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Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe – Malawi



Faculty of Science

School of Geography, Archaeology and Environmental Studies

THESIS

By

Lameck Zetu Khonje

Submitted in fulfillment of the requirements for the Degree of

DOCTOR OF PHILOSOPHY

at the

University of the Witwatersrand

Supervised by:

Professor Mulala Danny SIMATELE

Ethics Clearance Numbers: H17/06/18 & NCST/RTT/2/6

Declaration 1, Plagiarism

I, Lameck Zetu Khonje, declare that this Thesis, including the data, figures, tables, and any other information is my original work. I have, where necessary acknowledged the source of the material that has been used.

This Thesis contains my own writing, in areas that I have used the other person's ideas; I have duly acknowledged the sources. I have paraphrased ideas that have been borrowed from other authors and in instances where their ideas have been used, word for word, I have duly enclosed these ideas in quotation marks and referenced accordingly.

Furthermore, this Thesis is being submitted for the award of the degree of Doctor of Philosophy to the Faculty of Science at the University of the Witwatersrand, in Johannesburg, the Republic of South Africa. This is the first time I am submitting this Thesis for examination and the award of the degree thereafter. It has never been submitted to any other university before for a similar purpose.

Declaration 2, Publications

I, Lameck Zetu Khonje, declare that I sorely went and collected the data for this study in Malawi, conducted the data analysis, processed the results and wrote all the manuscripts and published the articles that were co-authored as indicated below. These manuscripts and published papers form Chapter 2, 3, 4, and 5 of this Thesis as follows;

1. Khonje, L.Z; Simatele, D.M, and Musavengane, R. (2018). The Rhetoric of Sustainability in the Malawian Tourism Accommodation Sector: Application of the Rogers Diffusion of Innovation Theory: killing the Goose that lays the golden eggs. *African Geographical Review - Manuscript ID RAFG-2018-0012.* (This manuscript has been accepted in its current format and will be published soon).

2. Khonje, LZ, Simatele, DM, and Musavengane, R. (2018). A critical review of common methodological approaches in environmental sustainability practices within the hotel sector: in pursuit of a befitting methodological approach for Malawi through the lens of a Qualitative Meta-Synthesis. *e-Reviews of Tourism Research – Manuscript ID 257- 965-1-ED. DOCX*. (This manuscript has been accepted in its current format and will be published soon).

3. Khonje, LZ, Simatele, DM, and Musavengane, R. (2018). The Role of Institutional and Legal Frameworks in Promoting Sustainable Tourism in Malawi: Application of Grounded Theory as a methodological imperative. *Journal of Sustainable Tourism - Manuscript ID JOST-4578.* (This manuscript is in submission)

4. Khonje, LZ, Simatele, DM, and Musavengane, R. (2018). Environmental Sustainability Innovations in the accommodation sub-sector: views from Lilongwe, Malawi. *Development Southern Africa - Manuscript ID CDSA-2018-0187*. (This paper is under review process).

Lameck Zetu ***KHONJE*** *(Candidate).* **Signature**: **Date:**

As the Candidate's Principal Supervisor, I certify that the above statements are true and I have therefore approved this thesis for final submission in its current state.

Professor Mulala Danny ***SIMATELE (Supervisor).*** **Signature:** **Date:**

Acknowledgment

First and foremost, I would like to sincerely thank my two Supervisors, Professor. Mulala, Danny Simatele and Doctor Regis Musavengane in the School of Geography, Archaeology, and Environmental Studies at the Witwatersrand University, and Department of Tourism & Hospitality Management at the Midlands State University, Zimbabwe for the commendable effort they put in ensuring that both the research proposal and the thesis took shape and were eventually refined. Thank you for the constructive criticisms. The Ph.D. study is a scary pursuit, but in my case, this was relatively less so and containable, thanks to their encouragement and helpful guidance. Mr. Dan Harawa, Dean of Faculty of Tourism, Hospitality, and Management Studies at Mzuzu University deserves my heartfelt gratitude for, in the first place, encouraging me to secure Ph.D. admission in universities in South Africa partly for the sake of 'further exposure' to the South African higher education system. It is following his piece of advice that I secured admission at the University of the Witwatersrand in South Africa.

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Executive Summary

This study centrally argues that despite the numerous investments that Malawian accommodation sector has undergone, especially in the post-1994 period, a majority of them are not able to embrace sustainable environmental innovations in order to promote sustainable tourism development in Malawi. However, previous scholars have focused on the socioeconomic aspects of sustainable tourism development from the 1970s and 1990s when tourism sector was earmarked as another viable sector for economic development of the country. This comprehensive study plays a complementary and supplementary role by focusing on the sustainable consumption and production practices within the accommodation sector from the 1990s onwards where academic research in Malawi is still in its infancy. The study employed the Rogers Diffusion of Innovation Theory through a critical analysis of secondary and archival sources and in-depth key informant interviews. In this regard, through a Grounded Theory methodological approach interviews involving respondents from the public sector and the private sector (accommodation units) in Lilongwe, the Capital City of Malawi, the study unveils the dynamics (nature, dimensions, and patterns) of environmental sustainability innovation within the accommodation units in Lilongwe. Through this approach, the study allows the informants to tell their own story and experiences within the tourism sector and the accommodation units in particular. The study makes a contribution to the sustainable tourism development historiography of Malawi and sub – Saharan Africa.

The study shows that the introduction of the multiparty system of government in Malawi brought abought a number of policy changes from the 1994 and to date, which have induced development in the tourism industry especially the accommodation sector to inform of small-scale and medium enterprises which have accelerated ecological catastrophes currently being experienced in Malawi. The study argues that the increase in a number of accommodation units was not only as a result of the new policy direction from the 1970s, but also the changes in the political and socio-economic environments of Malawi, and the entire SADC region. The study also argues that despite government enactment of the environmental sustainability law the tourism industry at large does not abide by this legal framework. During this period, most of these accommodation units are engaged in the unsustainable consumption of natural resources and produce environmental pollutants which are not well managed. These accommodation units also

lack environmental sustainability institutional legal frameworks to foster sustainable consumption and production practices.

The study highlights challenges that the public sector and accommodation units faced in Malawi. These challenges include a lack of political will, lack of appropriate policing tools, selective policy enforcement practices, and lack of universal investment incentives. The study also observed that some of the accommodation units devised environmental sustainability innovation to reduce their operating costs and support the local community socioeconomically. In addition, some accommodation units resorted to the use of compost manure and broken glass bottles on their premises. Through these measures, these accommodation units recycle their solid waste instead of dumping them into the environment.

The study has used the Roger Diffusion of Innovation perspective, to show that the accommodation units in Lilongwe fall within the Laggards category. For instance, in the face of the ecological challenges in Malawi, they continue to rely on and use the limited natural resource and grow their businesses. Through this, they have managed to maximize their savings, expand their business geographical horizon to other cities in Malawi (e.g. Cross Roads Hotels now opening another unit in Blantyre). The study also attempted to assess the impact of the available environmental institutional and legal framework in promoting sustainable consumption and production practices in the accommodation sector. There is inefficient flow of the provisions of this institutional and legal framework between the two key government departments (Department of Tourism and Department of Environmental Affairs) as a result of this inefficiency accommodation units are left wondering which one of these departments are demanding the rightful action from them as such there is a slow adoption of sustainable environmental innovations within the sector.

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Chapter 1:

Conceptual and Contextual Framework

1.1 Introduction

"Harnessing tourism's benefits will be critical to achieving the sustainable development goals and implementing the post – 2015 development agenda" (Ban Ki-moon, in UNWTO, 2015).

The United Nation's Sustainable Development Goals (SDGs) ensure that tourism plays a key role in the worlds' post – 2015 development agenda. Firstly, it is important to mention that the hospitality industry is a principle sector of tourism (Kotler, et al., 2010). Tourism is the worlds' fastest growing sector of the economy, which is projected to reach 1.8 billion international tourist arrivals in various destinations by the year 2030 (Kester, 2014). These projections correlate with UNWTO (2015) which stipulates that tourism has the potential to contribute directly or indirectly to the proposed SDGs. An ever-increasing number of tourism destinations worldwide have opened up and huge investments are being made in the tourism sector, making it a key social-economic driver through the creation of jobs and businesses, export revenue and infrastructure development (UNWTO, 2015). Globally, according to UNWTO (2013) tourism financial receipts increased to US$ 1,075 billion in 2012 from US$ 1,042 billion in 2011. This increase is in line with an experienced 4% growth in arrivals during the same period. Sub - Sahara Africa contributed US$24.2 billion slightly lower than some of the world's most popular destinations – the Caribbean at US$ 24.5 billion (Kester, 2014). Prospects in 2015, according to UNWTO, were high such that the Asian - Pacific and the American zones recorded a 4% and 5% increase in tourist arrivals, respectively. Europe and the Middle East also recorded an increase of about 3 – 4% and 2 – 5% respectively. At around the same time in Africa, there was a 3 – 5% increase in tourist arrivals (UNWTO, 2015). Similar developments are taking place in Malawi (Government of Malawi, 2017a)

Sustainability is defined as a process in which resources are used now in the development processes without compromising the ability of the future generation to meet their own developmental needs from the same (Valenti & Atlas, 2015). According to Pantelidis, et al.

(2010) in the tourism discourse, sustainability principles refer to the environmental, economic and socio-cultural aspects. Hulse (2007) also attests that sustainability means the integration of social, economic and environmental factors into all development agendas to make sure that development that takes place serves the present and future generations. It is, therefore, necessary to note that there is a link between tourism development activities and the physical environment (Kasim & Scarlat, 2007). Furthermore, Alexander (2002) confirms that the environmental impacts of the hospitality unit regardless of the size and type are, energy; water consumption; waste production and chemical use and atmospheric contamination to mention but a few.

It is, therefore, imperative to note that during the year 2013, Africa had received an increased total from 53.2 million to 56 million visitors traveling using different modes of transport (UNWTO, 2013). These tourists traveled by Air (52%), Road (40%), Water (6%) and Rail (2%) (UNWTO, 2015). This growth, however – despite the much glorified financial gains that come with tourism – it also comes with varying losses to mankind. The vice mainly comes from environmental degradation, climate change, negative socio-cultural problems which impact the local people's livelihoods in the destination areas (Alexander, 2002). Markham, et al., (2016), state that the tourism industry is responsible for about 5% of the global carbon dioxide emissions from fossil fuel combustion. Available evidence suggests that the concentration of greenhouse gases and carbon dioxide in the atmosphere has increased now and is greater than at any time in the past 800,000 years (International Tourism Partnership, 2016). These greenhouse gases cause climate change which is a threat to tourism and the livelihoods of people in the destination area (Agyeman, et.al. 2003). In this regard, therefore, the tourism sector is encouraged by various stakeholders to help reduce these greenhouse gas emissions. In most developed tourism nations like France, the United States, Germany, Malaysia and others, the hospitality industry has adopted the principles of sustainable consumption and production practices (SCPPs) which are seen as a pathway to sustainable tourism development (Best & Thapa, 2011; Kotler, et al., 2010; Hawkins & Bohdawicz, 2012; Pantelidis, et al., 2010). Amongst the many efforts, SCPPs facilitates the reduction of these greenhouse gases through forest conservation (creating sinks) that absorb the carbon dioxide (Markham et al., 2016). Similarly, in sub - Sahara Africa, some countries like Botswana, Kenya, and South Africa, some hospitality units have adopted these principles to create a sustainable tourism industry (Lubbe, 2003; Ogtrop, 2012; United Nations, 2012). In Malawi, there is little that is known of such efforts.

In today's Africa, tourism is recognized as a socio-economic development potential driver such that most countries in sub-Sahara Africa have put tourism as a priority sector for the same (AfDB, 2014). The Malawi government recognizes tourism sector as an area with potential to drive the socio-economic development of the country (Chilembwe & Mweiwa, 2014). This recognition has been manifested in pertinent strategic economic development policy documents such as the MGDS 1, MGDS 2, Vision 2020 and Economic Recovery Plan (Government of Malawi, 2013a). In Malawi, the service sector (including the tourism-related businesses) contributes about 24% of the Gross Domestic Product (GDP) compared to the 37% of the total GDP from the traditional agricultural sector (Government of Malawi, 2013a). This makes the service sector, tourism inclusive, the second largest sector in the country hence, government's keen interest to develop this sector to reach higher levels of international repute (Nsiku & Kiratu, 2009).

1.2 Thematic Consideration

Sustainability issues have become a talking point in every developmental aspect both in developed and developing countries. In this study, sustainability is discussed in the context of the hospitality industry in Malawi.

1.2.1 Sustainability in context

Sustainability issues gained prominence after the Brundtland Commission of 1987 which focussed on the three pillars of human well-being which are economic, socio-political and ecological environmental conditions (Foster, 2011; Middleton, 2013; Smit, 2015). According to available evidence, in this report, it was emphasized that there was a need to spur economic and social development, particularly for people in developing countries whilst ensuring that environmental integrity is sustained for future generation (Hulse, 2007; Foster, 2011; Middleton, 2013).

Available evidence also suggests that before the Brundtland Commission, the 1972 United Nations Conference on the Human Environment in Stockholm, Sweden was the first forum where issues that link the environment and development were discussed (Hulse, 2007). Since then a number of global forums have discussed these highly contentious issues. For instance, in

1992, the Rio, de Janeiro forum sought to build on the momentum for accelerated implementation of sustainable development principles (Smit, 2015). According to Middleton (2013), it was at this forum where a political declaration by world leaders was made affirming a renewed commitment to sustainable development and Agenda 21 was adopted. However, according to Hulse (2007), a review meeting on this commitment in 1997 revealed that there was little progress made on Agenda 21. Further available evidence suggests that in 2002 the UN meeting in Johannesburg reinvigorated the global commitment to sustainable development (Middleton, 2013). It is stated that during this meeting it was reiterated that it was important for every nation to achieve the internationally agreed development goals (Snyman & Spenceley, 2012).

1.2.2 Sustainability perspectives in Malawi

There seems to be an environmental challenge within Malawi that has partly emanated from the growth of the hospitality industry since 1994. This assumption is made because there is limited evidence from the literature that suggests this growth embraced SCPPs.

The SCPPs in a hospitality establishment in the context of this research means environmental management practices. The Malawi government identified the tourism sector as one of the priority sectors of the economy to uplift people's livelihoods (Government of Malawi, 2012a). The government of Malawi might have also known that, despite the much needed economic gains, tourism comes with certain environment-related problems. Thus the Malawi Tourism Policy states that environmental management issues should take centre stage in all tourism-related activities to protect the natural environment. Edgell, et al. (2008) also notes that tourism development in a country improves people's livelihoods. Bramwell and Lane (2012) however, attest that tourism development that ignores SCPPs affects the peoples' livelihood in a destination country. For instance, the economic processes associated with the tourism sector consume natural resources (fossil fuels) whilst generating harmful materials (carbon dioxide) that bring about climate change (Agyeman, 2012). It could be argued here, therefore, that the growth of the tourism industry in Malawi might bring about similar devastating results on the people's livelihoods.

Furthermore, the growth of this industry in Malawi displaces farmers and fishermen from their land, especially in the lakeshore district of Mangochi and makes them jobless (Nsiku & Kiratu, 2009). This development has increased the rate of unemployment thereby affecting the socio-economic wellbeing of the district and Malawi at large (Markham, et al., 2016). Available evidence confirms that in Malawi, there are a number of small and medium type of hospitality businesses mostly owned by foreign investors (Nsiku and Kiratu; 2009; Government of Malawi, 2013a). However, most of these new facilities were not developed in designated tourism areas and previously especially along the lakeshore areas, were used as government-private cottages (Magombo, et al., 2017). But when these facilities were sold out between 1994 – 1998 during the privatization process, they were converted into commercial outlets open to the general public (Nsiku & Kiratu, 2009). This eventually increased patronage to these properties thereby affecting the designed carrying capacity of the properties and the area (Best & Thapa, 2011). Once carrying capacity to a destination has been exceeded, the natural environment suffers (Bramwell & Lane, 2012). Magombo and Rogers (2012), observed that these developments were taking place at a time the Malawi Tourism policy had just been revised to align with the international tourism scene "ecotourism". It may be important also to assume that at this point in time, the Malawi government had put in place all the necessary machinery to enforce principles of ecotourism. However, there is limited knowledge available on what the government and hospitality units were doing to foster these principles.

1.2.3 Climate Change in sub – Saharan Africa

In sub – Sahara Africa, climate change has made it very difficult for the poor rural population to engage in productive ways to secure their livelihoods (Ebhuoma & Simatele, 2017). These effects of climate change have not spared Malawi. Such that, the country is vulnerable to varying effects of climate change such as floods, droughts, strong winds and landslides (Resilience Policy Team, 2015). These effects have caused a lot of problems for poor rural people. The most notable, unfortunate incident happened during the 1992 rainy season in Phalombe (christened Napolo by the local people), where several people got killed and severe damage was caused to livelihood structures in Phalombe and Mulanje districts (Chigwada, 2004). Recently districts of Karonga and Nsanje have become perennial flood disaster places in Malawi with huge losses to livelihood assets. The 2016 Mzuzu floods and 2017 Lilongwe and Blantyre floods are examples

of the other recent flood disasters that have affected Malawi (Chikoko, 2017; Chitete, 2017). Generally, Mzuzu, Lilongwe, and Blantyre cities have never been disaster-prone areas but all these might be happening in the face of climate change.



Figure 1: Flooded Lingadzi River in Lilongwe
Source: Chikoko, (2017)

Many Malawians assume that climatic problems experienced in the country are caused by deforestation activities and not greenhouse gas emissions from the heavily industrialized countries (Magrath, 2009). It is important, however, to note that despite these assumptions, Malawi has the highest rate of deforestation at 2.8% annually in the SADC region (AFIDEP, 2012). This deforestation process has brought about a number of challenges such as soil erosion, perennial floods, and siltation of most water reservoirs that have worsened the livelihood problems in Malawi (Mwale, et al., 2013).

Apart from the prominent 1992 Phalombe disaster, approximately 100% of the electricity in Malawi is generated from hydropower on Shire River - Nkula and Tedzani Falls, the only outlet

to Lake Malawi, this has also been drastically affected (Chigwada, 2004). It is important to note that capacity for these power plants was based on the 1970 and 1980 design, a period when Lake Malawi reached historic water levels (Chigwada, 2004). Thus, 1991, 1992, 1993 and 1994 droughts, significantly affected the water level in Lake Malawi, simultaneously, impacting the hydropower generation capacity at the Nkula and Tedzani power plants (AFIDEP, 2012). Consequently, this resulted in the rationing of electricity. Further to this, Mwale, et al. (2013) note that despite the rationing of electricity, Malawi has the most expensive electricity rates in the SADC region. Separately, Magrath (2009) further noted that as a result of the absence of alternative energy supply, such as gas, coupled with high electricity tariffs, Malawians have resorted into buying charcoal as a source of wood energy that has escalated deforestation and carbon dioxide emissions in the country.

It is vital at this point to note that Malawi embarked on a number of initiatives such as proper land use programs in trying to reduce the greenhouse gas emission that is responsible for global warming that has caused climate change (Mwale, et al., 2013). In addition, a number of reforestation programs have been introduced across the country to restore the forests and try to reduce climate change effects.

> *It is against this backdrop of events, taking place in Malawi, that this research, attempts to find out the institutional and policy framework available in the country to make sure that the principles of sustainability are promoted within the hospitality industry in general. At the same time, this research investigates how the accommodation units in Lilongwe use the natural resources to produce its products/services - SCPPs. Furthermore, this research would like to contribute to the body of knowledge on sustainable tourism in Malawi and sub – Saharan Africa.*

1.3 The Rationale for the Study

There have been a number of studies that have been carried out in Malawi on SCPPs in the agricultural sector, land management, forestry, sanitation, waste management and their impacts on climate change and livelihoods (Chigwada, 2004; Government of Malawi, 2013b; Magrath,

2009). Equally, there have been studies carried out on the rapid population growth and their associated SCPPs in the country (AFIDEP, 2012; Mkwambisi, et al., 2010). In all these studies focus has been on agriculture-related issues and how they impact the environment. Therefore, this study intends to focus on SCPPs in hospitality sector towards the environment. There seems to be a gap in the literature on the impacts the hospitality sector has on the environment in Malawi and recommendations made thereof. In this regard, therefore, this research intends to contribute new knowledge to SCPPs in the hospitality sector in Malawi and how they can be improved to make the tourism industry sustainable.

The sustainable tourism industry in which the hospitality sector embraces SCPPs is looked at as the best option to help in uplifting local people's lives (Best & Thapa, 2011). Thus, the research attempts to offer a new recommendation on the existing legal and policy framework by presenting new perceptions of how the hospitality sector may contribute to sustainable tourism in Malawi. This will contribute to a new understanding of SCPPs in Malawi, Africa and globally.

1.4 Aims and Objectives

The aim of this study is to investigate the extent to which the institutional and legal framework can support sustainable tourism in Malawi. Furthermore, the study will also seek to establish the extent to which the hospitality outlets in Malawi have embraced the principles of sustainability.
In view of this, the objectives are:

a. To identify the institutional and policy framework available in Malawi through which SCPPs can be promoted.
b. To use Roger's Model of Innovation adoption to characterize SCCPs in the tourism accommodation sector.
c. To identify opportunities and challenges that either facilitates or impedes the adoption of SCPPs in Malawi.
d. To establish how the accommodation units in Lilongwe practice SCPPs in order to promote sustainable tourism industry in Malawi.

1.4.1 Research Questions

In light of the aforementioned thematic issues, the following questions will guide the research process:

a. *What institutional and legal framework exists within which sustainable tourism can be pursued in Malawi?*
b. *In what ways do accommodation units practice principles of sustainability in order to promote sustainable tourism in Malawi?*
c. *What challenges exist in the pursuit of sustainability principles in Malawi?*
d. *What is the implication of the findings of this study in a wider context?*

1.5 Theoretical Considerations and Literature Review

The Constitution of Malawi (Republic of Malawi 1994 as amended) recognizes that SCPPs can make an important contribution towards achieving sustainable development, improved standards of living and conservation of natural resources (Government of Malawi, 2011). In 1994 the Government of Malawi developed the National Environmental Action Plan (NEAP) that provides the framework for integrating SCPPs in all national development programs with the view to achieving sustainable socio-economic development. This NEAP is used as a reference document to guide planners and developers in all sectors of the economy including tourism (Mwale et al., 2013). Magrath (2009) points out that the NEAP helps project planners and developers to identify and manage environmental issues and promote sustainable use of natural resources. Despite the manifestations of this NEAP, little is known of the efforts that are made in the tourism sector in Malawi.

Lochner (2005) attests that an Environmental Management Plan (EMP) is a tool that emanates from the NEAP, used to ensure that SCPPs are included in all economic development projects of a country. Furthermore, the International Standards Organisation (ISO) developed a tool to help promote SCPPs in an organization. On his part, Alexander (2002) notes that the ISO 14001 standard for environmental management activities is a tool developed for this cause. This tool helps to inculcate an SCPPs culture in an organization. In line with the foregoing, the Malawi Bureau of Standards adopted ISO 14001 standard and innovated ISO 14001 Malawi Standard for Environmental Management System (ISO 14001 MS - EMS) to help different organizations

develop an Environmental Management Program (EMP) to help mitigate climatic challenges Malawi is facing (Government of Malawi, 2013b).

International Tourism Partnership (2016) states that in June 2012, twenty-three (23) leading global hospitality companies which included among the many: Accor, Beijing Tourism Group, InterContinental Hotels Group, Marroit Internation Inc, Orient-Express Hotels Ltd, and Starwood Hotels & Resorts launched the hotel carbon measurement initiative. The methodology was developed by the hospitality industry to calculate and communicate the carbon footprint of hotel activities in a consistent and transparent manner (Blanke & Chiesa, 2013). Hawkins and Bohdanowicz, (2012) note that previous similar approaches to measuring and reporting on carbon emissions varied and this variation led to confusion amongst customers, particularly corporate clients looking to understand their own potential carbon footprint and meet their own goals in this area. As such, the new approach to the same is more viable because customers have become more aware of their impacts on the environment (Bruns-Smith, et al., 2015). In Malawi, such initiatives amongst hospitality companies are not documented and as such, it may not be possible to conclude that such practices are followed. These hotel companies developed a methodology basing on ISO 14064 – 1:2006 against which greenhouse gases emission reports are voluntarily verified (Pantelidis, et al., 2010). Furthermore, Madar (2016) states that this standard specifies principles and requirements at the organizational level for quantification and reporting of greenhouse gas emission. In addition, it includes requirements for the design, development, management reporting and verification of an organization's greenhouse gas inventory (Internation Tourism Partnership, 2016). In Malawi, however, it is not well known in the hospitality field that there are such initiatives taking place.

It is from the backdrop of the above-highlighted innovations that the researcher uses the Rogers Diffusion of Innovation Theory (RDIT) developed in 1962. The RDIT will help the researcher understand the process through which the new ideas, practices or technologies developed by international hotel companies are inculcated into the hospitality system in Malawi (Dibra, 2015). Furthermore, Andrews, et al. (2013) attest that RDIT will help the researcher know how the adopted innovations are enforced within the organization and instill SCPPs culture amongst employees. According to Murray (2009), RDIT suggests that specific channels are used to communicate new innovations within the organization over time. In which case then RDIT will

help the researcher identify the specific channels that are used to promote SCPPs within the hospitality sector in Malawi. In addition, Andrews et al. (2013) state that RDIT classifies organizations within the innovation process into five categories, Innovators, Early Adopters, Early Majority, and Laggards. In which case then this researcher will also be able to classify major stakeholders within the tourism industry in Malawi in that order. Besides, this theory has been used elsewhere in the same sector to understand how hotels adopted SCPPs (Dibra, 2015). Hence the replicability in a Malawian context.

Tourism is known to be one of the contributors to climate change in a number of ways (Lubbe, 2003 and Agyeman, 2012). Aucamp (2009) also notes that the development of tourism-related facilities such as roads, hotels and water supply systems to mention but a few destroy the natural environment that attracts tourists to a particular destination. The more these developments continue to take place without incorporating SCPPs, the more the natural beauty of an area diminishes (Valenti & Atlas, 2015). Furthermore, the hospitality outlets where tourists stay use natural resources (in need of SCPPs) to provide their services. Hawkins and Bohdanowicz (2012) warn that if these resources are not efficiently used, they may be depleted. This depletion could have far-reaching consequences both on the environment and socio-economic wellbeing of the local people (Agyeman, 2012).

In addition, these hospitality outlets produce an enormous amount of waste such as solid wastes and chemical wastes which have a negative impact on the environment if they are not well managed (Bramwell & Lane, 2012). This, therefore, calls for all hospitality outlets to adopt SCPPs in their operations to avert environmental degradation (Smit, 2015). In Malawi, it is yet to be known if such practices are followed. In this regard, therefore, it is appropriate that the tourism industry and its related services in Malawi embrace SCPPs to become sustainable and contribute to the country's agenda, which is poverty reduction.

It is important therefore at this juncture to talk about the developments that have taken place in the tourism industry in some parts of sub-Sahara Africa and Malawi in particular. Kasim and Scarlat (2007) state that tourism activities are so complex and diverse in nature and as such, policy makers and professionals need to understand its dynamics including SCPPs to avert the decline stage proposed in Butler's model.

1.6 Butler's Model of Tourist Resort Development

Butler's model of tourist resort development is one of the well-referenced models in tourism discourse. This model is favoured because it provides a basic and simplified framework for conducting research in tourist resort development studies (Magombo & Rogerson, 2012). It argues that tourist resorts should be regarded as products that are not infinite and timeless rather they should be viewed as non – renewable resources (Butler, 1980). The reasoning is that at some point these resorts would experience the life cycle that would proceed through stages (see Figure 2). According to Magombo and Rogerson (2012), this life cycle is likely to end until specific efforts are made to prevent it or prolong it. This, therefore, illustrates that there is always change that is related to growth to certain limits in tourism resort development. This realization in this regard could assist those people responsible for planning, developing, and managing tourist resorts to make appropriate interventions and decisions when promoting sustainable tourism development (Baidal, Sa`nchez, & Rebollo, 2013; Auguilo`, Alegre, & Sard, 2005; Butler, 1980).

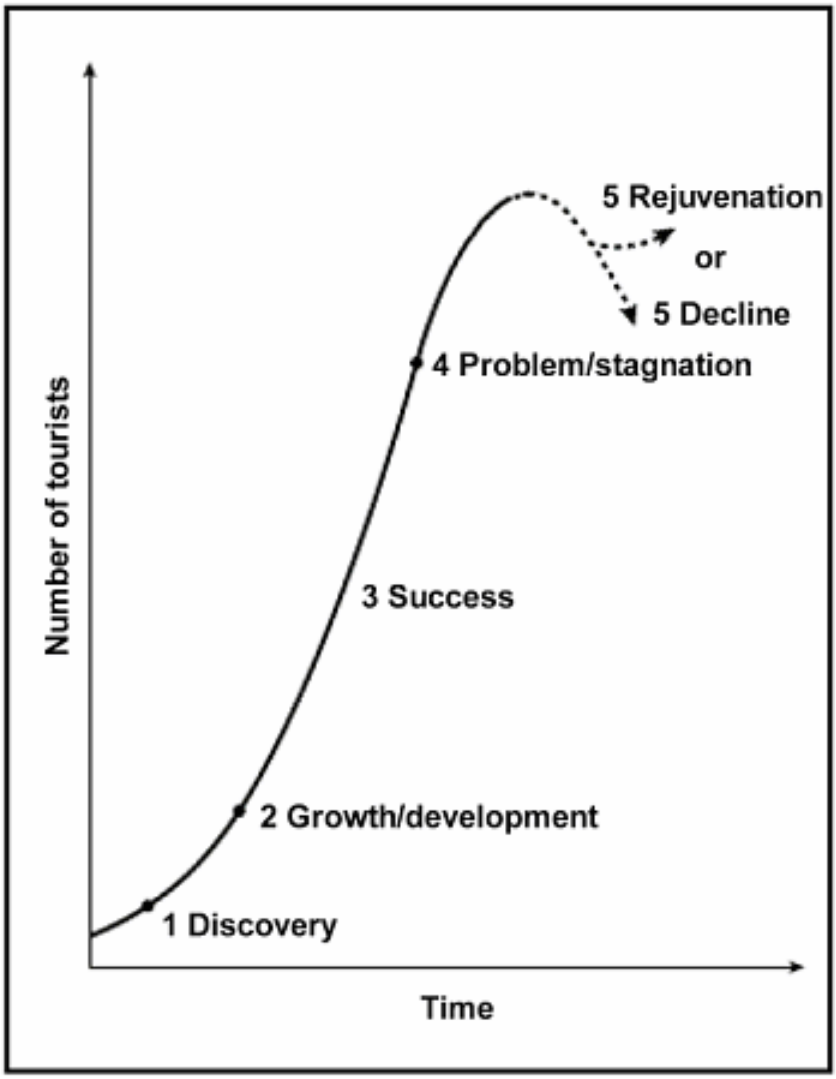


Figure 2: The Tourist Resort Life Cycle Model
Source: Butler (1980)

The key argument advanced by most researchers who have used this model is that there are developmental stages that these tourist resorts go through (see Figure 2), (Baidal, Sa`nchez, & Rebollo, 2013; Magombo & Rogerson, 2012; Auguilo`, Alegre, & Sard, 2005). These researchers have commonly agreed that resorts are not permanent and that they evolve through time because of external and internal forces. In this regard therefore despite the continued criticism of the Butler's model remains the viable option in this context.

The model, however, has been criticised by some researchers that it does not it does not apply well to developing countries because there are huge variations in tourism resort growth patterns

(Magombo & Rogerson, 2012). Other critics have argued that Butler's Model does not present empirical evidence to support this concept (Chapman & Speake, 2011).

1.7 Tourism Growth Trends in Eastern and Southern Africa

In South Africa, the tourism industry has grown significantly since the 1994 elections (Ogtrop, 2012). The number of hospitality outlets in key locations such as Cape Town, Johannesburg, Pretoria and Durban has increased because of the growing number of travelers (Lubbe, 2003). Kenya, another major tourist destination in East Africa also provides an example of a sub-Sahara African country that has embraced the growth in tourism as an important strategy for socio-economic development where the hospitality sector has been growing rapidly (Blanke & Chiesa, 2013). AfDB (2014) notes that Kenya developed the tourism sector in addition to the agricultural sector to become a source of foreign exchange earnings, job creation, and economic growth. Similarly, Malawi's tourism potential was recognized even during the pre-independence era. The first tourists to visit Nyasaland (now Malawi) were mainly motorists from South Africa, especially from Cape Town, Johannesburg, Pretoria and Salisbury in Southern Rhodesia (Magombo & Rogers, 2012). Thus, it could be argued that the Malawi tourism industry started polluting the environment through fossil fuel carbon emissions around that period (colonial period). The colonial and federal governments had done little to encourage Malawi's tourism industry to grow whilst embracing SCPPs (Nsiku & Kiratu, 2009).

From the early 1960s, the government of Nyasaland started focusing more attention on tourism, the post-independence (1964) period is on record as the time when considerable attention was given to the tourism sector (Department of Information, 1968a). But again there is no substantial record that indicates that this attention focused on SCPPs as well. The tourism resource base then included natural attractions such as lakes and rivers, mountains, natural parks, and wildlife reserves, scenic landscapes and natural heritage (Magombo & Rogers, 2012). As already alluded to, these assets are under threat of being depleted or destroyed. However, these assets remain an important base for the Malawi tourism industry to date (Government of Malawi, 2013a). Hence, the importance of embracing SCPPs within the hospitality sector to nurture them.

