

THE IMPACT OF GREEN INNOVATION STRATEGIES ON HOTEL PERFORMANCE IN THE GAMBIA

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Abstract: This conceptual paper proposes research which aims to investigate the impact of green innovation on Gambia hotels' performance. The paper reviewed literature on the adopting of green innovation for sustainability strategies of tourism industry. Although there is a growing trend in the adoption of green innovation strategies, there is little or no evidence that the Gambia tourism industry has given any attention to adoption of green innovations. The conclusion drawn from the literature is that green innovation has positive causal effect on environmental sustainability. The paper proposes using the quantitative method of collecting data through a self-administered questionnaire following a proper reliability test of measurement items of the research constructs. The findings of this research may help in bridging the gap in green innovation implementation, and increase the knowledge of hotel managers for the greater and improved environmental performance of hotels and the consequential costs saving and reduction of waste and pollution. The findings of this research may help cultivate the environmental sustainability culture of the hotels and reorient the attitudes and behavior of hotel staff towards sustainability performance.

Keywords-Climate Change, Environmental Performance, Gambia, Green innovation, Sustainable development.

I. Introduction

This paper begins with a brief review of global position of environmental degradation and the effects of this degradation on the world environment, followed by a review on sustainability and current sustainability practices of the Gambia tourism industry. This paper is conceptually focused primarily on green innovation strategy and green promotion. With a growing global concern for the impact of environmental degradation and its impact on economies, companies in various sectors in developed and underdeveloped countries are pressured to go green by adopting green strategies in pursuit of economic interests while improving environmental protection (Li *et al.*, 2017). Green innovation is a possible means to mitigate the undesirable impacts that result from production and other firm operations on the environment; green innovation focuses on the way to improve the processes, technologies, systems, products, and the management methods of firms (Asadi *et al.*, 2020). Advancing green development and mitigating issues related to environmental protection are possible when green innovations are used effectively (Li *et al.* 2017). Moreover, these innovations constitute important components for the coordinated improvement of environmental, societal, and financial outcomes of firms (Dangelico *et al.*, 2017). The concept of green innovation constitutes three fundamental dimensions of product, process, and systems (organizational management) (Chang, 2016). The process and product are mainly concerned with the combined objective of environmental protection. Furthermore, process innovation or production efficiency, and product innovations are concerned with the quality of the product (Asadi *et al.*, 2020).

While referring to Triple Bottom Line (TBL), Ekington (1998), posited that TBL facilitates the application of sustainability in research and decision making. By this concept, it is possible to maintain a balance among environment, societal, and economic parameters of the organization while maintaining a critical move towards sustainable development (Nilashi, Rupani *et al.*, 2019). Engaging in environmental matters is a key challenge for organizations everywhere as organizational activities that are not considered sustainability activities of operations result in severe depletion and deterioration of natural resources (Hall *et al.*, 2010). Thus, organizations need to be encouraged to integrate sustainability strategies and other positive approaches for the protection of the environment from excessive use of natural resources and waste generation (Asadi *et al.*, 2020).

Because of the operational activities of organizations that are reflective of non-sustainability behavior, there is a general need to encourage alternative strategies that will reverse the effects of conventional mass tourism, which was largely result in social and environmental degradation, especially within the coastal locations in developing countries. (Attemene & Eguavoen, 2017). Ecotourism, for example, is intended for the sole purpose of promoting environmental sustainability. According to Attemene and Eguavoen (2017), the extant literature suggests ecotourism as a variant of conventional tourism because it promotes nature and culture-based travel activities, heightens public environmental awareness, and the conservation of local resources. Ecotourism reduces the negative impact of tourism and provides numerous benefits to local communities (Attemene & Eguavoen, 2017). In effect, ecotourism integrates three dimensions of sustainability: a) iconological sustainability; b) socio-cultural and c) economic sustainability that are related to various benefits gained by local communities from cultural beliefs and values (Attemene & Eguavoen, 2017).

This conceptual paper, although share the theme of sustainability with ecotourism, is more focused on the integration of sustainability activities such as green innovation by hotels and lodges in the Gambia for the primary reduction of environmental degradation leading to better environmental performance and contributing the Gambia's effort for amelioration of climate change. The rest of this paper is organized as follows: a section discussed the purpose of inquiry, a section discussed sustainability, section discussed Gambia tourism industry, section discussed green innovation, firm performance, problem statement, theoretical framework and hypothesis development and the conceptual framework, a section discussed the recommended research methodology, the sample and data collections, and finally a section on concluding remarks and significance of the research.

