

# **Sustainability and Greening Concepts in the Curricula of Hospitality and Tourism Training Institutions in Zambia: A Review of Literature**

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## **Abstract**

*It is unquestionable that the need to address environmental problems has been recognised as an important point of interest for the hospitality and tourism industry. The increased environmental concerns on the part of the hotel operators, consumers, governments and nongovernmental organisations has put pressure on the industry to invest in more environmental friendly practices. The need for a 'hospitality and tourism sustainability curriculum' stems from the hospitality and tourism industry being one of the largest industries in the world, with huge negative impacts on the local environment. The growing importance of sustainability education to the hospitality and tourism industry has resulted in an increased pedagogical discussion pertaining to how to incorporate sustainability into the curriculum. This study extensively reviewed literature on sustainability education and greening of tourism and hospitality industry's curricula to examine the integration of greening initiatives as well as the extent of the incorporation of green initiatives in Zambia. Consensus among the literature reviewed is that there is need for teaching sustainability within the hospitality and tourism curriculum in order to prepare students for the demands of the hospitality and tourism profession. Since the industry is turning towards sustainable initiatives, it is imperative that hospitality and tourism training providers embrace sustainability and recognise that teaching it is of utmost importance to the success of their students and the industry. Educating students about sustainability will not only be popular among students, but there will also be a ripple effect from their sustainable education into the workplace. A review of different curricula from various hospitality and tourism training institutions in Zambia showed that although these institutions offer a comprehensive programme to those*

*individuals who intend to make a career in this, there is an obvious absence of a module in environmental education, sustainability education or indeed green practices.*

**Keywords:** curriculum, eco-friendly, education, greening, sustainability, sustainable development, training and Zambia.

## **Introduction**

As levels of environmental degradation continue to increase in Zambia, there is a great need for greening initiatives to be incorporated into business, industry and training models. The purpose of this study was to review literature on the possibility of mainstreaming greening topics in the curricula of hospitality and tourism training institutions. To do this, a systematic and extensive literature review approach was used. The study started with a review of literature on the keywords sustainability, sustainable development, greening and education for sustainable development. The study then reviewed literature on sustainability education and greening of tourism and hospitality industry's curricula to examine the integration of greening initiatives as well as the extent of the incorporation of green initiatives in Zambia. The review practically looks at how other scholars have tackled the concept of greening, environmentally/ eco-friendly practices in the tourism and hospitality industry in general and curricula for trainees in particular.

Greening is a strategy for environmental sustainability without which there will be pollution, ecosystem decay and depletion of natural resources. Since the hospitality and tourism industry is a major contributor to waste generation and environmental degradation generally, it is expected that the curricula of institutions offering training in hospitality would include greening as a key component of their training. This is within the understanding that institutions of learning should provide *quality* and *relevant* education to the country's citizenry (Namupe & Chileshe, 2013). It is incontestable that over the last few years some hotels and many of the biggest hotel chains around the world are trying to distinguish themselves as environmentally-friendly players within the tourism sector (Melissen & Roeven, 2007). In Zambia, however, hospitality training

institutions do not seem to offer modules on greening initiatives; while their curricula adequately cater for mainstream traditional topics in hospitality training, there is a conspicuous absence of topics on greening. This appears to agree with the article by Deale et al. (2009) that sustainability is rarely taught within the curriculum. Undoubtedly, any curriculum model that focuses on one set of issues at the expense of the others is not only difficult to justify but is also often unviable over the long-term. Mainstreaming greening into the traditional hospitality and tourism training curriculum will not only produce competent personnel for the hospitality industry but will also improve the chances of producing a workforce that has knowledge, skills and values in environmental sustainability. This study, therefore, reviews literature on how other countries have incorporated sustainability and greening practices in the curricula of hospitality and tourism industry.

### **The concepts of sustainability and greening**

According to Hardy, Beeton and Pearson (2002), the concept of sustainability arose from the many scientific, economic, socio-cultural and environmental problems of the 1970's and 1980's in an effort to address the need for a different, more responsive approach to development. The term 'sustainable development' can be said to have emerged out of the Brundtland Report as the dominant discourse on sustainability. In some treatises, the terms sustainable development and sustainability have been used interchangeably. According to Strong (1972), sustainable development was originally coined as 'eco-development' at the United Nations Environmental Progress Stockholm Conference, and was later defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987). Therefore, the core of sustainability is the recognition of the need for intergenerational equity, where not only the ability of future generations to prosper is considered, but that the needs of those currently marginalised are also met (Posch & Steiner, 2006).