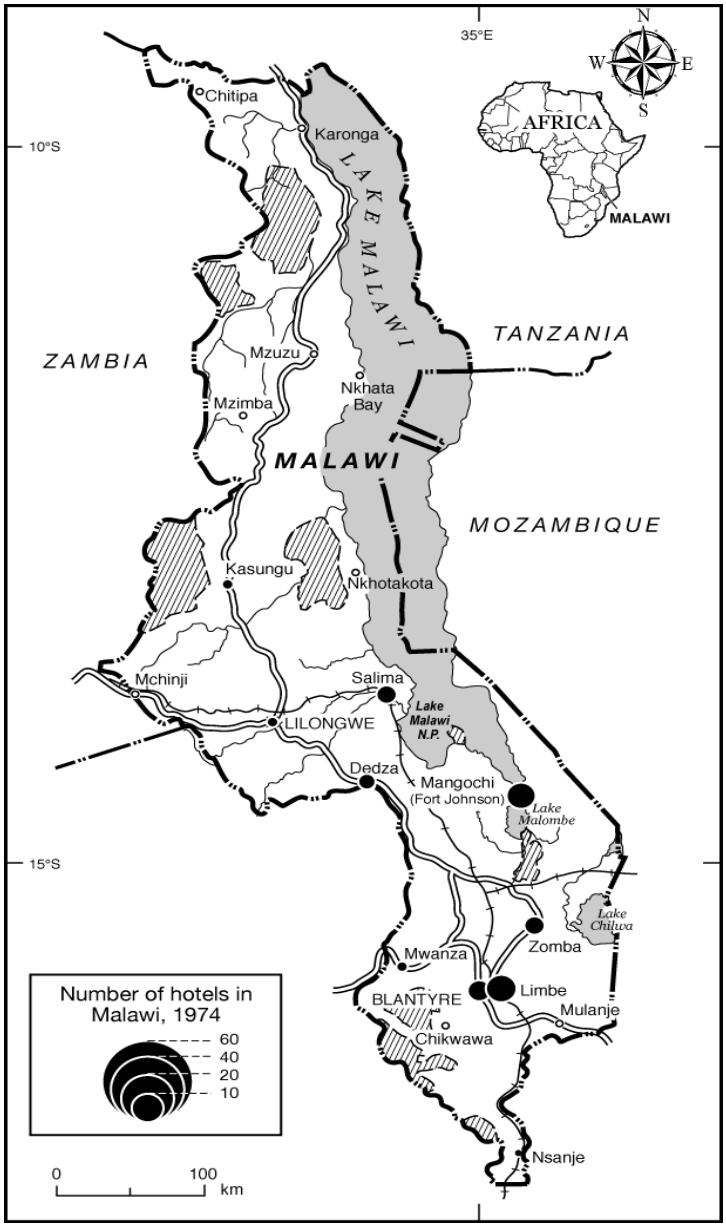


Figure 3: Malawi Tourism Resource Base and Accommodation Facilities by 1974
Source: Magombo, et al. (2017)

1.8 The Growth of the Hospitality Sector in Malawi

The hospitality sector in the context of this research project refers to accommodation facilities. The development of this sector in Malawi can be traced back to the colonial era and runs parallel to the developments in the postcolonial nation-state (Magombo, et al., 2017). The growth of the hospitality sector was central to the development and planning of tourism in Malawi such that

without a well-developed hospitality sector, Malawi could not aspire to become a competitive tourism destination (Magombo & Rogers, 2012). Initially, there were nine hotels in Nyasaland (now Malawi) during the colonial period which were built to accommodate missionaries who traveled to Malawi to stop the slave trade, namely, Ryalls Hotel; Nasha's Hotel and Malvern Hotel in Blantyre, Limbe Hotel and Shire Highlands Hotel in Limbe, Cape Maclear Hotel in Fort Johnston (now Mangochi), Grand Beach Hotel in Salima, Angoni Highlands Hotel in Dedza and the oldest hotel in Malawi, Hotel Masongola, previously called Government Hostel, situated on the slopes of Zomba Mountain in Zomba District (Magombo, et al., 2017). During this period, issues of SCPPs were not yet well and of a greater concern globally (Agyeman et al., 2003). As such, it could be assumed that the developers had no idea of what SCCPs were and as such did not consider them when building these hotels.

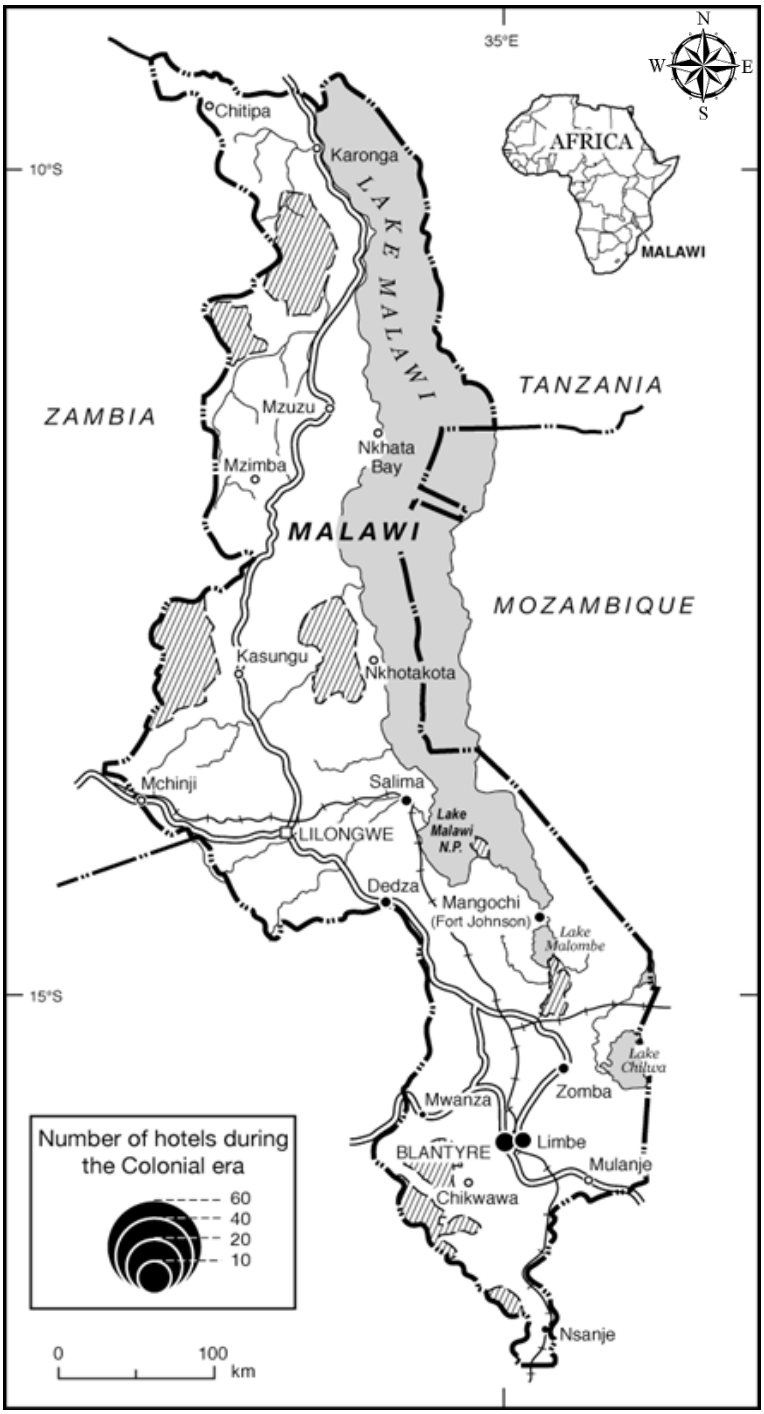


Figure 4: Distribution of Hotels in Malawi during the Colonial Era
Source: Magombo, et al., (2017).

1.8.1 Growth of the Hospitality Sector after independence – from July 1964

There is limited knowledge as to whether the new government thought about developing this sector to embrace the SCPPs. At the time of gaining independence from the colonial masters in 1964, there were now 25 hotels situated in the central region and the southern region of the country (Department of Information, 1970). These local hospitality units at that time were old-fashioned to appeal to the tourists thus the need to have new hospitality units of international standard was imminent (Government of Malawi, 1987a). However, it is not clear whether the government of Malawi considered SCPPs as one of the characteristics that would attract tourists to stay in a hotel or not. The new government of Malawi prioritized the development of the tourism sector to make Malawi a priority tourist destination; however, the government did not make a provision for financial support to upgrade these facilities, instead, the government left hospitality unit owners with the responsibility to bring their facilities up to the standards put down by hotels regulations (Department of Information, 1970; Magombo, et al., 2017). Furthermore, the tourism and hotel regulations used at that time in Malawi did not mention SCPPs as a prerequisite for a facility to get licensed (Department of Information, 1970). In this regard, therefore, these new developments excluded SCPPs because of probably a lack of knowledge and the development would have continued destroying the environment.

Table 1: Hospitality Properties in Malawi, 1964

Hospitality Facility	Location	Status
1. Country Inn	Blantyre	Government Property
2. Keiller's Transcontinental Hotel	Blantyre	Private Property
3. Mount Pleasant Inn	Blantyre	Government Property
4. Nash's Hotel	Blantyre	Private Property
5. Ryalls Hotel	Blantyre	Private Property
6. Country Hotel	Limbe	Private Property
7. Hotel International	Limbe	Private Property
8. Limbe Hotel	Limbe	Private Property
9. Nyasa Hotel	Limbe	Private Property
10. Portuguese Hotel	Limbe	Private Property
11. Shire Highlands Hotel	Limbe	Private Property

12. Chidzanja's Hotel	Lilongwe	Private Property
13. Lilongwe Hotel	Lilongwe	Private Property
14. Glengeary hotel	Fort Johnston	Private Property
15. Palm Beach	Fort Johnston	Private Property
16. Monkey bay Hotel	Fort Johnston	Private Property
17. Grand Beach Hotel	Salima	Private Property
18. Lake Nyasa Hotel	Salima	Private Property
19. Senga bay Hotel	Salima	Private Property
20. Angoni Highlands Hotel	Dedza	Private Property
21. Mwanza Hotel	Mwanza	Private Property
22. Mwanza Inn	Mwanza	Government Property
23. Government Hostel	Zomba	Government Property
24. Pigs &Whistle Hotel	Zomba	Private Property
25. Zomba Inn	Zomba	Government Property

Source: Department of Information, (1970a) and Magombo, et al. (2017)

The government of Malawi prepared a new plan to improve the hospitality sector and was now directly involved in the establishment of hospitality units (Department of Information, 1970). However, the plan did not tackle issues of SCPPs in which case then, it may be appropriate to conclude that these pertinent issues were left out. In 1966, the Division of Tourism prepared this plan that was approved by the National Development Committee which was mandated to scrutinize the sector's development plan and it became the country's official blueprint for upgrading the hospitality sector in the country (Magombo, et al., 2017). The focus was placed on the provision of professionally managed hospitality units to offer excellent services to the customers and not SCPPs. Furthermore, the plan specified the preferred location for tourism development. The emphasis was based on the unusual natural advantages such places possessed, such as lakeshore areas with superb beaches, spectacular plateaus, and conveniently sited game-viewing areas across the country (Nsiku & Kiratu, 2009; Magombo & Rogers, 2012). Unfortunately, according to Bramwell and Lane (2012), these are areas that become victims of tourism development if the SCPPs are not taken on board during the planning phase.

The plan also indicated that the development of new hospitality facilities should incorporate golf courses and other supporting infrastructure such as an airport, railway line, and good connecting roads (Department of Information, 1970; Magombo & Rogers, 2012; Magombo, et al., 2017). All these developments as already stated come with negative environmental impacts and as such it would have been important to consider SCPPs at this point (Foster, 2008; Foster, 2011; Foster, 2013). It was planned that Malawi Hotels Ltd would be formed to run all hospitality units that the government developed; however, this responsibility was later given to Hallways Hotel Overseas Ltd (Magombo, et al., 2017). It should be pointed out here that this was the period that the famous 1972 Stockholm UN environmental conference had just taken place (Hulse, 2007). Therefore the assumption is that the company would have known the need to incorporate SCPPs. Among other responsibilities, Hallway Overseas Ltd was mandated (1) to supervise the game camps at Lengwe Game Reserve, Lifupa in Kasungu and Chelinda at Nyika National Park, (2) provide catering services at Chileka and Lilongwe airports, and on the MV Ilala II ship, and (3) manage the duty-free shop at Chileka airport ((Department of Information, 1970; Magombo & Rogers, 2012; Magombo, et al., 2017). In this regard, therefore, it could be argued further that if Hallways Hotel Overseas Ltd had the knowledge and incorporated SCPPs, the hospitality sector in Malawi could have developed in an environmentally sustainable way.

The first phase of the plan, was to develop a commercial hotel, Mount Mlanje (now Mount Soche), with 100 double bedrooms in Blantyre because it was anticipated that business travelers from South Africa, Southern Rhodesia (Zimbabwe), Zambia and Mozambique to Malawi would use this facility because there was a growing demand from business travelers for better accommodation (Department of Information, 1968b; Department of Information, 1970; Magombo, et al., 2017). Another development that followed was the construction of a small tourist hotel (Nkopola Lodge) with 15 – 20 double bedrooms on the lakeshore near Fort Johnston (Mangochi) targeting internal and external car tourists (Department of Information, 1968a; Department of Information, 1970; Magombo, et al., 2017). The government's plan was to increase demand by promoting conference and convention facilities built in Blantyre (Department of Information, 1970; Star, 1977; Magombo, et al., 2017). The drive here was to increase economic benefits from the tourism sector and this, therefore, could have also increased the damage that these tourism activities caused to the environment (Foster, 1999; Foster, 2008; Foster, 2011). There was huge desire from the government to create worth through the increased

patronage to the hospitality facilities such that the government envisaged that reasonable air links between Blantyre, Fort Johnston (Mangochi), Lilongwe and Salima could encourage the establishment of more modern hotels in these areas (Department of Information, 1968a; Magombo & Rogers, 2012; Magombo, et al., 2017). In this regard, therefore, it could be argued that environmental damage in Malawi was being propagated due to lack of SCPPs.

Further damage to the ecosystem was manifested when the government of Malawi encouraged tour operators and travel agents to include the new hospitality units in the international travel itineraries and by that time, the government was building an additional block of bedrooms at the Mount Mlanje (Mount Soche) to cater for these international visitors (Foster, 2011; Farmaki, et al., 2015; Magombo, et al., 2017). Furthermore, the assumption could be that the government promoted more damage to the environment this government anticipated that the success of these hospitality facilities would depend not only on air links but also on improved road networks, both internally and externally such that the external Tete road and the internal roads between Blantyre, the Lakeshore area, and Lilongwe had been improved to promote traffic by road from South Africa, Southern Rhodesia and Mozambique (Agyeman, et al., 2003; Foster, 2013; Magombo, et al., 2017). In addition, the plan considered providing cheaper family hospitality units for the South African and Rhodesian visitors who would travel by road with families to Malawi (Nsiku & Kiratu, 2009; Magombo, et al., 2017). The government envisaged that these facilities would be popular and well patronized during weekends and holiday periods and as such the airstrip in Fort Johnson was enlarged to take Fokker or Viscounts aircraft further manifesting the negative environmental impacts from tourism in pursuit of economic development (Foster, 1999; Falkner, 2013; Magombo, et al., 2017).

The second phase for hospitality sector development shifted the geographical focus away from Blantyre focus was placed on the provision of the first major tourist hotel along the lake because this was regarded and still, it is the country's prime tourist attraction (Nsiku & Kiratu, 2009; Chilembwe & Mweiwa, 2014; Magombo, et al., 2017). Specifically focus was on Salima district because it lies along the lakeshore area and has several attractive sites which are proximate to Chipoka for rail and lake steamer passengers with a dry season Dakota airfield (Nsiku & Kiratu, 2009; Magombo & Rogers, 2012). Furthermore, Salima was close to the capital city designate, (Lilongwe) and nearer to the established Copper belt car tourist market in Zambia, which was a

targeted market (Department of Information, 1970; Magombo & Rogers, 2012; Magombo, et al., 2017). As a result, the government developed a holiday complex in Salima to complement the existing Grand Beach Hotel (Magombo, et al., 2017).

In the third phase of the development of the hospitality sector, the emphasis was placed on expanding spatially the network of hotels away from the cities and the lake to open up the tourism opportunities in other regions (Magombo & Rogers, 2012). At this point, it could be argued that the government had now started damaging the environment in protected areas due to lack of clearly stipulated SCPPs. In particular, during this phase, the focus was to undertake hospitality unit development at game reserves including the scenic plateau areas in three main game reserves, which had some existing hospitality facilities, thus Lifupa Camp in Kasungu National Park which had an airstrip and 14-bed accommodation unit; the then Malawi National Park (now Nyika National Park) in Rumphi District which had 22 beds and Lengwe Game Reserve camp in Chikwawa with 8 beds (Department of Information, 1970; Magombo, et al., 2017). In addition, the Star (1977) stated that eventually, the government policy of investing in hospitality sector changed and the new policy thrusts were to encourage private sector involvement. The key reasons for the change of policy direction in favor of greater private sector involvement relate to trade liberalization and most importantly, the introduction in Malawi of World Bank policies for *'Structural Adjustment Programme'* (Nsiku & Kiratu, 2009; Magombo & Rogers, 2012; AfDB, 2014). It could be further argued that this marked the end of the government's direct involvement in the hospitality sector planning and implementation and could also be viewed probably as a lost opportunity for the government to influence an SCPPs culture in the sector as is the case in most developing countries (Agyeman, et al., 2003; Agrawala & Fanhauser, 2008; Bello, et al., 2016).

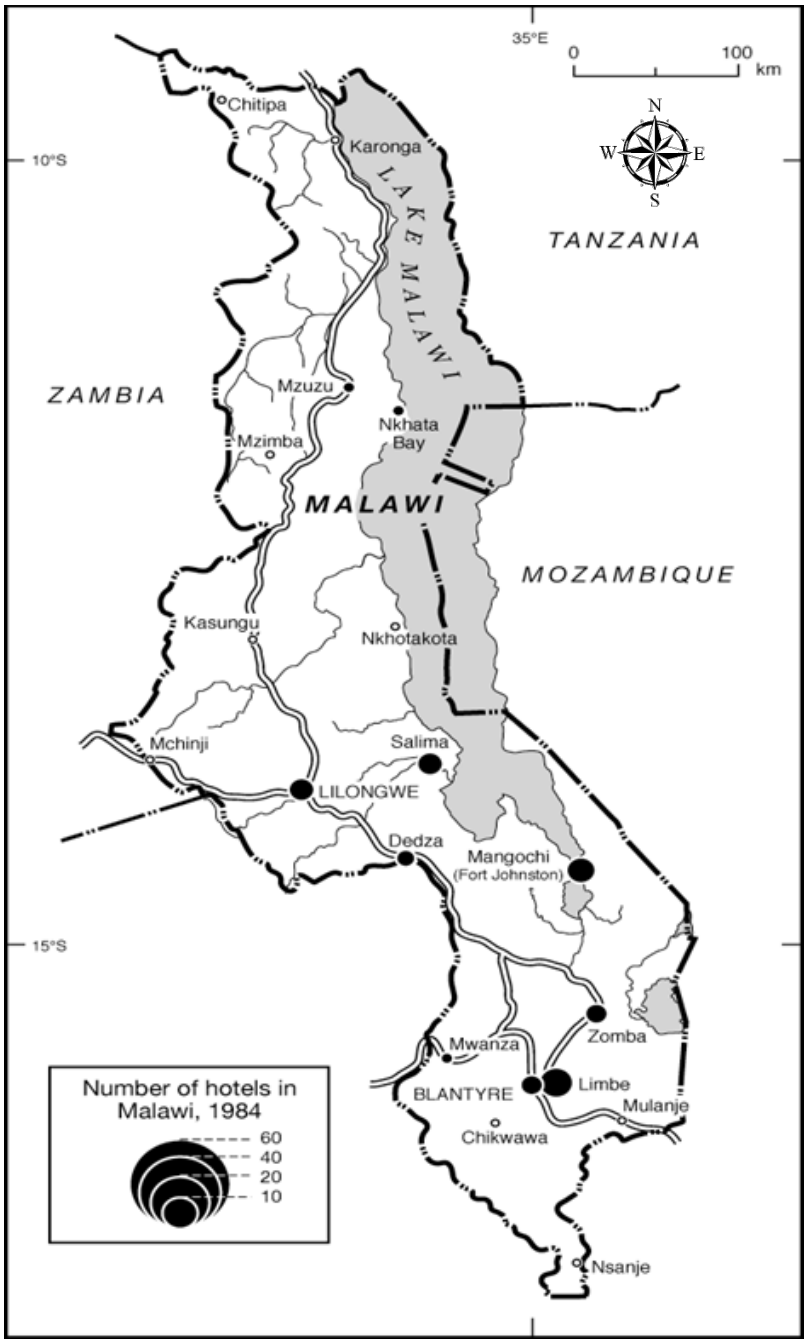


Figure 5: Distributions of Hospitality Facilities in Malawi, 1984
Source: Magombo, et al. (2017).

1.8.2 Growth during the Multi-Party System of Government

Available evidence suggests that this is an era in which government started showing interest in promoting SCPPs because it is the period government thought of introducing ecotourism in Malawi (Magombo & Rogers, 2012; Bello, et al., 2016; Bello, et al., 2017). Ecotourism as a

component of sustainable tourism endeavours to conserve ecosystems by promoting environmental management to bring about sustainable development (Alvarez, 2014; Zambrano, et al., 2010; Anandaraj, 2015). This concept started in Belize where the impetus was on protecting natural places and scenery by was evolved by the western developed nations (Honey; 2010). For instance, in 1872 the USA implemented this concept in the Yellow Stone Park and in 1879 and 1885 the Royal Park and Banff Park in Australia and Canada respectively introduced ecotourism. In developing countries especially in sub – Saharan Africa, this concept took center stage in sustainable development endeavors around the 1990s. For example, in Ghana, this concept according to Yeboah (2013), was introduced in 1995 to conserve the environment through community participation. In Malawi, this new tourism development approach was formulated just around the same period which gave priority to the development of ecotourism and associated infrastructure (Government of Malawi, 2008). One of the factors that stimulated this policy formulation was the bad publicity surrounding the treasured tourism icon, Lake Malawi, as a bilharzia-infested water body (Magombo & Rogers, 2012). From this point, it could be said that the government of Malawi started seeing the negative impacts that come with the tourism industry and the need for SCPP.

The first proposal for eco-lodges was the development of an up-market ecotourism lodge at Kande Beach along the Chintheche Strip in Nkhata Bay followed by other similar facilities at Maleri Island in the Lake Malawi National Park, Likhubula Falls in Mulanje, Machewe Falls and finally, a hotel in the Lilongwe Nature Sanctuary in Lilongwe (Government of Malawi, 1987a; Government of Malawi, 2008; Magombo, et al., 2017). The assumption was that these facilities would appeal to tourists who would want to stay in environmental friendly units (Magombo & Rogers, 2012). This, therefore, provides enough evidence that the government recognizes that a modern tourist is conscious of the negative impacts that come with tourism activities. At around the same time available evidence suggests that all hospitality facilities which were operated by were privatized and the government introduced specifically targeted incentives such as duty waiver on the importation of all capital goods to invest in this sector (Nsiku & Kiratu, 2009; Government of Malawi, 2012b; Magombo, et al., 2017). Due to this new policy, good progress was made in the hospitality sector although this was a missed opportunity to transform into an environmental friend sector instead focus was to improve the services offered (Nsiku & Kiratu, 2009; Government of Malawi, 2013b; Magombo, et al., 2017).

Furthermore, available evidence suggests that, between 2005 and 2009, a number of international hotels and lodges started developing properties in Malawi, for example, the Crossroads Hotel was built in 2005; Pacific Hotel was built in 2008; Nature Sanctuary Lodge in 2006 and Pumulani Lodge in 2009. In 2010, the Botswana-based luxury safari lodge enterprise, Wilderness Safari secured a concession to build its first lodge in Malawi (Government of Malawi, 2013a; Government of Malawi, 2016; Magombo, et al., 2017). During the same year, the Chinese investors were engaged in developing a new hotel in Lilongwe, Malawi's first 5 – star hotel that was financed under the Chinese loan agreement (Government of Malawi, 2013b).

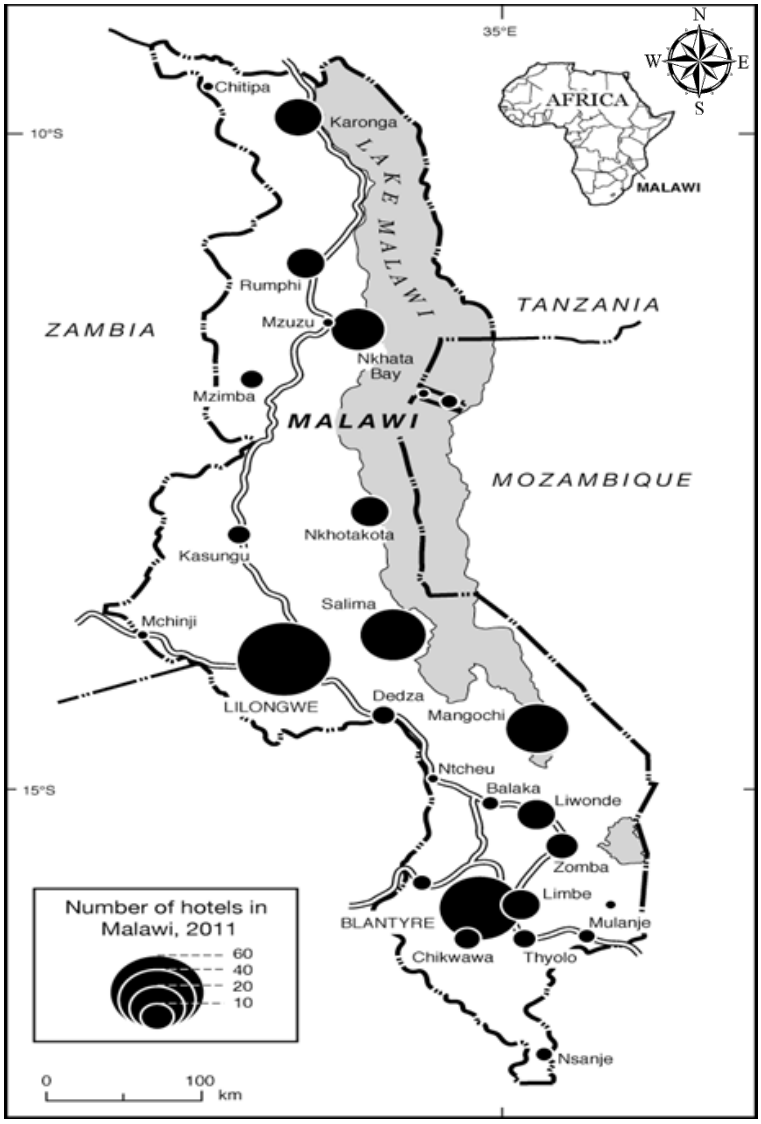


Figure 6: Distribution of Hospitality facilities in Malawi, 2011
Source: Magombo, et al., (2017).

1.9 Methodological Considerations

The researcher conducted a study that collected qualitative data. The researcher used interpretivist, holistic and integrative approach using a three-pronged strategy: Firstly, desk review of the literature on SCPPs related studies in Malawi and elsewhere; secondly, focus group discussions that took the form of discussion workshops; and thirdly, key informant interviews.

1.9.1 Description of the Study Area (Lilongwe)

The study was conducted in Lilongwe which is the capital city of Malawi. All government departments including the Department of Tourism have their head offices housed in Lilongwe. Lilongwe is a city that has the largest number of hospitality outlets in the country compared with the other two major cities of Blantyre and Mzuzu (Nsiku & Kiratu, 2009).

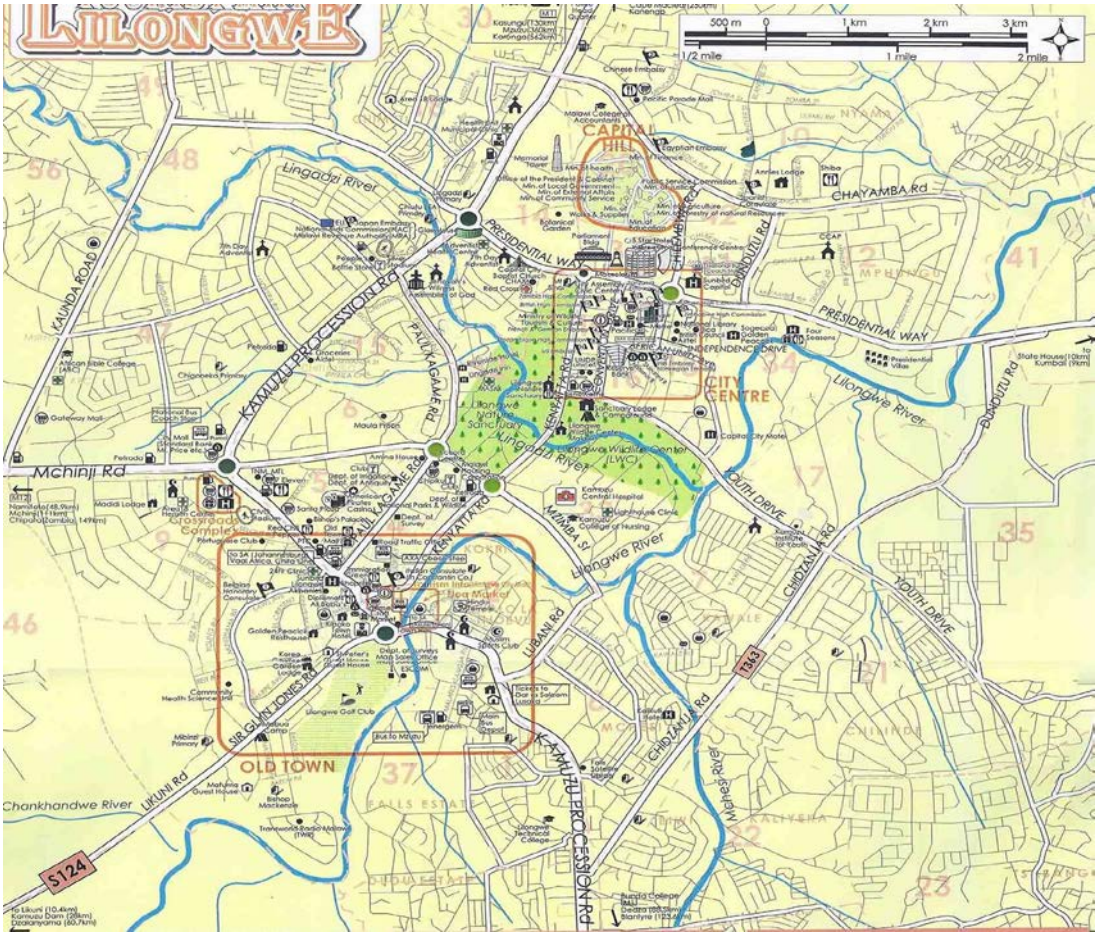


Figure 7: Map of Lilongwe showing study focus areas.
Source: Makwana (2014).

The government and private institutions mainly dominate Lilongwe's economy. Most of the industrial activities take place in Kanengo area in the northern parts of the city where food processing, tobacco storage, and sales, maize storage and other light industries take place (Magrath, 2009). Apart from these agricultural-related industrial activities, finance, banking, retail, construction, transport, public administration, and tourism are the other important economic activities in this city (Mkwambisi, et al., 2010).

Lilongwe's poverty levels are estimated at 25% of the population of which 76% lives in informal settlements with a 16% unemployment rate (Government of Malawi, 2006). The civil service employs about 27% of all workers resident in Lilongwe while 40% work in the private sector and 2 % are self-employed (Government of Malawi, 2013a).

There are various means of transportation in and out of Lilongwe. Kamuzu International Airport is located in the northern part of this city; several buses travel regularly in and out of Lilongwe to various destinations including international routes like Zambia, Tanzania and the Republic of South African via Mozambique and Zimbabwe (Government of Malawi, 2016). The first five-star hotel and conference centre in Malawi is located in Lilongwe (Government of Malawi, 2012a). Besides, this city has seen a lot of new hotels built by foreign investors.

1.9.2 Research Design

The researcher conducted a study that collected qualitative data. The researcher used interpretivist, holistic and integrative approaches using a three-pronged strategy: Firstly, desk review of the literature on SCPPs related studies in Malawi and elsewhere. A qualitative meta-analysis of sustainability practices using the Rogers Diffusion of Innovation Model was used in this regard; secondly, focus group discussions that took the form of discussion workshops; and thirdly, key informant interviews.

This qualitative research used a Grounded Theory (GT) strategy because the researcher wanted to develop an understanding of the phenomena in the data (Corbin & Strauss, 1990). The researcher had chosen the GT design because apart from promoting the grounding phenomena in the empirical data, it also allowed an active role of the researcher in both the data collection and analysis process (Denzin & Lincoln, 2011). Further, GT was one of the scientific ways of

answering socially purposeful questions of what was happening and why (Gasson, 2004). There are two schools of thought within the GT. The original school of thought is known as the Glassian Thought which believed in an inductive approach whereas the other School of Thought, Straussian, believed in a more step by step prescriptive approach to doing research (Corbin & Strauss, 1990; Glaser, 1992; Creswell & Creswell, 2018). Thus a Straussian School of thought was used to answer these questions. A preliminary review of the literature that was done revealed that the phenomenon was relatively new in Malawi. This review guided the formulation of the research question. Hence this study used an exploratory approach.

1.9.3 Study Population and Sampling Procedure

The study used purposive, convenience and snowball sampling techniques. The study context (Lilongwe) had been purposefully selected on a geographical basis for its importance in the tourism industry. This is where the headquarters of the government departments directly involved with tourism activities, the largest number of hospitality establishments and Malawi Tourism Council headquarters are located.

The study involved twenty-three (23) respondents out of which five (5) were government establishments. Two (2) key government departments, (the Department of Tourism and the Department of Environmental Affairs) were purposefully selected for this study. Snowball sampling technic was used to recruit other three (3) government departments, (Lilongwe City Assembly, Lilongwe District Assembly and Malawi Bureau of Standards) for this study. A total of Eighteen (18) accommodation units identified for this study (Table 1). From this number, Seven (7), Star Graded facilities were purposefully and the remaining Eleven (11) units were conveniently selected because they were deemed vital to provide information on the SCPPs.

A sampling of respondents that is, managers and employees were also purposive. The management team (general managers and section heads) of the sampled organizations were purposively sampled because they were perceived to be able to identify the SCPPs in their respective institutions. This information helped the researcher to identify the group in which the institution belongs to in RDIT five categories. Using a snowballing technic, the policy and decision makers in the hospitality establishment in the sampled organizations were identified and interviewed. These decision makers provided an account of the SCPPs that they adopted in their

respective organizations. By the nature of business hospitality organizations are divided into specialized sections, therefore the section heads of the randomly sampled organizations were purposively sampled for KIIs to provide information on the why and how SCPPs were implemented in an organization.

Table 2: Sampled Hospitality Institutions, Tools, and Respondents

Entity	Lilongwe	Sampled Institutions	Respondents	Study Tools
Accommodation Units	Licensed and 4 Star grade	1. Capital Hotel	Management and Staff	FGD & KII
	Licensed and 4 Star grade	2. Golden Peacock Hotel		
	Licensed but not assessed	3. President Walmont Hotel		
	Licensed and 2 Star grade	4. Lilongwe hotel		
	Licensed but not assessed	5. Kiboko Town Hotel		
	Licensed and 3 Star grade	6. Ufulu Gardens Hotel		
	Licensed and 3 Star grade	7. Cross Roads Hotel		
	Licensed but not assessed	8. Lingadzi Inn		
	Licensed but not assessed	9. Crown Hotel		
	Licensed but not assessed	10. Michilu Hotel		
	Licensed but not assessed	11. Platinum Suite Hotel		
	Licensed but not assessed	12. Kumbali Country Lodge		
	Licensed but not assessed	13. Latitude 13		
	Licensed but not assessed	14. Mabuya Camp		
	Licensed but not assessed	15. Mufatse Inn & Campsite		
	Licensed but not assessed	16. Nelly's Lodge		
	Licensed but not assessed	17. Sheila's Lodge		
	Sunbird Head Office	18. Sunbird Capital		
Government Departments	1. The Department of Tourism		Directorate	KII
	2. The Department of Environmental Affairs		Directorate	KII
	3. The Lilongwe City Assembly		Directorate	KII
	4. The Lilongwe District Assembly		Directorate	KII
	5. The Malawi Bureau of Standards		Directorate	KII

Source: Authors

1.9.4 Data Collection Instruments

The researcher used open-ended questions as an interview guide during Key Informant Interviews (KII) for the management team and an FGDs for a few purposefully identified experienced hotel employees within the largest hotel chain in Malawi, Sunbird. Further probing questions were asked for clarity. The interviews were recorded using a digital recorder (Panasonic IC Recorder), Observations were made on the actual practices on the ground to generate a set of data that was compared with that obtained through interviews (Sutcliffe, 2016). The researcher also analyzed policy and operational documents. These processes were done repeatedly until data saturation was achieved (Ahmed, 2016).