II. Purpose of Inquiry

This conceptual paper aims to explore the impact of green innovation strategy on hotels' performance of Gambian hotels. The growth of the green industries has received positive consideration by industry practitioners (Dangelico, 2016). Empirical evidence suggest different kinds of firms have redirected their resources and energies toward the adoption of green philosophies such as manufacturing firms, have positively increased their firm performance following the implementation of green processes (Hasan & Ali 2015). The hotel and tourism industries have also began pivoting towards green hotels and eco-tourism and continue to promote a green image (Hasan & Ali 2015). Although green practices and products are beneficial for firm performance, (Chiang *et al.*, 2011; Masud *et al.*, 2017; Musa and Mohamad, 2018; Dangelico, 2016) showed that green practices have some inhibiting factors.

Green practices has been shown to be mainly practiced by larger manufacturing firms in the West and not much attention given to green concept by Small and medium enterprises (SMEs) including hotels (Dangelico, 2016; Tariq *et al.*, 2017; Wei *et al.*, 2017), this is especially true for various industries including the hotels industry and particularly hotels in the sub-Saharan African countries such as the Gambia. Therefore, this conceptual paper intends to investigate green innovation strategies adopted by hotels in the Gambia. This is particularly important as there no evidence in the literature that hotels in the Gambia have seriously adopted green strategies, and therefore lacking. This study is significant because it will add new knowledge to the existing gap in the literature and enhance the knowledge of hotel managers on the benefits of the green strategies through a change in their thinking strategy. Consequently, an increase success in adoption of green strategies will encourage hotels to adopt green strategies and therefore increase the number of hotels that will embrace the sustainability drive.

III. Sustainability

The notion of sustainability has gained popularity in recent years giving it high consideration in the literature. Sustainability is a primary philosophy that has given much attention premised on the responsibility of businesses to meet human needs while at the same time concerned with the preservation of natural state of the world (Chen *et al.*, 2016; De Medeiros, Ribeiro & Cortimiglia, 2014; Jové-Llopis & Segarra-Blasco, 2018). The recent

challenges associated with the environment demand for managers to devise strategies that leads to controlling pollutions and preservation of the natural resources. According to Hasan and Ali (2015), integrating sustainability in organizational operations remains a challenge for many managers however, green strategies have been shown to have positive causal effect on firm performance (Albort-Morant, *et al.*, 2016; Dangelico, 2016; Fernando & Wah, 2017; Tariq *et al.*, 2017). Hence, many industries have adopted green business strategy to help gain sustainable growth of green business processes. Despite the adoption of green strategies is voluntary basis, an increase number of companies have considered taking up green practices. Moreover, green initiatives are becoming important to strategic consideration among companies (Hasan & Ali, 2015). The noticeable growth of new green industries shows a positive disposition of industry managers. The literature has provided sufficient prove of firm profitability as a result of adopting green systems (Kam-Sing Wong, 2012).

Several industries such as retail outlets are also promoting green image; and the agriculture sector has also responded to the green orientation by producing foods and other products that do little or no harm to the environment and to consumers (Hasan & Ali, 2015). The hotel and tourism industry is equally engaged in business changes that focus on green hotels and eco-tourism (Punitha & Rasdi 2013). Furthermore, the buying green concept continues to grow as consumers learn toward green and appreciate environmentally-friendly products; making buying habits shift from grey products to green products (Punitha & Rasdi 2013). While these habit change and businesses are challenged to form green business strategies, it remains unclear how green strategy affect the performance of hotels in Gambia.

Sustainability as a concept is synonymous with the management of the ecosystems long before it received greater focus termed 'Sustainable development' in 1972 when the United Nations (UN) mainstreamed the term sustainability at the UN Stockholm Conference on Human Environment (UNESCO, 2018). The UN conference shed global light on environmental protection for the benefit of the 'now' and generations to come in the future. The Conference also showed the challenges of sustainability and the necessity for providing the pertinent guiding principles that would address how to preserve the human environment during a period of global economic advancement. Moreover, it was in 1972 that the General Conference of UNESCO adopted the World Heritage Convention which addressed the question of conservation of the world's natural resources and cultural heritage (UNESCO, 2018). By the early 20th century, specifically in 2002, the Johannesburg World Summit on Sustainable Development, the concept of sustainability was expanded anchoring on three pillars of economic development, social development, and environmental protections (UNESCO, 2018). Governments like the Gambia showed commitment by cooperating with heritage preservation for the primary reason to improve the protection of the environment and natural resources and cultural heritage. By 2015, the UN unveiled the adoption of the 17 Sustainable Development Goals – the 2030 Agenda- with specific reference, in SDG 11 among which is the agenda calling for the remedial actions addressing climate change and the preservation of global systems (UNESCO, 2018). Appropriately, organizations should give greater consideration to investment, exploitation, and the use of green technologies and innovations which aim to efficiently utilize resources while at the same time advancing ecological actions and production processes (Khan, *et al.*, 2016).