In 2008, the U.S. Environmental Protection Agency (2008) stated that "sustainability encompasses ideas, aspirations and values that continue to inspire public and private organisations to become

better stewards of the environment and that promote positive economic growth and social objectives.” The EPA further explains that sustainability is not constrained to one industry, organisation, or activity; it impacts each and every person, business, and the entire environment. Describing sustainability this way denotes its holistic nature encompassing the ecological/environmental, economic, and social dimensions. The environmental dimension includes all aspects pertaining to the continued viability of the natural environment and resources, the economic dimension includes the flow of funds while the social dimension includes the social impacts on a region and its people (Posh & Steiner, 2006; Dale & Newman, 2005; Slaper & Hall, 2011). This holistic view of sustainability has been referred to as the ‘triple bottom line’ because it focuses on bringing benefits to all areas, not just the environment (Elkington, 1998).

Dryzek (2005, p. 157) cited in Boley (2011) suggested that sustainable development’s global popularity is largely based upon it being pro-development with a ‘rhetoric of reassurance’ where economic growth, environmental conservation, and social justice can exist in harmony forever. According to Kanianska (2017, p.6), “sustainable development has been the overarching goal of the international community since the UN Conference on Environment and Development (UNCED) in 1992.” In addition, Dryzek (2005) portrays the success of sustainable development as a function of its political nature which acknowledges environmental limits, but also allows these environmental limits to be stretched under the right policies so that economic growth can continue indefinitely.

For the purpose of this paper, environmental sustainability will be referred to as a pattern of resource use that aims to meet human needs while preserving the environment for present and future generations by tying together natural systems with social challenges facing humanity (World Commission on Environment and Development, 1987) while sustainability can be viewed as the balanced interaction between a population reaching to express its full potential without adversely affecting the carrying capacity upon which it depends (Bed-Eli, 2004).

The term sustainability was used much just when the concept emerged. Literature shows that, currently, the dominant discourse is ‘green’, that is, green growth (formulated by OECD) and green

economy (formulated by UNEP). Hossan (2014) states that the concept has become a “catch word” on all walks of human life and endeavours. It is applied to business, banking, construction of buildings, education, office maintenance, agriculture, trade and commerce. The term is differentiated from the term ‘brown’ economy which depends excessively on resource depletion and environmental degradation (Moonga & Chileshe, 2019). Kanianska (2017) explains that there have been continuing concerns over global economic and environmental developments in many countries, despite the efforts of many governments around the world to implement national strategies for sustainable development. Today, therefore, governments are seeking effective ways to lead their nations out of these crises whilst also taking into account these ecological limits and green growth or green economy has been proposed as a means for catalysing renewed national policy development and international cooperation and support for sustainable development. According to the OECD (2011, para. 2) green growth means; *fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies. To do this it must catalyse investment and innovation which will underpin sustained growth and give rise to new economic opportunities.*

It appears that, while sustainable growth focuses on people (future generations), the focus of green growth is on the future of natural assets. Kanianska (2017) argues that sustainable development provides an important context for green growth and green economy. On the other hand, green economy and green growth have not been conceived as a replacement for sustainable development, but rather should be considered a subset of them. As we progress in this paper, therefore, the terms sustainable development and green growth/green economy may be used interchangeably.

Behaviour that minimises harm to the environment may be designated as green or pro-environmental behaviour (Steg & Vlek, 2009; Chileshe & Moonga, 2019). More simply, green behaviour has been described as ‘doing good and avoiding bad’ (Cushman-Roisin, 2012). Science for Environment Policy (2012, p. 2) states that green behaviour is the shared responsibility of all citizens in a country, whether as individual private citizens, public authorities or industry. Some examples of green behaviour include minimising energy and

water use and reducing waste generation and pollution. Worldwide, green practices are becoming an increasingly important focus of many companies. In the tourism and hospitality industry, green practices will help operators to understand about what makes their operations green, and also help them to assess their environmental commitment and performance. According to Casado-Asensioi et al. (2014), embracing green growth can secure strong, stable and sustainable development because it allows economic activities to take place while also managing environmental risks.

