LIMITATIONS TO SUSTAINABLE RESOURCE MANAGEMENT IN THE GLOBAL SOUTH: EVIDENCE FROM THE ACCOMMODATION INDUSTRY

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Abstract
Purpose – This paper explores the factors responsible for the low level of sustainability uptake in tourism accommodation establishments in the Global South using the Greater Cape Town Region of South Africa as a case study.
Methodology – In-depth semi-structured interviews were conducted with managers of 30 accommodation establishments in the Greater Cape Town Region to obtain information on the barriers and/or challenges they encountered in implementing sustainable resource management (SRM). A content analysis methodology was used to analyse the data.
Approach – Given that resource consumption and management are at the core of sustainability in the accommodation industry, SRM was the primary focus of analysis in the study.
Findings – This study identified six key challenges undermining SRM implementation in this geographical location: financial and non-financial resource constraints; the service nature of the industry; the limiting policy and infrastructure environment; poor employee commitment/buy-in; and skill and knowledge inadequacies. These provide a holistic foundation for addressing the challenge of low sustainability uptake in the Global South context, and the recommendations are made in line with achieving this objective.
Originality of the research – This paper contributes to the limited literature on challenges to sustainability uptake in the tourism accommodation industry in the Global South.
Limitations: While a Global South perspective is adopted, the data used in this study were from a small, albeit popular, tourism destination in South Africa. Caution, therefore, has to be exercised when generalising the findings of the study.
Keywords Resource Management, Accommodation Industry, Tourism, Challenges to Sustainability, Global South, South Africa

1. INTRODUCTION

Globally, the consumption of natural resources by large, medium and small tourism accommodation establishments (TAEs) is overwhelmingly high (Becken 2013; Mak and Chang 2019). A large TAE is one with more than 100 rooms, a medium TAE has 51 to 100 rooms and a small TAE has 50 rooms or less (Ingram et al. 2000). In the context of developing countries, the burgeoning population, coupled with the rapid decline of

natural resources and future climate change projections[1], have been the driving force behind the numerous calls for TAEs to pursue and implement measures aimed at achieving both environmental sustainability (ES) and sustainable resource management (SRM). In so doing, the objective of the sustainable development goals – to leave a flourishing environment for future generations – will be achieved. Yet, the extent to which ES and SRM initiatives have been adopted by TAEs in developing countries is agonisingly low. In this paper, ES refers to the responsible utilisation of natural resources to avoid depletion or degradation (Morelli 2011). SRM is defined as the management of natural resources in order to maintain and scale-up the resilience of the ecosystem so that both the present and future generations can benefit from it.

The low adoption of ES and SRM initiatives is baffling for two reasons. First, the adoption of SRM practices by TAEs offers huge potential, especially in terms of environmental and economic benefits, because of its enormous dependence on natural resources (Becken 2013; Rogerson and Sims 2012). Second, environmental standards such as International Organisation for Standardisation (ISO) 14001, 20121 and 26000 already exist to ensure that industries and business organisations adopt practices geared towards achieving both effective SRM and ES (Chan and Hawkins 2012). These standards prescribe various initiatives that lead to saving costs with minimal cost input, as well as those with substantial initial cost outlay and significant cost reduction in the medium to long term (Chan and Wong 2004). While cost reduction in pursuance of both SRM and ES is deemed secondary, expectations would be that the drive to increase profitability would propel TAEs to aggressively pursue this secondary objective and ultimately achieve the primary objective of ES and effective SRM.

In South Africa, for example, a country where about 4.5% of the workforce is employed in tourism, the low adoption of ES practices is argued to be a characteristic feature of TAEs despite the country's pioneering role in sustainability and responsible tourism movement (Rogerson and Sims 2012; Van der Merwe and Wöcke 2007). In order to carve out tailored solutions to address this issue decisively, an in-depth understanding of the reasons for the low adoption of SRM and ES practices by TAEs is crucial. However, limited scholarship exists that robustly underlines the stumbling blocks impeding the adoption of effective SRM and ES initiatives in the South African TAEs. This requires urgent attention given South Africa's lingering energy and water woes, which are punctuated by an unprecedented increase in visits by international tourists and the nation's high dependence on tourism for employment and gross domestic product (GDP) contributions (Rogerson and Visser 2006). These could catalyse both unsustainable environmental practices and resource use if appropriate policy interventions are not injected.

Against this background, this paper is aimed at addressing this gap by analysing the perceptions of operators of TAEs in the Greater Cape Town Region – a popular tourist destination attracting about two million visitors per year (Cape Town Tourism 2017) – with regard to the challenges they faced in adopting and practicing effective SRM. Also, this paper is aimed at unpacking operators' perceptions of the factors responsible for the

[1] According to the Intergovernmental Panel on Climate Change (IPCC, 2014), extreme weather conditions will become the norm in developing countries by 2050.

high consumption of resources (mainly energy and water) in the TAEs in order to pinpoint areas where viable interventions can be injected.