IV. The Gambia Tourism Industry

The Gambia is known as the smallest country in continental Africa. The Gambia is categorized as a Least Developed Country (LDC) while in some quarters it is categorized as a developing country of approximately two million people. The Gambia is endowed with 80 km of coastline and a river called River Gambia that snakes along the entire length of the country from East to West (Attemene & Eguavoen, 2017). The Gambia was among the first beneficiaries of tourism in Africa as a preferred destination that received over 300 tourists from Sweden in 1965. Although the rise in the number of tourists remained constant, the Gambia enjoyed very limited benefits in the form of foreign exchange gains. By the 1970s the Gambia was not considered a significant tourist destination and had very limited public investment and a poor infrastructure (Attemene & Eguavoen, 2017). Moreover, the 1980s was marred by severe economic decline causing the Gambia government to disinvest in the hotel industry and abandoned the marketing of tourism to tour operators.

Considered a major driver of the Gambian economy, the Gambia Tourism sector contributes approximately 16% to the Gross Domestic Production (GDP) (Oluwatobi & Amaka 2019). As the Gambia continues to grow as a tourism destination for Europeans, the tourism sector is expected to contribute about 18% to GDP by 2020 (Amuzu *et al.*, 2018). The Gambia government has given significant consideration to the tourism sector for sustainable economic advancement (Oluwatobi & Amaka 2019). The Gambia is a popular destination for tourists from Scandinavia and Europe. Following an economic downturn of the early 80s, tourism bounce back in 1996 and by 2005 the sector recorded a significant growth of 23 percent (90,000 tourists were recorded in 2005) increase in

tourist' arrival by chartered air travel (Attemene & Eguavoen 2017). In 2004, the tourism sector accounted for approximately 16,000 jobs in the Gambia and projected to rise to an estimated 35,000 jobs by 2020 (Attemene & Eguavoen, 2017).

The government of Gambia made remarkable efforts to tap into the ecotourism potential by providing an alternative to an added source of income for rural communities. Consequently, ecotourism is an integral part of the national development plan for poverty alleviation and conservation strategies as well as contributing to efforts in addressing climate change through adaptation measures (Attemene & Eguavoen, 2017). However, while coordinated by various state and private agencies such as the Department of Forestry, The Gambia Tourism Board, Community forest managers, and individual tourism operators, ecotourism suffers from substandard quality with high-risk potential (GoG/Department of State for Tourism and Culture, 2006).

The impact of climate change remains a critical pervasive concern for the world. The impact of climate change is firstly felt by coastal zones with a high concentration of service industries like tourism, fisheries, transportation, recreation, and human settlement (Amuzu *et al.*, 2018). The Gambia like many other nations in Africa founded their capital cities along the coastal zones. This is the zone that receives the bulk of the tourist from across the world. For example, in 2015, the African tourism visits increased from 53.4 million tourists to 57.8 million in 2016 all of which were received in the coastal zone (Amuzu *et al.*, 2018). Therefore, climate change may negatively impact the expected benefits from tourism in the coastal zones. Coastal zones are highly threatened by climate change, for example, the increased settlements occurring in the coastal zones; the rising intensity of storms, rising temperature, variations in precipitation patterns, and rising sea levels are some of the threats (Change, 2014).

The estimated average rise of sea level along the African coastline is expected to reach 48 cm by the end of the 21st century (Amuzu *et al.*, 2018). The rising sea levels are expected to quickly lead to damaging the coastline, leading to soil and water table salinization, degrading and the altering the biological systems, and leading to the unintended migration of people (Yaffa, 2013). Consequently, Gambia's coastline zone of 92km² is predicted to fall under submersion as a result of only 1 m rise of sea level (Allowet *et al.*, 1996). Such an occurrence will undoubtedly lead to the loss of Gambia's capital Banjul (Amuzu *et al.*, 2018). Therefore, green innovation is an appropriate remedial action that fits well with the proposed effective approach with long term prospects in addressing climate change in the Gambia.

The Gambia government has demonstrated much-needed action for mitigating the consequent impact of climate change. In 2015, Gambia drafted The Low Emission Climate Resilient Development Strategy (LECRDS) (Gambia, 2011), with the primary aim to allow the Gambia a means for an effective response method to climate change. LECRDS program was a means to facilitate the Gambia government institutions to design, implement, monitor, and grow the existing low-emission climate-resilient development projects and programs (Gambia, 2011). A fundamental proposed LECRDS activity suggested the promotion and increase consideration for renewable energy mix (solar, wind, biomass) to produce, and consume electricity in the Gambia (Gambia, 2011).