### **The origins of green aspects in Zambia**

Green initiatives have the potential to address socio-economic and environmental challenges and open up new sources of growth (Kanianska, 2017). In Zambia, several initiatives have been undertaken which can be explained as green and have been documented in the literature (for example, Tordoff, 1979; Banda, 2013; Harvey & Mukosha, 2008; Banda & Bass, 2014; Casado-Asensio et al., 2014). One of the earlier initiatives was the “Keep Zambia Clean, Green and Health” programme, launched in 2007 by President Mwanawasa, mainly for the purpose of waste management. The aim of the programme was to improve health standards throughout the country by ensuring that people maintained clean, green and healthy surroundings. It was also anticipated that the initiative would reduce the cost of fighting perennial water-borne diseases as well as resources spent on cleaning cities and towns each time there was an outbreak of such diseases (Chaampa’s 2013; Phiri, 2018; Chileshe, 2018; Chileshe & Moonga, 2019).

The origin of the green initiative in Zambia is, therefore, situated in the proclamation of the “Keep Zambia Clean, Green, and Healthy” campaign. Beyond waste management, greening activities have also been undertaken in the economic sector, the conservation of natural resources (e.g. the water and energy sectors) and environmental sustainability through eco-friendly practices. In the job sector, the Zambia Green Jobs Programme was launched in 2013 to ‘promote more and better jobs for inclusive and green growth in sectors where goods and services can be produced with an environmental benefit’. The programme was a partnership between the Zambian Government and a team of United Nations agencies led by the International

Labour Organisation (ILO), and funded by Finland (ILO, n.d.). In forest management, green initiatives included the conservation of forests for carbon and co-benefits. To meet this need, each province was equipped with GIS capacities to provide information on land cover. According to Banda and Bass (2014), some provinces had also made forest inventories in order to provide a good deforestation and emissions baseline. These inventories also covered livelihood and socio-economic data, which could link forest loss/gain to specific people's welfare.

In water management, one green initiative was the Lusaka Water Security Initiative (LuWSI), a multi-stakeholder collaboration system between the public sector, private sector, civil society and international actors (Lusaka Water Security Initiative, 2019). This initiative worked towards providing water security for the residents and businesses of Lusaka. Its water security action areas were groundwater pollution prevention; sustainable groundwater exploitation; healthy Kafue River; access to water supply and sanitation; and urban flood risk management.

The landmark initiative by Zambia to explore green growth, however, began with a regional conference held by the African Development Bank Group (AfDB) and the Organisation for Economic Development (OECD) in Lusaka in the year 2013. At this conference, Zambian officials expressed interest in exploring more fully how green growth could be advanced in the country to contribute to short- and medium-term needs, such as reducing unemployment, poverty and inequality, and to help meet long-term needs, such as overcoming infrastructure deficits, connecting to markets worldwide and supporting the greening of growing cities (Banda & Bass, 2014).

All these initiatives made a contribution to solving various environmental problems and are often referred to as 'greening'. Becoming more sustainable or environmentally responsible is also described as an achievement in the field of greening.

## **Sustainability Education**

Taimur (2020) posits that unsustainable practices that humans engage in include pollution, inequalities, illness, poverty, climate change, and wars. All these are complex and have high potential of damage,

and, therefore, need immediate attention. To stave these problems off, there is need for individuals and societies to learn to live together sustainably. Scholars, such as Grunwald (2004), Blackstock and Carter (2007) and Talwar et al. (2011), have pointed to sustainability as an emerging field that can respond to the sustainability challenges through transformational action. Sustainability Education (SE) or Education for Sustainable Development (ESD) should empower people to change the way they think and work towards a sustainable future. According to UNESCO (2017), the role of SE is to empower learners to make informed decisions and responsible actions to ensure economic viability, just society, and environmental integrity. These should go in tandem with or alongside respecting cultural diversity for the present and future generations. UNESCO itself aims to improve access to quality education on sustainable development at all levels and in all social contexts, to transform society by reorienting education and help people develop knowledge, skills, values and behaviours needed for sustainable development (Buckler & Creech, 2014).