1.9.5 Data Analysis

The data obtained for this research project was manually analyzed after transcription, through a series of coding (Corbin & Strauss, 1990). Each line of the transcript was assigned a number. Data was then be broken down (open coding) into separate chunks, scrutinized, similarities and differences identified – where there was a need, new questions were formulated and follow up telephone interviews were conducted to get more insightful information about the phenomena reflected therein (Mahdiuon et al., 2017). This process resulted in the generation of mini categories which were then connected together to form subcategories through another coding process (axial coding). At this juncture, the data produced a more meaningful theme on the phenomena under investigation (Gasson, 2004). The researcher performed another coding process (selective coding) from those generated subcategories (Denzin & Lincoln, 2011). Those subcategories with similarities were grouped together to form core categories. The researcher refined and developed further categories that were considered ambiguous to generate real meaning (Corbin & Strauss, 1990).

Whilst the coding processes were being performed, the researcher concurrently generated theme notes (memos) from the data to generate a theory that was grounded in the data (Sutcliffe, 2016). This process helped the researcher to track the possible links between codes, assumptions about categories and emerging theoretical ideas. Thus memos supported the researcher's reflexiveness at the same time contributed to constant comparisons so that no ideas were lost in the process (Gasson, 2004). This process was done until the researcher reaches a comprehensive point (theoretical saturation) whereby no new properties or dimensions emerged from the data (Corbin & Strauss, 1990).

1.10 Ethical Consideration

The researcher sought clearance from the ethics committee of the School of Geography, Archaeology and Environmental Studies and the National Commission for Science and Technology in Malawi (NCST) to carry out this research in Malawi. Furthermore, permission was sought from the Lilongwe City Assembly and all the sampled organizations to conduct this research in Lilongwe. During the research process, the researcher made sure that:

- The respondents to this inquiry provided informed consent for voluntary participation.
- Participant identity was protected by using pseudonyms and codes.
- There was no physical or psychological harm to anyone who participated in this study by ensuring that none of the information solicited embarrassed or harmed them.
- Participants were assured of privacy and confidentiality that information obtained from inquiry was strictly used for academic purposes and that access to the same was protected by a password in the computer where this information was stored.
- Permission was sought from the organization where this research was conducted, to access operational documents, take photographs and where necessary make observations on how employees were working.

1.11 Outlines of the Dissertation

This dissertation is made up of publications and comprises of six (6) chapters, five of which publications. **Chapter 1** of this dissertation provides information on tourism in general and the developments that have taken place in sub – Sahara Africa. Detailed information on the development of the hospitality sector in Malawi has also been articulated in this Chapter. Finally, in this chapter, thematic issues on the topic under study are discussed, highlighting the research questions and objectives of the study. **Chapter 2** of this dissertation is a published paper that provides a comprehensive review of the literature relevant to the thematic area introduced in Chapter 1. From this review, gaps were identified which this research project endeavoured to fill. This chapter articulates policy issues; bad and good practices in the tourism industry in general and then narrow down to the hospitality sector where the appropriate practices as regards to environmental management in the accommodation sub – sector are highlighted. **Chapter 3** is a

paper that evaluates other methodological imperatives that had been used in similar studies elsewhere. This paper recommends a seven-step Full Version Grounded Theory methodological approach as an appropriate methodology for sustainability-related studies in Malawi and Sub – Saharan Africa at large. **Chapter 4** is a paper that discusses the role of the institutional and legal framework of Malawi in promoting SCPP in pursuit of sustainable tourism development. This paper presented the informants' views on the topic under study. These views suggested that the available framework has huge gaps that need to address because at the moment this framework does not promote SCPP to achieve sustainable tourism development in Malawi. **Chapter 5** is a paper that discusses the findings from the accommodation sub-sector in Lilongwe. The views from the informants and the observations made in the course of the fieldwork revealed that the accommodation sub-sector in Lilongwe is divided into two groups. There are other accommodation units that have adopted SCPP innovations to reduce their operating cost whilst the other group comprises of accommodation units that fall under the laggard's category within the Rogers Diffusion of Innovation classification. C**hapter 6** is the last section of this dissertation summarizing the discussions from the other chapters and makes recommendations for future research in SCPP in Malawi.

Chapter 2:

The Rhetoric of Sustainability in the Malawian Tourism Accommodation Sector: Application of the Rogers Diffusion of Innovation Theory: killing the Goose that lays the golden eggs.

Abstract

The hospitality industry in developed countries embraced sustainability ideologies since the early 1990s through various innovations and has since contributed meaningfully to the sustainable development of these countries. This paper assesses the adoption and practice of sustainable environmental initiatives in the Malawian accommodation sector by drawing lessons from other countries within the Southern African Region. A qualitative meta-analysis on sustainability practices using the Rogers Diffusion of Innovation Model was adopted as both a methodological and analytical framework of the paper. It is argued in this paper that, the accommodation sector in Malawi falls under the Laggards cadre within the model in terms of environmental sustainability innovations and in contrast to other Southern African countries. Furthermore, it is noted that the accommodation sector in Malawi is developing unsustainably. It is, therefore, recommended that there is an urgent need to develop appropriate institutional and policy framework through which effective environmental management and sustainability can be pursued in order to attain sustainable development in the Malawian accommodation sector.

Key Words: *Accommodation Sector; Environmental Sustainability, Sustainable Development, and Meta-analysis*

2.1 Introduction

This article questions the efficacy of imported euro-centric innovative sustainability ideologies of Reduce, Reuse and Recycle (3Rs) in promoting effective environmental management and sustainable development within the accommodation sector in Malawi. According to the Government of Malawi (1994), the 3Rs are some of the focus areas within the EMA of Malawi and as such, it becomes pertinent to find out how the Malawian accommodation sector embraces them. Rogerson and Sims (2012) and Middleton (2013), reported that the accommodation sector is the most environmentally harmful component of the hospitality industry, because it is characterised by high energy consumption rate (lighting; heating and cooling; cooking), high water consumption rate (Swimming pools; Laundry; Bathing and Toilet Facility), and high volumes of waste produced (Solid and Liquid). Thus, the focus of this paper is on the 3Rs environmental aspects of sustainability within the accommodation units. Environmental management in sub – Saharan Africa was introduced in the 1940s and 1960s through the creation of protected forestry and natural reserves (Poda et al., 2013). Bello et al. (2016), are of the view that this was done to promote scientific research, wildlife protection, preservation of species and genetic diversity, maintenance of ecosystem processes, protection of the unique natural and cultural features, tourism and as well as sustainable use of natural resources. Foster (2011) also noted that conservation issues started in the late eighteenth and nineteenth centuries after natural scientists realized that there was significant destruction of the natural environment.

As observed by Anandaraj (2015), the European accommodation sector started aligning their operations with environmental sustainability practices during the 1990s. These sustainable actions were motivated by the development of a number of international sustainability treaties and conventions which emanated from various international forums such as the 1992 Rio de Janeiro, United Nations conference on environment and development, which is deemed to have influenced the accommodation sector's innovative attitude towards the environment to foster sustainable development (Pantelidis et al., 2010). The 2002 Earth Summit officially recognized the accommodation sector as one of the major contributors to ecological catastrophes facing mankind and as such major hospitality companies from the developed north, formed an International Hotel Environmental Initiative (IHEI), a forum to debate on issues of environmental management innovations (Tuppen, 2015; Ioncica, et al., 2016). Since that time

according to Madar (2016), a number of efforts have been made (refer to table 3) to enhance the environmental performance of international chain hotels, through environmental innovations. This improved performance encouraged reduction, reusing and recycling resources to minimize the hotels' carbon footprint and enhance sustainability efforts (Alexander, 2002).

The concept of sustainable development in the context of the accommodation sector has been criticised by a number of scholars (see Kasim and Scarlat, 2007, Pantelidis et al., 2010; Leonard & Dlamini, 2014). It has, for example, been argued by scholars such as Hove (2004) that sustainable development has, in fact, served to further justify and reinforce the paradigm that it initially sought to deconstruct. This is because the concept has in part failed to take into account the ways that the more economically developed countries have continued to contribute to the inferiority and subordination of poorer countries (Falkner, 2013). Furthermore, this concept seems to be too broad and all-encompassing, thereby creating ambiguity in terms of its definition and causing a gap to occur between it's rhetoric and policy initiatives (Hove, 2004). Some scholars have argued that sustainable development appears to be more of a catch-phrase rather than a revolution of thought. Consequently, employing its use has simply fuelled the interests of advocates of exponential economic growth, undermining environmental reforms at the expense of the poor and the more vulnerable groups of people in society (Falkner, 2013; Tuppen, 2015; Georgec et al., 2016).

Despite these sentiments and criticisms, sustainable development is a concept that has evolved and has been embraced by varied actors in diverse contexts (Musavengane & Simatele, 2016; Siakwah, 2017). In the context of the accommodation sector, environmental sustainability is understood as referring to the different ways in which accommodation units use resources, provide services and act responsibly toward the environment (Legrand et al., 2016; Ioncica et al., 2016). In Malawi, environmental sustainability agendas are manifested in various sustainable development strategies in which the tourism industry as an economic sector is earmarked for the same (Government of Malawi, 2000; Nsiku & Kiratu, 2009; Government of Malawi, 2017). This article, therefore, paints a picture of the extent to which principles of environmental sustainability are practiced, and manifest themselves within the accommodation sector which is a principal component of the tourism industry at large in Malawi.

The Malawian accommodation sector is characterised by small and medium accommodation enterprises that have developed alongside the few hotels across the country (Nsiku & Kiratu, 2009). These accommodation units provide tourists with basic human need (shelter) during their stay in the country and in order to effectively serve their clients these units use natural resources such as water, energy, foodstuff, and other personal care products (Legrand, et al., 2013; Middleton, 2013; Mohapatra, 2016). Thus, the focus of this paper is on accommodation sector because it is a pinnacle to every tourist-related activity in the country and therefore there is need to fully understand the way the various units engage the 3Rs in order to facilitate sustainable consumption and productions practices. According to Magombo, et al. (2017), the country's general elections of 1994 ushered in the multiparty system of government that brought about new development policy strategies which allowed unplanned growth of small-scale accommodation outlets across the country (Figure 7).

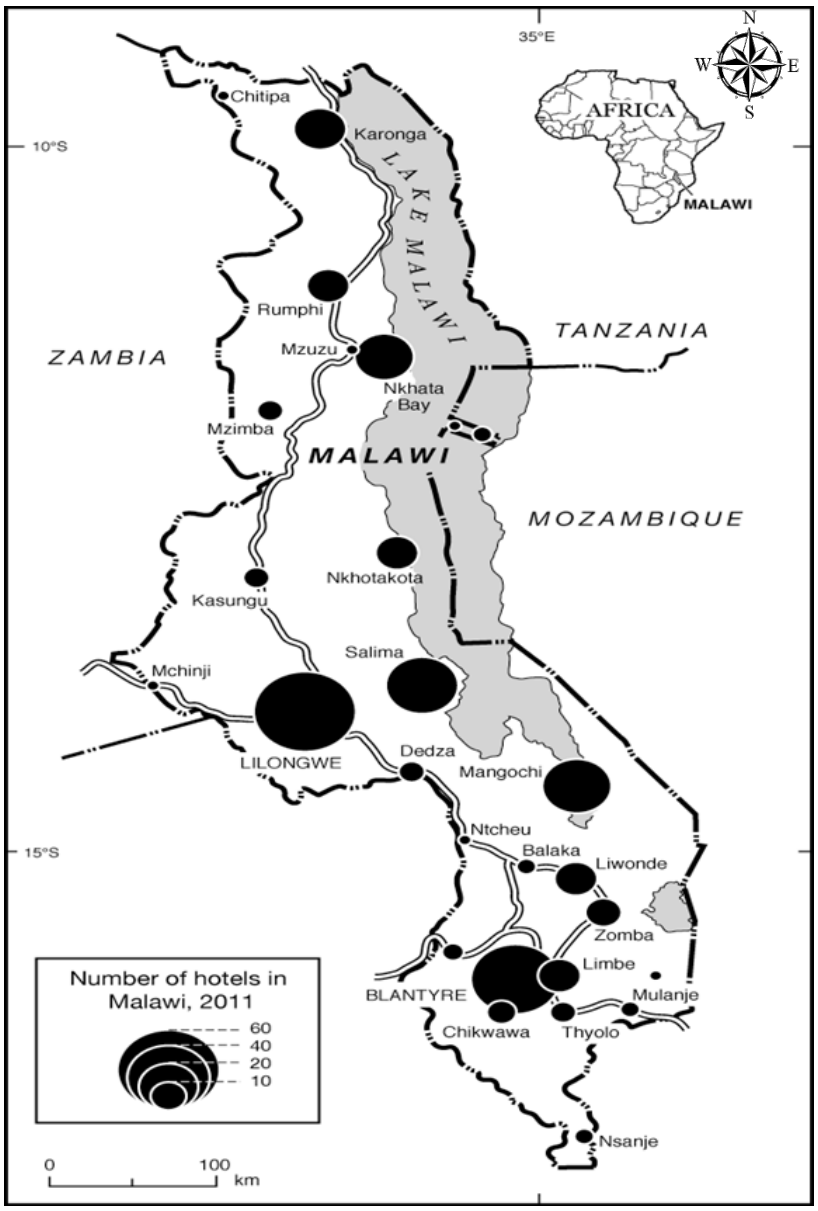


Figure 8 Accommodation Sector Development Pattern after 1994
Source: Magombo, Rogerson, and Rogerson (2017).

2.2 Diffusion of Innovation Theory and the Hospitality Industry

Three major innovation models (Cost/Benefit Analysis, Freeman's 1984 Model and Roger's Model) have been used by a number of scholars to study the likelihood of adopting sustainability practices within the hospitality industry (Dibra, 2015). The Cost/Benefit Analysis model seeks to identify all the costs and benefits that come with the proposed environmental sustainable practices in order for the decision makers in business organization to take a rational decision to

adopt the practices (Murray, 2009). The Freeman's 1984 Model, also known as Stakeholders' Theory, on the other hand, focuses much on the characteristics and behaviour of the business organization and appreciates the roles of stakeholders into a company's environment before adopting the proposed environmental sustainability practices (Dibra, 2015). These two models have been faulted in this context because, the first model has restrictions in evaluating all the costs and benefits which accompany environmental sustainability innovations because this concept cannot be completely understandable through the economic analysis of costs and benefits (Murray, 2009). The latter model is more applicable in big hospitality organisations from the developed countries from the north, thus in developing countries where the hospitality industry is dominated by small and medium accommodation units hence this theory may not work (Dibra, 2015). Hence, Roger's Diffusion of Innovation Model is favoured because it describes the process by which new ideas and innovations are implemented into a society or organisation regardless of the size of the organisation (Andrews, et al., 2013).

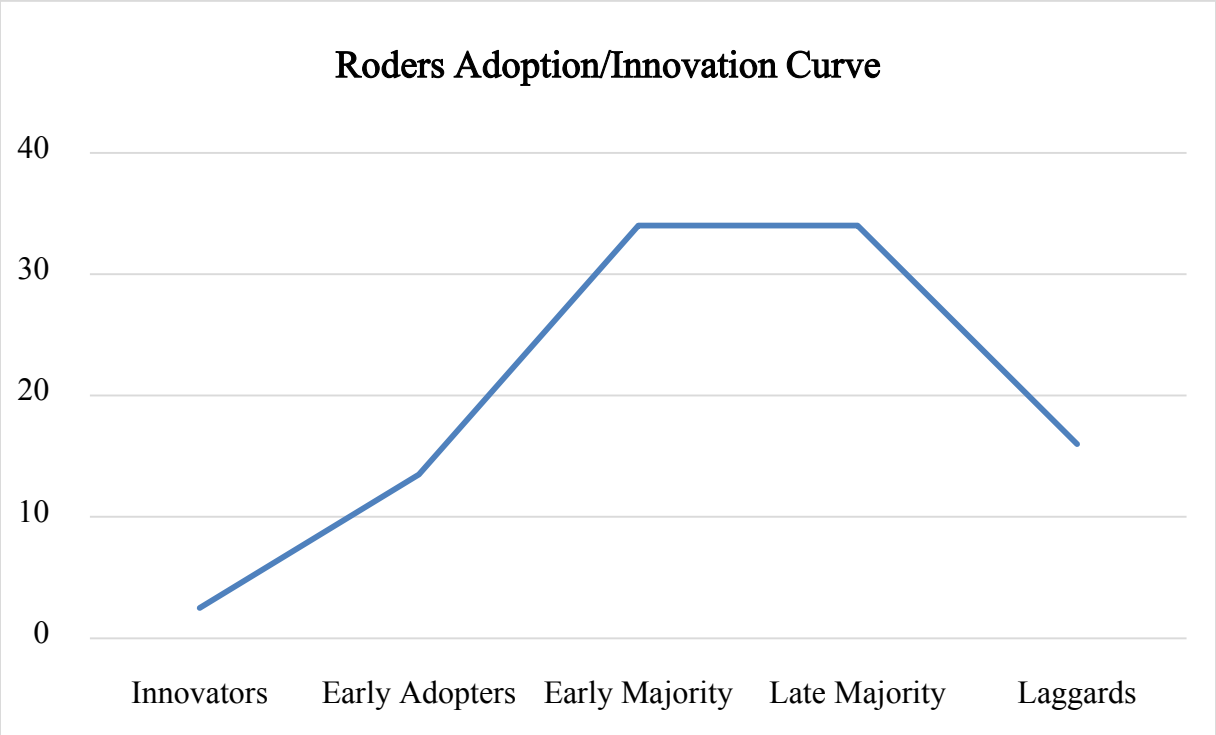
In this paper, the Rogers Model of innovation has been adapted to define the current sustainability innovation status of the accommodation sector in Malawi. The model classifies adopters of innovation into five categories – Innovators, Early Adopters, Early Majority, Late Majority, and Laggards (see Figure 7) because certain organizations are more open to innovation adaptation than others (Robinson, 2009). Andrews, et al. (2013), state that the diffusion of innovation is a process whereby through certain channels, novelty is communicated among members of a social system over time. Through this process, innovation is spread out from its discovery source to the user or its adopter. This process starts with innovation which could be an idea, practice, or object dissemination (Dibra, 2015). These things according to Andrews, et al. (2013) have to be perceived as new and desirable to adopt by potential adopters. According to Murray (2009), there are five characteristics that adopters would look at before adopting an innovation:

a. The extent by which a particular group of users perceive the innovation as better than the idea or practice it replaces in an organisation.
b. The compatibility with the existing values and practices to which innovation is perceived as consistent with existing values, past experiences, and needs of potential adopters.
c. The complexity to which an innovation is perceived as difficult to understand and use.

d. The ability to be tested on limited evidence.
e. The distinctiveness of the results whereupon the results of an innovation are more visible.

In accommodation units where environmental sustainability innovations have been adopted, they looked at their compatibility with the existing values and practices (Booyens, 2012). Andrews et al., (2013) also affirm that an innovation that is economically viable, simpler to understand at implementation, is the most adopted innovation within the hotel industry. Robinson (2009) also attests that it is after this rigorous analysis process where the adopters are classified into the five mentioned categories. According to Hang et al. (2016), these adopters are classified depending on the information obtained to influence their innovation adoption decision at different intervals.

Figure 9: Rogers Adoption/ Innovation Curve



Source: Robinson (2009)

2.3 Sustainability Innovative Initiatives and the Hospitality Industry

This global ecological crisis that the accommodation sector is attempting to limit its carnage on humankind, has a historical origin from the advent of capitalism as a system (Foster, 2008). In

the developed countries simplicity of environmental sustainability innovations and knowledgeable leadership within hospitality industry influences the adoption of innovations (Smerecnik & Andersen, 2011). Similarly, Madar (2016) notes that the development of the ISO 14000 EMS promoted innovativeness in the accommodation sector because it defines environmental policy issues and determines the environmental impact of an organisation and the ways to mitigate them. In addition, Pantelidis et al., (2010) are of the view that various accommodation units that have remained competitive in the present business environment have demonstrated environmental sustainability innovativeness because they are guided by environmental policy. Further to this, Fukey and Isaac (2014) observe that the formation of the IHEI promoted environmental sustainability innovations within the accommodation sector in the 1990s. Adesina and Ngozi (2013) are of the view that the 3Rs innovations within the accommodation sector are encouraged because any success of the accommodation unit anchors largely on sustainable consumption and production practices which promote environmental sustainability. Thus, according to Alexander (2002), accommodation units must acknowledge the potential they possess to serve as a restorative force to mitigate past problems where natural resources had been carelessly used. In the developed countries from the north, these units realized that three components of the business environment (People, Planet and Profit) have to be equally nurtured to foster sustainability (Houdre', 2011). Thus, some accommodation units efficiently manage and measure their energy needs, reduces energy demand with the use of new technology, and conserves natural resources, fauna, and flora by protecting the natural environment (Houdre', 2011). Furthermore, Zein et al., (2008), notes that these units use products, responsible suppliers and materials, which support and encourage environmentally sustainable practices. In the same vein, Miller and Spoolman (2011) observe that the buzzwords, Reduce, Reuse, and Recycle, have become part of the sector's culture in developed countries. These accommodation units according to Hawkins and Bohdanowicz (2012) have gone an extra mile in environmental sustainability efforts by innovating ways of reducing their solid waste through a waste management minimization hierarchy (see Figure 9).

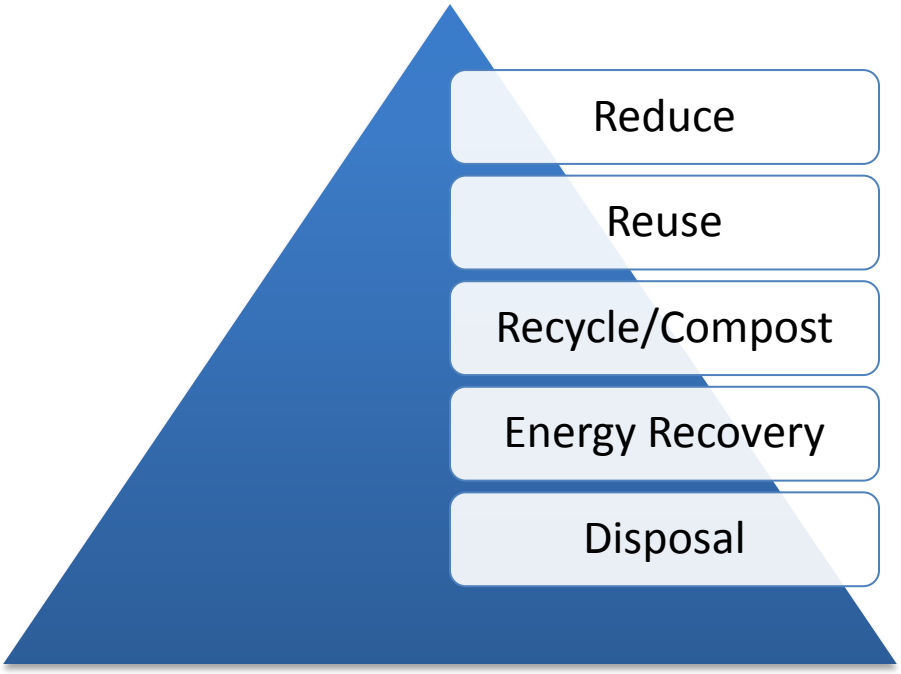


Figure 10: The Waste Minimization Hierarchy
Source: Hawkins and Bohdanowicz (2012: 86)

Of recent, authors, researchers and policymakers have debated the determinants behind the hospitality industry's inclusion of environmental sustainability practices in their strategic planning and implications of this inclusion on their business performance in various developed countries (Houdre', 2011; Madar, 2016; The International Hotel and Restaurant Association, 1996; Snyman & Spenceley, 2012). This debate, according to Goudie (2013), emanates from an understanding that the accommodation sector's relationship with environmental sustainability is becoming increasingly important worldwide. As such, there is a need to incorporate sustainability strategies at the corporate management level to initiate the adoption of the 3Rs at the operational level (Kemp & Martens, 2007). Miller and Spoolman (2011) also recommend that the accommodation sector by nature must integrate 3Rs strategies, as active agents that must elaborate on their own sustainability practices at the operational level. This proactive position has the potential to provide a competitive advantage to the accommodation unit, in particular, where minimum legal requirements towards environmental sustainability are high (Goudie, 2013). For example, when the accommodation unit is perceived to be environmentally friendly, it is more likely to appeal to tourists and make more money through regular accommodation and other related services bookings (Houdre', 2011). Furthermore, when the accommodation unit demonstrates a sustainability orientation, it is perceived to have adopted the triple bottom line

approach to doing responsible business which captures the idea that the unit considers the needs of all stakeholders instead of solely on profit maximization (Kotler et al., 2010; Rogerson & Sims, 2012; Mohapatra, 2016).

It is important however to note that, this positive environmental attitude has been accredited to an aggressive stance which the major economic stakeholders took, calling upon the accommodation sector to incorporate sustainability principles in their business philosophy to contribute to the sustainable economic development in these countries (Alzboun, 2014; Doherty, 2013; Houdre', 2011). In support of this observation, Kotler et al. (2010) and Hedluind (2011) are of the view that corporate clients exerted pressure on the accommodation sector to show commitment towards sustainability. Furthermore, the demand for sustainability practices by environmental pressure groups also exerted pressure on the accommodation sector (Houdre', 2011). In sub – Sahara Africa and Malawi such initiatives are minimal.

Government systems in developed countries as observed by Georgec, et al., (2016), have enacted laws that foster short and long-term environmental sustainability. In support of this assertion, Sattler et al., (2016) state that such countries adopt a multilevel governance system, continuous interaction between the state, community and civil society promoting environmental sustainability. Again limited knowledge available does not indicate that this is a common practice in sub – Sahara Africa, especially in Malawi.

Recently, Doherty (2013) noted that there have been tailor-made environmental sustainability initiatives in different accommodation units in the developed countries to suit their clients' orientation towards the environment. In addition, Tuppen (2015) reports that such accommodation units classify their guests into two broad categories "corporate and independent customers" and align their sustainability practices to suit their chosen clientele. Furthermore, even the language used to promote sustainability practices is focussed towards their customers (Ioncica et al., 2016). In addition, Pantelidis et al., (2010) note that varied tenets within sustainability innovations including environmental protection, community involvement, and process modification, helps accommodation units determine how to communicate sustainability practices to a specific clientele. Mohapatra (2016) observed that a number of accommodation units in developed states are avoiding wasteful consumption of resources by innovating recycling

and conservation methods which are communicated to their customers. In light of this development, Legrand et al., (2016) note that most multi-national accommodation units have developed sustainability indicators and policies to communicate their group's sustainability practices even in sub – Sahara Africa. Due to the high utilization of energy, water, and consumables in the hospitality facilities, a number of innovative initiatives to foster sustainable consumption of these resources are imperative (Legrand et al., 2016). For example, Hedluind (2011) report that some of the initiatives (see Table 3) have been launched by various hotel companies in developed countries to foster stainability.

Table 3: Sustainable consumption initiatives in hotels

Initiative	**Year of Launch**	**Motive**
1. Hotel Energy Solution (HES) toolkit	Launched in 2011	This toolkit helps hospitality outlets to monitor energy consumption levels in the hotel and where need be aptly interventions are made to avoid wastage
2. Hotel Carbon Measurement Initiative (HCMI)	Launched in 2012	This initiative helps hospitality outlets to know their carbon footprint which in turn helps them to strategically make decisions on how to reduce them.
3. Hotel Water Measurement Initiative (HWMI)	Launched in 2016	This initiative was launched to help hospitality outlets monitor water consumption

***Source*:** Authors

It is important to note that a number of authors have lauded these essential sustainability initiatives taken by hotel companies (Doherty 2013; Goudie 2013; Fukey & Isaac, 2014; Mohapatra, 2016). For instance, Miller and Spoolman (2011, p. 217 – 218) pointed out 'that fresh water is becoming scarce and the emerging water shortages in many parts of the world, along with the related problems of biodiversity loss and climate change, are the three most serious environmental problems the world is facing now.' Furthermore, apart from these widely celebrated initiatives, Best and Thapa (2011) point out that the accommodation sector in developed countries devised new technology to regulate their production systems by filtering air emissions, reduce and recycle solid waste, and minimize the use of chemicals (Doherty, 2013). Hospitality companies in developed countries have instituted processes of minimizing waste production to lessen their impact on the environment. These processes called 'waste minimisation hierarchy' are adopted in hotels through green procurement, to reduce

environmental impact from waste products (Hawkins & Bohdanowicz, 2012). Sustainability conscience hotels, as further noted by Zein et al. (2008) recycle materials to minimise the amount of waste that it produces. Furthermore, Mohapatra (2016) notes that such hotels turn the leftover decomposable solid material into manure to fertilize their green areas and reduce on chemical fertilizers. On the contrary, Pantelidis et al. (2010) suggest that accommodation units in developing countries seem to ignore environmental sustainability because they assume the accommodation units do not pollute the environment compared to other industries such as the manufacturing industry. In sub – Saharan Africa however, there are still challenges in embracing sustainability ideologies in almost all the economic sectors (Chigwada, 2004; Kubanza et al. 2016; Kubanza & Simatele, 2016; Magrath, 2009). According to Bello et al. (2016), in many developing and sub – Sahara African countries, the central government, and the private sector look at the protocols that are involved in sustainability as unnecessary, time-consuming, expensive and unnecessary delays in decision – making a ladder. These observations are also echoed by Lekaota (2016) that private sector in most developing countries are not consulted when formulating sustainability policies. This result in the failure of the plans formulated to promote sustainability culture.

2.4 Methodological Considerations

The paper adopted a desk study methodology; a systematic search of literature and referenced articles was conducted between August 2016 and February 2018. The search was aimed at studies that have been done on sustainable tourism development in general and sustainable hospitality practices in particular. Google Scholar and other databases such as Scopus and Web of Science were used to identify the materials. The database inquiries were formulated using Boolean operators to combine two or more keywords (Ebhuoma & Gebreslasie (2016). The keywords were identified and selected from sustainable tourism studies, sustainable development studies, environmental management studies, ecotourism studies, sustainable hospitality studies, climate change studies, and subject headings. The key words were ‘sustainable tourism’, ‘sustainable development’, ‘sustainable hospitality’, ‘environmental management’, ‘ecotourism’, ‘climate change’ and “in sub – Saharan Africa”.

According to Vos et al. (2011), there are different ways of checking the credibility, validity, and reliability of documents. For this paper titles and abstracts were initially examined to determine their relevance. Thereafter, the full texts were downloaded to ascertain if they conformed to the selection criteria. Instrument reliability was employed whereby documents were repeatedly crossed checked with similar documents and analyst reliability was carried out where the results of two or more researchers were compared. Lastly, the reference list of each article was assessed to identify other relevant articles. This process is illustrated in table 4.

Table 4: Publication screening and selection processes

Stage and activity carried out	**Articles**
Potential articles retrieved from Google Scholar and University of the Witwatersrand encore search and find e-books and e-journals databases	235
Duplicate articles excluded	60
Potential articles identified for further screening	175
Articles screened out after the title and abstract review	58
Potential articled identified for further screening	117
Articles screened out after full article review	59
Articles selected	58
Articles identified from the reference list of selected articles	7
Relevant articles selected and reviewed	65
Relevant articles finally selected and analyzed using a Meta-analysis	13

***Source**: Authors*

The selection criteria involved post hoc inclusion and exclusion criteria which enabled the elimination of studies that were outside the scope of the study aim and ensured consistency. According to Ebhuoma and Gebreslasie (2016), this is inclusion and an exclusion criterion which is determined at the beginning of the article selection process whereupon various stages of the conceptual review stages and the selection criteria were refined until the final selection criteria were accepted. This enabled us to eliminate studies that were outside the scope of our study aim and ensured consistency.

In developed countries, substantive research has been published on environmental sustainability innovations within the accommodation sector from the time the tourism industry was identified as one of the major industries that negatively affect the natural environment (Ayuso, 2007; Aragon-Correa, et al., 2015; C. Warren & Coghlan, 2017). Available evidence suggests that in sub – Saharan Africa similar research though on a small scale has been carried out but in few countries such as South Africa where it was observed that environment sustainability innovations are yet to be embraced by many accommodation units (Leonard & Dlamini, 2014; Sucheran, 2015; Booyens & Rodgerson, 2016). In Malawi, since the 1992 Earth Summit in Rio, there has been very limited research work on environmental sustainability that has been published (Chiotha, et al., 2012). Much of this research focuses on cooperate social responsibility (CSR) practices with the accommodation units (Nsiku & Kiratu, 2009; Bello, et al., 2017; Mzembe, et al., 2018). Thus, the articles that were finally selected were original peer-reviewed articles published in English between 1982 and 2018 and published organization reports (see Table 5).

Table 5: Synopsis of studies in the Meta-analysis

Author(s)	**Countries**	**Sample**	**Sample Year**	**Specific Sustainability Theme**
1. Masau and Prideaux (2003)	Kenya	237	1998	Sustainable environmental practices
2. Mbasera, Plessis, Saayman, and Kruger, (2016)	Zimbabwe and South African	8	2015	Environment
3. Magombo and Rogerson (2012)	Malawi	none	none	Eco – Lodges
4. Magombo, Rogerson, and Rogerson (2017)	Malawi	none	none	Policy changes
5. Bello, Banda, and Kamanga (2017)	Malawi	12	2014	Waste Management Practices
6. Leonard and Dlamini (2014)	South Africa	10	2013	Environmental protection practices
7. Gardner (2014; 2015)	Malawi	none	none	Climate conservation
8. Martineau (2011)	Ghana	none	none	Environmental sustainability
9. Booyens (2012)	South	none	none	Innovation in Tourism

	Africa			
10. Mbugua and Cornwell, (2008)	Kenya	10	1997 and 1998	Tourism impacts
11. Booyens and Rogerson (2016)	South Africa	*N=156*	2010 - 2012	Innovative
12. Baker and Mearns, (2017)	Namibia	51	none	Environmental sustainability
13. Nsiku and Kiratu (2009)	Malawi	18	none	Environmental sustainability

***Source**: Authors*

The search period was selected because since 1982 there has been a growing trend in the application of sustainable development practices in various economic sectors. In addition, this period coincides with the advent of sustainability discourse in the hospitality industry. Articles that articulated the impacts of the tourism industry on climate change, in general, were included. Those articles that specifically discussed sustainable hospitality industry were preferred. Historical articles that discussed the evolution of the tourism industry generally in Malawi were excluded. But those articles that discussed the evolution of the hospitality industry in Malawi were included.