Furthermore, as one of the least developed countries in the world, Gambia has been steadfast in demonstrating a commitment to mitigating climate change from which the country is adversely affected. To demonstrate the quest in mitigating climate change, in 1994, the Gambia ratified The United Nations Framework Convention on Climate Change (UNFCCC), the Gambia showed commitment to climate change in actions taken with its First National Communication to the first United Nations Framework Convention on Climate Change, The National Adaptation Program of Action, The National Capacity Self-Assessment Report, The Gambia Program for Accelerated Growth and Employment (PAGE), and The Second National Communication (Gambia, 2011). Consequently, these national reports submitted to UNFCCC and development partners, are a means to an end of facilitating inter alia, capacity building, technical and financial strategies, and help Gambia in the quest to nationally, regionally, and internationally implement the Climate Change Convention. (Gambia, 2011). Based on the foregone discussion, integration of green innovation strategy into the development agenda of the sectoral policy of the hotel industry is most appropriate and congruous to the Gambia's overall quest and efforts toward mitigating the adverse effects of climate change.

V. Green Innovation

Green innovation is a means for organizations to achieve economic advantage while engaging in procedures that have zero or minimal impact on the environment (Li *et al.*, 2017). Thus in practical terms, green innovations are practical measures taken by firms to mitigate undesirable impact their organizations have on the environment. Central to the concept of green innovation is improving processes, techniques, systems, products, as well as management systems of organizations (Chen *et al.*, 2018). Therefore, green innovations are a means to promote the developing and addressing efforts associated with protecting the environment. Furthermore, green

innovations are regarded as important elements to improve the environment while at the same time improving the societal and financial interest of organizations (Dangelico & Pujari, 2010). Green innovation consists of the three fundamental components; green products, green process, and green system (management) (Li *et al.*, 2017). Product and process are primarily concerned with combining environmental objectives for efficient productivity while product innovation aims at product quality (Triguero, *et al.*, 2013).

Green product and process innovation are useful for not only reducing the undesirable environmental effects, but are also useful in increasing the economic and social performance of a firm through reducing costs, and waste generation (Calza *et al.*, 2017). Besides, product innovation can improve the market position of a firm, increase brand knowledge, leapfrogs competition, afford breakthroughs, and attract new customers (Calza *et al.*, 2017). This paper is interested in environmental technologies that address pollution control, cleaner process technologies or green energy technologies, organizational innovation for the environment that may enable management systems for addressing environmental issues (Chen *et al.*, 2016) in the hotel industry. Organizations everywhere face major challenges addressing environmental issues as non-sustainable organizational activities contribute to the depletion and destruction of natural resources (Asadi, 2020). Therefore, organizations need to be encouraged to engage to adopt positive methods for the protection of the environment during their activities that impacts on the biophysical environment through the use of large amounts of natural resources and waste generation (Chen *et al.*, 2016).

VI. Firm Performance

Firm performance is not only a measure of certain dimensions importance to the firm but also seen as the benefits derived from the strategic business operations (Hasan & Ali, 2015). Several researchers have supported the notion that firms can improve their environmental performance and business efficiency through the implementation of green innovations (Chen, Lai & Wen, 2006; Dangelico, 2016; Roni *et al.*, 2017). According to Chen *et al.* (2016), investing in green innovation results in positive impact on the firm. Likewise, Lee, Cin and Lee (2016) posited the green process involved in developing new products is positively related to firm performance. However, literature has also shown debates on whether firms that adopt green strategies and gain certification of ISO 4001 EMS (environmental management systems) gain any positive outcome on firm performance (Dangelico, 2016). Punitha and Rasdi (2013) showed the benefits and the advantages attached to green business practices for firms may be obtained from such practices; some of these benefits include improved financial and market performance. Literature has shown for example in countries like Malaysia and other nations that have firms that have integrated green practices, benefited from cost savings, market opportunities and financial gains from the marketing of green products and services which are drive green initiatives (ElTayeb *et al.*, 2010). Furthermore, pressures of competitiveness and the customer needs have been shown in the literature as important stimulus for green business strategies which results in green product, process and services (ElTayeb *et al.*, 2010). Additionally, literature has shown the importance of ISO 14001 certification and its positive correlation with firm's performance which includes perceived positive financial impact, environmental impact, customer satisfaction (Hasan & Ali, 2015).

Companies are said to positively gain from implementing ISO 14001; these gains include sustainable market positioning, and improved environmental performance (Zhang *et al.*, 2019). In the literature, firm performance was demonstrated as comprising customer satisfaction, employee morale, growth in export, profitability, productivity, reduced quality cost, financial performance, and environmental performance (Hasan & Ali, 2015). Ledwith and O'Dwyer (2009) posited that measuring the success of new products or services may be achieved by using indexes like market standing or positioning, financial measures, customer acceptance measures, product or service level measures etc. Moreover, achieving financial motivators are critical for firms to use the green concept as a market strategy (Qiu, Jie, Wang, & Zhao, 2020). Other researcher have indicated that overall firm performance may be measured on indices of environmental performance, economic performance and intangible performance (Laosirihongthong *et al.*, 2013; Vijayvargy *et al.*, 2017). Several other researchers used environmental performance, economic performance, and market performance to discuss and determine firm performance (Vijayvargy *et al.*, 2017).