Apart from transforming society generally, SE also aims to develop future leaders who can contribute to building a sustainable society (Taimur, 2020). Wals (2015) and Wals and Lenglet (2016) call such leaders “sustainability citizens”. According to Wals (2015, p. 30), a sustainability citizen is one who is able to interrogate resilient unsustainability and who can participate in the co-creation of new systems and associated routines that appear, at least for the moment, more sustainable than the ones in need of replacement.” To develop such leaders, creating such leaders is only possible when SE allows learners to construct, critique, and act with high degree of autonomy and self-determination (Wals 2011, cited in Taimur, 2020). Posch (1991) explains that SE has a role in developing learners’ dynamic qualities because sustainability requires self-discipline and taking responsibility.

The content to be integrated in the SE curriculum could include topics such as poverty, climate change, environmental degradation, greening or sustainable consumption. The knowledge should be applicable, practical, inclusive, and self-critical. Concerning pedagogy, SE requires interactive, learner-centered teaching and learning settings (Taimmur, 2020). According to Taimur,



pedagogy holds an important place when it comes to SE to avoid past disappointments brought about by standard knowledge-based educational approaches. Evaluation should be based on self-evaluation, self-generated indicators, critical feedback and support from others, and assessment that is qualitative as well as quantitative (Sterling, 2001).

Wals (2011) is of the view that providing information, raising awareness, and changing attitudes are not enough to change people's behaviours as these models reflect an oversimplified form of reality that incorrectly assumes a linear correlation between knowledge, awareness, and behaviour. Taimur (2020), citing Burns (2011) and Cress (2003) asserts that, for SE, there is a need for the kind of learning which can explore the depth of things and bring about pragmatic shift. This shift should be from transmissive to transformative learning. According to Sadki (2015), transmissive learning methods are ineffective and irrelevant when it comes to teaching and learning the critical thinking skills. Transformative learning, on the other hand, should enable students to understand themselves and their relationship to other humans and natural environment around them, and that is why this kind of learning leads to a paradigm shift (O'Sullivan et al. 2002, cited in Taimur, 2020). It transforms learners' values and perspectives so that they are able to embrace sustainability as a new paradigm or a lens through which to view the world and make a change (Burns 2009). This new form of learning can develop the capacities and qualities of individuals, groups, and communities to meet the challenges linked to sustainability (Wals, 2011).

### **The Importance of Including Sustainability in the Tourism and Hospitality Curriculum**

It is unquestionable that the need to address environmental problems has been recognised as an important point of interest for the most varied businesses and their managers all around the world (Melissen & Roeven, 2007). While hotels do not consume extensive amounts of environmental resources individually, collectively they cause substantial impacts on the environment (Kirk, 1996; Webster, 2000; Webster & Hartwell, 2008). At the same time, unplanned and uncontrolled hotel development can seriously generate

gross environmental degradation. Because of such negative consequences, it is very important that the hotel industry takes some drastic measures and make some investments allowing the industry to reduce their environmental impacts. One such drastic measure would be to integrate green practices into their curricula.

Bader (2005) argues that teaching sustainability to undergraduate students is important to hospitality and tourism educators for three main reasons. Firstly, sustainability and 'green initiatives' are of growing importance to hospitality and tourism employers. The growing importance of sustainable practices has been attributed to the changing perceptions of responsibilities among managers, rising operational costs, and growing consumer demand for sustainable products (Bader, 2005). Sustainability has also grown in popularity among hotels due to forces such as "consumer demand, environmental regulation, managerial concern with ethics, consumer satisfaction, and maintenance issues related to physical buildings" (Baker, Davis & Weaver (2010). The second reason is that, in addition to attracting the 'green consumer,' green hotel initiatives also have the potential to save hotels a lot of money (reduction in waste, energy and water consumption all leads to improved financial performance) (Bohdanowicz, 2005). This has led to the belief that green initiatives are of critical importance to the success of hotels in the current market environment (Baker et al., 2010). The third reason is that programmes have a responsibility to produce graduates capable of bringing benefits to the triple bottom line.

Deale et al. (2009) contend that, despite the hospitality and tourism industry being one of the largest industries in the world with the resulting positive and negative environmental, economic, and societal impacts associated with that responsibility, the discussion pertaining to teaching sustainability within the hospitality and tourism curriculum is 'scant' and still in its infancy. They observe that there are a handful of articles that discuss sustainability in hospitality and tourism education (Barber et al., 2011; Deale & Barber, 2010; Bramwell, 1996; Busby, 2003; Deale et al., 2009; Eber, 2003; Flohr, 2001; Jurowski & Liburd, 2001; Tesone, 2004; Tribe, 2002, Wade, 1999), but these have provided little pedagogical debate over how to best teach sustainability. They contended that the consensus among the previous literature is that there is a need for

teaching sustainability within the hospitality and tourism curriculum in order to prepare students for the demands of the hospitality and tourism profession (Barber et al., 2011; Deale et al., 2009).