2. LITERATURE REVIEW

2.1. TAEs and environmental management practices (EMPs)

In most economies of the world driven by capitalism, the fundamental purpose of business is to make a profit (Kasim 2004). In the course of pursuing profit, however, most businesses degrade the environment by exploiting natural resources. This, as several studies have shown (e.g. Chen et al. 2014; Ebhuoma and Simatele 2019), has triggered anthropogenically-induced climate change. The alarming rate of environmental degradation has led to increased calls for critical scrutiny of both the operational impacts of businesses and the EMPs that these enterprises adopt to reduce these impacts (Aragón-Correa et al. 2008; Sánchez-Medina et al. 2016). The tourism industry is not left out of this call to ensure responsible and sustainable use of natural resources. Contrary to previous notions that portrayed tourism as an industry void of carbon emissions (Kasim 2004), the industry (including TAEs) is now under pressure to ensure effective EMPs. The call to ensure effective EMPs will not only be beneficial for the environment, but also for the tourism industry. As Kasim (2004, 64) notes, 'tourism's survival depends highly on its ability to minimise its negative impacts on the environment. In other words, the quality of tourists' interaction will be diminished considerably if the natural setting of a tourism activity is polluted, degraded or lost its aesthetic qualities as a result of a poorly planned tourism development'.

Large TAEs are at the forefront of implementing significant changes to showcase their commitment to protecting the environment (see e.g. Teng et al. 2013; Hsiao et al. 2018; Sánchez-Medina et al. 2016). The ability of large TAEs to implement EMPs is largely attributed to them having greater availability of resources than their smaller counterparts (López-Gamero et al. 2009), adequate training and support of employees (Bohdanowicz et al. 2011), and the government's financial subsidies and monetary incentives for enterprises that installed eco-friendly products (Teng et al. 2013). To enhance and concretise the reputation of an enterprise to customers as eco-friendly and more socially responsible, some large TAEs have taken the initiative to acquire formal certifications from the relevant tourism regulatory body. For example, two large hotels in the state of Oaxaca, Mexico, in 2012 obtained an official tourism environmental quality certificate from the agency responsible for ensuring compliance with environmental regulation (Sánchez-Medina et al. 2016). However, small and medium-sized TAEs have some advantages that enable them to swiftly take advantage of niche EMPs. One such advantage is flexibility (Bowen 2002). As Buffa et al. (2018, 658) note, 'the flexibility characteristic of small businesses and their ability to develop relationships which allow them to gain access to incentives and subsidies to supplement their internal resources are of fundamental importance'. Another factor that enhances small TAEs' ability to swiftly adopt innovative EMPs is the relationships established with other small TAEs. This provides them with the opportunity to benefit from belonging to a network while maintaining their sovereignty to take major decisions quickly (Presutti et al. 2011). This is something large TAEs often find challenging to achieve, owing to bureaucratic

organisational structure that compromises swift decision making (Leonard and Dlamini 2014). Despite the numerous advantages small TAEs have, Aragón-Correa et al. (2008, 1) emphasise that small TAEs 'lack the resources to implement proactive environmental strategies that go beyond minimum regulatory compliance'. Small TAEs' lack of resources prevents them from implementing proactive strategies, especially since such initiatives may reduce their profitability (e.g. Buffa et al. 2018). Consequently, small TAEs can opt for either formal (certification) or informal (without official certification) solutions (Sánchez-Medina et al. 2016). The flexibility to opt for either formal or informal solutions is primarily due to lax regulation regarding environmentalism (Buffa et al. 2018), a characteristic feature of the tourism industry in most developing countries (Kasim 2004; Leonard and Dlamini 2014; Sánchez-Medina et al. 2016). Skills shortage is another factor that hampers small TAEs from adopting EMPs (Buffa et al. 2018).

Despite the underlined factors known to hamper small TAEs from adopting and implementing EMPs, these issues have been largely under-theorized, especially in the context of South Africa. It is crucial to highlight the issues that undermine small TAEs from engaging in EMPs, as the ever-increasing environmental pressure caused by built infrastructures and their proliferating diversity necessitates the need for more robust interventions aimed at facilitating effective EMPs (Bohdanowicz et al. 2005). Thus, by using the Greater Cape Town Region of South Africa as a case study, it is hoped that highlighting these issues that limit EMPs will contribute meaningfully to the body of literature and trigger healthy discussions on measures that need to be put in place to enable TAEs to engage in effective EMPs.

