this by following climate change regulations, at the very least. For example, businesses should aim to comply with any mandatory GHG mitigation law and regulations to harness their contribution towards climate change commitments.

Adhering to climate change regulations is a reactive behavior. Beyond reaction, businesses in Africa can be proactive in championing climate change policies. Being proactive involves two things. The first is self-regulation, through which businesses can establish and institutionalize

industry standards for mitigating climate change, such as carbon disclosures (Andrew and Cortese, 2011). Businesses can also establish internal guidelines and requirements for their own operations. Such self-regulatory proactive initiatives have been documented elsewhere (Eberlein and Matten, 2009; Jeswani *et al.*, 2008; Kolk and Pinkse, 2004). In Africa, there have been calls for self-regulation to counter the impact of climate change (Kumssa and Jones, 2010), but action has been abysmal. The second proactive thing businesses in Africa could do is engage in institutional entrepreneurship, particularly of formal institutions. This will entail doing corporate political activity (CPA), or what is popularly called lobbying (Hillman and Hitt, 1999). Research works have recorded how firms do CPA in African countries to enhance their profitability and competitive advantage (Liedong and Frynas, 2018; Liedong, Aghanya, and Rajwani, 2020a; Liedong, Rajwani, and Mellahi, 2017; Mbalyohere *et al.*, 2017; Wocke and Moodley, 2015). There is the need for the focus of CPA to shift from economic competition to the strengthening of the institutional frameworks for climate change mitigation. Just as businesses are encouraged to lobby for anti-corruption regulation in Africa (Idemudia *et al.*, 2019; Liedong, 2017), so are they encouraged to lobby for climate change policies. At the least, businesses should contribute their expertise to climate change policymaking.

CPA or lobbying, despite raising some ethical concerns (Liedong, 2020), has been assessed as a social responsibility. Some scholars argue that businesses need to participate in political processes and contribute to social welfare by filling regulatory gaps and sponsoring or endorsing “best political candidates” (Alzola, 2013; Scherer *et al.*, 2013). Others argue that policymakers often lack information needed for policy formulation, which makes it a responsibility for businesses to fill knowledge gaps where they exist (Hamilton and Hoch, 1997). Moreover, CPA is seen as a way for businesses to represent their shareholders and stakeholders in policy processes (Leong *et al.*, 2013), in which case lobbying is deemed a socially responsible behaviour that is not only permissible, but also obligatory (Neron, 2016). The foregoing arguments provide the basis for firms to engage in pro-climate change CPA to re-define and strengthen the institutions moderating environmental protection in Africa.

4.3 Ethical Dimension of CSR

According to Carroll (1991), CSR's ethical dimension focuses on expectations, norms, standards, or behavior expected of an organization by society but not specified in law. Ethical responsibility supports the principle of organizations being fair by protecting and respecting their stakeholders' moral rights (Kilcullen and Kooistra 1999). Some of the proponents of this view argue that organizations should accept their moral responsibility beyond simple obedience to society's laws. For instance, McWilliams and Siegel (2001) defined CSR as a situation where the firm goes beyond compliance and engages in actions that appear to further some social good, beyond the firm's interests and that which is required by law. In this respect, there is a strong belief that acting in an environmentally friendly manner is essential for fulfilling an organization's ethical responsibility. For instance, Groves et al. (2011) argue that organizations must be committed to acting socially to foster social well-being, which entails protecting the ecological balance. In the same vein, if any business operations or activities result in harm, effort must be made to provide redress or remedy (Campbell, 2007). Behaving ethically does not only help businesses to develop and maintain social legitimacy (Werther Jr and Chandler, 2010; Hopkins, 2005) but it also helps to avert climate change.

Due to their natural resource wealth, African countries have been attractive for businesses looking to expand their operations and global footprint beyond their domestic markets. These businesses need to try to protect the environment by conducting their activities without harming the environment. For instance, industries such as oil and gas and agriculture depend on resources and/or raw materials that are prone to changing weather conditions and depletion (Lash and Wellington, 2007). In the exploitation of natural resources, businesses should act in a stewardship capacity by ensuring that the resources used in production and manufacturing can be replenished for future use. The oil and agricultural industries particularly require higher levels of ethical consideration in Africa due to their potential contribution to greenhouse gases through their flaring and bush burning activities. It is imperative for businesses operating in these industries to employ strategies that keep track of greenhouse gas emissions. Other industries such as mining should assess and remedy the desertification associated with their operations has on global warming. Overall, self-enforced initiatives underpinned by moral beliefs, not by legal obligations, are needed to stop the tide of climate change in Africa. This is particularly true because the regulatory

frameworks in African countries are relatively weak to buffer significant gains in climate protection (Collier *et al.*, 2008; Kumssa and Jones, 2010). Thus, relying on only the law will not help much.

4.4 Philanthropic Dimension of CSR

Businesses are expected to give back to society, mainly because they would not exist without society. According to Carroll (1991), CSR's philanthropic dimension entails all business programs and activities directed at meeting society's expectations in promoting goodwill and welfare. Kotler and Lee (2005, p. 3) capture this dimension as "a commitment to improving community well-being through discretionary business practices and contributions of corporate resources." The gift of goods and donations in funds are mediums through which organizations make philanthropic contributions. However, organizations are not perceived as unethical if they are not philanthropic (Carroll 1991). Hence, the main difference between the ethical and philanthropic dimensions is that the latter is an act of goodwill while the former is a moral act. The philanthropic dimension to CSR is also perceived as organizations investing in their society. Just like the ethical dimension, philanthropy is not a legal requirement.

Africa, being underdeveloped, records a lot of human activity that significantly influence the earth's temperature and climate, including deforestation and fossil fuel usage. Despite these devastating activities, philanthropic CSR in the region assumes the form of equipment and financial donations to health, education and other causes in local communities (Adeleye *et al.*, 2020; Amaeshi *et al.*, 2016; Cranenburgh and Arenas, 2014; Kühn, Stiglbauer, and Fifka, 2018), but overlooks the environment. It is important that philanthropic CSR shifts in two ways. The first is a move towards "pro-green" donations, which could manifest in the form of providing renewable energy such as solar lamps, establishing wind energy farms, and donating gas to rural communities to reduce dependency on, or end the usage of fossil fuels. The second is a move from material donations to knowledge sharing. Businesses can alter the trajectory of climate change by "donating" their knowledge to help enlighten rural areas on the challenges, risks, and remedies of climate change. For instance, they could offer charitable donations and aids that would foster information sharing and learning about climate change. They could also target their philanthropy at charities, non-governmental and civil society organizations whose work focus on climate change

mitigation. Further, they could donate equipment for facilitating the works of public agencies that are crucial to climate change mitigation, such as agricultural and environmental departments.

5. Conclusion

This chapter explored the challenges posed by climate change in Africa and discussed how businesses could tackle these challenges through their CSR activities. It explores four CSR dimensions that broaden the scope of what businesses can do to help mitigate the adverse effects of climate change. To address climate change, businesses must commit to engage in meaningful and sustainable development activities. As economic agents, they can empower individuals and nations to fight climatic variations through their economic decisions. As legal entities, they can adhere to existing regulations while lobbying to strengthen climate change regulatory regimes. Furthermore, as ethics champions and philanthropists, they can act respectively as environmental stewards and climate change resource providers. Through these diverse roles, businesses can help protect the future while also creating the conditions that support their survival, profitability, and competitive advantage.

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