2.5 Findings and Discussion from the Meta-Analysis

The variables included in this meta-analysis on the selected articles in measuring the 3Rs initiatives that the hotel industry could use include water management and rationing; energy efficiency and economy, and waste resource recovery. Magombo and Rogerson (2012) found out that by 1994 there was a plan in Malawi to develop upmarket eco-lodges that would be on the same high-quality standards as those found in Kenya, South Africa, and Zambia in order for the tourism industry to compete favourably within the region. Nsiku and Kiratu (2009) indicated that in Malawi sustainable management of tourism facilities posed a unique challenge much as there is a policy that targets ecotourism because of inadequate resources available to achieve ecotourism goals. Further to this, Nsiku and Kiratu (2009) say that the degree of environmental degradation from investments in beach resorts; national parks and mountains (Figure 3 and 4) vary according to tourist activities. Bello et al. (2017) further discovered that in Malawi those

hotel establishments that are engaged in any form of sustainability initiatives do them as a marketing tool so that the location where such initiatives are carried out know more about their services. Generally, these voluntary initiatives target locations where these companies are located. This assertion is supported by what Gardner (2015, p. 14) reported: 'we have a policy to focus our corporate social investment activities in these areas; girl child education, nutrition/feeding schemes, health, and the environment.' As Mzembe, et al. (2018) observes sustainable environmental innovations in the Malawian accommodation sector are not well embraced as compared to the other neighbouring countries in sub – Saharan African such as Zimbabwe, Namibia, and South Africa.

Mbasera et al. (2016) found out that in Zimbabwe and South Africa, hospitality establishments practice environmental management initiatives voluntarily due to scanty awareness of the environmental degradation caused by their operations. In Kenya also, as reported by Masau and Prideaux (2003), there is a substantial impact that hospitality units have on the environment and as such a recommendation was made that these outlets must exercise collective leadership to lobby other members within the tourism industry and government to implement sustainable environmental practices nationally. Mbugua and Cornwell (2008) also recommended that the Kenyan Tourism Board and the Ministry of Tourism should strive to educate tourism industry players on the impact of tourism on the environment.

2.5.1 Water Management and Rationalisation

The Malawi government, according to Nsiku and Kiratu (2009), has provided a policy framework and an ideal legal and regulatory environment that enables and encourages local and foreign private sector investors to respond to sustainability issues. Bello et al. (2017) found out that despite this provision most hospitality establishments that are involved in sustainability initiatives do it voluntarily. Similarly, Mbasera et al. (2016) found out that in Zimbabwe there is no existing legislation for environmentally – friendly initiatives to be mandatory in hotels. Further to this Mbasera, et at. (2016) again discovered that even in the South African hotel sector there is a high percentage of hotels that do not participate in responsible tourism mainly because there are no legal or industry regulations requiring them to do so. Booyens (2012), however, discovered that the Drakensberg Sun Lifestyle Resort operated their own water treatment facility

which contributes to the quality of water and increased river flows. Baker and Mearns, (2017, p. 11 -12) found out that in two lodges within the Namib Desert;

> *"On arrival guests are informed of the bucket policy, which consists of a bucket which is placed in guest showers. Guests are encouraged to place this bucket under the shower when they turn it on. The bucket is used to catch water while the shower warms up. Guests leave this water in the bucket, as room service staff will make use of this water to clean the room. The towel policy states that due to water scarcity, towels are not washed every day. Guests are requested, if they do not mind, to reuse the towel, that they hang them up if they insist on having it washed they place it in a basket provided."*

In this way, tourists are involved in water conservation measures in innovative ways. In a study that involved some hotels in Zimbabwe and South Africa, Mbasera et al. (2016), concluded that in both Zimbabwe and South Africa the hospitality sector is facing an increasing burden of excessive use of water. As a result of this pressure, some hotels in both Zimbabwe and South Africa, according to Mbasera et al. (2016), have started implementing, despite lacking policy, water saving initiatives by encouraging the use of towels more than once before washing them. Therefore, in view of what has been highlighted in this paragraph, it may be important to suppose that having policy direction and enforcement mechanisms in place hotels would be able to become more innovative as regards water management and rationalisation. As pointed out by Nsiku and Kiratu (2009), the only way to generate fully sustainable tourism in Malawi and Africa at large is to have the Central and Local government to take leading roles in policy formulation and enforcement.

2.5.2 Energy Efficiency and Economy

All the reviewed papers, but one, acknowledge that the hospitality industry has an enormous impact on the environment in one way or the other through consumption and production practices. Martineau (2011) reported that there were plans in their hotel to enhance energy efficiency and economy. In this report, it was indicated that the hotel had set a five-year target to achieve tangible increases in energy savings and migrate to renewable energy sources. Mbasera et al., (2016) found out that in both Zimbabwe and South Africa hotels are implementing sustainable environmental management initiatives such as energy saving and use of solar energy.

Chisoni (2016) also discovered that the innovation of the improved cookstove has the potential to contribute to sustainable firewood harvesting and consumption in Malawi because it is energy efficient. However, it has to be pointed out that there could be limited proof that this innovation has been adopted in the hospitality sector this far. Booyens and Rogerson (2016) noted that recently there has been a new or significant improvement in energy saving measures in the Western Cape tourism sector. Baker and Mearns (2017) reported that the Namib Desert lodges diesel was used to power their generators which provided electricity. In addition, the use of air conditioners in guest rooms forces them to run the generator 24 hours a day. However, there is an initiative to lower the carbon footprint through the use of solar geysers in the guest rooms.

2.5.3 Waste Recovery

Variables related to waste recovery have shown that most hotels are practicing some waste management practices despite a lack of clear policy guidance. Baker and Mearns (2017) found that lodging facilities in Namibia were not recording the amount of waste being produced and so the volume of waste being produced was unknown. However, it was further discovered within the same facilities that they had developed a sustainable waste management system. However, it was evident that some waste was not properly separated. Bello et al. (2017) reported that in Malawi some hotels recycled their waste into organic manure and that other hotels have rubbish bins in designated places where waste was collected by the city council. Mbasera et al. (2016) also found out that some hotels in Zimbabwe and South Africa implement a paperless environment through a no – print policy and reuse soap bottles as part of their waste management initiatives. Booyens and Rogerson (2016) in the Western Cape hospitality sector there have been innovations in waste management, especially in recycling, safe disposal of hazardous waste, dry toilet systems, and bio – gestures, and worm farms to make compost from foodstuff waste. This discovery in South Africa is also supported by what Leonard and Dlamini (2014) noted that even in Johannesburg newer companies make sure that the materials they use to build their properties are not harmful to the environment. This helps them reduce their carbon footprint. Furthermore, Martineau (2011) reported that in their hotel they planned that within a 5 year period they should achieve a substantial reduction in excess waste and start using more recycled products. Baker and Mearns (2017) found that lodges in the Namib Desert use environmentally friendly chemicals for cleaning, laundry, and guests are encouraged to use environmentally friendly shower gel and shampoo provided by the camp. This signifies the awareness that hotels in sub –

Sahara Africa have on their environmental impacts through, energy consumption, water consumption, and waste generation.

2.6 Lessons for Malawian Accommodation Sector from the Meta-analysis

The revelations from the Meta-analysis suggest that the Malawian accommodation sector needs to adopt innovations that are aligned with sustainable water consumption, sustainable energy consumption, and sustainable waste management practices. As discussed in the above paragraphs these are innovations that contribute to sustainable environmental management. As noted by The suggestion from the analysed Malawian authors indicate the sector focuses on socioeconomic sustainability innovation rather than sustainable environment (see, Nsiku & Kiratu, 2009; Bello, et al., 2017; Mzembe, Melissen, et al., 2018).

The innovations that have been adopted by some accommodation establishments in Southern Africa are aimed at enhancing sustainable environmental management (see, Leonard and Dlamini, 2014; Mbasera et al. 2016; Baker and Mearns 2017). In this regard, therefore, in comparison, the Malawian accommodation sector falls under the Laggards category of the Rogers Diffusion of Innovation Theory.

2.7 Conclusion

The major finding from the Meta-analysis suggests that minimal sustainability initiatives are done voluntarily in sub – Sahara Africa. Furthermore, there is a lack of sustainability policy guidance in most of the hospitality establishments and all the efforts being pursued are done haphazardly. The findings are in tandem with the conclusions drawn from a study that was conducted by Mbasera et al. (2016). There is a need for the hospitality establishments in Malawi to demonstrate an interest in sustainability issues not only at the corporate level but even at the operational level.

There is evidenced desire from some organisations within the hospitality industry to embrace sustainability practices in Malawi (Gardner, 2014; 2015). However, the conclusion drawn is that the industry lacks the capacity to fully implement sustainability initiatives and as such, all voluntarily executed initiatives are in the form of donations to other organisations. As a result of the challenge highlighted above hospitality establishments in Malawi and Kenya, according to

Masau and Prideaux (2003) and Bello et al. (2017), could be indeed classified under the Laggards category within the Rogers Diffusion of Innovation curve (Robinson, 2009).

It has also been observed that attempts are being made within some hospitality establishments in sub – Sahara Africa to include sustainability practices in their operations (Snyman and Spenceley, 2012). For example, in the Namib Desert hospitality units are investing in technology that serves energy, they make use of bore water (Baker & Mearns, 2017). In Western Cape, hospitality establishments are also engaging in sustainability initiatives as reported by Booyens and Rogerson (2016). Leonard and Dlamini (2014) also reported that hospitality outlets within Johannesburg city are also pursuing sustainability initiatives. In this regard, therefore, it could be concluded that Namib, Western Cape, and Johannesburg have some hospitality facilities which could be categorised under a late majority, considering the period taken between the discovery of such initiatives by international hotel chains (the 1990s) and the time these facilities started adopting them.

It has also been concluded that the accommodation sector generally in Malawi is developing in an unsustainable manner. As demonstrated in figures 3 and 4, this sector has a huge negative impact on the environment, as such it will end up destroying the natural environment which is a major feature that makes it thrive (killing the Goose that lays the golden eggs). In this regard, therefore, there is a need for public sector policy makers to start engaging the private sector players to effectively develop environmental sustainability procedures which will then ignite environmental sustainability practices within the accommodation sector to enhance sustainable development efforts in Malawi. Through such efforts the accommodation sector will see the need to embrace the 3Rs which are part of the environment component of sustainability principles, thereby transforming the entire hospitality industry and become innovative towards environmental sustainability.

Chapter 3:

A critical review of common methodological approaches in environmental sustainability practices within the hotel sector: in pursuit of a befitting Synthesis.

Abstract

This paper uses a qualitative meta-synthesis approach and suggests an appropriate methodological approach to study environmental sustainability practices in the hotel sector in Malawi. 20 selected articles published between 2007 and 2017 were purposefully selected for a meta-synthesis because of their scope. The results from this meta-synthesis indicate that the majority of researchers from developed countries use a quantitative method to establish the status of environmental sustainability practices in the hotel sector. The results also revealed that some researchers from developing countries used both quantitative and qualitative (mixed method) methods whilst others preferred the use of qualitative. This paper, therefore, proposes a seven-stage version of the Grounded Theory methodology for studying environmental sustainability practices in the hotel sector in Malawi and sub – Saharan Africa at large.

Key Words: Sustainability, Hotel Sector, sub – Saharan Africa, Grounded Theory, and Malawi

3.1 Introduction

The tourism industry in Malawi has been identified as a possible economic sector that would help improve the economic status of the country (Bello, et al., 2017). Available literature suggests that this industry has developed tremendously after the 1994 general elections. For instance, Magombo, et al. (2017) noted that policy changes which occurred after these general elections opened more opportunities for accelerated growth of the industry. More accommodation units were built because of the increased demand for accommodation. Magombo, et al. (2017) states that during this period the number of hotels of international standard increased from 9 to 13 excluding the numerous upmarket lodges which were also constructed around the same time.

A number of authors agree that the hospitality sector is a major sector of the tourism industry (Aragon-Correa, et al., 2015; Bello, et al., 2017; Cvelbar, et al., 2017). In which case then, to attain a sustainable tourism industry, this sector must embrace environmentally sustainable practices. It is against this understanding that this Meta – synthesis was conducted to propose an appropriate methodology for studying sustainable environmental management practices in the Malawi hotel sector. In this regard, therefore, this desk research, which focusses on selected published research articles on environmental sustainability initiatives within the hotel sector, has been initiated to analyse the various methodological approaches adopted by these researchers.

3.2 Qualitative Meta-Synthesis

The qualitative meta-synthesis is an important methodology that helps qualitative researchers analyses secondary results from other qualitative studies (Zimmer, 2006). Despite a contingent nature of the evidence collected from meta-synthesis and current lack of consensus about some of its aspects, Walsh and Downe (2005) are of the view that meta-synthesis remains an important technique for qualitative researchers because it thoroughly helps in the understanding of the contextual dimensions of various fields of qualitative study. It is in its nature that a qualitative meta-synthesis uses as data the findings from other qualitative studies linked to the same or a related topic and this is the reason why this approach was adopted for this study (Zimmer, 2006).

In addition, Salter, et al. (2008) states that a meta-synthesis as a process, helps the research to examine, compare, and interpret the various methodological approaches and the results from selected published qualitative studies which help the researcher advance the understanding of the applicability of the approaches in the selected topic of interest. It is from understanding that Walsh and Downe (2005) concludes that this process attempts to integrate results from a number of different but inter-related qualitative studies in an interpretive manner. This approached was used to make suggestions on the methodological approach appropriate for the Malawi hotel sector.

3.3 Literature Review

Research that has been carried out in many developed countries on environmental sustainability indicates that these hotels have adopted environmental sustainability innovations to save costs and reduce their negative impacts on the ecological system (Chan & Hawkins, 2010; Rodríguez-Antón, et al., 2012; Wang, et al., 2013). To study these developments within the hotel industry, qualitative, quantitative and at times, mixed method approaches were used by these researchers (Bohdanowicz, et al., 2001; Aragon-Correa, et al., 2015; Cvelbar, et al., 2017).

3.3.1 International research scholarship on sustainability practices in the hotel sector

The hotel sector in most developed countries adopted environmental sustainability practices because they are well informed of the potential economic and the ecological catastrophe facing the humankind (Kasim, 2009; Aucamp, 2009; Alvarez, 2014). The establishment of many environmental watchdogs and support organizations such as the International Hospitality Establishments and Restaurant Association and Green Hospitality Establishments Association has propelled the adoption of sustainability practices in the hospitality sector (Ayuso, 2007; Aragon-Correa, et al., 2015; Booyens & Rodgerson, 2016). Despite the growing body of knowledge on these developments both in developed and some developing countries there is limited information similar development within the hotel sector in Malawi.

In order to understand these developments research has been carried out using different methodological approaches, both in developed and some developing countries. For instance, Bohdanowicz, et al., (2011) reported that in the United States of America hospitality

establishments invested in various sustainability practices to save money from their operational costs. Some of these hospitality units adopted a zero paper office policy compliance which helped them save money from operational costs (Rathore, et al., 2009). Others changed from using paper-based communication processes to paperless electronic-based communication processes (Pantelidis, et al., 2010). However, as noted by Kasim (2004) and Berezan, et al (2013) these ecological sustainability innovations do not really measure the traditional core competency of the hotel and as such, some establishments tend to ignore them because of the initial high cost of adoption. It is from this observation that research to verify the existence and practice of publicized environmental sustainability practices in those hotels that claim embrace such practices is justified.

3.3.2 Environmental sustainability initiatives from the developed world

Available evidence suggests that most hotel in the developed countries have advanced tremendously in terms of environmental sustainability innovations (Bohdanowicz, et al., 2011; Rheede and Blomme, 2012; Bruns-Smith, et al., 2015). Many hotel chains systematically monitor their environmental sustainability initiatives by benchmarking within other leading hotel chains, where monitoring and performance assessment of the different sustainability goals is done (Burgos-Jiménez, et al., 2002; Ayuso, 2007; Aucamp, 2009). Most of these innovations focus on energy saving, waste management, and water conservation and these innovations apart from saving costs they also enhance environmental sustainability efforts (Manaktola & Jauhari, 2007; Bruns-Smith, et al. 2015; Kuščer, et al., 2017). This debate, therefore, could be suggesting that the primary focus of the innovations within the hospitality outlets in developed countries is cost saving. It, therefore, remains known if this suggestion applies to the hotels within the sub – Sahara African, Malawi in particular.

Above and beyond the suggestions being advanced above, most scholars noted that such innovations have a positive influence on guests' satisfaction and return intentions in most western guests because of the perceived sustainability initiative (Meade and Pringle, 2001; Berezan, et al., 2013; Prud'homme and Raymond, 2013). In this regard, therefore, it could be suggested that international tourists' perception of new innovations within the hotel sector is to enhance environmental sustainability. The suggestion justify publicity by various hospitality

establishments regarding their perceived sustainability practices. In Malawi, there is scanty information on such initiatives and as such, there is a need to conduct research and establish the current status on environmental sustainability initiatives.

3.3.3 Claims from sub – Sahara Africa

In developing countries, sub – Sahara in particular, some hotels indicate that they have engaged in similar sustainability initiatives (Avery, 2013; Leonard & Dlamini, 2014; Booyens & Rodgerson, 2016). In Kenya, Serena Hotels (2015) publicised that hospitality establishments have instituted programs that save water, energy and reduce solid waste. Simiraly, Verde Hotel (2015) reported that, in South Africa, hospitality establishments they have a vertical aquaponic garden designed to save space while allowing for the efficient production of small plants depending on season and demand. In Malawi, according to Gardner (2015), Sunbird Capital Hotel is also engaged in conservation-related issues whereby the company planted 1000 tree seedlings at Kauma Sewage Treatment Site (Figure 1) in Lilongwe under the guidance of the Lilongwe City Council. However, a visit to the site revealed that the stated area had no tresses of the planted trees and the area was a cattle grazing land for the local community.

The limited knowledge available does not confirm that these initiatives are done to enhance environmental sustainability practices. In which case then, the assumption is that these initiatives are carried out for a marketing cause (Rogerson and Sims, 2012; Avery, 2013; Bello, et al. 2017). In this regard, therefore, research is needed to verify practice and intended purposes in most sub – Saharan hospitality establishment including Malawi.

3.3.4 Research approaches to study sustainability within the hospitality sector

Several authors have written about the research tradition or paradigm, researchers usually adopt when conducting studies on environmental sustainability practices in the hotels (Bryman, et al., 2011; Vos, et al., 2011; Cilliérs, et al., 2014). A paradigm that a researcher ascribes to helps that researcher to determine what questions are considered worthy of investigation and the processes required to obtain answers to those questions, thus, there are three dominant paradigms that are commonly used to conduct this type of research; namely Positivism, Critical Realism, and Interpretivism (Corbin & Strauss, 1990; Bernard, 2006; Cilliérs, et al., 2014).

3.3.4.1 Positivism Paradigm

Positivism is the approach of the natural sciences where researchers advocate the application of the natural science methods to study certain phenomena including social phenomena such these researchers believe that knowledge is the result of empirical observation only, and they, therefore, see a clear separation between science and non – sciences (Charmaz, 1996; Bryman, et al., 2011; Cilliérs, et al., 2014). These researchers generate knowledge through careful and meticulous observation and testing of hypothesis against the real world and rely heavily on experiments, utilizing control groups and experimental groups to arrive at a conclusion over a phenomenon under study (Charmaz, 2006; Bryman, et al., 2011; Cilliérs, et al., 2014). In this regard, therefore, this approach could suit hotels in developed countries (Bohdanowicz, et al., 2011).

These researchers ascribe to Objectivism because they believe that there is the reality which can be observed and measured to be known, in which case then, the researcher simply has to discover the laws that govern reality which has order and regularity (Bryman, et al., 2011; Cilliérs, et al., 2014). Positivists trust that theories must be universally valid and applicable regardless of cultural or historical backgrounds. Thus, they place emphasis on objective and value-free research, where theories are tested by using hypotheses (Corbin & Strauss, 1990; Vos, et al., 2011; Cilliérs, et al., 2014).

From the methodological stance, according to Marvasti (2004), positivists maintain that science must be based on empirical data emanating from direct observations. These researchers prefer recording facts in terms of quantities, or numbers, that can be processed by using statistical techniques (quantitative research methodology) because it emphasizes quantification in the collection and analysis of empirical data (Corbin & Strauss, 1990; Vos, et al., 2011; Cilliérs, et al., 2014). Thus, they use direct observation, measurement, and experiments in laboratory conditions (Bernard, 2006).

3.3.4.2 Interpretivisms Paradigm

This is a paradigm which is the opposite of positivism which assumes that any research approach needs to respect the differences between people and the objects of the natural science and as such researchers grasp the subjective meaning of social action (Bernard, 2006; Willig, 2008; Cilliérs,

et al., 2014). These researchers believe that people do not live in laboratories as such peoples' behavior cannot be studied in a laboratory setting because they are influenced by things happening within their environment and they challenge the idea of objective knowledge and objective truth because they believe and describe the meaningful social action by gaining an in-depth understanding of what is meaningful and relevant to them (Bernard, 2006; Merriam, 2009; Bryman, et al., 2011). These researchers believe that truth is dependent on people's interpretation of facts making generalizing results in a problem because the methodologies used are sensitive to a particular context in which the study was conducted, thus, they trust that reality is a social construction and that it is dependent on the meanings that people ascribe to their own experiences and interactions with others (Marvasti, 2004; Merriam, 2009; Coles, et al., 2017).

These researchers generate a theory that tells a story describing and interpreting how the subject under study, in a particular context, conduct themselves on a daily basis, from where, researchers, gain an in-depth understanding (qualitative research methodology) of multiple realities, thus, they use methods, such as focus group discussions, interviews, ethnography and grounded theory (Corbin & Strauss, 1990; Glaser, 1992; Strauss & Corbin, 1998). Thus, it is suggested that this could be an appropriate paradigm for research on environmentally sustainable practices in Malawi.

3.3.4.3 Critical Realism Paradigm

This paradigm emanated from the frustration with interpretivist's passive, contextual, subjective and relativist view thus critical realism combines both positivism and interpretivism (Marvasti, 2004; Bernard, 2006; Cilliérs, et al., 2014). These researchers adopted positivists' belief that real structures exist independent of human consciousness and that knowledge is a social construct which explains issues rather than predicting the outcome (Marvasti, 2004; Willig, 2008; Cilliérs, et al., 2014). The assession suggests that this approach suits research subjects that are fully aware of the ecological impacts of the hotel operation. In Malawi, this approach may not suit because of the limited sustainability knowledge levels in the tourism sector in general (Bello, et al., 2017).

3.3.4.4 Grounded Theory

This research method is of special interest in this study because it provide a set of strategies for conducting rigorous qualitative research unlike most other research methods in that it merges the processes of data collection and analysis whereby the researcher moves back and forth between the two (data collection and analysis) in an attempt to 'ground' the analysis in the data (Corbin & Strauss, 1990; Glaser, 1992; Strauss & Corbin, 1998).

This method has two ways of conducting research (the full version and the abbreviated version) and both ways are compatible with a wide range of data collection techniques such as semi-structured interviews, participant observation, focus groups and document analysis (Glaser, 1992; Charmaz, 1996; Charmaz, 2006). The full version of grounded theory allows the researcher to push outwards, to seek out manifestations of categories, negative cases, and opposites, until category development is dense, detailed and differentiated as theoretical saturation is being approached whilst the abbreviated version of grounded theory works with the original data only interview transcripts or other documents are analysed following the principles of grounded theory (Corbin & Strauss, 1990; Glaser, 1992; Strauss & Corbin, 1998). This variation, therefore, suggests that the full version of grounded theory could be appropriate for conducting research on sustainability practices within the hospitality sector in Malawi because there is limited knowledge available.

3.4 Methodological Considerations

This desk research sought to analyze the methodological approaches adopted by various researchers in the field of sustainability within the hospitality industry. This desk research approach involved a systematic search to retrieve relevant literature and referenced articles began in January 2018 and the final search was finalized in April 2018. The focus was on studies conducted on sustainability practices within the hospitality industry.

3.4.1 Detailed Process of the Qualitative Meta-Synthesis of this Study

Table 6: Qualitative Meta-Synthesis Process

Stages	Activity	Processes
1.	Framing a Meta – Synthesis Process	• Identification of an appropriate research question. • Identification of the purpose/aim of the Meta-Synthesis.
2.	Locating relevant studies	• Location and selection of papers through a robust search on the topic area through divergent, rather than a linear search
3.	Deciding what to include	• Identifying and comparing the epistemological approaches in each study. • Location and selection of papers through a robust search on the topic area through divergent, rather than a linear search
4.	Appraising studies	• Appraising the rigor of individual studies with a set of pre-meditated criteria
5.	Comparing and contrasting	• Comparing different studies by identifying metaphors, phrases, ideas, concepts, and relationships, preserving the original meaning.
6.	Reciprocal translation	• Translating one study's findings into another using metaphors and concepts that could be applied to both.
7.	Synthesis of translation	• Refining clusters of metaphors and surfacing consensual substantive theory reflecting the tension between contradictory explanations.

***Source*:** Adapted from Walsh and Downe (2005) in Lee J., et al., (2010).

3.4.2 Location and Selection of Papers.

The articles were purposively selected for this study to come up with a comparative conclusion (Vos, et al., 2011). An Internet search on googlescholar.com, using keywords like sustainable tourism, sustainable hospitality establishments, environmental management, and hospitality

establishments, produced 100. Out of these articles, 56 articles were sampled to form the contextual and theoretical framework of this study. Using a deviant case sampling, 20 articles (10 from developed countries and 10 from sub–Sahara Africa and India) were purposefully selected for a meta-synthesis. Basing on the scope of the selected papers, two publications on the hotel sector from the USA; one paper covering a case study hotel across Europe; and two papers from hotels in Spanish, one paper from hotels in Canada, Mexico, Taiwan and China respectively, where selected to represent the practices in developed countries. Publications on the hotel sector in South Africa; one publication on hotels from three eastern African countries and one on the Malawi hotel sector and one from India were chosen to represent practices in developing countries within sub – Sahara Africa and South – West Asia. South African publications had been favored because they are mostly used as a benchmark in the Malawi Hotel setup (Gardner, 2015; Nsiku & Kiratu, 2009 and Tourism Intelligence International, 2008).

Table 7. Overview of studies in the Meta-Synthesis

Author	Country	Sample Size	Year	Methodological Themes
1. Bruns-Smith, et al. (2015)	USA	100	2006 & 2010	• Database research • Questionnaires • Observations
2. Nicholls & Kang (2012)	USA	217	2010	• Questionnaires emailed
3. Bohdanowicz, Zientara, & Novotna, (2011)	Europe	20	2008	• Emails • Interviews • Questionnaires
4. Claver-Cortés, et al.(2009)	Spain	153		• Questionnaires
5. Prud'homme & Raymond, (2013)	Canada	473	2009	• Questionnaires
6. Berezan, et al. (2013)	Mexico	329		• Questionnaires
7. Rogerson & Sims, (2012)	RSA	10		• Interviews
8. Machete & Morakinyo, (2017)	RSA	8		• Questionnaires • Voice recorder • Observation checklist

9. Tichaawa & Samhere, (2015)	RSA	286		• Questionnaire • Interview
10. Mearns & Boshoff, (2017)	RSA	9	2010 to 2013	• Resource tracking sheet
11. Van de Merwe & Wöcke, (2007)	RSA	60		• Questionnaire
12. Leonard & Dlamini, (2014)	RSA	4	2013	• Interviews
13. Booyens & Rodgerson, (2016)	RSA	60		• Interviews
14. Fortanier & Wijk, (2010)	Mozambique, Tanzania & Ethiopia	123		• Interviews
15. Bello, Banda, & Kamanga, (2017)	Malawi	12	2014	• Interviews
16. Sharma, Yadav, & Sharma (2018)	India	66		• Questionnaire • Document Analysis
17. Ganglimair-Wooliscraft & Wooliscroft, (2016)	New Zealand	322		• Quantitative • Questionnaire
18. Rodríguez-Antón, et al., (2012)	Spain	294	2008	• Survey • Questionnaires
19. Chan & Hawkins, (2010)	China	27		• KII Interview • Document Analysis
20. Wang, et al., (2013)	Taiwan	23		• Survey • Questionnaire

***Source*:** Authors

3.4.3 Identifying and Comparing the Epistemological approaches in each study.

The data were processed following a qualitative, meta-analysis. The identified texts were read repeatedly to gain a sense of the dataset as a whole (Bryman, et al., 2011). The articles were given number codes 1 to 20. A line by line analysis of the methodology section of the selected

articles was done. The texts that captured key concepts were highlighted and coded to express key concepts. The pertinent texts were highlighted and assigned predetermined codes. These codes were then group into categories and subcategories.

Table 8. Factors indicating the research approach and methodology adopted

	Paper Number																			
Methodology	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Research design																				
Exploratory	x[b]	x[b]					x[b]		x[b]			x[b]			x[b]					x[b]
Survey				x[c]	x[c]	x[c]					x[c]		x[c]	x[c]		x[c]	x[c]	x[c]		
Case study			x[d]					x[d]		x[d]									x[d]	
Sampling Procedure																				
Probability Sampling	x[f]								x[f]											x[f]
Non – probability Sampling			x[g]	x[g]	x[g]	x[g]	x[g]	x[g]	x[g]	x[g]	x[g]	x[g]	x[g]	x[g]	x[g]	x[g]	x[g]	x[g]	x[g]	
Data Collection Methods																				
Questionnaire			x[h]	x[h]	x[h]	x[h]	x[h]			x[h]		x[h]		x[h]		x[h]	x[h]	x[h]		x[h]
Interviews	x[l]			x[l]				x[l]	x[l]	x[l]	x[l]		x[l]	x[l]	x[l]				x[l]	
Observations	x[i]								x[i]											
Document Analysis	x[j]			x[j]				x[j]	x[j]		x[j]									
E-research			x[k]	x[k]																
Data Analysis Methods																				
Quantitative Data Analysis	x[m]		x[m]	x[m]	x[m]	x[m]	x[m]		x[m]	x[m]	x[m]	x[m]			x[m]	x[m]	x[m]	x[m]		
Qualitative Data Analysis								x[n]		x[n]			x[n]	x[n]	x[n]				x[n]	x[n]

Keys for Table 8.

a. Experimental	e. Comparative	i. Observations	m. Qualitative Analysis
b. Exploratory	f. Probability	j. Document Analysis	n. Quantitative Analysis
c. Survey	g. Non - Probability	k. E - research	
d. Case Study	h. Questionnaires	i. Interviews	

Source: Authors

3.5 Findings from the Qualitative Meta-Synthesis

The findings are presented in two categories: developed countries and developing countries. Out of the fifteen papers sampled for the Meta – synthesis, six are from developed countries and nine from developing countries.

3.5.1 Results from developed countries

The results indicate that a survey approach using structured questionnaires was favored to solicit views and draw conclusions on environmentally sustainable practices within the hospitality industry in developed countries. This suggests that these researchers are positivists (Cilliérs, et al., 2014). Claver-Cortés, et al., (2009) through a survey concluded that based on environmental proactivity, there were three groups of hospitality establishments in Alicante province in Spain; Proactive, Intermediate and reactive. Rodríguez-Antón, et al., (2012) also used crossed – ended questions in a telephone survey to patterns for integrating sustainability management systems in hotels. Prud'homme and Raymond, (2013) also, through a survey, concluded that in the Quebec region of Canada, customers are happy in hospitality establishments where sustainability initiatives are adopted. Similarly, Berezan, et al (2013) concluded that there is a positive relationship between green hospitality establishments practices and guest satisfaction in Mexican popular tourist destinations. However, the few studies that were analyzed from the far eastern countries indicated that open-ended questions were favored in conducted similar research from their countries. For instance, Wang, et al., (2013) partly used open-ended questions to establish how green standards in restaurant management. Similarly, Chan and Hawkins, (2010) also used in-depth and semi-structured interviews to understand the impact of environmental management systems on a hotel employee in China. These results may be suggesting that qualitative research is favored in this geographical region of the world.

Furthermore, the results show that researchers preferred non – probability sampling strategies, questionnaires, and quantitative data analysis approaches when conducting research on environmental practices in the hospitality establishments industry. This further confirms that these researchers subscribe to the positivist paradigm (Bernard, 2006). These researchers used questionnaires to generate data and draw conclusions. The Likert scale was the commonest measurement scale that was adopted in their research tool. Their analysis was based on descriptive statistics upon which conclusions were drawn. According to Bryman, et al., (2011) this approach underscores a quantitative positivistic approach. In some studies, tests were conducted to identify any statistically significant differences between responses. This also affirms the positivistic approach taken by this researcher (Bryman, et al., 2011).

3.5.2 Results from developing countries

Out of the nine papers that were analyzed from the developing countries, two approaches were favored by the researchers (exploratory and survey). These approaches are synonymous with qualitative interpretivism (Bernard, 2006). Four researchers adopted the exploratory approach. Three used the survey approach and two used a case study approach. Rogerson and Sims (2012) through a qualitative approach concluded that there is low local consumer interest in green hospitality establishments as a tourism product in urban hospitality establishments of the Gauteng province in South Africa. Furthermore, they also observed that the lack of government regulatory measures is affecting the progress of hospitality establishments greening initiatives. Thus the approach adopted suggests that Rogerson and Sims are interpretivists. Tichaawa and Samhere (2015) on the other hand used a mixed method approach and found that in East London stakeholders in the tourism industry were not aware of the impact their efforts had on sustainability practices despite existing evidence of responsible tourism practices. This lack of awareness is also existing in the hospitality establishments industry in the Johannesburg area. The approach they adopted suggests they are Critical Realists. Just like Rogerson and Sims, Leonard and Dlamini (2014) employed qualitative methodology and found out that there was a need to enhance communication from central offices to various hospitality establishments managers on sustainability initiatives. Whilst Bello, et al., (2017) also used a qualitative approach to report that in Malawi there is a lack of top management interest and awareness on issues related to environmental sustainability and inhibit sustainability practices.

The three authors that adopted a survey approach also reported their findings. Van de Merwe and Wöcke (2007) found out that "many of the responding hospitality establishments do not participate in responsible tourism initiatives because of - amongst others - confusion about what the concept means, and a lack of awareness of such initiatives." In the Western Cape region, it was revealed that innovation by tourism firms in sustainability issues was widespread (Booyens and Rodgerson, 2016). On the contrary, though Fortanier and Wijk (2010) through use of a mixed method approach, reported that foreign hospitality establishments investors in Tanzania, Mozambique and Ethiopia are not willing to invest in training human capacity. This is one way or the other has a direct negative impact on sustainability awareness among hospitality establishments employees. The other two authors who adopted a case study approach, for example, Machete and Morakinyo (2017) after adopting a mixed method approach, found that in the Mpumalanga province of South Africa there was a huge variation (19.2 kg) in terms of carbon footprint between high and low carbon emitting hospitality establishments. Mearns and Boshoff (2017) confirm that in South Africa, the Sun City Resort management team is dedicated to ensuring that the impact of the business on the environment is managed effectively to achieve greater sustainability.