The study by Deale's et al. (2009) specifically demonstrates the need for an increased focus on incorporating sustainability into the hospitality curriculum. Their study highlights the large gap between educators' attitudes in favour of sustainability and schools actually teaching sustainability. Deale et al., (2009) found that 72% of the hospitality educators sampled indicated that they felt it was important for students to be taught about sustainable issues, but that at best, only 12% of them were actually teaching sustainability in the classroom. These findings reveal a desire amongst hospitality educators to teach sustainability, but that the various challenges of actually doing so are cumbersome.

Building upon the work of Deale et al. (2009), Barber et al. (2011) examined the perceived importance of sustainability amongst different stakeholders of hospitality education (students, educators, and industry practitioners). They compared stakeholders' environmental attitudes, environmental behaviour, interest in sustainability, importance of environmental issues within the hospitality curriculum, and priority of which environmental topics should be taught within the hospitality curriculum to see if there were differences between the stakeholders. Their results revealed that all three stakeholder groups demonstrated a 'sincere' interest in environmental sustainability, but that there were significant differences amongst the stakeholders as to the level of importance of environmental sustainability. Despite the differences among the stakeholders, they generally agreed that teaching sustainability in the hospitality and tourism curriculum was a worthwhile pursuit.

The growing importance of sustainability education to the hospitality and tourism industry has resulted in an increased pedagogical discussion pertaining to how to incorporate sustainability into the undergraduate curriculum. The previous discussion has largely focused on the need to teach sustainability within the hospitality and tourism curriculum (Deale et al., 2009), and determining hospitality and tourism stakeholders' attitudes towards teaching sustainability in the curriculum (Barber et al., 2011). Despite the strong interest in sustainability education, Deale

*et al.* (2009) reveal that sustainability is rarely taught within the curriculum. Deale's study moves the discussion away from should sustainability be taught within the hospitality and tourism curriculum towards a discussion of how to best teach sustainability within the curriculum. The same article suggests that an integrated sustainability curriculum will provide students with a better education and better preparation for the hospitality and tourism profession than limiting its inclusion to specific classes or majors.

According to Deale et al (2009), part of the recommendation for integration of sustainability into the hospitality and tourism curriculum is a proposed model that demonstrates the need to view sustainability as the ultimate context of focus and hospitality and tourism as a subcomponent of this focus. Having sustainability as the end goal of hospitality and tourism will result in natural integration of sustainability into the curriculum because sustainability is the main context of interest.

While the discussion of teaching sustainability within the hospitality and tourism curriculum is still in its infancy, there appeared to be a consensus of the need to teach sustainability and the importance of teaching sustainability from the view of stakeholders. Deale et al. (2009) have brought to the attention of hospitality and tourism educators that while many educators think sustainability is important, very few actually cover it within the classroom. Eber (2003b) also referred to the teaching of sustainable tourism as marginal. He argued that there is a disconnection between the general consensus that sustainability is important to the hospitality and tourism industry and the teaching of sustainability in hospitality and tourism classrooms. He further argued that part of the disconnection can be attributed to the lack of a coherent approach in incorporating sustainability into undergraduate hospitality and tourism curricula.

The main purpose of undergraduate hospitality and tourism sustainability programmes was to prepare the future hospitality and tourism professional for the sustainable workforce. It may be argued that since the profession is moving towards sustainability, the curriculum should also move towards sustainability as well. It appears that it should, but as Deale et al. (2009) noted, it has failed to do so with a low percentage of hospitality educators actually teaching any aspect of sustainability to their classes.

For those tourism and hospitality training programmes that do not currently teach sustainability courses or attempt to integrate sustainability into their curriculum, the training providers should ask themselves if they are providing the best and most relevant education by leaving sustainability out of the hospitality and tourism curriculum. Since the industry is turning towards sustainable initiatives, it is imperative that hospitality and tourism training providers embrace sustainability and recognize that teaching it is of utmost importance to the success of their students. This point is reiterated by Jurowski and Liburd (2001, p. 25) in the following quote: “the integration of the principles of sustainable development is critical because, as one of the world’s largest industries, hospitality and tourism should actively contribute to implementing the environmental and socio-cultural principles of sustainable development.”