Given the various definitions of environmental performance was described as firm performing with a low operational cost, minimal consumption of energy, recycling waste for the intended preservation and protection of the environment (Hasan & Ali, 2015). Operational performance is the definition used for this paper as it best indicates firm's performance regardless of whether resources belonging to the firms are effectively utilized to achieve the aim of the firm; hence, it is appropriate that economic performance and operational performance that are related to the objective of improving the processes and methods, are used frequently to measure overall performance (Hasan & Ali, 2015). Despite the amount of studies in this area, none has addressed the impact of green strategies on firm

performance of Gambian hotels.

VII. Problem Statement

The 21st century will be known as the globalization century marked by a mass movement of populations, advanced developments in transportation, and various technologies aiding global communication that have significantly contributed to the development of the travel and tourism industry of the global economic sector (Lee & Brahmairene, 2013). Tourism is an economic engine that significantly contributes to national economies across the globe through job creation, tax revenues, hard currency, and jobs (Lee & Brahmairene, 2013). Albeit the tourism sector in countries is a key player contributing to rapidly improving the economic development of nations, tourism has also negatively impacted the environment (Asadi *et al.*, 2020). Empirical evidence literature showed clear findings that undeniably supported tourism as a key contributor of CO₂, and that tourism's global carbon footprint amounted to approximately 8% of the global greenhouse emissions (Lenzen *et al.*, 2018). Hence regardless of tourism's economic performance, the negative impact of carbon emissions on the environment cannot be ignored (Asadi *et al.*, 2020). Thus the growing interest in the quest to address this problem is warranted for a means to design sustainable tourism strategies for reducing the negative effect the industry has contributed to climate change and global warming (Koçak *et al.*, 2020).

Tourism ranks high among the top industries in the world which is a major consumer of a significant proportion of natural resources while producing a significant amount of waste and pollutants (Bohdanowicz & Martinac, 2003; Nilashiet *et al.*, 2019). Hotels, therefore, have an irrefutable role to play in the promotion of green consumption which enhances the quest for designing sustainability strategies for the reduction of waste and pollution. The extant literature has provided large amounts of evidence confirming the negative impacts of the hotel industry on the environment through significant and large amounts of water consumed, high energy used, and waste generated (Asadi *et al.*, 2020; Siti-Nabiha *et al.*, 2011; Yusof & Jamaludin, 2013).

According to Mohamad *et al.* (2014), the hotel industry causes severe harm to the environment, and attributed 75% of the effects of tourism on the environment to unreasonable use of soft consumables, energy, and water, and contributing considerably to climate change. Hotels, therefore, are responsible for the largest levels of energy consumption in the area of tourism (Asadi *et al.*, 2020). There is no evidence in the literature that hotels in the Gambia are aware of the issues associated with the environment; because there is no evidence of the Gambian hotels' green practices in the industry. Referencing Martínez-Pérez *et al.* (2015) green initiatives are growingly gaining popular recognition in the hotel industry because they are implemented as a novel business model that helps in the achievement of a better quality of sustainable products and services derived from innovations which are applied to hotel operations, and environmental protection. Therefore, it may be appropriately suggested that on one hand sustainability is important for improving the natural environment and on the other hand, to achieve the competitive performance of hotels (Asadi *et al.*, 2020). Therefore, green innovation is undeniably important in achieving sustainability in a firm's performance (Asadi *et al.*, 2020). Although there have been notable amounts of research in this area with much consideration for manufacturing and other industries (Asadi *et al.*, 2020), however, very few studies focused on green innovation in the hotel industry.

The extant literature has shown that green innovation is mainly viewed as an abstract notion, which is the reason for a significant number of hotel managers' apprehension about adopting it (Smerecnik & Andersen, 2011). Furthermore, very limited studies have examined the association between green innovation and sustainability in the operations of a firm (Zailani *et al.*, 2015). Therefore, the adoption of green innovation by hotel managers requires a good understanding of the concept of green innovation. The extant literature has shown that successful adoption of green innovation can lead to new competitive areas while resulting into the "win-win" conditions, through the reduction of negative environmental effects of the hotel industry, and the improvement of the firm's economic performance (Asadi *et al.* 2020; Siti-Nabiha *et al.*, 2011; Zailani *et al.* 2015). Therefore, it is important to conduct detailed research that aims to provide a comprehensive understanding of the effects green strategies may have on the sustainable performance of hotels in the Gambia. In this regard, the present conceptual paper proposes research that will bridge the gap in the literature through empirical evidence with data collected from the Gambian hotel managers. This conceptual paper is expected to be a source of encouragement for hotels to adopt green innovation initiatives and enhance sustainable performance as well as their competitive potential. Accordingly, the primary objective of the present conceptual paper is review the literature on the adopting and benefits of green strategies for environmental performance of Gambia hotels' performance.