The most favoured sampling procedure by most authors was the non – probability method. However, Tichaawa and Samhere (2015) adopted both the probability and non - probability sampling approaches. When choosing primary data sources, a stratified random sampling technique was used to target the stakeholders, who were divided into four subsectors, namely: bed and breakfasts; guest houses; backpackers; and travel agencies. Key informants were chosen through purposive sampling technique. The most preferred data collection tool adopted by most of the analyzed authors from the developing countries were interviewed. Seven authors out of nine used interviews to collect their data. Two authors combined questionnaires and interviews (Tichaawa and Samhere, 2015; Booyens and Rodgerson, 2016). Rogerson and Sims (2012), and Mearns and Boshoff (2017) used both interviews and document analysis to collect data for their studies. Machete and Morakinyo (2017) were the only authors who used three techniques (interview, observations and document analysis) to collect data for their study. As regards to data analysis, two authors used both quantitative and qualitative data analysis techniques (Tichaawa and Samhere, 2015; Fortanier and Wijk, 2010). Four authors adopted a qualitative data analysis

technique while the remaining three used quantitative data analysis technique. This, therefore, suggests that qualitative methodology suits better in developing countries to understand the developments and generate new theory as regards to environmentally sustainable practices within the hospitality industry.

3.6 Current Practices in Malawi, Discussion, and Conclusion

To begin with, it would be important to start the discussions of the Meta – synthesis results by briefly explaining the empirical evidence from Malawi on the current status of the hotel sector. The Malawi Government has provided an appropriate legal framework to foster sustainability innovations within the hospitality industry. Respondent B from the Department of Environmental Affairs (Interview, 2017) indicated that;

> *"Our core function is to enhance compliance with the Environmental Management Act (EMA). Within the Environmental Management Act, there is section 24 which calls for an Environmental Impact Assessment (EIA) of various development projects. Apart from that the EMA also calls for any developer, any development project, in this case, hospitality areas, to make sure that they prevent pollution of any type or resource. But also it is there to preserve the natural resources to conserve them."*

Another respondent from the Department of Tourism also indicated that regulations are available that provide guidance on sustainability. Respondent A (Interview, 2017) said;

> *"I think us (department of tourism) need to do more because the regulations that we have at present do not penalize units (hotels) that are not following sustainable tourism practices. What is available in the Tourism and Hotels Act, in terms of regulations is to provide advice on issues of sustainable practice and no punitive measures"*.

The respondent from the local government setup also indicated there is policy guidance that encourages sustainability innovations within the hotel sector. Respondent C (Interview, 2017) from the Lilongwe City Council mentioned that: *"Our policy mainly focuses on ensuring a safe environment in terms of pollution and degradation."* Despite this provision of the legal

framework the hotel sector seems to be lacking capacity and knowledge to initiate sustainability innovations. For instance, Respondent B (Interview, 2017) said: *"There is a big challenge in compliance amongst most of the hospitality facilities. Those that comply are mostly found in the cities or major areas which attract major interest."* Respondent A (Interview, 2017) also affirmed that:

> *"The industry is mixed as at now. There are tourism industry players that are practicing sustainable tourism. But there are others (tourism industry players) who are not yet practicing sustainable tourism. Most of the time is due to perhaps lack of knowledge."*

Similarly, Respondent C (Interview, 2017) revealed challenges that face with the hospitality sector:

> *"We just find ourselves in a confrontation with those that are constructing such facilities (hotels) when we enquire about how they will manage their waste and wastewaters from their premises. Sometimes, even when we enquire about how they will manage their surrounding in terms of greenery."*

To get a balanced view on these revelations, interviews were also conducted with three selected major industry players in Lilongwe. Respondents D, E, and F were purposefully selected to present views from the accommodation sector in Lilongwe. Respondent D was recruited from Sunbird Hotels which the largest hotel chain in Malawi. Respondent E was recruited from a backpacker accommodation facility which is foreign owned and operated with the capital city and Respondent F was recruited from a three star graded lodge which is owned and operated by an indigenous investor within the capital city. In responding to a question on enforcement of EMA, Respondent D (Interview, 2017) said:

> *"I will tell you that from my observation there is not much that these regulatory bodies look at in terms of the environmental sustainability. I really think that there is a lot that needs to be done. I know that not in Sunbird Hotels of course that are operating without proper disposal of their waste and are not doing much in areas of air pollution and disposal of waste from their production areas. When*

they come they look at the upkeep of the property in terms of maintenance, look at staff health issues, and they look at compliance in terms of their guidelines. But their guidelines I know don't really cover environmental sustainability issues."

This revelation is in line with the revelations made by Respondent A, who is a representative of the mother department. These two respondents agree that there is a lot that needs to be done to make sure that the EMA is implemented and followed as intended and as such it could be assumed that this EMA exists only on paper that in practices. The other dimension from this revelation could be that the EMA was enacted after the hotel chain was already operational and as such its implementation and enforcement on these hotels is a challenge. This assumption is in agreement to the revelations made by Respondent B from the Department of Environmental Affair. Furthermore this revelation indicates that there are some properties within the city who are not practicing as indicated in the EMA which is also in line with what Respondent A said. It could be concluded therefore that despite having the regulations on paper the implementation and enforcement of these regulations leave a lot to be desired. In responding to the same question, Respondent E (Interview, 2017) indicated that; "*We have never had any directives given to us about recycling or that. It is very much what we decided to do rather than government directive."* Respondent F (Interview, 2017) also said;

" I have worked with Malawi Bureau of Standards per se. They are the ones that walk in at any time when they check the standards. I worked with the Ministry of Tourism and City Council. What I would have liked to see though, is some level of orientation of officials that come to check. Some level of orientation of the product so that they have a good understanding because it is like they just come and just anyhow. They should get an orientation and see what standards are set and what they should check. Sometimes you see that they come to regulate things that they don't understand or they are not at the same level."

These two revelations are all indicating that the EMA is not enforced and it is documented. Furthermore, these revelations indicate that the accommodation sector is more knowledgeable on matters of sustainability that the regulating bodies. In this regard, therefore, they support views that Respondent A expressed. The quotations may also be indicating that regulators do know

what they are supposed to check when they inspect accommodation units. This assumption is in line with what Respondent C stated. As such the conclusion is that the regulations on paper at the government level are not communicated to accommodation operators in Lilongwe. In addition, it could be assumed that the regulations were formed without extensive consultations with various stakeholders including the accommodation sector.

Most hotels in sub – Sahara Africa are now publishing their engagement in conservation efforts, for instance, Sunbird Hotels Limited in Malawi, (Gardner, 2015: 14), there is need to confirm such claims through in-depth interviews and ground verification. Just like in the case of Figure 2, where there are claims indicating tree planting exercise was conducted and followed by subsequent visits to confirm the seedling tree survival rate. But to the contrary, the claimed area has no surviving planted trees. It is from this revelation that a seven-step full version of grounded theory approach would suit research on environmental sustainability practices within Malawi.



Figure 11: Kauma Sewage Treatment Area of the Lilongwe City Assembly
***Source*:** Authors

These results reveal that in developed countries, researchers in environmental sustainability in the hospitality industry prefer using the quantitative methodology to assess sustainability practices in the industry. The conclusion drawn is that most of these researchers are positivists. As indicated already this approach could have been favored on the assumption that the majority, both from the hospitality industry players and the customers, have knowledge of what constitute environmental sustainable practices within the hospitality industry. As indicated in Tables 1 and 2 above, surveys are common where a self-administered questionnaire is deployed to solicit views from respondents. The conclusion drawing from the analysis is that this approach is suitable in that area because of high levels of awareness on matters of sustainability hence it was possible to generalize the results. This approach was used in an investigation in order to validate the findings on sustainability.

The use of closed-ended questionnaires by researchers in developed countries could also imply that the target respondents were conversant with the subject matter and as such it was easy to solicit their views. This conclusion is in tandem with Prud'homme and Raymond, (2013) and Berezan, et al, (2013) who indicated that in developed countries the majority of the population have an adequate understanding of environmental sustainability issues. In Sub – Sahara Africa, use of a questionnaire on a survey type of research wouldn't yield the results as intended basically because of ignorance levels in sustainability-related issues. This conclusion is well supported by Van de Merwe and Wöcke (2007). Bello, et al, (2017) and Leonard and Dlamini (2014) also agree that lack of awareness is a general problem in developing countries and as such use of the questionnaire may pose a challenge to researchers in this field of sustainability. In this regard, therefore, a researcher-administered questionnaire suits best in this setup.

In light of the above observations and discussion ensuing from the findings, it is plausible to suggest that a Grounded Theory approach would be an idle approach to assessing whether the advertised sustainability practices are really being pursued the cause or are just a mere advertising gimmick. As suggested by Bello, et al, (2017) most of the purported sustainability efforts in Malawi are philanthropic in nature. In this regard, therefore, this paper suggests the below modified full version grounded theory approach research model for Malawi.

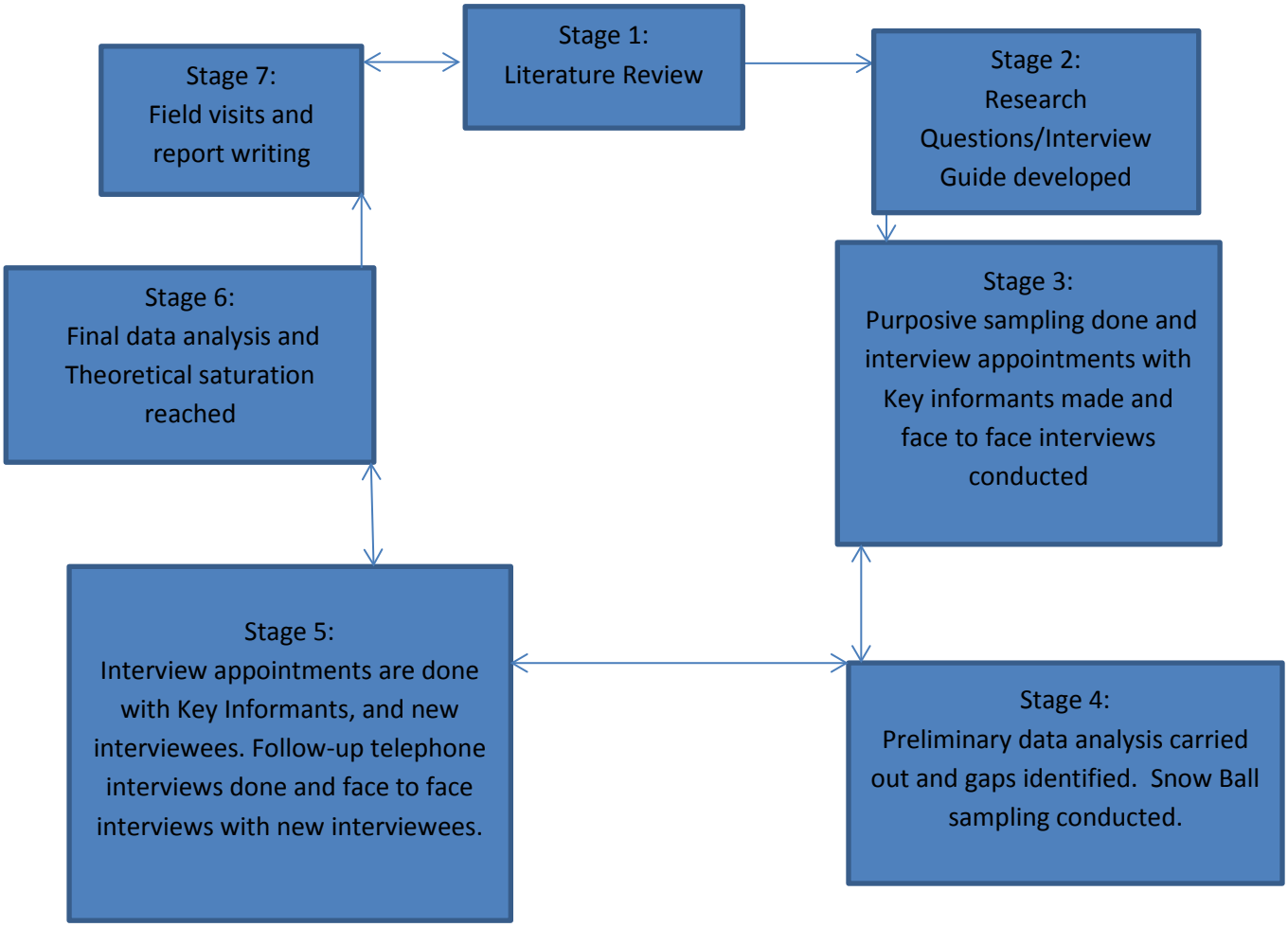


Figure 12**:** A Seven (7) Stages Full Version Grounded Theory
Source: Authors

This suggested model would be ideal for Malawi because there are relatively few hospitality establishments chains in the country compared with other countries in the region and furthermore the interviews conducted and the ground verification exercise we took produced contradictory results. This model would be idle for Malawi because there are relatively few hospitality establishments chains in the country compared with other countries in the region.

Chapter 4:

The Role of Institutional and Legal Frameworks in Promoting Sustainable Tourism in Malawi: Application of Grounded Theory as a methodological imperative.

Abstract

This paper examines the combined impacts of an effective natural resource management system and policy formulation as well as the enforcement of legislation in facilitating the development of a sustainable tourism sector in Malawi. It is argued in the paper that institutions shape behaviour and that the implementation of different pieces of legislation re-enforces and augments behaviour patterns. Thus, drawing from environmental sustainability initiatives currently being embarked on within the accommodation sub-sector in Malawi, this paper attempts to identify avenues through which the country can harness and develop strategies and mechanisms to foster and spearhead sustainable tourism vis-à-vis economic growth and national development. The paper, thus, adopts Grounded Theory both as a methodological and analytical approach to effectively contextualize how to re-imagine this important subsector in the Malawian economy. Key to the argument of the paper is the urgent need for the Malawian government to embark on institutional transformation in ways that will facilitate the decentralization of executive power and increase the participation of lower levels of government structures and local communities in decision-making processes. In the absence of such a system, tourism will continue to yield unsustainable returns with potential for increased conflicts between different stakeholders including government.

Key Words: Sustainable Tourism; Natural Resource Management; Environmental Sustainability; Malawi.

4.1 Introduction

Researchers have in the recent past shown an increasing interest in sustainable tourism development as an architect of sustainable economic development (SED) within the developing world (Fortanier & Wijk, 2010; Bramwell & Lane, 2012; Cvelbar & Dwyer, 2013). A key aspect of sustainable tourism development (STD) is a sound institutional and legal framework within the tourism destination country (Aucamp, 2009; Krutwaysho & Bramwell, 2010; Aragon-Correa, Martin-Tapia and Torre-Ruiz 2015). Previous studies have suggested that in most developed countries decentralization allows for sustainable tourism decisions to be made from the local government perspective with input from the local population (Ayuso, 2007; Alvarez, 2014; Carasuk, Becken & Hughey 2016). Recent evidence suggests that sustainable tourism governance setup alters over time due to changing political contexts (Bramwell and Lane, 2012; Alvarez, 2014). This paper, therefore, examines the institutional and legal frameworks within the public sector in Malawi and examines how these structures, systems, and mechanisms of governance can be used as tools for the development of an effective and STD.

4.2 Literature Review

Existing evidence suggest that in many countries of the developed north, tourism is an industry whose development is guided and governed by national and sometimes by regional laws and this is enacted and effectively enforced at various spatial scales such as national and local with meaningful participation from different stakeholders (Cvelbar & Dwyer, 2013; Doherty, 2013; Environmental Audit Committee,[EAC] 2017). The first serious discussion and analyses of sustainable development emerged during the 1972 United Nations Stockholm conference where research and surveys on environmental related issues were sanctioned (Hulse, 2007). Around the same period, varying governmental legislative protocols and regulations on sustainable development within the tourism industry emanated. One such development was the Hannah Arendt's Political Theory of Action which stipulates that governance of sustainable tourism should involve multiple participants and not just be in the hands of a few (Strydom & King, 2009; Bramwell & Lane, 2012; Aragon-Correa, et al., 2015).

4.2.1 Sustainable Tourism Development and the Devolution of Powers

Available evidence suggests that in most developed countries there is a good working relationship between decentralized government structures and the private sector which ensures sustainable tourism development across the country and attainment of SED (Aragon-Correa, et al., 2015; Shone, Simmons & Dalziel 2016; Bets, Lamers & Tatenhove 2017). This available literature on sustainable development in developed countries suggests that the government authority plays an important role in mobilizing stakeholders' commitment to sustainable development initiatives through a participatory and consultative process (Strydom & King, 2009; Middleton, 2013; Smit, 2015). In developing countries, on the contrary, particularly those in sub-Saharan Africa, the centralized system of governance has entailed that any decision-making process has predominantly followed a top-down system involving less stakeholder dialogue and participation. This system of governance has increasingly resulted in the marginalization of a significant number of people, especially the poor who normally lack any voice and resources to effectively assert themselves and determine their own future and that of their children (Lee & Jamal, 2008; Hussein, 2017; Tantoh & Simatele, 2018).

It has been observed by a number of scholars working within the tourism sector in developing countries that there has been significant changes and transformations especially in terms of the tourism sustainability policy, industrial practices as well as public thinking (Aucamp, 2009; Alvarez, 2014; Valente, Dredge & Lohmann 2015). Despite these noticeable changes, Rogerson and Sims, (2012) are of the view that some countries within sub – Saharan Africa have lacked good governance processes and systems to foster sustainable tourism and register meaningful local economic development and trigger household and community well-being (see also ; Leonard & Dlamini, 2014; Booyens & Rodgerson, 2016; Musavengane, 2018).

It is important to note here that although a significant volume of work has been done on the benefits of sustainable tourism, there is still a gap in knowledge and no known work has been conducted which draws on any systematic processes such as the role that institutional and legal framework play in promoting on sustainable tourism in a developing country context (Lee & Jamal, 2008; Nsiku & Kiratu, 2009; Bello, Lovelock & Carr 2016). Of particular interest is understanding how effective governance of natural resources has the potential of facilitating and adoption of sustainable environmental practices within the hospitality industry with a focus on

accommodation units. This paper, therefore, explores and critically examines the new developments that have taken place within the tourism industry in Malawi with the view of determining whether Malawi is on the right path to achieve sustainable natural resource management and economic growth as well as national development.

4.2.2 Sustainable Tourism Development Structures in Malawi

It is worth pointing out here that the government of Malawi has in the recent past customized the United Nations Sustainable Development Goals (SDGs) through its policy documents called the Malawi Growth and Development Strategy (MGDS) and Vision 2020. Sustainable tourism and its development is a pivotal focus of the two policy developments as it has been earmarked aa s an important sector in the SED of the country (Government of Malawi, 2000; Government of Malawi, 2017b). This development has further been complimented with the approval and adoption of the international standards such as the MS – ISO 14001: 2015 to provide institutional guidance in order to achieve sustainable environmental and economic development (International Standards Organisation [ISO], 2015). In spite of these developments and in the context of Malawi, a key question that requires to be addressed is the effectiveness of these institutional and legislative changes in facilitating the development of a tourism sector that can be considered to be sustainable. Furthermore, there is need to address the question of what ought to be present in terms of environmental management practices in the hospitality sector that can catalyze and trigger sustainable economic gains from the tourism sector to help reduce poverty and improve local peoples' livelihoods.

Recent evidence from Malawi suggests that the government plays a center stage (Figure 1) in fostering sustainability initiatives where all stakeholders including the private sector organizations are involved and are expected to align their activities and support government agenda at all levels in order for the country to attain SED (Government of Malawi, 2017b). However, the question is, what has the government put in place to ensure that environmental management practices are embraced by the accommodation sub-sector of the hospitality industry apart from the available governance structure. The government of Malawi has manifested these attempts to promote basic elements of good governance through a decentralized local governance system thus, a new National Decentralisation Policy was developed to provide a platform for STD in Malawi (Hussein, 2003; Patel, et al., 2007; Hussein, 2017).

A number of authors that have written on sustainability governance in Malawi have argued that despite having a well-outlined sustainability governance structure (Figure 10), most of the governance challenges emanate from lack of coordination amongst stakeholders, unclear regulation enforcement, and political interference which have subsequently led to the halting of the existing sustainability governance structures (Tambulasi 2010; O'Neil, et al., 2014; Zalengera, et al. 2014).

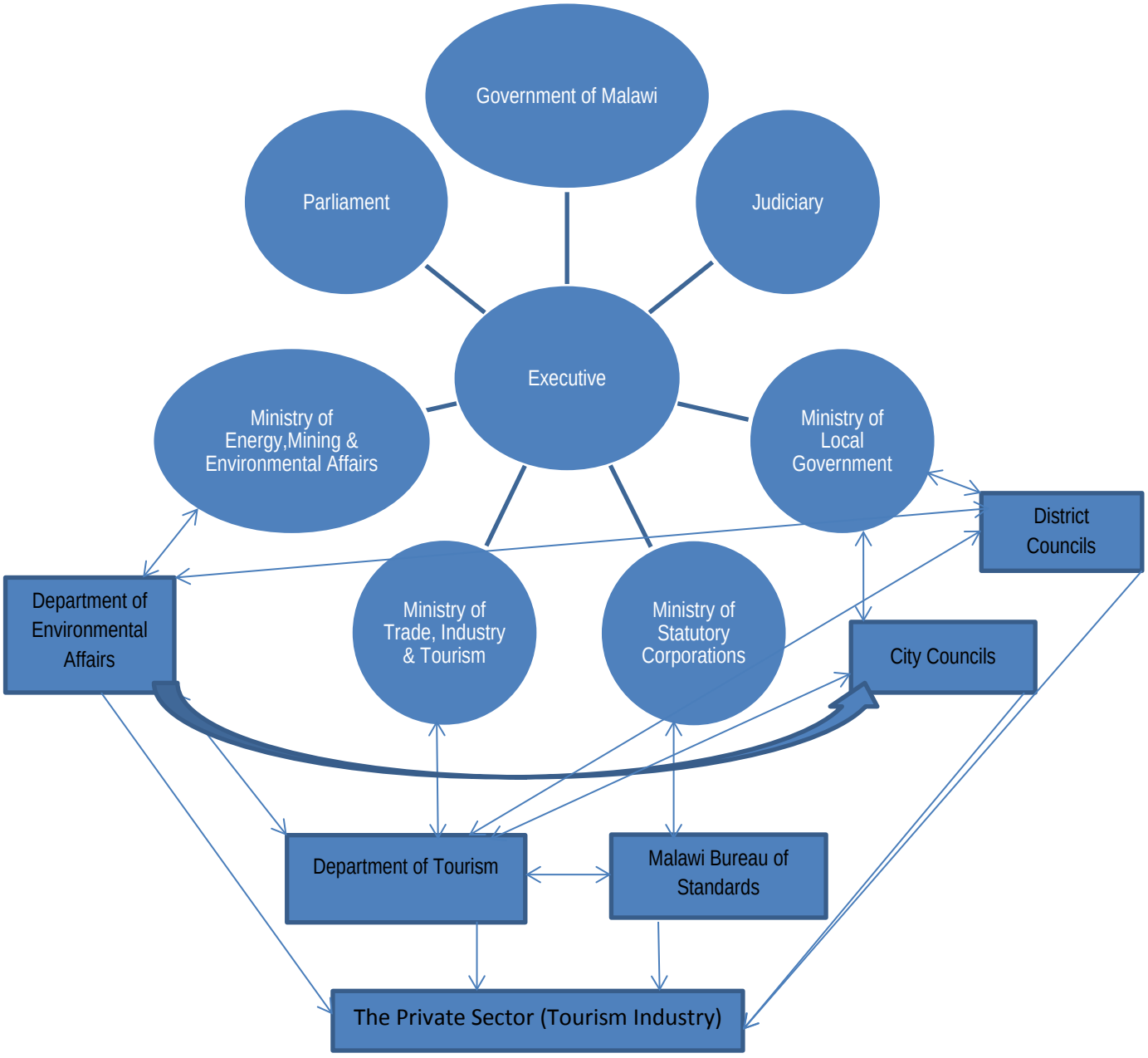


Figure 13: Government institutional arrangement and the link to the private sector in Malawi
Source: Authors

4.2.3 *The Role of the Government in Sustainable Tourism Development in Developed Countries*

Recent research from developed countries suggests that socioeconomic development activities influence the public sector to play their roles in promoting STD (Falkner, 2013; Alvarez, 2014; Smit, 2015). Of particular importance here are studies which were conducted by Foster, (2008; 2011) suggesting that most governments in these developed countries started developing interest in sustainability issues after they noted that an increasing human population and industrialization strained the environment due to unsustainable consumption of natural resources and increased effluent production from economic development activities which steered rapid environmental degradation and raise to socio-economic problems facing humankind globally. In summary, therefore, it is not an overstatement to conclude that a sound institutional and legal machinery of environmental management is an important ingredient to shape the behavior and practices of the human population and the industry at large (Shone, et al., 2016; Bets, et al., 2017; Tantoh & Simatele, 2018). When there is a growing concern on the impacts that human behavior and industrialization caused to the environment vested government authority, especially in developing countries within sub – Saharan Africa, became necessary to intervene through the development of sound environmental sustainability institutional and legal policy framework (Strydom and King, 2009).

According to available evidence, there are two tools (structured scenarios and active adaptive management) that developed countries use foster STD which requires multi-level governance systems which necessitate learning and increasing adaptive sustainability capacity within a specific geographical locality (Folke, et al. 2002; Shone, et al., 2016; Bets, et al., 2017). Other publications from developed countries also demonstrate that STD tenets are entrenched in many governance structures and they promote sustainable environmental practices within the accommodation sub-sector. For instance in the United Kingdom, the Environmental Audit Committee (2017) state that local government and public sector institutions facilitate sustainability awareness by engaging with the local community and the private sector. Bisgaard, et al., (2012) also states that in Norway the public sector engages the private sector through a dialogue process when formulating environmental sustainability policy so that the new regulation is founded on a common wider understanding of environmental challenges. In New

Zealand also, local authorities are empowered to develop their own policies from national sustainability agenda to foster countrywide sustainable development (Connell, et al., 2009).

It would be unrealistic, however, to assume that every developed country in the has fully embraced sustainable environmental management because there are still other countries that are facing challenges with sustainability issues. For instance, Pastras and Bramwell (2013) reported that in Greece there are challenges to attain countrywide sustainability because the central government does not strongly coordinate activities of regional and local governments; as such there is a minimal public and private sector partnership in promoting sustainable development. Logar (2010) also revealed that in Croatia they are still grappling with sustainability issues because of poor coordination of sustainability issues between the government and private sector.

4.2.4 The Role of the Government in Sustainable Tourism Development in Developing Countries

There have been a number of longitudinal studies on efforts that are being pursued in most developing countries to entrench sustainability tenets in government and other developmental systems to attain sustainable development. For instance, Hulse (2007) noted that in developing countries, governments enact and enforce varying laws related to tourism resources within their territories and jurisdictions because of persuasive influence from industries and organizations with vested interests. In some sub – Sahara African countries similar tourism sustainability efforts are being pursued to come up with collaborative arrangements between the public sector and the private sector to promote sustainability practices and attain SED (Kubanza, et al., 2016; Rylance & Spenceley, 2016; Spenceley, et al., 2017). However, a major problem with this kind of approach experienced in developing countries, according to Yasarata, et al., (2010) is the politicization of the public sector which weakens the regulations that enforce tourism sustainability practices. This complexity in most developing countries hinders the implementation and enforcement of environmental sustainability practices because the whole governance system is highly susceptible to external forces of power the malpractice affects STD (Farmaki, et al., 2015). These external forces of power in most developing countries create tensions around the established government environmental sustainability machinery thus, in the tourism development context, sustainable development and eventually SED of a country is affected (Krutwaysho and Bramwell, 2010). This paper examines the machinery that the government of Malawi has come up with so that the impact of human behavior and tourism

industry development on the natural environment is controlled. This paper also examines the efficacy of this machinery from the accommodation sub-sector perspective.

4.3 Methodological Considerations

To date, various methods have been developed and introduced to measure the efficacy of the public sector in enforcing sustainable tourism policies in developed and developing countries. This paper uses the qualitative methodological strategy of Grounded Theory which aimed at constructing middle - level theory on environmental sustainability in the accommodation sub-sector of Lilongwe directly from data analysis. This approach provided a set of systematic inductive methods for grounding theory in the data (Charmaz, 2006). The study used in-depth Key Informant Interviews and Field Visits to collect the data.

Eligibility criteria required individuals to have been working in government departments in positions which are directly linked to the tourism industry in terms of policy and regulation. Furthermore, those individuals from the hotel industry with senior positions in operations were recruited from best hotels within Lilongwe for KII. The data for this paper was collected from September to December 2017. Five senior members of staff (Table 9) from five prominent government departments (Department of Tourism, Department of Environmental Affairs, Lilongwe City Council, Lilongwe District Council and Malawi Bureau of Standards) and six management representatives from 2 – 4 Star rated hotel properties (Table 10) within Lilongwe were purposively selected for Key Informant Interviews (Government of Malawi, 2017). In addition, field visits were made and pictures were taken from these units to provide additional information to that obtained during interviews. Follow up telephone interviews were done to solicit extra views from the targeted respondents on matters arising from the preliminary data analysis process (Dey, 1999). The resulting analysis built their power on strong empirical foundations which provided focused, abstract, conceptual theories that explain the studied empirical phenomena in Lilongwe (Corbin and Strauss, 1990; Strauss and Corbin, 1998, and Charmaz, 2006).

Table 9: Profile of Respondents from Government Departments

Pseudonym	Department	Duty Station	Experience
Officer A	Department of Tourism	Central Government	23 years
Officer B	Department of Environmental Affairs	Central Government	3 years
Officer C	Lilongwe City Council	Local Government	15 years
Officer D	Lilongwe District Council	Local Government	5 years
Officer E	Malawi Bureau of Standards	Parastatal	4 years

Source: Authors

Table 10: Profile of Respondents from Hotels

Pseudonym	Unit	Star Grading	Location
Officer F	Sunbird Capital Hotel	4 Star	City Centre, Lilongwe
Officer G	Sogecoa Golden Peacock Hotel	4 Star	City Centre, Lilongwe
Officer H	Ufulu Gardens Hotel	3 Star	Area 43, Lilongwe
Officer I	Cross Roads Hotel	3 Star	Area 9, Lilongwe
Officer J	Kumbali Country Lodge	3 Star	Area 44, Lilongwe
Officer K	Mafumu Hotel	2 Star	Area 3, Lilongwe

Source: Authors

Interviews were first transcribed verbatim after that data was cleaned to remove some materials that were not relevant to the questions asked. Open coding process started by assigning a number to each line of the interview transcript. Through a line by line analysis, process notations were marked with a segment of data that was relevant to help answer the research question (Corbin & Strauss, 1990). This process ensured there was the grounding of the analysis to create categories from the data that suggested answers to the research question. After working through the entire transcript in that manner, marginal notes and comments were sorted out by grouping together those that indicated similarities in meaning through analytical coding process (Merriam, 2009). This process according to Strauss and Corbin, (1998) created higher-level categories and later on theoretical codes were formulated through selective coding process which described the status of environmental sustainability in the hospitality industry in Lilongwe.

4.4 **Results and Discussion**

The government of Malawi enacted law through parliament to guide matters of environmental management in general. However, there are gaps within the government machinery entrusted with the enforcement of this law. These gaps affect the enforcement of environmental

management law and other related issues within the hospitality sector. Despite that deficiency, there are efforts being carried out to address these identified shortfalls.

4.4.1 Availability of the Institutional and Legal Framework

Out of the five interviewees, four interviewees confirmed the availability of the Environmental Law and Policy Framework. The Department of Environmental Affairs is a government department in Malawi that was created to make sure that environmental management issues are fostered. Commenting on the existence of the Institutional and Legal Framework, Officer A (Interview, 2017) stated:

> *"According to Environmental Law, a unit (hotel) of a particular magnitude and size, before it is constructed it has to undergo an EIA. This is to check if the proposed development will not have a negative impact on the environment."*

Talking on the same issue, Officer B (Interview,2017) also mentioned:

> *"Within the Environmental Management Act, there is section 24 which calls for an Environmental Impact Assessment (EIA) of various development projects. Through that (EIA) we encourage the hospitality industry to abide by this Act."*

Two divergent and often conflicting discourses emerged from the other interviewees, whilst commenting on the institutional and legal framework. These views are suggesting that it is only at the central government level where they have a well documented national environmental management policy. Whilst at the local government level, they don't have a tailor-made policy to suit their locality. Officer C (Interview, 2017) said:

> *"We rely on the National Environmental Management Policy which has been developed by the Department of Environmental Affairs and was streamlined in the Local Government Policy to give us mandate on certain aspects."*

Emphasizing the existence of the Law and Policy, Officer D (Interview, 2017 said: *"We have policies but we may not say they are necessarily district-specific policies. The same policies operating at the national level are enforced at the district level."* These results confirm that Malawi has a national environmental policy framework on STD, but does not have a subsidiary environmental policy framework at local government level both in City and District Assemblies.

Overall the results indicate serious disparities in terms of the applicability of the existing legal framework across the country to promote STD to attain SED.

These divergent views were also noted within the different government departments at the central level regarding the applicability of the law. Respondent A, (Interview, 2017) was of the view that this existing law only applies to certain accommodation unit development projects and not every project depending on the size of the accommodation unit to be developed. Respondent B (Interview, 2017), was of the contrary view that the existing institutional and legal framework applies across all projects regardless of the size. These opposing views suggest that implementation and enforcement of this available machinery may be a problem because these are departments that are directly involved with policing the tourism industry in Malawi. If we now turn to enforcement of this existing institutional and legal framework respondents indicated that there are efforts being pursued to make sure that the available institutional and legal framework is adhered to albeit with challenges. A variety of perspectives were expressed. For example, Officers A (Interview, 2017) said: *"It is required that they (big hotel projects) have to undergo an environmental impact assessment (EIA) exercise."* Furthermore, this respondent stated:

> *"Under the private/public partnership law, we also have a working relationship whereby ourselves including the department of parks and protected areas we work together when developing a tourism product or facility like a game lodge. Before you (developer) build anything you are supposed to do a feasibility study and under that study, one of the components is the EIA."*

These views are contradicting the expectations of the Department of Environmental Affairs which has the overall mandate to ensure that environmental management issues are practiced in all economic development sectors in Malawi. Officer B (Interview, 2017) also said:

> *"Firstly, is as I said earlier, on all these facilities (hotels) they need to undergo an EIA and roughly an estimated figure of less than 30% of the existing facilities that we have inspected have undergone an EIA exercise." In addition, this interviewee also indicated: "We do inspections for most of the facilities (hotels) by – annually. So, we try as much as possible that once every six months we visit at least all the facilities."*

If we compare these revelations from Officers A and B to the earlier responses provided by Officers C and D, interviewees from the local government set up, there was an indication that the institutional and legal framework exists in Malawi albeit with challenges.

Further contradictory statements underscoring the existence of the institutional and legal framework on environmental sustainability were made by officials from the local government structures in Lilongwe. In the context of local government, these Officers contradicted themselves from their earlier statements (section 4.1, paragraph 2) by emphasizing the availability of the machinery at the local government level. Officer C (Interview, 2017) said:

> *"We have bylaws on environmental protection which the enforcement team assists in making sure that any activities that are happening contrary to these bylaws, offenders should be apprehended and penalties paid."*

Officer D (Interview, 2017) also said:

> *"At the moment we have stakeholders meetings trying to build awareness and capacity, among councilors and the technical staff in terms of how we can make sure that environmental management policies are better enforced on the ground through bylaws."*

These contradictory revelations may be suggesting that there is an information gap between the central level government departments and the local government machinery. As mentioned in the literature review, by Tambulasi (2010) and Zalengera, et al. (2014), together, these results provide insights into the gaps that exist within the departments that are supposed to enforce the available institutional and legal framework.