The need for a ‘hospitality and tourism sustainability curriculum’ stems from the hospitality and tourism industry being one of the largest industries in the world, which consequently has many impacts on the locales where it takes places. In Archer, Cooper, and Ruhanen’s (2005) review of the potential positive and negative impacts of hospitality and tourism, they addressed a very important fact that impacts are unpreventable, but effective planning and education can focus on ways to minimize the negative impacts while facilitating the positive ones. They contended that examples of positive impacts include: generation of employment, promotion of peace, preservation of cultural and natural resources, and the significant economic impact of bringing outside money into the community (Archer et al., 2005). In addition, hospitality and tourism is equally recognized for its negative impacts, which have led to environmental and cultural degradation; decreases in moral standards leading to increased crime, prostitution, and gambling (Kreag, 2001). The many positive and negative impacts of hospitality and tourism mentioned here place an important burden on hospitality and tourism sustainability curriculum to be responsive to these.

Hospitality and tourism students can become effective managers if they are taught about sustainability in many contexts across the curriculum. Wade (1999) refers to students as potential ‘change agents’ that have the ability to bring sustainability to the hospitality and tourism industry. Kevany (2007) also stressed the

notion that educating students about sustainability will not only be popular among students, but there will also be a ripple effect from their sustainable education into the workplace. Kevany further emphasized that it is certainly important to teach students from a variety of perspectives about sustainability in order to lessen hospitality and tourism's negative impacts and maximize its positive impacts in general, but more specifically teaching sustainability is important because a destination's natural and cultural resources are tremendously strategic resources. He further argued that if students are not educated about sustainable hospitality and tourism practices, these competitive resources, which attract tourists to businesses/destinations and provide residents with a high quality of life, could end up being degraded by the mismanagement of these strategic resources, and result in a lower quality product.

Vital to the future of the hospitality and tourism industry are trainers/educators capable of tackling the challenges that the industry faces in the 21st Century. Since students will be the 'change agents' of the future, it will become increasingly important to prepare them to deal with the complexities of sustainability within the hospitality and tourism industry (Wade, 1999). The sustainability aspect is lacking in the curricula of tourism and hospitality in Zambia hence, this study. The increased environmental concerns on the part of the hotel operators, consumers, governments and nongovernmental organizations has put pressure on the industry to invest in more environmental friendly practices, and the development of voluntary codes of conduct, certification, eco-labels, awards and self-help guides and eco training manuals and green alliances (Font and Buckley, 2001; Honey, 2002).

As observed above, the tourism and hospitality industry is such a stakeholder because it contributes immensely to waste generation. One way by which the sector can participate is by developing modules on green initiatives which can be used by institutions to train people for tourism and hospitality in Zambia. According to Naik (2014), there is need to address environmental problems that have become an important point of interest for hoteliers and their managers throughout the world. This means that institutions training in tourism and hospitality should include in their curricula topics on sustainability education. However, a glance at different

curricula from various hospitality and tourism training institutions in Zambia show that although these institutions offer a comprehensive programme to those individuals who intend to make a career in this field (an individual is able to acquire knowledge of all the areas and fields that are part of the hospitality industry), there is an obvious absence of a module in environmental education, sustainability education or indeed green practices.

### **Global Studies**

At a global level, several publications on sustainability in hospitality and much work on sustainable tourism have been published, including studies about attitudes towards sustainable tourism (Aipanjiguly & Jacobson, 2002; Choi & Sirakaya, 2005; Smith & Krannich, 1998). Deale (2013) conducted a study in the United States of America and focused on discovering what was happening within hospitality education to gain sustainability efforts and the implementation of sustainable practices. It specifically demonstrated the need for an increased focus on incorporating sustainability into the hospitality curriculum. This study was limited to 151 members of the ICHRIE organisation and, therefore, it is not possible to generalise the findings to the entire profession of hospitality education. This sample represented only a small portion of the organization's membership (approximately 11%). A questionnaire was administered online via an online survey tool and quantitative descriptive analyses of the data were conducted using the Statistical Package for the Social Sciences (SPSS). The study revealed that many educators did not actually incorporate sustainability into their classes although they may have indicated that they were interested in it and believed it to be important. Further, educators indicated that some sustainability education was being incorporated into the hospitality courses of those sampled. However, what is striking is that it did not yet appear that SE was integral to education in this field. These findings reveal a desire amongst hospitality educators to teach sustainability, but that the various challenges of actually doing so are cumbersome.