Theoretical grounding and relevant constructs

The proposed conceptual framework for examining the influence of green innovation on sustainable business performance of the Gambian hotel industry is grounded in the resource-based view (RBV) theory. RBV

was first introduced to describe an organization as composing of unique resources and capabilities that cumulatively create competencies (Wernerfelt, 1984). RBV postulates that organizations may achieve sustained competitive advantages through capabilities or resources that are valued, rare, inimitable, non-sustainable, and non-transferable (Gollagher et al., 2010). Hence, RBV theory presupposes that organizations' capabilities and resources are the means through which organizations can achieve success and competitive advantage (Xie et al., 2019). Because firms face external and internal pressures in the adoption and implementation of environmentally friendly actions, the need for organizations to engage and sustain green organizational capabilities continues to rise. The importance for organizations to recognize and adopt green organizational actions has become greater in recent years as organizations face more external and internal pressures arising from governmental regulations, environmental agencies, shareholders, personnel, competitors, and clients (Asadi et al., 2020) thus compelling firms to engage in programs such as green technologies, green products, and implementing green supply chain management (Asadi et al., 2020). Based on the RBV, environmental regulations, green innovation strategies, green organizational culture, and energy savings help to enhance green innovation; which involves important tangible, valuable, inimitable, and useful resources. The proposed research framework which is adapted referencing Asadi et al. (2020) is depicted in Fig. 1 followed by research hypotheses and related discussion on the constructs.

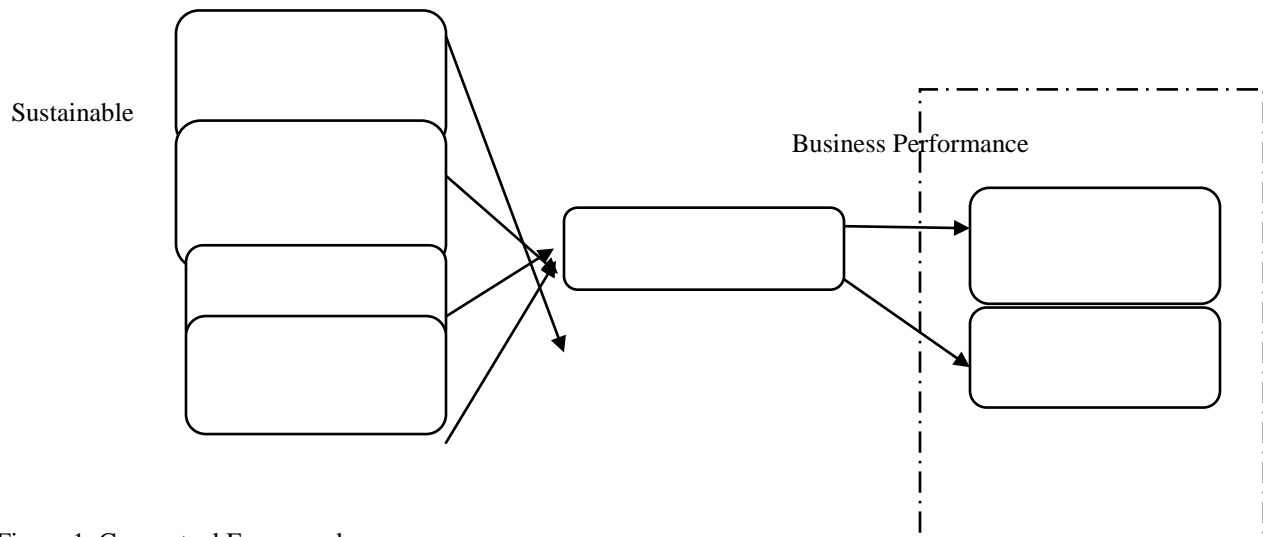


Figure 1. Conceptual Framework

Environmental regulation

Firms may be disposed to view environmental regulations as a hindrance to the economic objective of maximizing corporate value. Conversely, Porter, and Van der Linde (1995), posited that firms that engage in green innovation as a result of environmental regulations and experience cost consequences, will ultimately in the long run enjoy enhanced productivity. Thus environmental regulations should be seen as beneficial in the long run and not a limitation for firms. These regulations should be more or less viewed as motivation to move in the direction of green procedures which have beneficial consequential outcomes for firms (Dangelico, 2016). Zailani et al. (2015) suggested that green innovation strategies stimulate and direct environmental regulations which are a means to pressure firms to adopt environmental green initiatives (Liet et al., 2014). Furthermore, environmental regulations are known to compel firms to invest in clean technologies and making considerations for environmental issues in the design of firms' products and procedures (Asadi et al., 2020). Based on the discussions, H1 is suggested as a possible viable hypothesis:

H1. Environmental regulations have a positive relationship with green innovations.