4.4.2 Existing Challenges

Despite the revealed efforts to promote environmental sustainability practices within the hospitality sector so that the envisaged sustainable development is attained, there are challenges that these efforts are encountering. Sustainability being a new phenomenon in Malawi there are challenges within the government system which frustrate the country's vision to attain economic sustainability through sustainable tourism. The country lacks appropriate policing tools to enforce the Environmental Management Act.

4.4.2.1 Lack of Appropriate Policing and Guiding Tools

A common view amongst interviewees was that the existing institutional and legal framework is not adequately fortified to promote STD in Malawi. Bemoaning the gaps that are in this machinery, Officer A, (Interview, 2017) said:

> *"We (department of tourism) are trying to regulate the industry in terms of what they should be doing and what they should not be doing. But I think us (department of tourism), need to do more because the regulations that we have at present do not penalize units (hotels) that are not following sustainable tourism practices. What is available in the Tourism and Hotels Act, in terms of regulations is to provide advice on issues of sustainable practice and no punitive measures."*

Information coming from the data suggests that in Malawi, the available environmental management law is yet to become effective so that STD could be promoted and achieve the desired SED of the country. The existing machinery has gaps to address to become effective. Officer B (Interview, 2017) said:

> *"We have some lapses in the EMA; let's say if the hotel is polluting or is not complying with some of the set laws, it will be difficult for us to suspend them (hotel)."*

Talking to the same challenges, Officer E (Interview, 2017) said:

> *"For issues to do with environmental management, we still have problems, because as of now Malawi Bureau of Standards is yet to be accredited to enforce compliance with available environmental management standard."*

These views were also resonated by Officer C, (Interview, 2017) who said:

> *"Some people that are knowledgeable of the law when we try to caution them for doing wrong things against the bylaws, they challenge us that we are not supposed to enforce a bylaw that has not been enacted upon by parliament. Currently, we just find ourselves in a confrontation with those that are constructing such facilities (hotels) when we enquire about how they will manage their waste and wastewaters from their premises. Sometimes, even when we enquire about how they will manage their surrounding in terms of greenery."*

In summary, these results indicate that the existing institutional and legal framework in Malawi is not effective. Also, these results may be revealing that the policing government departments are not working on the same wavelength to make sure this machinery becomes effective. In this regard, therefore, it could be concluded that the sustainability institutional and legal framework available in Malawi was hurriedly put together without involving other pertinent departments. The picture being painted from these results could be that government departments are operating in contrast to the ideal working pattern in Figure 10. Furthermore, it could also be argued that these results have shown that what is practically being followed on the ground in terms of sustainability governance is the opposite of what Patel, et al., (2007) and Hussein (2017) indicated in the literature review.

4.4.2.2 Inadequate capacity in human and infrastructure for monitoring and enforcing sustainable environmental management practices

There is inadequate capacity in Malawi in terms of monitoring and enforcement of the environmental sustainability practices within the accommodation units in Lilongwe. This was recurrently revealed during the interviews that there was an inadequate capacity to enforce the existing sustainability institutional and legal framework. For example, Officer A, (Interview, 2017) said:

> *"The department of tourism itself does not have adequate capacity. At the moment we have a few officers who have done training courses in sustainable tourism. So we need to develop capacity in our department so that we all talk the same language of sustainable tourism practices."*

This view was also affirmed by Officer D (Interview, 2017) who said: "Unlike other government departments and ministries which have their officer deployed at the District Councils to spearhead activities of those Departments and Ministries, the Department of Tourism doesn't have officers based at the District Council."

It was also revealed that Malawi lacks the proper infrastructure for testing environmental management related issues. Taking about this deficiency, Officer E (Interview, 2017) said:

> *"We hope that with the infrastructure (laboratory) that we are developing, which is one of the requirements, by end 2018 we definitely shall be accredited to enforce the environmental management standard. Using this infrastructure (laboratory)*

we are hoping that we should be able to certify companies, monitor their performance, and enforce environmental standards in all organization including the tourism industry."

Together these results provide important insights into the discrepancies in terms of appropriate human resource within the Department of Tourism. The assumption here is that the department of tourism has not yet embraced the decentralization policy as mentioned by Hussein (2017). Furthermore, it could be assumed from these results that those departments with representation at local government level do not have a knowledgeable human resource to promote STD. Also coming out from these results is that Malawi lacks laboratory infrastructure where tests could be carried out on samples from the accommodation sub-sector to assess their impact on the environment and design appropriate measures to the policy the industry and minimize its impacts on the environment.

4.4.2.3 Political interferences and lack of willingness to promote and enforce sustainable environmental management laws and regulations

The extensive discussions that took place with respondents from the public sector confirm that in Malawi there are political related challenges that affect STD. These revelations made by interviewees are in conformity with Krutwaysho and Bramwell (2010); Yasarata, et al. (2010) and Farmaki, et al. (2015) that political interference is the common challenge with STD policy implementation in most developing countries and Malawi in particular. A variety of perspectives were expressed indicating political interference in STD. For instance, Officer C (Interview, 2017) said:

"The problem was mainly political. You remember from 1999 to 2004 it was a second term for that (UDF) government in a democratic country. Now, the regulations or laws that were to reflect the democratic thinking that people wanted were not in favour by the ruling party. The government was afraid of those laws. When the draft laws were submitted to the Local Government Ministry for approval, the minister could not sign for them and pass them onto the Ministry of Justice to process and proceed with parliament enactment into laws. So we just feel it was a political play since these laws were being developed during a democratic dispensation and had some connotations of trying to take away some

power from those that had gotten the powers to reflect what people wanted on the ground."

The point being emphasized in the above quotation section is a complication that political interference brings to STD. The political machinery in Malawi creates a lot of challenges to the government departments that are mandated to promote STD. Commenting on these challenges Officer C (Interview, 2017) said: *"For a long time we haven't had the Councilors in place in the Councils. It is only now, 2 or 3 years that we have had councilors in place. So because of that, there has been a gap in terms of what the role of councilors should be."* Alluding to these City Assembly challenges, Officer A, (Interview, 2017) said: "*They (City Assemblies) have their own challenges, politics, economic issues etc. For them to be sophisticated like this (implement sustainable practices) they have a long way to go."* In conclusion, these sentiments are talking to the argument that politicians in developing countries play an important role in STD.

An overview of the given responses indicates that some respondents were of the view that at a local government level the available legal framework is interpreted differently. The results also indicated that the policy that exists at the Central Government Level is not implemented entirely at the local government level. There are specific sections that they are allowed to implement at this level. Surprisingly, another respondent was of the view that the policy implementation at local level follows what the top level policy stipulates entirely. This disparity also may suggest implementation and enforcement challenges exist at the local government level. This, therefore, suggests that though the institutional and legal framework of STD exists in Malawi there are policy interpretation inconsistencies both at central and local government level which is in tandem with the observation made by Zalengera, et al. (2014).

4.4.3 Perceptions from the Accommodation Sub - Sector in Lilongwe

The government of Malawi is very good at developing institutional and legal frameworks which gather dust on the shelves because of the lack of implementation. Most of the times the government of Malawi has unilaterally formed institutional and legal frameworks without input from other stakeholders, which affects the acceptability and success of this machinery. When the accommodation sub-sector in Lilongwe was engaged to provide their views of the environmental sustainability institutional and legal framework to promote STD, there was a general view amongst interviewees that this perceived environmental sustainability institutional and legal

framework does not exist. The six senior employees from the selected accommodation units responded to the existence and enforcement of the sustainability institutional and legal framework. In their accounts surrounding the machinery, they provided their perceptions of the current practices that the policing government institutions do when they inspect their properties. Officer F (Interview, 2017) said:

> *"There is no any organization that comes to force us comes up with environmental sustainability initiatives. I will tell you that from my observation there is not much that these regulatory bodies look at in terms of environmental sustainability. When they come they look at the upkeep of the property in terms of maintenance, look at staff health issues, and they look at compliance in terms of their guidelines. But their guidelines I know don't really cover environmental sustainability issues."*

The respondents doubted the availability and implementation of the environmental sustainability institutional and legal framework and how it is enforced, Officer J, (Interview, 2017) said: *"Malawi as a country, we are very good at putting policies together but implementations are the biggest challenge due to corruption."* Some interviewees agreed with the revelation made by officer F. Officer H (Interview, 2017) said:

> *"The Department of Tourism, Malawi Bureau of Standards, the Lilongwe City Assembly and other big customer organizations come to inspect our facility. The Department of Tourism checks the guest feedback and checks our rooms and other facilities to see if the service offered is of the standard they set. Malawi Bureau of Standards comes quarterly to check this facility. They mainly focus on health issues in the kitchen, food and beverage facilities, and the water area and also the way we dispose of our garbage, these are the areas of their focus. The City Assembly comes to check health issues. They check if we are complying with the City Assembly By-Laws."*

Talking to the same issue, Officer G (Interview, 2017) said: *"The Malawi Bureau of Standards comes to inspect food hygiene. They go into the kitchen and check our members of staff have medical certificates as food handlers. The City Assembly comes to check the validity of business licenses and to collect garbage though they come erratically. Malawi Revenue Authority also*

comes to check tax compliance." Officer I (Interview, 2017) also affirmed these revelations and said:

> *"The main organizations that come to inspect our hotel are the Department of Tourism and the Malawi Bureau of Standards. The Department comes to check if we are conforming to the tourism regulations which are similar to those of Bureau of Standards. The only difference is that the Bureau of Standards is there for the health of guests and staff whilst the Department of Tourism is basically there to make sure that we are keeping up the service standards that they have set"*

A discussion with another official from one of the accommodation unit revealed that the accommodation sub-sector in Lilongwe doubts the ability of these government organizations to enforce sustainable environmental management practices when they inspect their facilities. Officer K (Interview, 2017) said:

> *"I have worked with Malawi Bureau of Standards. They are the ones that walk in at any time when they check the standards. I worked with the Ministry of Tourism and the City Council. What I would have liked to see though, is some level of orientation of officials that come to check. Sometimes you see that they come to regulate things that they don't understand or they are not at the same level."*

Whilst the results from the public sector are indicating that there is an environmental sustainability institutional and legal framework, the accommodation sub-sector is of the contrary opinion. When participants from the accommodation sub-sector were asked to explain how the existing environmental sustainability institutional and legal frameworks are enforced, the majority commented contrary to expectations. Their views were a contrast to what was revealed by respondents from the Central Government and Local Government departments. These contradictions may be suggesting that the accommodation sub-sector is not aware of these institutional and legal frameworks. Furthermore, it may also indicate that there is no proper coordination at central government level amongst departments that are mandated to foster sustainable environmental management practices as such the accommodation sub-sector may be taking their chances and avoid adoption of these practices. In this regard, therefore, most accommodation units in Lilongwe could be developing without following sustainable environmental practices. These revelations are in line with what Musavengane (2018) observed

as the biggest challenge in sub – Saharan Africa. Furthermore, the indication here could be that the governments within sub – Saharan Africa are not very much interested in STD on the ground rather than the development of paper-based STD which is contrary to practices in developed countries (See Foster, 2008).

A comparison of the two sets of results suggests that the public sector formulated the environmental sustainability institutional and legal framework without consulting accommodation sub-sector, thus the sector is not aware of its existence. Furthermore, the two results are contradicting each other in the sense that the public sector indicated that there are attempts being made to enforce the existing machinery but the accommodation sub-sector feels there is not much that is being pursued as regards to this existing institutional and legal framework. In this regard, therefore, it could be suggested that there is an information gap between these camps regarding sustainable environmental management practices expected of the accommodation sub-sector. This unfortunate scenario is not in line with the approach that was adopted in developed countries where STD has been achieved (See Folke, et al. 2002; Shone, et al. 2016; Bets, et al. 2017).

Furthermore, a comparison of the revelations made by the Central Government Departments indicates there are disparities in terms of policy implementation. Some officers are of the view that certain accommodation units are exempted from following what the available institutional and legal framework demands of them. Whilst the other officials indicated that it is mandatory that every accommodation unit follow what is stipulated in the institutional and legal framework. In this regard, therefore, the conclusion could be drawn that accommodation units are being confused by these officers' dissenting interpretation of the environmental sustainability institutional and legal framework. The challenges faced could be emanating from differences in policy interpretation and implementation at a higher level of governance. This is also another misnomer to what happens in developed countries where STD has been achieved (See Environmental Audit Committee, 2017; Bisgaard, et al. 2012).

An overview of the revelations on the challenges during enforcement of the existing institutional and legal framework on environmentally sustainable practices may be suggesting a hasty formulation and implementation process of this machinery. Respondent A is of the view that lacks punitive measures within the existing institutional and legal framework makes

accommodation sub-sector ignore the requirements. Respondent B also bemoans lapses within the existing machinery makes compliance difficult such that as indicated by Respondent C industry players are able to challenge these laws. Furthermore as indicated by Respondent C the existing bylaws are still in draft form, as a result, those knowledgeable practitioners challenge their enforcement. This revealed standoff between authority and industry players is also noted by Tambulasi (2010) as one hindrance to meaningful sustainable development in Malawi. These results further reveal that local government lacks appropriate bylaws to enforce sustainable environmental practices. Respondent D indicated that there are no sustainability bylaws at the district level. Respondent E also indicated that some institutions which are mandated to police environmental sustainability practices are not yet accredited to do so. This demonstrated lack of coordination is another problem in the sub – Saharan setup because according to literature developed countries, where STD has been achieved, do their things differently (Check, Connell, et al, 2009; Bisgaard, et al. 2012; Alvarez, 2014).

Evidence of the capacity challenges to enforce environmental sustainability practices within the accommodation sub-sector is indicated by the results. Respondent A revealed that the Department of Tourism does not have an adequate human resource with sustainable practice knowledge to effectively enforce sustainability practices within the tourism industry. Similarly, Respondent B also revealed that even at a local government level some central level departments such as the Department of Tourism are not well represented to advance sustainable tourism agenda. Furthermore, Respondent C indicated that despite inadequate human capacity Malawi lacks appropriate laboratory facilities which could be used for testing samples which could help in finding solutions to some of the prevailing practices and help find solutions for sustainable practices which would promote sustainable development. These revelations are in tandem with the observations by O'Neil, et al., (2014). Furthermore, these revelations are indicating that there are steps that need to be followed before STD could be achieved in sub – Saharan African (See, Bisgaard, et al. 2012; Shone, et al. 2016; Bets, et al. 2017).

The results reveal that political interference exists within the sustainability policy implementation setup in Malawi. For Instance, Respondent A doubted if the City Assembly could succeed in policing sustainable practices within the tourism sector because of political interference. Respondent B also was of the view that between 1999 and 2004 their politics prevented the approval and enforcement of the sustainability by-laws within the city assembly.

Furthermore, Respondent D also mentioned that during the same period Councilors were abolished which incapacitated the local government set up to enact and enforce sustainability bylaws. However recently according to the same respondents, there has been the political will to allow local government to set up and enact their own sustainability bylaws. These revelations confirm the observations made by Yasarata, et al., (2010). Also, these revelations are confirming that practice in sub –Saharan Africa is different with that in developed countries where STD was achieved (See, Folke, et al. ; Bisgaard, et al.; Environmental Audit Committee, 2017).

Contrary to expectations, this study found a significant difference between what the public sector indicated were the practices on the existing institutional and legal framework and was obtained on the ground. What is surprising is that the accommodation sub-sector suggested that the institutional and legal framework does not exist. Respondent F claimed that none of the enforcing agents from the public sector enforce any sustainability regulations. Instead, the respondent indicated that the Occupational Health and Safety Law (OHSL) is one which is enforced. Similarly, respondent G also indicated that OHSL is enforced together with Business Licensing Issues and not sustainability practices. Respondent H and I also were of the same views but added Service Quality as another aspect that is enforced by the public sector organizations. One unanticipated finding was that Respondent J bemoaned the tendency in Malawi of formulating good policy but poor at implementation. This revelation is in tandem with what Tambulasi (2010), O'Neil, et al., (2014) and Zalengera, et al., (2014) observed in other studies on Malawi.

4.5 Conclusion

The present study was set out to determine the existence and efficacy of the tourism sustainability institutional and legal framework in Malawi. The study has shown that the law exists on paper but is not well publicized to the hotel sector. The evidence from this study suggests that the existing sustainability governance structure in Malawi is not effective. In general, therefore it seems in Malawi political interference and lack of coordination hampers sustainability policy implementation. An implication of this is the possibility that the public sector has challenges beyond the capacity level to implement tourism sustainability policies in Malawi. In this regard, therefore, the results of this research support the idea of awareness

campaigns and capacity building both in the public sector and hotel sector. This is because the results show that the efforts being pursued to attain sustainable development are disjointed and that responsible government departments have no proper guiding tools to make sure that the tourism industry is guided accordingly and ensure sustainability. Furthermore, despite having an Environmental Management Act, the responsible departments lack adequate human capacity to enforce this law. In addition, the results reveal policy incoherence which affects the enforcement of the regulations and the promotion of sustainability practices within the hospitality industry. This, in turn, affects attempts made through the enforcement process which is done haphazardly rendering this Environmental Management Law ineffective.

From the results and the conclusions made by other authors, it could be plausible to conclude that there shall still be lack of joint effort to enforce sustainability practices in the hospitality sector unless the department of tourism steps up efforts to bring together all government departments that are involved with regulating the sector to come up with a joint approach to enforcing sustainability practices. The conclusion drawing from the findings is that there is a limited effort being pursued from the public sector to promote sustainability practices in the hospitality sector. This, therefore, means that it remains a far-fetched dream for the country to achieve SED through the tourism industry. Furthermore, the results and the debate that ensued from the literature it could be concluded that the tourism industry is developing in a sustainable manner.

This paper, therefore, recommends that in order to attain sustainability within the tourism industry there is a need for meaningful collaboration amongst government departments so that an appropriate tool is jointly developed. Furthermore, the following additional recommendations are made:

- The Department of Tourism should facilitate a stakeholder meeting where STD issues could be tackled.
- The Department of Environmental Affairs in conjunction with the Department of Tourism should initiate sustainability awareness campaigns across the tourism industry in Malawi in order to attain STD.

- The Department of Tourism should facilitate capacity building for all accommodation facilities inspectors in order to empower them with the required knowledge so that they inspect the facilities accordingly.

As discussed in the literature, this paper suggests the joint effort is in tandem with what is happening in other developing countries that have made meaningful strides towards sustainability. This research, therefore, extends our knowledge of sustainable tourism governance challenges in developing countries.

Chapter 5:

Environmental Sustainability Innovations in the Accommodation sub-sector: views from Lilongwe, Malawi.

Abstract

This paper examines the existence and application of sustainable environmental practices within the accommodation sub-sector in Lilongwe. This qualitative study used in-depth interviews, focus group discussions and photographs as data sources to determine the status of environmental sustainability innovations. The data was collected between September and December 2017. The respondents were purposefully recruited from five government departments and nineteen accommodation units. The Rogers Diffusion of Innovation Theory was used in this study and the results revealed that the cost-benefit factor enticed some accommodation units to adopt certain sustainability practices. The results also indicated that some accommodation units are lagging behind in terms of adopting environmental sustainability innovations. The paper recommends awareness campaigns and strict policy enforcement to foster sustainability innovations in the accommodation sub-sector. Thus, the study contributes to a better understanding of the specific drivers on environment sustainability innovations within the accommodation sector in Sub – Saharan Africa.

Key Word: Accommodation Sub – Sector, Innovation Theory, Environmental Sustainability, and Sub – Saharan Africa.

5.1 Introduction

In the new global economy, the tourism sector has become a central focus for sustainable economic development (SED). Tourism development, if not well regulated, usually leads to capital accumulation which results in the global ecological crisis (Foster, 2008). The Marxist Theory of the nineteenth century, according to Foster, (2013), provides ecological insights to understanding the relationship between tourism development, the ecosystems, and ecological complexity. Various economic development disciplines have sought to include ecological awareness into their core paradigm in an effort to address challenges that environmentalism has raised in line with the now widely perceived global ecological crisis (Alvarez, 2014).

In the tourism discourse, a number of researchers from the developed countries in the North have discussed the efforts that the accommodation sub-sector has made in trying to address the perceived ecological crisis (Bohdanowicz, et al., 2011; Cvelbar & Dwyer, 2013; Aragon-Correa, et al., 2015). These researchers have demonstrated that the accommodation sub-sector in developed countries in the global North and South have innovated a number of ways of addressing this widely known global ecological crisis (Bruns-Smith, et al., 2015; Carasuk, et al., 2016; C. Warren & Coghlan, 2017).

Recent studies from the developing countries, especially the Sub – Saharan African region, have shown that some accommodation units have started adopting environmental sustainability innovations to try and address this ecological catastrophe (Van de Merwe & Wöcke, 2007; Rogerson & Sims, 2012; Booyens & Rodgerson, 2016). In Malawi, the tourism sector has become a focus area in an effort to attain sustainable economic development. The accommodation sub-sector within the tourism sector in Malawi has demonstrated a steady growth since the advent of the multi-party system of government in 1994 (Magombo, et al., 2017). At around the same time, there was a global justifiable growing concern with undesirable accelerated changes to the environment by various development activities including developments within the tourism sector, which increased environmental pollution in one way or the other (Hulse, 2007).

This study is the first of its nature to be done on the accommodation sub-sector in Malawi to examine environmental sustainability initiatives taking place in the accommodation sub-sector to

promote STD and SED. In this context, therefore, the Rogers Diffusion of Innovation Theory is applied to draw realistic conclusions on environmental sustainability innovations.

5.2 The Rodgers Diffusion of Innovation

This theory stipulates that there are many forms of information about an innovation that could influence the adoption process of innovation. Hang, et al. (2016) states that basically there are two sets of information that influences the adoption process, thus awareness information and cost-benefit information. However, Murray (2009) is of the view that there are five primary factors (Figure, 12) that would interest an organization to adopt an innovation and these are; the perceived relative advantage over previous practices; the ease of comprehension; compatibility with the adopter's values and needs; testability and result visibility. Dibra (2015) also confirm that these factors have been instrumental in the innovation adoption processes in most hotels.

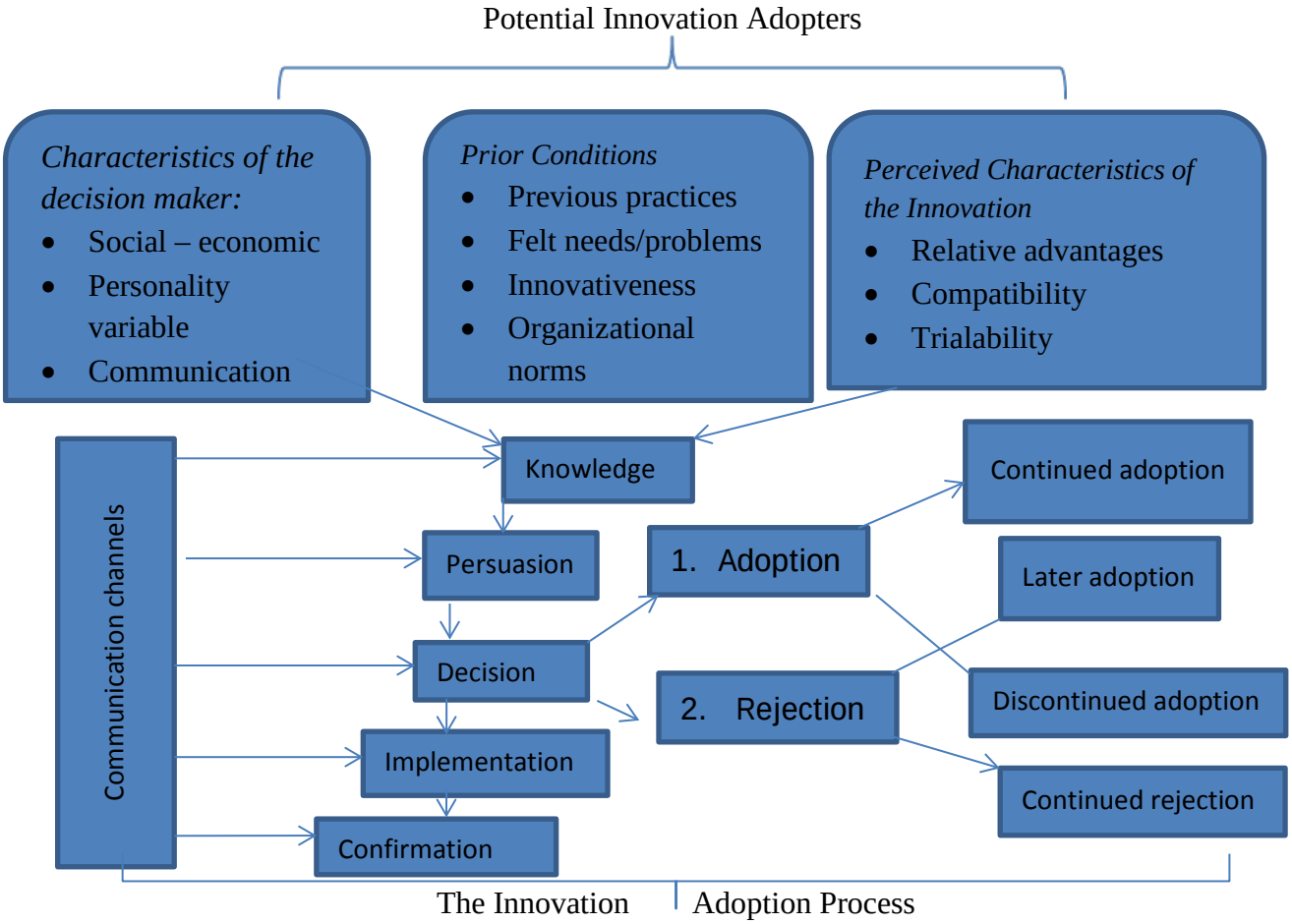


Figure 14: Elements of Rogers Initial Model of Innovation Diffusion Process
Source: Dibra (2015)

5.3 The Impact of the Accommodation Sector on the Environment

In recent years, there has been an increasing amount of literature on the intense utilization of natural resources whereby the hotels' environmental carbon footprint is typically larger than those of buildings of similar size but is under a different use (Aragon-Correa, et al., 2015; Mohapatra, 2016; C. Warren & Coghlan, 2017). In this regard, therefore, it has been argued that these units irrespective of the size have to find ways of reducing their carbon footprint (Berezan, et al., 2013; Claver-Cortés, et al., 2015; Cvelbar, et al., 2017).

According to Middleton (2013), the disruption to the natural environment by these units ultimately feeds back on the operations of the sector itself and the society's general wellbeing. In view of what has been said so far, one may suppose that the operations within the accommodation sub-sector ought to conform more closely with that of the ecosystem because otherwise, the sector may destroy itself (Carasuk, et al., 2016). Figure 2 compares the three cycles showing the relationship between modes of development and the environment. In cycle A, according to Middleton (2013) represents the global economy in historical times where wealth was accumulated largely by degrading the environment.

As can be seen from the diagram this wealth brought numerous advances to most parts of the world, which reduced stress on the society improved livelihoods prompting further inappropriate development to continue on cycle A. As noted by Alvarez (2014) when the economic developments in cycle A cross an environmental threshold and the developments enter cycle B, the degraded environment begins to feedback on society's livelihoods and stress increases. According to Houdre' (2011), the increased stress on livelihoods in cycle B promotes further inappropriate economic developments in a country particularly when the country in question has limited livelihood options. Therefore, any continued economic developments in cycle B would ultimately lead to society's livelihood collapse. Questions have been raised about rapid developments experienced within the tourism sector in Malawi after 1994 in line with the corresponding negative impact on the natural environment.

The only appropriate way to exit cycle B is to enter cycle C by adjusting the tourism sector development system from being parasitic to the environment to a more symbiotic one (Middleton, 2013). A recent study by Aragon-Correa, et al., (2015) suggests that cycle C is the idle long-term economic development strategy despite a danger that reduced stress would encourage a reversion to the old ways of cycles A and B. Recent evidence suggests that the accommodation units consume huge amounts of water and energy to sustain their operations compared to similar domestic operations that demand the same resources (Bohdanowicz, et al., 2011). Indicatively, Kasim (2007) summarized the estimated water consumption levels (Table11) within the accommodation units of different sizes which suggest that these facilities could negatively impact the environment they ignore water sustainability innovations.

Table 11: Estimated average monthly hotel water consumption

Number of Rooms	**Average Monthly Water Consumption**
50 - 200	50,000 – 100,000 Litres
200 300	120,000 – 180,000 Litres
300 - 400	180,000 – 250,000 Litres
Over 400	300,000 – 500,000 Litres

Source: Kasim (2007)

There is a consensus among researchers that these units also consume a lot of energy which creates pressure on various energy sources (Bohdanowicz, et al., 2001; Chan and Lam, 2010; Goldstein, et al., 2012). For example, Goldstein, et al., (2012) suggests that a luxury accommodation unit in tropical climatic locations consume around 280 Kwh/m2 per year whilst a similar facility operating in temperate climatic locations consumes about 200 Kwh/m2 per year. Recent evidence from Malawi suggests that there is an increase in energy demand than supply such that accommodation units have resorted to using fuelwood which has increased environmental degradation (Mwale, et al., 2013).

Available evidence suggests that volumes of waste that are produced by the accommodation units are one of the major causes of environmental related catastrophe affecting livelihoods (Middleton, 2013; Bruns-Smith, et al., 2015; Wanda, et al., 2017). For instance, Wanda, et al., (2017) discovered that personal care waste products discharged into the environment from accommodation units contains micropollutants which comprise of a wide range of natural and synthetic organic compounds which are contaminants of emerging concern. A recent study by

Nsiku and Kiratu (2009) suggested that in Malawi accommodation units generate waste materials that are carelessly released into the environment.

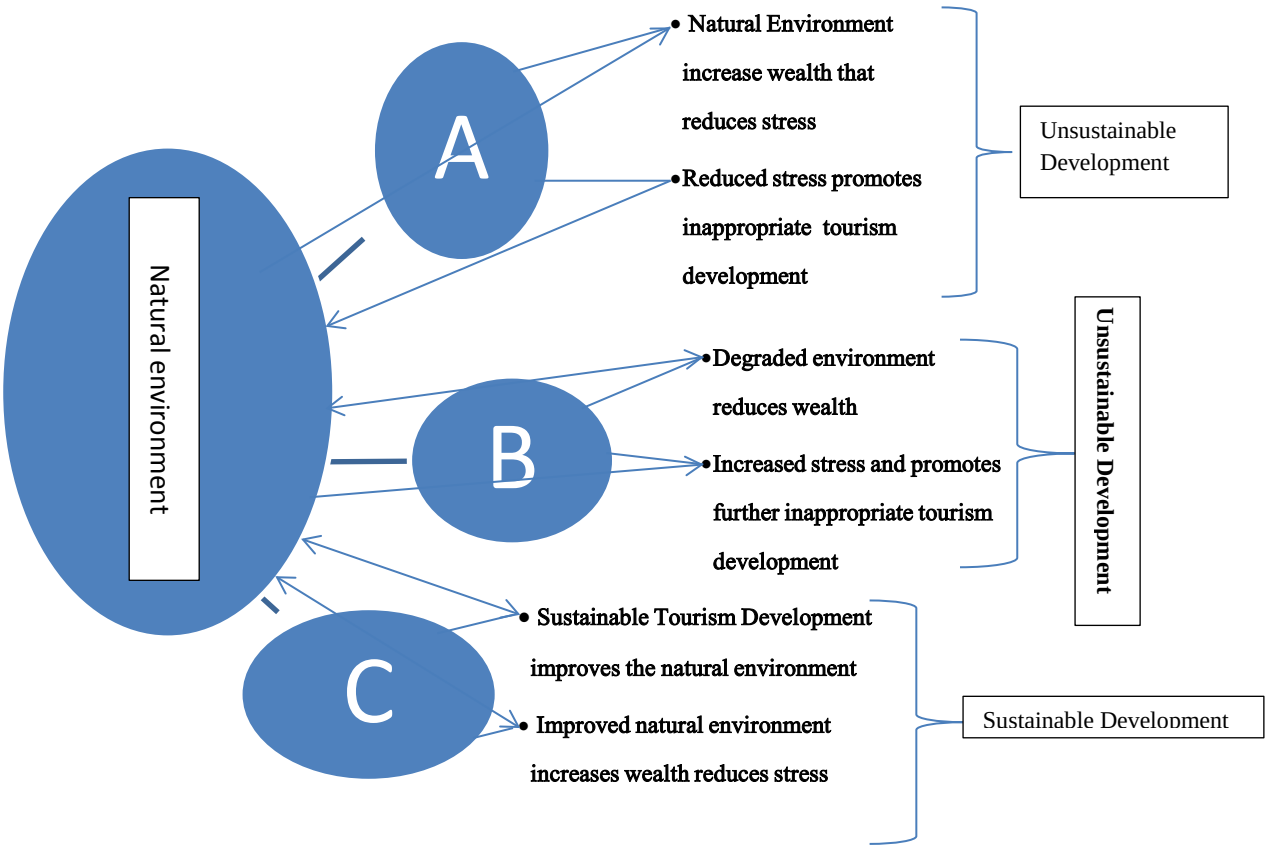


Figure 15: The three cycles showing the relationship between modes of development and the natural environment.

Source: Modified from Middleton (2013)

5.4 Innovations within the Accommodation Sector

There is a large volume of published studies describing the efforts that the accommodation units are making in promoting sustainable consumption and production practices focusing on energy, water, and other consumables (Legrand, et al., 2013; Kasim, et al., 2014; Fraj, et al., 2015). Most of the efforts being pursued within these units are through the adoption of innovations (Priego, et al., 2011). Some innovation in environmental sustainability involves local residents, short and long-term stay visitors and other directly related business operators like taxi drivers (Bramwell and Lane, 2012). Traditionally, in developed countries, ecosystem protection and resource conservation are a collective, voluntary responsibility among individuals, communities,

industries, state and national governments (Hulse, 2007). It is from this approach that innovations of various forms have been made to try to address environmental challenges facing mankind.

Over the past decade most research in sustainability innovations within the accommodation units has emphasized that a diversity of small operations from food and beverage operations to housekeeping, each of these accounts for a small share of environmental pollution in terms of energy and water consumption, food waste and other resources (Kasim, et al., 2014; Booyens & Rodgerson, 2016; Kuščer, et al., 2017). The accommodation sub – sector had very little interest in sustainable environmental practices up until the late 1980s when it emerged as an important development sector (Kasim 2007; Bruns-Smith, et al., 2015). Due to mounting pressure from other stakeholders, this sub-sector started innovations within six thematic areas (Bisgaard, et al., 2012; Aragon-Correa, et al., 2015; Borden, et al., 2017). These are;

5.4.1 Waste Disposal and Management

Waste disposal and management have become the most relevant component for sustainability innovativeness within the accommodation units in developed countries whereby innovative waste management systems have been developed (Rathore, et al., 2009; Tuppen, 2015; Mohapatra, 2016). Recent studies suggest that accommodation units have become innovative such that they reuse, recover, and recycle waste products to reduce their consumption on natural resources to minimize their impact on the environmental (Radwan, et al., 2012; Rodríguez-Antón, et al., 2012; Razumova, et al., 2015). Some accommodation units have innovated a hierarchy of waste treatment techniques (Table 12) in order to reduce the amount of waste they produce (Middleton, 2013). It has been observed that reusing a waste product makes environmental sense as opposed to discarding it into the environment because in that way the accommodation unit reduces resource consumption (Alvarez, 2014).