Boley (2011) also conducted a study in the United States of America (University of Georgia) and looked at the move beyond examining

the need to teach sustainability or whether or not stakeholders think it is important. The target group included students, educators, and industry practitioners. The purpose of the study was to demonstrate to hospitality and tourism educators the importance of integrating sustainability into their classrooms. Building upon the Deale et al. (2009) work, Boley (2011) examined the perceived importance of sustainability amongst different stakeholders of hospitality education (students, educators, and industry practitioners). They compared stakeholders' environmental attitudes, environmental behaviour, interest in sustainability, importance of environmental issues within the hospitality curriculum, and priority of which environmental topics should be taught within the hospitality curriculum to see if there are differences between the stakeholders. Their results revealed that all three stakeholder groups demonstrated a 'sincere' interest in environmental sustainability, but that there were significant differences amongst the stakeholders as to the level of importance of environmental sustainability. While hospitality educators had higher environmental attitudes than industry professionals and students, the study found out that industry practitioners were more likely to participate in environmentally friendly behavior in order to save money. Despite the differences among the stakeholders, they generally

Cotgrave and Alkhaddar (2006) studied *Greening the Curricula within Construction Programmes*, at Liverpool John Moores University in the UK. The ultimate aim of the research was to develop a set of well-developed concepts through statements of relationship that could be used to explain or predict phenomena related to curriculum modeling as well as to develop concepts relating to curriculum design based on the systematic collection and subsequent analysis of data. The study used an analysis of primary quantitative data and was focused on the total population of universities based in the United Kingdom that run undergraduate programmes in Construction Management that are accredited by the Chartered Institute of Building under function D of their educational framework. The data was generated in four phases which included the international comparison, illustrated that there are a number



of differences in the approach to curriculum design, and that there is no 'best practice' clearly identifiable. The study concluded that incorporating environmental issues within the construction education curricula provided an ideal mechanism for achieving their goal.

### **Regional Studies**

Mbasera (2015) carried out a study titled *A green management framework for hotels: A case of two African countries* in South Africa and Zimbabwe, (Sub-Saharan Africa). The goal of the study was to develop a green management framework for hotels in South Africa and Zimbabwe so that these developing countries may contribute significantly in mitigation of the negative environmental effects. The sample size for the study comprised four hotel managers in Zimbabwe and four hotel managers in South Africa. A qualitative research design was used in order to reach the goals of the study. According to Mbasera, the main findings were that, while some perceptions of managers about the green management concept were consistent with a number of aspects, some hotel managers did not fully understand or grasp what the concept of green entails. He argued that, this was an indication that a gap existed between managers' knowledge and what green really meant. The study also established that in most hotels, there was unavailability of green management policies, suggesting that there is a lack of knowledge about the importance of a green management policy amongst hotel managers in these two developing countries.

In the study entitled *Green Practices in Egyptian Hotels: Importance and Existence*, Shehata and Elfeel (2017) focused on investigating the importance and the existence of green practices in hotels in Egypt, regardless of them being certified or non-certified. The study depicted the current status of green practices in Egyptian hotels, as it determined to look at the extent to which awareness was towards green practices and their level of implementation. The population of the study included only 5-star hotels in Egypt, which are 150 hotels. The research used a quantitative and qualitative data collection approach through reviewing the literature and distributing online questionnaires. This category represents the niche of hotels and is more capable to adopt such relatively new trends. Results of the research indicated that there was a significant difference between

importance and implementation of green practices in Egyptian hotels with variance in each group elements. The exception was for these practices that are related in water conservation in green-certified five–star hotels, since most of the practices that were considered important, from managers’ points of view were implemented in their hotels.

Fadhil (2015) carried out a study entitled *Adoption of green practices in hospitality and tourism industry in Lamu County, Kenya*. The aim of the study was to determine the adoption of green practices in the Hospitality and Tourism Industry in Lamu County. The research looked at various factors cited as green practices adoption. These included green energy consumption, water and liquid waste management, air quality and greenhouse gas emissions, green building and design and solid waste management. The research used cross-sectional census survey design to collect quantitative data by use of questionnaires. The population was 31 hotels and the response number was 24 of the hotels. The overall research study revealed that hotels in Lamu County have started to appreciate the eco-friendly practices in running and managing their hotels and that there is still room for improvement in adopting green practices. The research had also shown that the main drivers for hotels to adopt green practices was through hotel policy and the customer’s attractions to green practices and the accrued benefits the hotels get in saving.