Green innovation strategy

Green innovation is primarily concerned with the reduction of waste and the prevention of pollution with a focus on a system of environmental management (Song & Yu, 2018). Moreover, green innovation is one of the primary environmental strategies for firms, that involves changes in production processes which constitutes the reduction of consumption of resources, prevention of pollution, and adoption of environmental management systems (Asadi et al. 2020). Green innovation strategy is a means to coordinate different resources necessary for green

production processes. Thus, green strategies may help firms to avoid associated high social and economic costs and damage to the environment on one hand and the other gain new market opportunities and competitive advantage (Chen *et al.*, 2006). With increased consumer environmental knowledge and consciousness, consumers are increasingly disposed to select green products because of a desire for a green behavioral and environmentally friendliness (Chen *et al.*, 2018). Therefore, green innovation strategy provides the best means to enhance green product innovation at the same time meeting consumer expectations. Consequently, the application of green strategies motivates considerations for environmentally friendly concepts during the design, packaging, and subsequently the promotion of green innovation. Therefore, arising from these discussions is the formulation of H2:

H2. Green innovation strategy has a positive relationship with green innovation.

Green organizational culture

Green organizational culture is regarded as assumptions, values, symbols, and artifacts of organizations that are reflected in a desire or need to operate in an environmentally sustainable way (Asadi, *et al.*, 2020). In other words, a green culture may be seen as the way a firm deals with an environmental problem along the lines of organizational values (Pham *et al.*, 2018). Because green organizational culture is an important concept, firms should attach importance to green concepts for the reasons for remaining productive and competitive in the long term (Asadi *et al.*, 2020). An organization may be regarded as “green” when the staff gives less focus to profit-making considerations and give greater interest to reducing the negative impact of their organizational actions that results in maximizing the positive impact on the environment (Roscoe *et al.*, 2019). Thus, the hotel industry should create an organizational culture and invest in green innovation actions that will result in gaining and maintaining a competitive advantage.

The hotel industry can, therefore, play a major role in protecting the environment when a green organizational culture is cultivated and adopted by all staff (Asadi *et al.*, 2020). Moreover, environmental strategies help the hotel industry to develop and manage their staff’s environmental responsiveness when this is within the context of a green culture; at the same time enhancing customer satisfaction while boosting economic and environmental performance through energy savings, rationalization of water usage, and reducing waste, and pollution. (Pham *et al.*, 2018). Therefore, hotels should encourage the cultivation of type of organizational culture that helps innovative operations such as a goal of green innovation that should be communicated across the organization. Green innovations can only be successfully implemented through a green organizational culture because it affects both the organizations and staff (Asadi *et al.* 2020). Chang (2016) suggest that the green organizational culture has a positive influence on both green process and product innovation. Therefore, organizational commitment is important for the adoption of green innovation adaptability (Chang, 2016). Accordingly, the literature supports that organizational culture may be regarded as a key influencing factor in innovation. Therefore, arising from these discussions hypothesis (H3) was suggested:

H3. A green organizational culture has a positive relationship with green innovations.

Energy conservation

Some of the notable activities of tourism include transportation and hosting of tourists. Consumption of tourism services is dependent on a variety of infrastructure services such as airports, ports, roads, railheads, and telecommunication (Lee & Brahmairene, 2013). The development of these infrastructure involves the generation of an array of environmental and ecological effects. For example, modern tourists are progressively opting to drive personal auto vehicles to visit tourist destinations. Consequently, this results in considerable environmental damage (Black & Lynch, 2004). Tourism is a key contributor to environmental degradation that also negatively impacts the social and cultural lives of people. Failure to properly manage tourism has led to damages to the natural and socio-cultural environment of tourism destinations (Place *et al.*, 1998). These negative side effects have resulted in an urgent and alarming concern for finding ways for conservation and preservation of natural resources, and the well-being of humans, and the long-term economic viability of countries (Lee & Brahmairene, 2013; Scott *et al.*, 2010).

Tourism goes hand in hand with the consumption of fossil fuels for transportation, accommodation, and various other activities. Fossil fuels are connected to greenhouse gas emissions (Black & Lynch, 2004). Empirical evidence has shown the relationship between greenhouse gases and global warming (Bode *et al.*, 2003). A United Nations World Tourism Organization report (UNWTO, 2008) stated that the average CO₂ emission contributed by the tourism industry equals approximately five percent of the world total; that a large quantity of emissions is from the transportation of tourists by air travel (Lee & Brahmairene, 2013). Thus, the tourism sector’s contribution to global climate change is substantial. Moreover, according to Scott *et al.* (2010) tourism could become a lead contributor to greenhouse gases in the future. Scott *et al.* (2010) posited that reduction of emission could be achieved along the lines of important changes in policy and practices related to air travel. Nevertheless, the tourism sector’s response to climate change is important for the sustainability of tourism (Lee & Brahmairene, 2013). Redirecting the

policies to new ways that promote a low-carbon economy, or renewed limited emissions technology, both of which are capable of facilitating lower CO₂ emissions regardless of growing increase in the number of tourist globally.