Table 12: Waste Management Hierarchy: Priorities for Treatment

Approach	**Priorities for Treatment**
Cleaner Technology	1. Prevention
Recovery	2. Reuse
	3. Recycling
	4. Other means of generating energy
Disposal	5. Incineration or Composting
	6. Landfill

Source: White et al. (1999) in Middleton, (2013: 402)

Several studies have revealed that reusing and recycling are the most innovative techniques that are commonly practiced by the accommodation unit in order to reduce the amount of waste they produce (Bohdanowicz, et al., 2011; Bruns-Smith, et al., 2015; Cvelbar, et al., 2017). Some units from developed countries recycle toiletries and encourage their guests to reuse towels to reduce the amount of waste and the initiative saves the hotel millions of dollars (Rathore, et al., 2009). Other accommodation units have built effluent treatment plants that are used to treat wastewater for recycling purposes (Bohdanowicz, et al., (2011). In Kenya also the Serena Hotel ensures that solid waste is separated such that dry waste paper and bottles are forwarded to recycling companies (Serena Hotels, 2015).

5.4.2 Saving Resources and Energy

Traditionally, it has been argued that most accommodation units have put thought into saving millions of dollars daily by adopting various sustainable practices including saving resources and energy (Chan & Lam, 2010; Bisgaard, et al., 2012; Booyens & Rodgerson, 2016; C. Warren & Coghlan, 2017). The major hotel groups from developed countries have innovated toolkits such as the Hotel Energy Solution launched in 2011 and the Nearly Zero Energy Hotel launched in 2013 (Legrand, et al., 2013). In the same vein, these properties have replaced incandescent bulbs with Compact Fluorescent Lamp's (CFL's) or Light-emitting Diode (LED) bulbs to reduce on their energy bills whilst improving on their energy consumption and environmental impact (Doherty, 2013).

5.4.3 Adopting Integrative Purchasing Policy

Recent evidence suggests that accommodation units have realized that there is a need for the collective and conscious effort of all key stakeholders to prioritize environmental issues in their daily undertakings (Avery, 2013; Berezan, et al., 2013; Aragon-Correa, et al., 2015; Font, et al., 2016). For instance, Fraj, et al., (2015) suggests accommodation units buy green products and use more organic and locally produced items. They buy products that have been produced through processes that mitigate environmental impacts (Houdre', 2011). These units prefer buying guest amenities that are made from natural products, or from recycled materials (Prud'homme and Raymond, 2013).

5.4.4 Sustainable Hotel Design

Debate continues about the best strategies for environmental sustainability practices within the accommodation sub-sector from the property design point of view. For example, the International Hotel and Restaurant Association (1995) reported that Neptune Hotel in Copenhagen, Denmark is an example of accommodation units that have adopted a design style which is based on the 18th-century Scandinavian design concepts that incorporate environmental consideration. Rathore, et al., (2009) also draws our attention to distinctive specifications of the Green Building Council and states that most modern accommodation units succeed in becoming sustainable by achieving the leadership in energy and environmental design certification (LEED).

5.4.5 Zero Paper Office Compliance

The past decade has seen the rapid development of technology adoption in many international hotels whereby the adopted technology reduces the impact on the environment through reduced natural resource consumption (Mohapatra, 2016). Recent evidence suggests that most chain hotels have adopted online booking systems and encourage their guest to book via such systems to reduce paper usage (Berezan, et al., 2013). Similarly, Goldstein, et al., (2012) noted that in these facilities they have also adopted computer network systems that allow employees to transact and communicate business matters with minimal paper usage.

5.4.6 Establishment of Effective Environmental Committees

Studies on sustainable environmental practices within the accommodation units show the importance of establishing environmental committees within the operational unit levels (Ayuso, 2007; Bohdanowicz, et al., 2011; Booyens & Rodgerson, 2016). These committees make sure that the implementation of an established environmental program is successful by ensuring that established clear targets are covered within an accommodation outlet (Pantelidis, et al., 2010; Pacana, et al., 2017).

Studies that have been carried out so far on the sustainable tourism in Malawi have not conclusively dealt with such developments and as such this study attempted to address this gap.

5.5 Methodological Considerations

This paper used Grounded Theory because it provided an effective systematic inductive way of constructing a theory on innovative environmental sustainability in the accommodation units of Lilongwe (Charmaz, 2006). The sample for this study comprised (Table 13 and Table 14) a total of Twenty Four (24) respondents.

Table 13: Profile of the Respondents from Government Departments

Pseudonym	Department	Duty Station	Experience
Officer A	Department of Tourism	Central Government	23 years
Officer B	Department of Environmental Affairs	Central Government	3 years
Officer C	Lilongwe City Council	Local Government	15 years
Officer D	Lilongwe District Council	Local Government	5 years
Officer E	Malawi Bureau of Standards	Parastatal	4 years

***Source*:** Authors

The first Five (5) respondents were purposefully selected from Five (5) key government departments that are directly responsible for regulating the operations within the tourism industry in general and accommodation units specifically (Bernard, 2006). Eligibility criteria required individuals to have been working in these government departments inspecting accommodation units in terms of policy, regulation, and practice. The study also purposefully recruited respondents who were in charge of various specific accommodation unit operations from Six (6) star graded accommodation units. Through Convenience Sampling, Eleven (11) other accommodation unit representatives were also recruited as Key Informants (Glaser, 1992). Two FGDs were conducted in one Four (4) and Two (2) Star Accommodation Units respectively.

Table 14: Profile of Respondents from Accommodation Units

Pseudonym	Unit	Star Grading	Location
Officer F	Sunbird Limited	Head Office	City Centre, Lilongwe
Officer G	Sogecoa Golden Peacock Hotel	4 Star	City Centre, Lilongwe
Officer H	Ufulu Gardens Hotel	3 Star	Area 43, Lilongwe
Officer I	Cross Roads Hotel	3 Star	Area 9, Lilongwe
Officer J	Kumbali Country Lodge	3 Star	Area 44, Lilongwe
Officer K	Mafumu Hotel	2 Star	Area 3, Lilongwe
Focus Group A	Sunbird Capital Hotel	4 Star	City Centre, Lilongwe
Focus Group B	Sunbird Lilongwe Hotel	2 Star	Area 3, Lilongwe
Officer L	Crown Hotel	Not graded	Area 9, Lilongwe
Officer M	BICC	Not graded	City Centre, Lilongwe
Officer N	Kiboko Hotel	Not graded	Old Town, Lilongwe
Officer O	Latitude 13 Hotel	Not graded	Area 43, Lilongwe
Officer P	Lingadzi Inn	Not graded	Area 15, Lilongwe

Officer Q	Mabuya Camp	Not graded	Area 3, Lilongwe
Officer R	Michiru Hotel	Not graded	Area 9, Lilongwe
Officer S	Mufatse Lodge	Not graded	Area 3, Lilongwe
Officer T	Nelly's Lodge	Not graded	Area 9, Lilongwe
Officer U	Platinum Suits Lodge	Not graded	Area 12, Lilongwe
Officer V	Sheila's Lodge	Not graded	Area 43, Lilongwe

Source: Government of Malawi (2017b)

Key Informant Interviews and FGDs, and field visits where photographs were taken to gather data for this study (Charmaz, 2006). This data was collected from September to December 2017. The interview guide comprised of open-ended questions and where clarity was sought, follow – up closed-ended questions were used in the course of the interview process (Cilliérs, et al., 2014). Permission was sought to use pictures and other information available on their websites deemed helpful to provide answers to the research objectives (Corbin & Strauss, 1990). Follow up telephone interviews were done to solicit extra views from the respondents on matters arising from the preliminary data analysis process (Charmaz, 2006).

After the interviews were transcribed, each transcript was assigned a code and each respondent was given a pseudonym to conceal their identity (Charmaz, 1996). Thereafter, each line of every transcript was assigned a line number to facilitate a line by line analysis (Bernard, 2006). Through this process, smaller categories of meaning from the data were prepared (Charmaz, 2006). These smaller categories were further scrutinized to identify similarities and differences and later those smaller categories that represented a general similar meaning were combined to form subcategories which were representing the general interpretation of data per each transcript (Bernard, 2006). These subcategories were also scrutinized, compared with other subcategories from other transcripts and those subcategories with similar interpretation were combined to form major categories and final themes emanating from data from different interview transcripts (Strauss & Corbin, 1998; Corbin & Strauss, 1990).

The pictures that were taken, both from field visits and website, were also critically analysed in line with information being generated from the interview transcripts to confirm the information being provided by respondents (Bernard, 2006). These pictures helped to validate the answers provided by respondents (Corbin and Strauss, 1990; Strauss and Corbin, 1998, and Charmaz, 2006).

5.6 Results and Discussion

Sustainable environmental innovations within the accommodation sector revolve around six thematic areas of waste disposal and management; saving resources and energy; adopting integrative purchasing policy; sustainable hotel design; zero paper office compliance, and the establishment of effective environmental committees.

The first set of results presents the perceptions of the regulating and policing authorities of the accommodation units in Lilongwe. Three respondents from the public sector provided their opinion whilst the other two indicated they had dealt with these units before. Two broad themes emerged from the data analysis (Non-Compliance and Conservation Efforts) from the public sector (from the Department of Tourism, Department of Environmental Affairs and City Assembly). Talking about the issues of non – compliance Officer A, (Interview, 2017) said:

> *"There is a tendency in Malawi for some people to prepare that land by just cutting down all the trees, which is a very bad practice because tourism strives on nature. So you find out that there are operators (hotels) who have not followed this rule. They just cut down everything and expect the place to be attractive. You will find out that there is a group that follows that and there is another group that doesn't follow these (construction Regulation) practices."*

Officer B (Interview, 2017) said: *"In fact, I would say the hotel sector is one area that we (department of environmental affairs) have a big challenge with in terms of compliance. Those hotel units that comply are mostly found in the cities or major areas which attract major interest"*. Officer C (Interview, 2017) also said:

> *"For example, we have got this hotel close to us here (Sunbird Capital Hotel) the sewer line that comes from there, has been giving problems down across the road to the state house. There is always bad smells there because of some problems with their sewer line. Most of these hotels here don't care about their impact on the environment."*

A possible explanation for these results is that there are inadequate policing tools and limited knowledge within the accommodation sub-sector regarding the available regulation.

Furthermore, one respondent indicated that some accommodation units make conservation efforts. Officer A, (Interview, 2017) said:

> *"For instance at Sunbird Hotels or Umodzi Park, I have seen sustainable utilization of local materials as well as at Club Makokola and others. But there are plenty of these other places (smaller hotels) that practice sustainable tourism. So you will see that in Malawi, we have a mixed bag. We have units (hotels) that are practicing sustainable tourism while others are not. The big operators in the country, I have seen efforts of energy conservation and water conservation. They advise users in the hotels to conserve water through message tags "conserve water, water is life, make sure that when you are brushing your teeth close the tap, use a shower instead of a bath tab to conserve water."*

This result suggests there are some units that are innovative, thus, these observations are in line with the observations in earlier studies by Rathore, et al., 2009; Tuppen, 2015; Mohapatra, 2016 and Coles, et al., 2017).

The second set of analysis examined the practices within the selected accommodation units in Lilongwe. In their account of events surrounding environmental sustainability innovation, two groups emerged from these accommodation units. There are some accommodation units that are making progress on sustainability innovations and there are others that are not making any initiatives at all. For instance, Sunbird Hotels are introducing water saving technology in all their guest rooms (See Figures 21 & 22). Other accommodation units diversified in terms of water sources whereby bores holes are used to supplement water that is obtained from the Water Boards (See Figures, 23; 24; 27; 28, & 29). Some accommodation units adopted energy conservation methods whilst others decided to adopt waste Management, sustainable hotel designs and embarking on reforestation activities.

The following theories emerged from the data analysis from the accommodation sub-sector; Water Conservation, Energy Conservation, Waste Management, Sustainable Hotel Designs, and Reforestation. A variety of perspectives was expressed amongst the respondents regarding innovations. Out of the nineteen sampled accommodation units, fourteen units indicated they were engaged in the sustainability of some sort.

5.6.1 Water Conservation Initiatives are pursued

The most interesting finding was that out of the fourteen accommodation units, nine indicated that they were engaged in water conservation activities. For instance, Officer F (Interview, 2017) said:

> *"In our hotels, we have what we call towel talk where we encourage customers to reuse towels at will just to help us preserve the usage of water. We are undergoing refurbishment at our Sunbird Lilongwe Hotel, where we are changing ordinary water taps to water saving gadgets so that we help conserve water."*

Focus Group B (FGD, 2017) also mentioned: *"We have water – talk cards where we advise our long staying guests to decide when their bedroom linen should be changed."* These results suggest these accommodation units adapted the towel talk innovation to preserve water. The indication here is that the aim of adapting this innovation was cost saving. Similarly, the revelation that the accommodation replaced ordinary water taps with new water saving taps suggests that cost saving was a major factor in adopting this new technology. Talking on the same issue of water conservation, Officer G (Interview, 2017) said: *"We have boreholes that provide us with water in times of water shortage."* Similarly, Officer J (Interview, 2017) said: *"I have my own water treatment plant in case the water board fails to supply I use my own treated water to run my operations."* Focus Group A (FGD, 2017) also mentioned: *"We have a borehole which we use to water the plants other than relying on water from the Water Board."* Focus Group B (FDG, 2017) again mentioned:

> *"We have a borehole that we use to water our gardens and we also have a stream that runs behind this hotel which we have blocked to divert the water to water our gardens as opposed to using the water from the Water Board."*

Officer O (Interview, 2017) also said: *"We have a borehole that supplies water for the garden and refilling our swimming pool."* And lastly, Officer T (Interview, 2017) said:

> *"I use borehole water to water my garden. Water from the Water Board is very expensive so I decided to drill my borehole to water my gardens. Also, water from the Lilongwe Water Board is not enough. The Water Board has been complaining*

that the water they provide is not enough for Lilongwe City. If these Water Board people find you watering your garden using their water they punish you."

The results here are indicating that a borehole was another preferred innovation. These results may be suggesting two reasons for adopting this innovation. One is the intermittent water supply in Lilongwe and Two, as a cost-cutting initiative. This, therefore, suggests that there is a strong relationship between cost-cutting and adoption of borehole innovations within the accommodation sector in Lilongwe. Another important finding indicated there was another way of making sure that the water is conserved. Focus Group A (FGD, 2017) revealed:

> *"We have also sensitized staff as well to ensure that any leakage or any taps which are spotted oozing water have to be reported immediately to maintenance to control wastage. As a company, we have issued an instruction to car washers to use buckets instead of horse pipes because these horse pipes can make us consume more water."*

Talking to the same innovation, Officer N (Interview, 2017) said: *"We train our staff that when they are doing the washing they should use the basin instead of running water and that saves us a lot on water bills."* Officer P (Interview, 2017) also said:

> *"We have started zero gardening principles. We look at taking care of the gardens without misusing resources like water. I advise our gardeners to water the gardens during the morning and evening hours where most of the water will not be lost to evaporation."*

These results are further indicating that cost saving is the most prevalent factor that drives innovativeness within the accommodation units in Lilongwe.

5.6.2 Energy Conservation Initiatives are adopted

Nine accommodation units indicated that they were practicing energy conservation. Officer F (Interview, 2017) said: *"We have automatic switches in hotels like Sunbird Capital and Mount Soche we have these switches that use a card slot."* Officer K (Interview, 2017) also said: *"The cost-cutting measures that are in place, for instance, we now have energy saver bulbs in rooms because of these bulbs last longer and they consume less energy*." Focus Group A (FGD, 2017)

mentioned: *"We have made sure that this hotel uses energy saver bulbs in all areas that require eliminating."* Focus Group B (FDG, 2017) also mentioned:

> *"We have key cards that help to switch on and off electricity supply in our guest rooms. Through this key card when the guest is in the room the card is inserted in its socket to power the room and when the guest leaves the room carries this key card and automatically the electricity is cut off."*

Officer N (Interview, 2017) also said*:*

> *"We changed our lighting system four months ago to LED lights 2 or 5 watts. We are saving on each meter a 100 thousand kwacha a month per meter. And our bills are still dropping."*

These results are suggesting that these accommodation units implemented energy-saving technology to reduce their costs. Another dimension of energy conservation was also revealed by the data. Officer J (Interview, 2017) indicated: *"I had solar panels on top of the houses and the water pump but they stole the solar panel and now I have gone back to using ESCOM power."* Officer Q (Interview, 2017) also said: *"We have solar water heaters; they actually back up our electric water heaters because of the bigger numbers of people that stay here."* Officer T (Interview, 2017) indicated: *"I have decided to start using solar power in my rooms because of the frequent power interruptions."* These results are indicating that accommodation units in Lilongwe have started adopting new technology that provides an alternative source of energy because the only energy provider in Malawi, ESCOM does not have enough capacity to supply energy. Whilst talking to the same point, respondents revealed another innovation that they adopted in order to conserve energy. Focus Group A (FGD, 2017) mentioned:

> *"There is an instruction that whenever we are going out of the offices we have to switch off all lights and the equipment. "In the kitchen, we also make sure that our equipment has to work controlling nobs. When we discover that some nobs are not working, we report to maintenance to get them fixed so that we are able to control the energy that is either gas or electricity."*

Focus Group B (FDG, 2017) also mentioned: *"We also encourage our kitchen staff and laundry staff to switch off the equipment is they are not in use to preserve energy in this hotel."* Similarly, Officer N (Interview, 2017) said*:*

> *"We have an on the running program with our water heating system. We switch off our geysers from 9:00 am to 4:00 pm. We do this so that we don't spend energy on water heating when our guests are not in the room."*

Officer V (Interview, 2017) said:

> *"We have notes placed in all our rooms advising our guests on the usage of these air conditioners. Our members of staff go and switch them off and later on we inform our guests when they come back that we switched the air conditioners off because we want to conserve power."*

These results suggest that in an effort to reduce energy costs, these accommodation units' innovated ways of engaging their members of staff in the conservation efforts and reduce their operating costs.

5.6.3 Waste Management Innovations

Another important finding from this study was that the accommodation units recycle and make compost. Officer G (Interview, 2017) said:

> *"The refuse that we separate from the other, are plastic bottles and this initiative is done by individual employees because they make some money from these empty plastic bottles."*

Commenting on waste management practices Officer N (Interview, 2017) said: *"We separate our trash here that is the most important thing I would point out."* Officer T (Interview, 2017) said: *"I also bury some waste to make manure there."* Talking to the same issue, Officer O (Interview, 2017) also said:

> *"We recycle plastic bottle and glass bottles. The materials that we have used at our reception area, those are used dumped spare parts from old cars. We go*

around looking for such materials negotiate with the owners, buy the scrap materials and bring them here. They become valuable again in this hotel. The vegetable waste and other kitchen food waste we make them into compost manure that we are using in our gardens."

Similarly, Officer Q (Interview, 2017) also said:

"We encourage our staff that if they see something that we want to throw away and they would like to use it at home to come and meet me to allow them to get the items and recycle. This wood and the thatch that is used for construction when it is finished it biodegrades and we can use it as mash on the garden something like that. We compost a lot of the garden waste."

The possible explanation for these findings is that members of staff within some of these accommodation units found waste as an opportunity to make money especially plastic bottles. The indication here is that this innovation is a temporary arrangement and cannot be accredited as an initiative by the unit. These results also suggest that some accommodation units recycle materials that are sourced from their surrounding vicinity, thus they create a source of income for the local community whilst implicitly removing trash from the environment. Some units use manure in their gardens and reduce the use of chemical fertilizers.

5.6.4 Sustainable Hotel Design and Reforestation initiatives

Out of the nineteen accommodation units, only two units indicated that they adopted this innovation. Officer J (Interview, 2017) said:

"You see even this building everything here is made from materials made in Malawi that is what tourists want to see. Everything in my lodge is local and that is what tourists love to see."

Officer Q (Interview, 2017) also said:

"Most of our structures are made of wood and are thatched with glass and there is a lot of space and gardens. This is what people are looking for because they are looking for something that is different from what they experience in Europe."

Talking about reforestation innovative initiatives four accommodation units mentioned that they engage in reforestation activities in Lilongwe. Focus Group B (FDG, 2017) mentioned:

> *"We donate seedlings to the City Assembly and we jointly go to Kauma where there is Sewage Plant System to plant trees. This is an annual event so that these trees should help in air purification."*

Officer M (Interview, 2017) said: *"We go to the Forestry Department, we tell them if you look at the new tree planting season we will give you this number of trees that you can use in planting back."* Officer O (Interview, 2017) also said: *"We believe in planting trees, as you can see that this hotel is surrounded by trees. We make sure that we plant trees and that this place is green."* Officer L (Interview, 2017) said:

> *"Over the past three years, we have contributed to the planting of trees to make sure that the green environment is promoted. We have a very good link with the local community at Mbwatalika Village in Traditional Authority Maliri where we conduct this exercise. We chose Mbwatalika area because the land is bear and I have a farm there so when I looked at the impact that these trees have on the environment and rainfall pattern."*

These results suggest that these units adopted the sustainable design and tree planting initiatives to address the needs of their target markets this is in line with Bruns-Smith, et al., (2015). These results also suggest that these units have knowledge of the tenets of sustainable environmental practices.

Turning now to evidence from the field visits and pictures from the websites Figure 16, 17,18 and 19. These results suggest that some accommodation units practice what the respondents revealed. However, the result in Figure 19 is contradicting what some of the respondents said. The bare ground of Kauma Sewage Plant area could be indicating that the donated trees are not planted there.



Figure 16: Kumbali Country Lodge built with locally sourced materials.
***Source*:** https://www.tripadvisor.com. It was accessed on 14th August 2018.



Figure 17: Mabuya Camp Lodge built with recyclable materials.
Source: https://www.mabuyacamp.com. It was accessed on 14th August 2018.

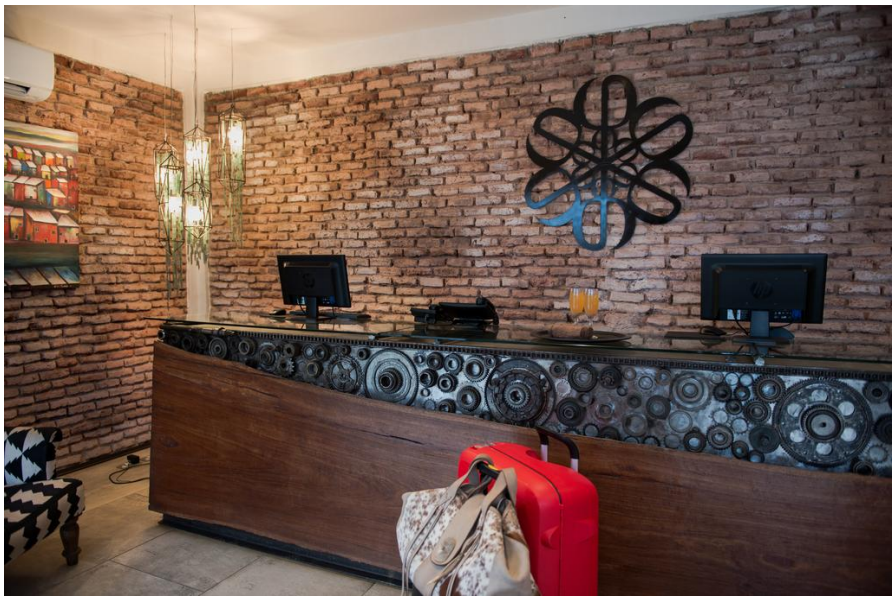


Figure 18: Latitude 13 Hotel Reception Area made from Recycled Scrap Motor Vehicle Parts.
***Source*:** https://www.tripadvisor.com. It was accessed on 14th August 2018.



Figure 19: The Kauma Sewage Site in Lilongwe
***Source*:** Authors.

5.7 Conclusion

This study set out with the aim of assessing sustainability innovativeness within the accommodation units in Lilongwe. Furthermore, this study set out to determine the environmental sustainability innovativeness of the accommodation units in Lilongwe. The results suggest that some accommodation units in Lilongwe conserve water and energy, recycle waste, make compost manure as opposed to using chemical fertilizers in their gardens and design their buildings in a sustainable manner. The results have shown that the accommodation units in Lilongwe are a mixed bag in the sense that some units are making attempts to adopt sustainability innovations whilst others are not. It was also shown that some regulators are not well conversant with the current practices within the accommodation units.

Taken together, these findings suggest that the accommodation units are allowed to practice as it pleases them such that an innovation that is seen to be cost effective becomes the most appealing to them. These units tend to become innovative in the way they use resources to save costs. The results also have demonstrated that regulators luck capacity for them to enforce sustainability practices within the accommodation sector in Lilongwe, Malawi. From the results, it could also be concluded that some accommodation facilities realise that Lilongwe has fresh water supply problems and as such, they diversified to a borehole water source to supplement water supply within their facilities. It is also important to note that the results are indicating that aware of the fact that the natural environment has been depleted in Lilongwe and as such, they have embarked on a reforestation exercise to help improve the situation. The other observation is made from the results is that there is laxity from the regulatory point of view such that some accommodation units did not see any significance in adopting sustainability initiatives.

The conclusion here is that there is a strong relationship between conservation practices in accommodation units in Lilongwe and cost saving. In this regard, therefore, this study extends our knowledge on the initiatives being made in accommodation units in Lilongwe and sub – Saharan Africa at large.

Chapter 6:

General Conclusion and Recommendations

6.1. Introduction

Sustainable tourism development is a challenge that is facing many developing nations globally. In sub – Saharan African countries also sustainable development poses a challenge because of a number of factors ranging from governance structures to awareness issues. Despite the development on paper of flowery sustainable tourism development policies the tourism sector still demonstrates gaps which need to be addressed before we can start talking about sustainable development. This study centrally argues that despite the numerous investments that Malawian accommodation sector has undergone, especially in the post-1994 period, a majority of them are not able to embrace sustainable environmental innovations in order to promote sustainable tourism development in Malawi. However, previous scholars have focused on the socioeconomic aspects of sustainable tourism development from the 1970s and 1990s when tourism sector was earmarked as another viable sector for economic development of the country.

This comprehensive study plays a complementary and supplementary role by focusing on the sustainable consumption and production practices within the accommodation sector from the 1990s onwards where academic research in Malawi is still in its infancy. The study employed the Rogers Diffusion of Innovation Theory through a critical analysis of secondary and archival sources and in-depth key informant interviews. In this regard, through a Grounded Theory methodological approach interviews involving respondents from the public sector and the private sector (accommodation units) in Lilongwe, the Capital City of Malawi, the study unveils the dynamics (nature, dimensions, and patterns) of environmental sustainability innovation within the accommodation units in Lilongwe.

The study shows that the introduction of the multiparty system of government in Malawi brought abought a number of policy changes from the 1994 and to date, which have induced development in the tourism industry especially the accommodation sector to inform of small-scale and medium enterprises which have accelerated ecological catastrophes currently being experienced in Malawi. The study argues that the increase in a number of accommodation units was not only

as a result of the new policy direction from the 1970s, but also the changes in the political and socio-economic environments of Malawi, and the entire SADC region. The study also argues that despite government enactment of the environmental sustainability law the tourism industry at large does not abide by this legal framework. During this period, most of these accommodation units are engaged in the unsustainable consumption of natural resources and produce environmental pollutants which are not well managed. These accommodation units also lack environmental sustainability institutional legal frameworks to foster sustainable consumption and production practices.

The study highlights challenges that the public sector and accommodation units faced in Malawi. These challenges include a lack of political will, lack of appropriate policing tools, selective policy enforcement practices, and lack of universal investment incentives. The study also observed that some of the accommodation units devised environmental sustainability innovation to reduce their operating costs and support the local community socioeconomically. In addition, some accommodation units resorted to the use of compost manure and broken glass bottles on their premises. Through these measures, these accommodation units recycle their solid waste instead of dumping them into the environment.

The study has used the Roger Diffusion of Innovation perspective, to show that the accommodation units in Lilongwe fall within the Laggards category. For instance, in the face of the ecological challenges in Malawi, they continue to rely on and use the limited natural resource and grow their businesses. Through this, they have managed to maximize their savings, expand their business geographical horizon to other cities in Malawi (e.g. Cross Roads Hotels now opening another unit in Blantyre). The study also attempted to assess the impact of the available environmental institutional and legal framework in promoting sustainable consumption and production practices in the accommodation sector. There is inefficient flow of the provisions of this institutional and legal framework between the two key government departments (Department of Tourism and Department of Environmental Affairs) as a result of this inefficiency accommodation units are left wondering which one of these departments are demanding the rightful action from them as such there is a slow adoption of sustainable environmental innovations within the sector.

6.2 Key Findings

This study is situated broadly on 'environmental sustainability perspective', which when applied to the tourism industry and the accommodation sub-sector, in particular, suggests the accommodation units are able to improve their natural resource consumption habits and reduce their harmful production processes and become sustainable. These practices help to promote the sustainable economic development of the country they are located. This study has shown that in spite of the enacted Environmental Management Act and the formulation of the MS - ISO 14001:2015 these pieces of legislation and regulation are not successfully implemented to induce environmental sustainability innovations within the accommodation sub-sector. The study has also revealed that the central government departments are not collaborating very well in making sure that the available piece of legislation is enforced and because of this disjointed working relationship amongst these departments the accommodation units are not aware of this pertinent regulatory tool and as such they operate as it pleases them which eventually fosters unsustainable consumption and production practices within the accommodation units.

The study has further revealed that there are some accommodation units within Lilongwe that have adopted some sustainability innovations to reduce their operating costs. These units adopted innovations in water conservation, energy conservation, and waste management voluntarily without following any government directive. The other reason that these innovations were adopted in the few accommodation units is that Lilongwe has huge water shortage problems because the Lilongwe Water Board doesn't have adequate capacity to meet the ever-growing demand. Lilongwe also experiences erratic power supply and as such the few accommodation units that innovated energy conservation ways and adopted other energy sources such as solar energy did this in order to avoid inconveniencing their clients. These accommodation units also innovated ways of managing waste that they produce. Some accommodation units recycle glass material to make decorations, they use scrap materials that they source around Lilongwe to construct their structures and others make compost to fertilize their gardens instead of using chemical fertilizers.

In order to achieve these results, **Chapter 1** highlighted the key theory that was used in this study, 'Rogers Diffusion of Innovation', and the qualitative methodological approach of

Grounded Theory which facilitated a rigorous and in-depth interrogation of the interviewees to collect data for this study and analysis of the same to generate theory. The study also relied on website information and field visits where pictures were taken and analyzed accordingly. This Chapter also discusses the area of study, Lilongwe and how respondents to this investigation were recruited. This Chapter also provides a synopsis of the whole thesis.

Chapter 2, discussed that the hospitality industry in developed countries embraced sustainability ideologies since the early 1990s through various innovations and has since contributed meaningfully to the sustainable development of these countries. Furthermore, in this Chapter, an assessment of the adoption and practice of sustainable environmental initiatives in the accommodation sector of the Malawian hospitality industry is conducted. Through a qualitative meta-analysis approach the Chapter examines sustainability practices in the hospitality sector and uses the Rogers Diffusion of Innovation Model to conclude that comparatively, the accommodation sub-sector in Malawi falls under the Laggards cadre within the model in terms of environmental sustainability innovations in comparison to other Southern African countries. The Chapter further classifies accommodation units in the Namib and parts of South Africa under Late Majority within the same model. This Chapter further concludes that the accommodation sub-sector in Malawi is developing unsustainably.

Chapter 3 looked at various common methodologies that have been used to study environmental sustainability issues in the accommodation units in developed countries and in some developing countries. In this chapter the discussed findings emanated from a qualitative Meta-analysis of the results of those publications and proposes a seven stage full version Grounded Theory approach as the idle methodological approach to understand environmental sustainability issues in the developing countries especially in Sub – Saharan Africa because there has been demonstrable policy lapses and huge knowledge gaps on these issues.

Chapter 4 examined the combined impacts of an effective natural resource management system and policy formulation as well as the enforcement of legislation in facilitating the development of a sustainable tourism sector in Malawi. It is argued in the Chapter that institutions shape behavior and that the implementation of different pieces of legislation re-enforces and augments behavior patterns. Thus, drawing from environmental sustainability initiatives currently being embarked on within the accommodation sub-sector in Malawi, this Chapter identifies avenues

through which the country can harness and develop strategies and mechanisms to foster and spearhead sustainable tourism vis-à-vis economic growth and national development. Grounded Theory is used both as a methodological and analytical approach to effectively contextualize how to re-imagine this important sub-sector in the Malawian economy.

Chapter 5 examined the existence and application of the sustainable environmental practices within the few selected units of accommodation sub-sector in Lilongwe. This Chapter explains how a qualitative study approach was conducted to draw conclusions on environmental sustainability innovations within the accommodation sub-sector in Lilongwe, Malawi. This Chapter further explains how respondents were recruited from five government departments and nineteen accommodation units between September and December 2017. It also explains how the Rogers Diffusion of Innovation Theory was used to conclude that the accommodation sub-sector in Lilongwe is a mixed bag. This is because there are some accommodation units in Lilongwe that have adopted sustainability practices to reduce their operating costs and also that there are some accommodations units which are lagging behind in terms of adopting environmental sustainability innovations.

6.3 Recommendations

In view of the above discussed developments in the accommodation sub-sector in Lilongwe, Malawi, and conclusions drawing from the same, it is recommended that there is need to review the available environmental sustainability institutional and legal framework in the country and development an appropriate institutional and legal framework through systems thinking through which sustainable consumption and production practices within the accommodation sub-sector can be pursued in order to attain sustainable tourism development and eventually sustainable economic development in Malawi. Key to the argument of this study is the urgent need for the Malawi government to embark on institutional transformation in ways that will facilitate the decentralization of executive power and increase the participation of lower levels of government structures and local communities in decision-making processes. In the absence of such a system, tourism will continue to yield unsustainable returns with potential for increased conflicts between different stakeholders including government. In this regard, therefore, it is further being recommended that in order to understand sustainability issues across the country and Sub –

Saharan Africa the ideal methodological approach is a seven-stage full version of the Grounded Theory. Finally, it is recommended that the following are the proposed areas for further studies:

- This study has focussed on sustainable consumption and production practices within the accommodation sub-sector in Lilongwe, thus further studies could be done on the same in other tourism prime areas in Malawi such as the Lake Shore districts of Mangochi, Salima, Nkhotakota, Nkhata Bay, Rumphi, and Karonga. Further studies of a similar nature could be conducted in various wildlife protected areas which attract tourists such as game reserves and national parks with tourist accommodation facilities.
- Since the achievement of Sustainable Development Goals (SDGs) depends on a partnership between various stakeholders (Haywood, et al., 2018). Longitudinal research on this theme could, therefore, be conducted with a view to establishing the awareness of environmental sustainability in the tourism industry in Malawi since 1994.
- Although Malawi's economy is agro-based, there have been attempts made to make the tourism sector another important arm of sustainable economic development. Therefore, there is a need for research to establish how environmental sustainability studies are addressed in various tourism related training programmes in all schools that train manpower for this sector in the country in order to assess if the locally trained manpower is equipped with the relevant knowledge to promote sustainable consumption and production practices across the sector.
- After 1994 general elections Malawi created favourable investment conditions that such access to bank loans for business establishment and development in the tourism sector improved (Government of Malawi, 2012a). A number of financial incentives were introduced to promote tourism sector development in the country (Magombo & Rogers, 2012). In this regard, therefore, research to establish if these incentives come with environmental sustainability conditions is pertinent for the country to promote sustainable consumption and production practices in all new tourism-related projects.