At the University of Nairobi, Omonge (2013) studied *Green Supply Chain Management Practices and Competitiveness of Commercial Banks in Kenya*. The study sought to establish the role of green supply chain management practices on an organisational competitiveness among commercial banks in Kenya. The population of the study was made up of all the 45 commercial banks in Kenya as at 31<sup>st</sup> December, 2011. The study adopted a descriptive research design which involved distribution of a questionnaire to the banks. Because the number of commercial banks is small a census study was used. A good response rate of 81% was realised. The findings of the study were that different banks adopt different green supply chain practices depending on the activities that they are engaged in and also which

green supply chain practice would yield better competitiveness to the bank. It also established that most of the banks' green supply chain practices involved environmental collaboration, monitoring, purchasing and the greening of the production phase. Furthermore, the study found out that the competitiveness to the banks resulting from the green supply chain practices included improved operational efficiency, increased customer base, offering superior services, reduction in waste level and all these leads to improved financial performance. In conclusion, the study stated that incorporation of green practices in the operations of organisations should form part of long term strategy of the organisations to gain competitive advantage over its competitors.

### **Local Studies**

Several studies have been conducted in Zambia regarding the teaching of greening in institutions of higher learning. Mbewe (2019) carried out a study in Lusaka entitled *An Assessment of Green Computing Awareness and Adoption in Higher Education Institutions in Zambia: A Case of ZCAS*. The study addressed a general concern about whether the use and eventual disposal of ICT hardware will have minimal impact on the environment. Mbewe asserts that the grooming or modification of behaviour of users for the future generation takes place in educational institutions. Her paper, therefore, explored the level of use of ICTs in Higher Educational Institutions (HEIs) with regard to the awareness and adoption of green computing in these institutions. The results indicated that though there is a high level of use in the HEIs, the level of green computing awareness was simply moderate and the level of green computing adoption was low. Therefore, there is need for HEIs, the IT community and the legislative bodies to do more in introducing practices that will promote eco-friendly use and disposal of ICTs in Zambia.

A report entitled *Creating and protecting Zambia's wealth: Experience and next steps in environmental mainstreaming* (Aongola et al., 2009) shows that environment and development are not treated systematically together in Zambia. The authors assert that, to truly

integrate environment and development objectives is a long-term process of institutional change that proceeds on many tracks. Among these tracks are education and awareness. The greening of industries implies ensuring that all industries, regardless of their sector, size or location, continuously improve their environmental performance. Education is one way of achieving this.

## **Conclusion**

Perhaps one of the reasons that there has been more awareness rather than action about greening in the hotel industry is because there has not been a clearly articulated business case for going green. Currently, the hotel industry is still supply-driven rather than demand-led when looking at environmental practices. Although demand is growing for “green” hotels by the general public, individual hotels must see benefits through all elements to be convinced of the business case. The resource based theory of the firm identifies through best practice examples that being environmentally committed ensures competitiveness and increased organizational performance that will lead to lower costs, improved reputation and strategic alignment with future changes in the general business environment (Aragon-Correa & Sharma, 2003).

Through working collectively and sharing best practices of the benefits to environmental commitment, great things can be achieved. The hotel industry must move towards action not only to preserve and protect but also to ensure the future viability and growth of this industry.

Studies on green practices adoption in many industries, revealed that the role of continuous green initiatives and green technology within an organization has improved and matured throughout history hence being green and going green have become widely used slogans in many industries throughout the world, nonetheless hospitality has not been left out and have implemented green practices in a variety of formats especially in developed countries. In addition, green management and supply chain on performance and competitiveness, supply chain management has traditionally been viewed as a process where raw materials are converted into final products, and delivered to the end consumer while on the competitiveness of the firm in the banks resulting from the green supply chain practices includes

improved operational efficiency, increased customer base, reduction in waste level which all leads to improved financial performance. All these can be achieved with the introduction / increased incorporation of sustainability education in different training programmes in all sectors.

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