2.2. Limitations to SRM in TAEs

The most detailed studies on the limitations to implementing SRM practices in hotels were carried out by Chan (2008) and Kasim (2007a); while other studies (Mak and Chang 2019; Melubo et al. 2019; Rogerson and Sims 2012; Tang et al. 2014) discuss these barriers/challenges in passing or as part of a broader objective. These include resource constraints like manpower, finance and time that affect the adoption, implementation and continuation of SRM practices (Heung and Pun 2013; Gil et al. 2001; Melubo et al. 2019). Consistent with the approach of KamalulAriffin et al. (2013) and El Dief and Font (2010), these factors constitute the framework for evaluating and discussing the findings of this paper.

Chan (Chan 2011; 2008) and Heung and Pun (2013) found that the *cost* of obtaining environmental certification, and implementing the necessary (often high) requirements to obtain such verification and certification, discouraged some hotels from embarking on any sustainable initiative. Also, the *nature of the accommodation industry* – 'soft industry' characteristics, industry vulnerability, service nature of the industry and the short tenure of managers in the industry (Kasim 2007a, 2007b; Rogerson and Sims 2012) – may inhibit the adoption of SRM schemes. Chan (2008) indicates that some guests at hotels have apathy for environmental initiatives implemented and sometimes even demand that such initiatives be overridden for their sake. Given that customers are the main reason for the industry's existence, they are the most important drivers of, as well as barriers to, adoption and hence have the greatest influence of all stakeholders in the business and on environmental decisions of industry managers (Chan 2008). With

environmentally apathetic customers, the resource-saving potential of the industry is greatly reduced, especially with the mindset that resource reduction implies a compromise of comfort. El Dief and Font (2010) and Chan and Hawkins (2012) argue that the short tenure of managers had more of an impact on the implementation practices and continuation of already adopted practices than it did on adoption for Red Sea hotels and Hong Kong hotels respectively.

The *lack of enabling environment* was also highlighted as a barrier to the adoption of SRM and ES practices at TAEs. For the successful implementation of ES, an enabling regulatory and infrastructural environment is required. This includes environmentally friendly policies and regulations, and infrastructural professional support to facilitate the initiation and maintenance of ES systems. Another key support system identified is the availability of professional advice and support. Chan (2008) found this to be one of the most significant barriers to the adoption of environmentally sustainable services in Hong Kong hotels. Kasim (2007a) and El Dief and Font (2010) suggest that the non-existence or inadequacy of appropriate infrastructure and support structures that encourage the adoption and implementation of SRM and ES practices serve as a deterrent to those who might want to engage in these practices. This leads to a gap between the environmentally friendly intentions of managers and the actions they carry out (El Dief and Font 2010). Examples of such infrastructure and support systems include recycling plants and recycle-material pick-up or drop-off points (Kasim 2007a). It is further argued that in the absence of adequate policies and a regulatory environment that encourages and promotes environmental issues in the tourism sector as a whole, the uptake of SRM and ES practices will be low (Kasim 2007a). This is valid given that such practices often involve a movement away from normal business operations and often involve extra financial investments (Chan 2008; El Dief and Font 2010; Gil et al. 2001). For example, it was found that for Red Sea hotels, the non-existence of '*formalised environmental structures*' frustrated the morale of managers interested in ES activities as it ultimately meant higher costs if they were pursued. The managers, therefore, suppressed their ES beliefs to preserve economic interests (El Dief and Font 2010). Consequently, an external nudge in the form of government policies and regulations may be necessary to boost the adoption of these practices in developing countries where resource constraints are generally an issue.

In relation to the lack of professional advice, the lack of knowledge or required skills was also identified as a barrier. Where the awareness or necessary knowledge of the idea and principles of SRM and ES practices is low among decision makers in an establishment, the adoption and implementation of such practices are expected to be low. This lack of knowledge might be specific to awareness of environmental standards, as identified by Van der Merwe and Wöcke (2007) for South Africa and Chan (2008) for Hong Kong, or just general lack of education on ES as a whole, as indicated by Kasim (2007a) for Malaysia and Chan (2011) for both large and small hotels in Hong Kong. El Dief and Font (2010) indicate that managers of hospitality establishments who do not adopt SRM and ES practices are often unaware of the potential benefits of these practices as it relates to the industry. Education and knowledge development on issues of ES, as well as existing standards and guidelines, is, therefore, a prerequisite for improving the adoption and implementation of ES activities in the TAEs (Kasim 2007a). Kasim further notes that beyond the adoption phase, establishments that had adopted these practices

struggled with implementation as a result of the scepticism of their staff who found it difficult to justify the implied additional workload against the merits of such initiatives. The need for both awareness education as well as more formalised/academic education on ES issues is thus highlighted.