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8. Appendices

8.1 Appendix A: Sustainability initiatives at Sunbird Capital Hotel

*8.1.1 **Energy Serving Technology (Electronic Key Card System)***

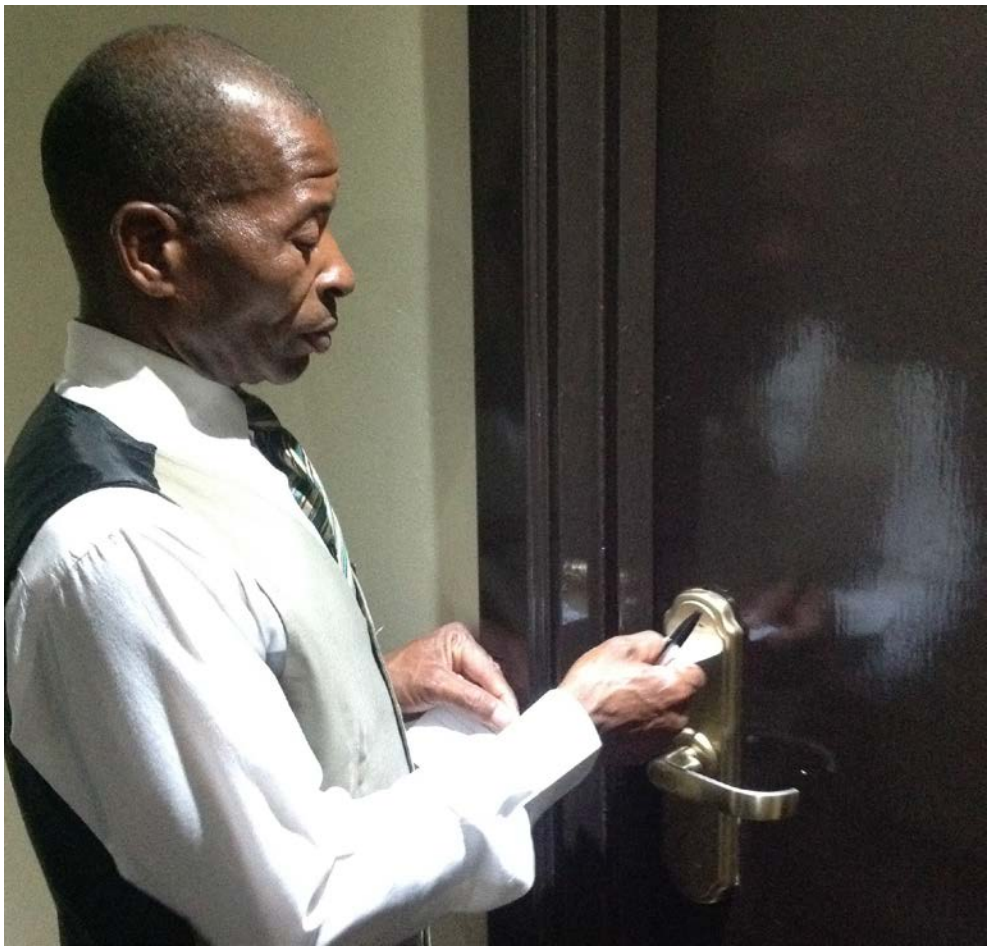


Figure 20: Electronic Key Card System
Source: *Field Visits*

8.1.2 Water Saving Technology (Low Water Flow Toilet and Shower Systems)



Figure 21: Low Water Toilet Flashing System

Source: *Field Visit*

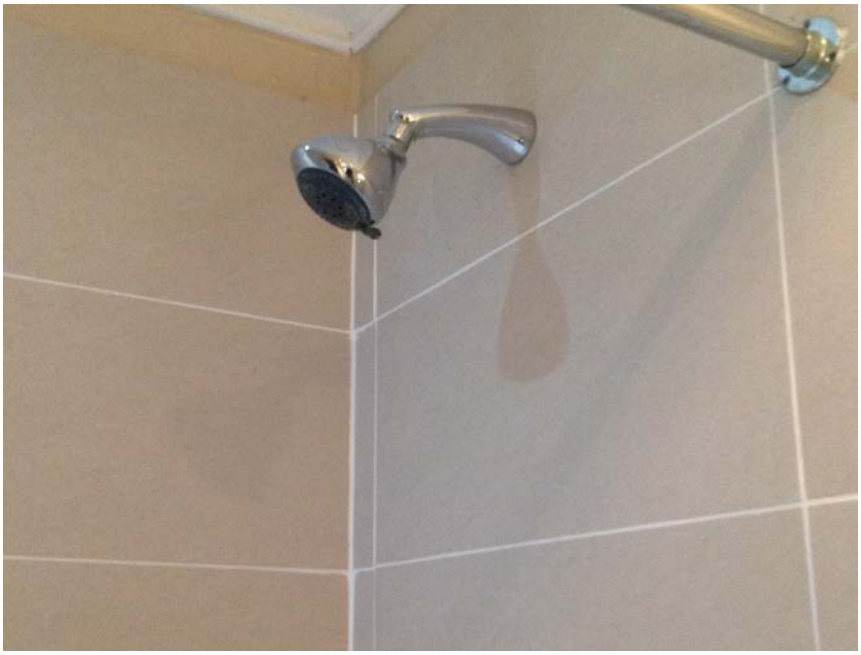


Figure 22: Low Water Flow Shower Head
Source: *Author, Field Visit*

8.1.3 Water Saving Technology (Borehole Water for watering garden)



Figure 23: Borehole at Sunbird Capital Hotel
Source: *Author, Field Visits*



Figure 24: Sunbird Capital Hotel's Green Gardens irrigated by Borehole water
Source: *Author, Field Visit*

8.2 **Appendix B:** Sustainability initiatives at Latitude 13 Hotel

8.2.1 Recycling materials

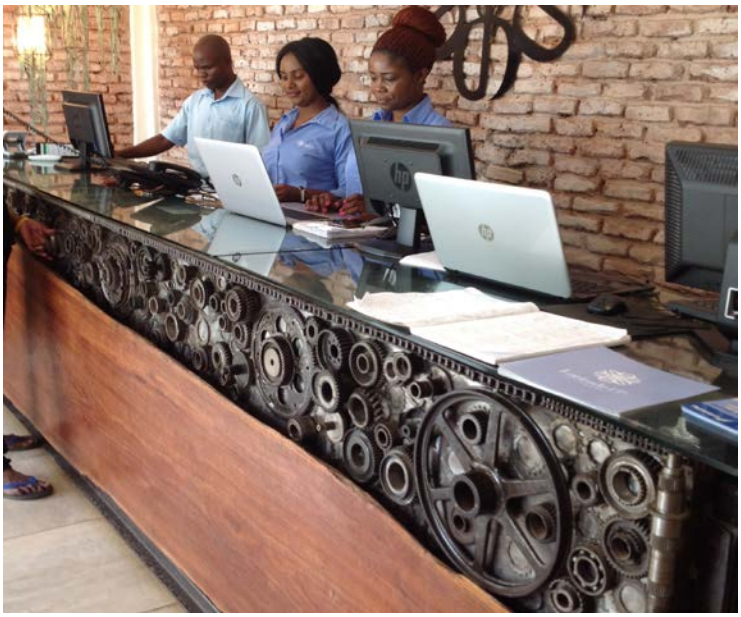


Figure 25: Reception desk made from recycled materials
Source: *Author, Field Visit*



Figure 26: Wall hangings and Chandeliers made from recycled materials
Source: *Authors, Field Visit*

8.2.2 Water saving initiatives



Figure 27: Sunken Borehole Pump System
Source: *Author, Field Visits*



Figure 28: Green Gardens and Swimming Pool using Borehole water
Source: *Author, Field Visit*

8.3 Appendix C: Sustainability initiatives at Kumbali Country Lodge

8.3.1 Water Saving Technology.



Figure 29: Solar Powered Borehole System
Source: *Author, Field Visit*



Figure 30: Water Treatment Plant
Source: *Author, Field Visit*

8.4. Appendix D: The University of the Witwatersrand Ethics Clearance

Research Office

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 Khonje

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: H17/06/18**
PROJECT TITLE	Sustainable consumption and production practices in the hospitality industry in Lilongwe - Malawi
INVESTIGATOR(S)	Mr L Khonje
SCHOOL/DEPARTMENT	Geography, Archaeology and Environmental Studies/
DATE CONSIDERED	23 June 2017
DECISION OF THE COMMITTEE	Approved
EXPIRY DATE	10 July 2020
DATE 11 July 2017	**CHAIRPERSON** pp (Professor J Knight)

cc: Supervisor : Professor D Simatele

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University. Unreported changes to the application may invalidate the clearance given by the HREC (Non-Medical)

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to completion of a yearly progress report.**

Signature

11,07,2017
Date

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES

8.5. Appendix E: The National Commission for Science and Technology Ethics Clearance

NATIONAL COMMISSION FOR SCIENCE & TECHNOLOGY

Lingadzi House
Robert Mugabe Crescent
P/Bag B303
City Centre
Lilongwe

Tel: +265 1 771 550
+265 1 774 189
+265 1 774 869
Fax: +265 1772 431
Email:directorgeneral@ncst.mw
Website:http://www.ncst.mw

All communication should be directed to the Director General

REF.NO.NCST/RTT/2/6 27th September, 2017

Lameck Khonje
zetu2002@gmail.com

Dear Lameck Khonje,

RE: ETHICS AND REGULATORY APPROVAL AND PERMIT OF PROTOCOL P08/17/205 SUSTAINABLE CONSUMPTION AND PRODUCTION PRACTICES IN THE HOSPITALITY INDUSTRIES IN LILONGWE, MALAWI

Having satisfied all the ethical, scientific and regulatory requirements, procedures and guidelines for the conduct of research in the social sciences sector in Malawi, I am pleased to inform you that the above referred research study has officially been approved. You may now proceed with its implementation. Should there be any amendments to the approved protocol in the course of implementing it, you shall be required to seek approval of such amendments before implementation of the same.

This approval is valid for one year from the date of issuance of this letter. If the study goes beyond one year, an annual approval for continuation shall be required to be sought from the National Committee on Research Ethics in the Social Sciences and Humanities (NCRSH) in a format that is available at the Secretariat. Once the study is finished, you are required to furnish the Committee and the Commission with a final report of the study. The committee reserves the right to carry out compliance inspection of this approved protocol at any time as may be deemed by it. As such, you are expected to properly maintain all study documents including consent forms.

Wishing you a successful implementation of your study.

Yours Sincerely,

NATIONAL COMMISSION FOR SCIENCE AND TECHNOLOGY
27 SEP 2017
P/BAG B 303, LILONGWE 3

Martina Chimzimu
NCRSH ADMINISTRATOR
For: CHAIRMAN OF NCRSH

A nation with scientifically and technologically led sustainable growth and development

8.6. Appendix F: The Lilongwe City Council Letter of Clearance

LILONGWE CITY COUNCIL

ALL CORESPONDENCE TO BE ADDRESSED TO THE CHIEF EXECUTIVE

Our Ref: LCC/ADMIN/7

P. O. BOX 30396
LILONGWE 3
MALAWI

Tel: (265) 01773144
Fax (265) 01770885

18th September, 2017

Mr. Lameck Zetu Khonje
University of the WitWaterand
Johannesburg
Cell: (265)99 373 3073

Dear Mr. L.Z.Khonje,

SUBJECT: REQUEST FOR PERMISSION TO CONDUCT AN ACADEMIC RESEARCH STUDY 'SUSTANABLE COMSUPTION AND PRODUCTION PRACTICES IN THE HOSPITALITY INDUSTRY IN LILONGWE - MALAWI'

We acknowledge receipt of your letter dated 8th July, 2017 requesting permission from Lilongwe City Council to conduct an academic research on 'sustainable consumption and production practices in the hospitality industry in Lilongwe - Malawi.

The Lilongwe City Council has no objection to your request and you can proceed as planned. You are however advised to adhere to research ethics and also arrange to share your study findings with this institution once completed.

Yours faithfully,

V.P.V MULULA
DIRECTOR OF HEALTH AND SOCIAL WELFARE SERVICES
FOR/ACTING CHIEF EXECUTIVE OFFICER
Cc: Director of Health and Social Welfare Services

8.7. Appendix G: Letter seeking permission from the Public Sector

The Director

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Dear Sir/Madam

RE: Request for permission to conduct research

I, Lameck Zetu Khonje currently a Ph.D. student at the School of Geography, Archaeology and Environmental Studies at the University of the Witwatersrand, South Africa, under the Supervision of Professor Danny Simatele. I would like to ask for permission to carry out research in your department in Lilongwe.

The research title is **Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe, Malawi**. The study intends to investigate the extent to which the institutional and legal framework can support tourism in Malawi. Furthermore, the study will also seek to establish the extent to which the hospitality outlets in Malawi embraced principles of sustainability.

I would like to request your permission to have an interview with you on environmental management policy and enforcement issues in general. There are no negative consequences for non-participation. If consent is given I will respect all your right to privacy, safety from harm and confidentiality. I will ensure that all documentation and transcripts are anonymous, with pseudonym being given. Confidentiality will be maintained in the recorded interviews. Any detail that might identify a participant or their institutions will be omitted in any published and written data. The Human Research Ethics Committee (Geography, Archaeology and Environmental Studies) of The University of the Witwatersrand has cleared this project [**Protocol Number: H17/06/18].**

The study has the potential to contribute to scholarly research, in the understanding of sustainability (environmental) practices in the tourism sector in general, especially defined in a Malawian context. It will also be beneficial to the department by aiding policy development and enforcement in the hospitality industry. Further, bring new insights into assessing the impacts of such policies.

All data collected (including hard copies of interview transcripts and policy documents) will be kept securely in a locked cupboard in my locked office and will be destroyed by shredding or deleting within three to five years after completion of the study. The results of the research project will be used for academic purposes only and may be published in academic journal articles, books, and conference presentations. There are no foreseeable risks in participating and the institution or officers will not be paid for this study.

If you are willing to give permission for research to be conducted at your institution, please sign at the bottom of this form and return it to me as soon as possible. I would appreciate accessing your institution from the 14th August to 31 August 2017. If you have any concerns or queries regarding this research, please do not hesitate to contact my supervisor or me.

Thanking you for your continued cooperation,

Yours faithfully,

Name of student: Lameck Zetu Khonje

Wits Student number: 1656743

Email: zetu2002@gmail.com

Phone No: +265 99 373 3073

Research supervisor: Danny Simatele

Phone No: +27 0117176515

Danny.simatele@wits.ac.za

8.8 Appendix H: Letter seeking permission from the Private Sector

The Director/Manager

…….

…….

…….

…….

…….

Dear Sir/Madam

RE: Request for permission to conduct research

I, Lameck Zetu Khonje currently a Ph.D. student at the School of Geography, Archaeology and Environmental Studies at the University of the Witwatersrand, South Africa, under the Supervision of Professor Danny Simatele. I would like to ask for permission to carry out research in your organisation in Lilongwe.

The research title is **Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe, Malawi**. The study intends to investigate the extent to which the institutional and legal framework can support tourism in Malawi. Furthermore, the study will also seek to establish the extent to which the hospitality outlets in Malawi embraced principles of sustainability.

I would like to request your permission to have an interview with you on environmental management policy and enforcement issues in general. There are no negative consequences for non-participation. If consent is given I will respect all your right to privacy, safety from harm and confidentiality. I will ensure that all documentation and transcripts are anonymous, with pseudonym being given. Confidentiality will be maintained in the recorded interviews. Any detail that might identify a participant or their institutions will be omitted in any published and written data. The Human Research Ethics Committee (Geography, Archaeology and Environmental Studies) of The University of the Witwatersrand has cleared this project [**Protocol Number: H17/06/18].**

The study has the potential to contribute to scholarly research, in the understanding of sustainability (environmental) practices in the tourism sector in general, especially defined in a Malawian context. It will also be beneficial to the organisation by aiding policy development and enforcement in the hospitality industry. Further, bring new insights into assessing the impacts of such policies.

All data collected (including hard copies of interview transcripts and policy documents) will be kept securely in a locked cupboard in my locked office and will be destroyed by shredding or deleting within three to five years after completion of the study. The results of the research project will be used for academic purposes only and may be published in academic journal articles, books, and conference presentations. There are no foreseeable risks in participating and the institution or officers will not be paid for this study.

If you are willing to give permission for research to be conducted at your institution, please sign at the bottom of this form and return it to me as soon as possible. I would appreciate accessing your institution from the 1st November to 31st November 2017. If you have any concerns or queries regarding this research, please do not hesitate to contact my supervisor or me.

Thanking you for your continued cooperation,

Yours faithfully,

Name of student: Lameck Zetu Khonje
Wits Student number: 1656743
Email: zetu2002@gmail.com
Phone No: +265 99 373 3073

Research supervisor: Danny Simatele
Phone No: +27 0117176515
Danny.simatele@wits.ac.za

8.9 Appendix I: Public Sector Participant Information Sheet

Principle Investigator	:	Lameck Zetu Khonje
Student Registration Number	:	1656743
Estimated Interview Duration	:	Thirty (30) minutes

Research Topic: *Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe, Malawi.*

A. Preamble

Dear Sir/Madam,

I am Lameck Zetu Khonje, a student at the University of the Witwatersrand, Johannesburg, in the School of Geography, Archaeology and Environmental Studies. I am studying towards a Ph.D. My research is on Sustainable Consumption and Production Practices (SCPPs) in the hospitality sector in Malawi. I, therefore, would like to invite you to participate in an interview process which would take about thirty minutes maximum duration. If you decide to participate in this interview process I would like to request you to sign a consent form to confirm acceptance to be part of this research process.

B. Purpose of the study

This research focuses on SCPPs in hospitality sector because this is a critical sector within the tourism industry. Basically, I am investigating environmental management issues. SCPPs contribute to a sustainable hospitality sector which in turn helps make the tourism industry as a whole sustainable. You were chosen to participate in this research process because you are working in the public sector that oversees environmental management issues and tourism activities in Malawi. Thus you could help provide information pertaining to this research topic. It is therefore important to mention that the information you will provide will be used for academic purposes only.

C. Procedure

This interview process will be conducted in your place of work unless advised otherwise by yourself. The researcher will record the interview session using a digital recorder where

necessary pictures could be taken of some relevant sources of additional information to help in the data analysis thereafter.

D. Potential risks and benefits to the participant

There are no risks involved in taking part in this research process. This study will in essence, help to improve environmental management practices in general and promote SCPPs in the hospitality sector in particular. This study will also help to generate contribute new knowledge on SCPPs in the hospitality sector in Malawi and sub – Sahara Africa.

E. Confidentiality and Anonymity

Participation in this research process is voluntary and no fee will be paid. Unless advised otherwise by the participant, contributions will be strictly anonymous and result confidential. At no point during the interview process will you be asked to indicate your name or any personal information that can be used to identify you later on. You are also free to stop the interview or skip any question that you find offensive/uncomfortable answering. You may also withdraw at any time without any consequences or any explanation.

The data collected from this research will be used for academic purposes only. They will be compiled into a Ph.D. thesis through publication in scientific journals and submitted to the Faculty of Science, University of the Witwatersrand. Any information that may identify you or any references made in this study will not be disclosed. The results would be accessed through the University website and Wits library archives open to all registered students and staff of the University.

F. Researcher contact details

For further information regarding the research or the implication of your participation, please do not hesitate to contact me or my supervisor on:

Researcher's Contact

KHONJE Zetu Lameck
Phone No: +27 733824000.
Email address: zetu2002@gmial.com

Supervisor's Contact

Professor DANNY Simatele
Phone No: +27 0117176515
Danny.simatele@wits.ac.za

8.10 Appendix J: Private Sector Participant Information Sheet

Principle Investigator	:	Lameck Zetu Khonje
Student Registration Number	:	1656743
Estimated Interview Duration	:	Thirty (30) minutes

Research Topic: *Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe, Malawi.*

A. Preamble

Dear Sir/Madam,

I am Lameck Zetu Khonje, a student at the University of the Witwatersrand, Johannesburg, in the School of Geography, Archaeology and Environmental Studies. I am studying towards a Ph.D. My research is on Sustainable Consumption and Production Practices (SCPPs) in the hospitality sector in Malawi. I, therefore, would like to invite you to participate in an interview process which would take about thirty minutes maximum duration. If you decide to participate in this interview process I would like to request you to sign a consent form to confirm acceptance to be part of this research process.

B. Purpose of the study

This research focuses on SCPPs in hospitality sector because this is a critical sector within the tourism industry. Basically, I am investigating environmental management issues. SCPPs contribute to a sustainable hospitality sector which in turn helps make the tourism industry as a whole sustainable. You were chosen to participate in this research process because you are working in the tourism/hotel industry. Thus you could help provide information pertaining to this research topic. It is therefore important to mention that the information you will provide will be used for academic purposes only.

C. Procedure

This interview process will be conducted in your place of work unless advised otherwise by yourself. The researcher will record the interview session using a digital recorder where

necessary pictures could be taken of some relevant sources of additional information to help in the data analysis thereafter.

D. Potential risks and benefits to the participant

There are no risks involved in taking part in this research process. This study will in essence, help to improve environmental management practices in general and promote SCPPs in the hospitality sector in particular. This study will also help to generate contribute new knowledge on SCPPs in the hospitality sector in Malawi and sub – Sahara Africa.

E. Confidentiality and Anonymity

Participation in this research process is voluntary and no fee will be paid. Unless advised otherwise by the participant, contributions will be strictly anonymous and result confidential. At no point during the interview process will you be asked to indicate your name or any personal information that can be used to identify you later on. You are also free to stop the interview or skip any question that you find offensive/uncomfortable answering. You may also withdraw at any time without any consequences or any explanation.

The data collected from this research will be used for academic purposes only. They will be compiled into a Ph.D. thesis through publication in scientific journals and submitted to the Faculty of Science, University of the Witwatersrand. Any information that may identify you or any references made in this study will not be disclosed. The results would be accessed through the University website and Wits library archives open to all registered students and staff of the University.

F. Researcher contact details

For further information regarding the research or the implication of your participation, please do not hesitate to contact me or my supervisor on:

Researcher's Contact

KHONJE Zetu Lameck

Phone No: +27 733824000.

Email address: zetu2002@gmial.com

Supervisor's Contact

Professor DANNY Simatele

Phone No: +27 0117176515

Danny.simatele@wits.ac.za

8.11 Appendix K: Focus Group Discussion Participant Information Sheet

Principle Investigator	:	Lameck Zetu Khonje
Student Registration Number	:	1656743
Estimated Interview Duration	:	One hour (60 minutes)

Research Topic: *Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe, Malawi.*

A. Preamble

Dear Sir/Madam,

I am Lameck Zetu Khonje, a student at the University of the Witwatersrand, Johannesburg, in the School of Geography, Archaeology and Environmental Studies. I am studying towards a Ph.D. My research is on Sustainable Consumption and Production Practices (SCPPs) in the hospitality sector in Malawi. I, therefore, would like to invite you to participate in an interview process which would take about one-hour maximum duration. If you decide to participate in this interview process, I would like to request you to sign a consent form to confirm acceptance to be part of this research process.

B. Purpose of the study

This research focuses on SCPPs in hospitality sector because this is a critical sector within the tourism industry. Basically, I am investigating environmental management issues. SCPPs contribute to a sustainable hospitality sector which in turn helps make the tourism industry as a whole sustainable. You were chosen to participate in this research process because you are working in the tourism/hotel industry. Thus you could help provide information pertaining to this research topic. It is therefore important to mention that the information you will provide will be used for academic purposes only.

C. Procedure

This interview process will be conducted in your place of work unless advised otherwise by yourself. The researcher will record the interview session using a digital recorder. If you are not

comfortable with audial recording, the researcher will take notes of the interview proceedings. During the focus group, discussions interview session pictures will not be taken.

D. Potential risks and benefits to the participant

There are no risks involved in taking part in this research process. This study will in essence, help to improve environmental management practices in general and promote SCPPs in the hospitality sector in particular. This study will also help to generate contribute new knowledge on SCPPs in the hospitality sector in Malawi and sub – Sahara Africa.

E. Confidentiality and Anonymity

Participation in this research process is voluntary and no fee will be paid. Unless advised otherwise by the participant, contributions will be strictly anonymous and result confidential. At no point during the interview process will you be asked to indicate your name or any personal information that can be used to identify you later on. You are also free to stop the interview or skip any question that you find offensive/uncomfortable answering. You may also withdraw at any time without any consequences or any explanation.

The data collected from this research will be used for academic purposes only. They will be compiled into a Ph.D. thesis through publication in scientific journals and submitted to the Faculty of Science, University of the Witwatersrand. Any information that may identify you or any references made in this study will not be disclosed. The results would be accessed through the University website and Wits library archives open to all registered students and staff of the University.

F. Researcher contact details

For further information regarding the research or the implication of your participation, please do not hesitate to contact me or my supervisor on:

Researcher's Contact

KHONJE Zetu Lameck

Phone No: +27 733824000.

Email address: zetu2002@gmial.com

Supervisor's Contact

Professor DANNY Simatele

Phone No: +27 0117176515

Danny.simatele@wits.ac.za

8.12 Appendix L: Key Informants Consent Form

Research Topic: *Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe, Malawi.*

I hereby confirm that I have been well informed by study investigator Mr. Lameck Zetu KHONJE about the nature, conduct, benefits, and risks of the study. I have also received, read and understood the participant information sheet regarding the study. I am aware that the results of the study will be anonymously processed and may, at any stage without prejudice withdraw my consent and participation in the study. I have had sufficient opportunity to ask questions and therefore; I declare that; I am/more than at 18 years of age and prepared to voluntarily participate in the study.

(Tick where it is relevant)

- I do agree to be audio-recorded /participate in the survey. ☐
- I do not agree to be audio-recorded / participate in the survey. ☐
- I do agree that photographing and observations could be taken done. ☐
- I do not agree that photographing and observations should be done. ☐

PARTICIPANT' S

Signature ---------- Date----------

I, **KHONJE Zetu Lameck**, herewith confirm that the above participant has been fully informed about the nature and conduct of the above study

RESEARCHER

KHONJE Zetu Lameck

Signature ---------- Date----------

8.13 Appendix M: Focus Group Discussion Consent Form

Research Topic: *Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe, Malawi.*

We hereby confirm that we have been well informed by study investigator Mr. Lameck Zetu KHONJE about the nature, conduct, benefits, and risks of the study. We have also received, read and understood the participant information sheet regarding the study. We are aware that the results of the study will be anonymously processed and may, at any stage without prejudice withdraw my consent and participation in the study. We have had sufficient opportunity to ask questions and therefore; we declare that; we are above 18 years of age and prepared to voluntarily participate in the study.

(Tick where it is relevant)

- I do agree to be audio-recorded /participate in the survey. ☐
- I do not agree to be audio-recorded / participate in the survey. ☐

PARTICIPANT' S

Signatures: Date----------

I, **KHONJE Zetu Lameck**, herewith confirm that the above participant has been fully informed about the nature and conduct of the above study

RESEARCHER

KHONJE Zetu Lameck

Signature ---------- Date----------

8.14 Appendix N: Interview Guide for the Department of Environmental Affairs.

University of the Witwatersrand

Faculty of Science

School of Geography, Archaeology and Environmental Studies

Research Topic:

Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe, Malawi

Objective: *To identify the institutional and policy framework within which sustainable tourism can be pursued in Malawi.*

Interview Process

Open-ended questions will be used and wherever necessary additional probing questions will be asked for clarity sake.

I. Demographic Information.

a. Could you please state your position and responsibilities in this organization?
b. How long have you worked in your current position?
c. Have you worked for another organization before joining your current employers?

II. Knowledge on Environmental Management.

a. What is your understanding of environmental management in general?
b. What do you think of environmental management in a Malawian context?
c. How would you link the accommodation sector to sustainable environmental management issues here in Lilongwe?
d. Is there any way the hospitality sector could be involved in environmental management?

III. Understanding the Institutional and Legal Framework in Malawi.

a. How are sustainable environmental management practices regulated within the accommodation sector in Lilongwe?

b. In what way do you think the accommodation sector is guided on sustainable environmental management practices in Lilongwe?

c. Are there any mechanisms put in place to monitor the accommodation sector on sustainable environmental management practices?

d. In your pursuit to guide tourism development and adoption of best practices in tourism, how do you intend to promote sustainable consumption and production practices within the accommodation sector?

e. It is mentioned in the National Tourism Policy strategy priority area 6 promote mitigation measure for environmental degradation and climate change adaptation, could you explain these targeted mitigation measures and why they are a priority?

IV. Knowledge of the efforts that the accommodation sector has made towards environmental management.

a. What is your perception of the impact of the accommodation sector on the environment in Lilongwe?

b. Would you explain how the accommodation sector is helping with sustainable environmental management issues?

c. What would the accommodation sector do to improve their performance towards sustainable environmental management in Lilongwe?

8.15 Appendix O: Interview Guide for the Department of Tourism.

University of the Witwatersrand

Faculty of Science

School of Geography, Archaeology and Environmental Studies

Research Topic:

Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe, Malawi

Objective: *To identify the institutional and policy framework within which sustainable tourism can be pursued in Malawi.*

Interview Process

Open-ended questions will be used and wherever necessary additional probing questions will be asked for clarity sake.

I. Demographic Information.

a. Could you please state your position and responsibilities in this organization?
b. How long have you worked in your current position?
c. Have you worked for another organization before joining your current employers?

II. Knowledge on Environmental Management.

a. What is your understanding of environmental management in general?
b. What do you think of environmental management in a Malawi context?
c. How would you link the accommodation sector to environmental management issues here in Lilongwe?
d. Is there any way the accommodation sector could be involved in sustainable environmental management?

III. Understanding the Institutional and Legal Framework in Malawi.

a. How are sustainable environmental management practices regulated within the accommodation sector in Lilongwe?
b. In what way do you think the accommodation sector is guided on sustainable environmental management practices in Malawi?

c. Are there any mechanisms put in place to monitor the accommodation sector on sustainable environmental management practices?

d. In your pursuit to guide sustainable tourism development and adoption of best practices in tourism, how do you intend to promote sustainable consumption and production practices within the accommodation sector?

e. It is mentioned in the National Tourism Policy strategy priority area 6 promote mitigation measure for environmental degradation and climate change adaptation, could you explain these targeted mitigation measures and why they are a priority?

IV. Knowledge of the efforts that the accommodation sector has made towards sustainable environmental management.

a. What is your perception of the impact of the accommodation sector on the environment in Lilongwe?

b. Would you explain how the accommodation sector is practicing sustainable environmental management?

c. What would the accommodation sector do to improve their performance towards sustainable environmental management in Lilongwe?

8.16 Appendix P: Interview Guide for the City and District Councils.

University of the Witwatersrand

Faculty of Science

School of Geography, Archaeology and Environmental Studies

Research Topic:

Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe, Malawi

Objective: *To identify the institutional and policy framework within which sustainable tourism can be pursued in Malawi.*

Interview Process

Open-ended questions will be used and wherever necessary additional probing questions will be asked for clarity sake.

I. Demographic Information.

a. Could you please state your position and responsibilities in this organization?
b. How long have you worked in your current position?
c. Have you worked for another similar organization before joining your current employers?

II. Knowledge on Environmental Management.

a. What is your understanding of environmental management in general?
b. What do you think of environmental management in a Malawi context?
c. How would you link the accommodation sector to sustainable environmental management issues in Lilongwe?
d. How would you explain the commitment of the accommodation sector in sustainable environmental management in Lilongwe?

III. Understanding the Institutional and Legal Framework in Malawi.

a. How are environmental management issues being addressed in Malawi?
b. In what ways do you think the accommodation sector is guided on sustainable environmental management practices in Malawi?

c. Would you explain how you monitor the accommodation sector on sustainable environmental management practices?

d. How do you make sure that the accommodation sector adopts SCPPs?

e. Would you explain any of the SCPPs that you promote to the accommodation sector?

IV. Knowledge of the efforts that the hospitality sector has made towards Environmental Management.

a. Would you explain how the accommodation sector is adopting sustainable environmental management practices?

b. What would you suggest to be done to make the hospitality sector improve their performance towards environmental management?

c. What is your perception of the impact of the accommodation sector on the environment in Lilongwe?

8.17 Appendix Q: Interview Guide for the Accommodation Units.

University of the Witwatersrand

Faculty of Science

School of Geography, Archaeology and Environmental Studies

Research Topic:

Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe, Malawi

Objective: *Establish how the accommodation units practice principles of environmental sustainability in order to promote sustainable tourism industry in Malawi.*

Interview Process

Open-ended questions will be used and wherever necessary additional probing questions will be asked for clarity sake.

I. Demographic Information.

a. Could you please state your position and responsibilities in this organization?

b. How long have you worked in your current position?

c. Have you worked for another similar organization before joining your current employers?

II. Knowledge on Environmental Management.

a. What is your understanding of environmental management?

b. What do you think of environmental management in a hospitality context?

c. How would you link the accommodation units to sustainable environmental management issues here in Lilongwe?

d. Is there any way the accommodation units could be involved in sustainable environmental management?

III. Understanding the Institutional and Legal Framework in Malawi.

a. How are environmental management issues regulated within the accommodation sector in Lilongwe?
b. In what way do you think the accommodation units are guided on sustainable environmental practices here in Lilongwe?
c. How do you promote sustainable environmental practices in this facility?

IV. Knowledge of the efforts that the hospitality sector has made towards Environmental Management.

a. What are your perceptions of the impact of this accommodation unit on the environment?
b. Would you explain the activities that this accommodation unit does towards environmental sustainability?
c. Why were these sustainable environmental initiatives introduced in this unit?
d. What would you suggest could be done to encourage the accommodation sector to adopt environmental sustainability practices here in Lilongwe?

8.18 Appendix U: Field Observation Checklist for SCPPs.

University of the Witwatersrand
Faculty of Science
School of Geography, Archaeology and Environmental Studies
Research Topic:

Sustainable Consumption and Production Practices in the Hospitality Industry in Lilongwe, Malawi

Objective: *Establish how the hospitality units practice principles of sustainability in order to promote sustainable tourism industry in Malawi.*

Observation Process

Date of field Observation:

Observations	Yes	No	Description (Photographs)
1. Environmental Management Policy available and followed accordingly			
2. Water Conservation systems available and used appropriately			
3. Energy Conservation Systems available and used appropriately			
4. Waste Management Systems available and followed accordingly			
5. Carbon Offset and Measurement initiatives available and used appropriately			
6. Green Cleaning Standards available and followed accordingly			
7. Green Procurement Policy available and followed accordingly			