In providing services for the comfort of guests, hotels in the tourism sector account for a significant amount of energy and resource consumption (Asadi *et al.*, 2020). The efficient use of energy performance in hotels is influenced by a myriad of parameters that include design and type of air conditioning used in hotels. The tourism industry's sustainability and competitiveness are affected by two factors of efficient use of energy (reducing the cumulative use of energy) and the comprehensive application of renewables (Pratt *et al.*, 2011). Based on the literature, energy consumption ranges from 25 and 284 Mj/guest/night in hotels. In hotels, holiday villages, and vacation homes, the energy consumption varies from 90-130 Mj/guest/night (Gössling *et al.*, 2005).

Generally, there remains a need for improved efficiency of energy use in hotels which is responsible for a substantial amount of consumed energy. According to literature, the hotels' level of energy consumption is remarkably high because they provide different guest services (Asadi *et al.*, 2020). Therefore, the need to evaluate hotels' efficient use of energy is paramount and significantly important. Based on past studies, the level of energy used in hotel unit guest rooms is closely related to the level of carbon dioxide and therefore showing a correlation between energy consumption and carbon footprint of hotels. Based on the above discussion, the hypothesis, H4 was suggested.

H4. Energy conservation is positively related to green innovation.

The present conceptual paper proposes to use purposive sampling as one of the primary types of non-probability sampling methods in which the unit of analysis is chosen with a structured purpose (Creswell, 2002). In purposive sampling, the unit analysis is purposively selected to satisfy specific intended criteria for inclusion and exclusion from participation in the research (Sekaran, 2003). The technique of purposive sampling is appropriate for allowing the researcher to describe a phenomenon or develop new knowledge about a phenomenon that otherwise was less known about.

This conceptual paper stands to immensely gain from the insight provided in literature; gaining additional knowledge is critical for deriving greater understanding for this paper. The literature is a source for obtaining findings on the impact of green strategy on firm performance of hotels. Green strategy is effective in advancing green products and strategies for the satisfaction of customers wants and requirements (Hasan & Ali, 2015; Ledwith & O'Dwyer, 2009). Leonidou *et al.* (2013) suggested that green marketing strategy programs are useful for firm's performance. This is in congruence with other findings that suggested that green marketing strategies facilitates better resource management, operational efficiency, and positive firm image and reputation which results in improved financial performance (Fraj *et al.*, 2011).

A good review of the literature has shown that a mix of green innovation and green promotion with the marketing strategy is way to provide good pricing and distribution and promotion of products. After a good review of the literature, conclusively, it may be suggested that green strategies result in firm profitability, competitive advantage and a motivator for greener ways of buying habits by customers (Fraj *et al.*, 2011). Therefore, hotels that integrate green strategies stand to gain from improved firm performance from customers that are attracted and prefer to by green.

VIII. Conclusion

There is a growing awareness and increased knowledge about sustainability that organizations are keenly adopting and integrating into their organizational operations. The present conceptual paper reviewed the literature on green innovation along the line of sustainability of business performance in Gambian hotels that apply any form of green practices. The implementation of green strategies continues to grow across the globe and motivates firms to keep developing their green potential with innovative green processes for reducing the negative environmental impact of their activities. Research has shown green innovation strategies have a positive correlation with environmental performance, thus firms that have adopted green innovation will achieve increased acceptable environmental performance (Hasan & Ali, 2015). Hence this is a way for firms to meet government and industrial requirements for the reduction of environmental pollution while achieving enhanced competitive potential. According to the findings of past research, green innovation procedures explained 55 percent of the difference observed in environmental performance and 45 percent of the difference reported in economic performance (Asadi *et al.*, 2020). The present conceptual paper examined the effects that green innovations may have on sustainability performance in the context of the Gambian hotels' industry. The Gambian hotel industry potential reorienting its position to become more disposed in protecting the environment, which, without a doubt result in beneficial rewards to hotels in the Gambia.

Empirical evidence has demonstrated that green innovation in the production and processes of hotels, is

meant for cost savings in hotels while attracting customers who are concerned with environmental issues and recognize and respect these efforts. As far as can be determined in the literature, this conceptual paper is the first of its kind to propose the exploration of the impact of green innovation in hotels in the context of the Gambia hotel industry. This review comes with theoretical as well as practical implications connected to sustainable hotel performance and provides novelty that is associated with the Gambia hotel industry. This review is expected to provide much needed knowledge and understanding of the benefits of green innovation and how hotel managers may adopt and implement green practices for better firms' environmental performance and eventual improved overall firm performance.

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