3. RESEARCH METHODOLOGY

Tourism in South Africa is hailed as one of the key drivers of economic growth and development (Rogerson 2013; Saayman and Saayman 2008). The nation has over seven decades of experience in the tourism industry and is considered a premier destination and a global competitor in the tourism market (Phiri 2016). Tourist arrivals in South Africa has shown an upward trend in this time, with available data (South Africa.net 2019) indicating that in 2018 the number of international arrivals in the country was about 10.47 million individuals who spent about 118 million bed nights. PricewaterhouseCoopers (PwC 2018) reports that hotels alone provided only about 63 000 rooms and 13.8 million guest nights of the 118 million guest nights recorded in 2018.

Of the nine provinces of the country, the provinces with the highest number of travel instances were Gauteng (36%), Limpopo (20.9%) and the Western Cape (16.5%). The Western Cape, however, had the highest average length of stay (at about 14 days) and the second highest total bed nights (at about 23 million, behind Gauteng at 40 million). In the Western Cape, 96% of tourists visited Cape Town, 44% visited Stellenbosch and about 30% visited Simon's Town. These visitors to the Western Cape primarily stayed in TAEs (16.3 million people), compared to those who stayed with family and friends (6.2 million people). Tourists typically visit the Cape during the warmer spring and summer months of the year (i.e. between October and March).

This study was, hence, conducted in both the Cape Town Municipality (including Simon's Town) and Stellenbosch Municipality of the Western Cape (collectively known as the Greater Cape Town Region). These municipalities play host to some of the most visited tourist attractions, which accounts for the large number of tourists annually attracted to the Cape. Consequently, they have a high concentration of TAEs.

A convenient sampling technique was initially used to select appropriate participants to partake in this study. The process entailed compiling a list of TAEs registered with the Tourism Grading Council of South Africa (TGCSA) and the Stellenbosch 360 in 2014, available on their respective websites. This facilitated the identification of relevant establishments in the study areas. Next, establishments were contacted telephonically, specifically requesting to speak with the person in charge of ES or energy, water and waste issues in the organisation. The details of the proposed study were fully explained and only those willing to participate in the study were interviewed. It is worth mentioning that to avoid any form of bias, establishments that were not listed on either the TGCSA or Stellenbosch 360 but in the vicinity of participating establishment were contacted to find out if they were willing to participate in the study. A snowball approach was adopted to identify other eligible participants by asking the participants who were interviewed to recommend their colleagues in other establishments who were well knowledgeable in the topic of inquiry.

Semi-structured interviews were conducted with management-level staff (owners, general managers, deputy managers, sustainability directors and maintenance engineers) of TAEs in the two municipalities between March and September 2015. Semi-structured interviews were suited to meet the objectives of this study because they provided a guide that allow for consistency across questions asked in different interviews and also created legitimate room for flexibility in the dialogue emerging from the interview process, thus allowing for new themes to emerge and be pursued (Gill et al. 2008; Idahosa 2018). The questions of the interview guide were open-ended and information was gathered on the participants' thoughts regarding the challenges and limitations they encountered in implementing SRM practices in their establishments. Probing questions were asked to understand unclear responses or new ideas introduced which had not been captured in the guide. In total, 34 interviews were conducted; however, only 30 were usable to effectively address the objectives of this paper. A snowball approach was used in participant gathering. Table 1 provides a summary of the characteristics of businesses in the study.

Table 1: **Characteristics of establishments in the data**

		Number	Total
Ownership Structure	External Board of directors	2	30
	Business/Hotel Group	8	
	Family	9	
	Sole Proprietorship/Partnership	11	
Age of Business	Less than 5 years	5	30
	6–10 years	6	
	11–20 years	7	
	21–30 years	7	
	31–100 years	1	
	More than 100 years	3	
	Unknown	1	
Star Grading	No Star	6	30
	2-Star	1	
	3-Star	10	
	4-Star	12	
	5-Star	1	
Type of Accommodation	Backpacker/Hostel	4	30
	Bed and Breakfast	4	
	Guesthouse	8	
	Hotel	14	
Number of Rooms	Less than 10 rooms	8	30
	11–20 rooms	7	
	21–50 rooms	5	
	51–100 rooms	1	
	100–200 rooms	7	
	More than 200 rooms	2	

The table shows that the majority of establishments were owned by single individuals, partners and families (about 67%). More than 40% of these businesses were at least 10 years old, the majority of which had been in business for at least six years (about 83%). Their duration in business gives credence to their experience in running successful

accommodation businesses in the given context, and hence makes their responses on industry practices and conditions authoritative. The table further shows that the majority of businesses fell in the 3-star and 4-star categories; about 47% were hotels while 53% were other accommodation types; 50% had 20 rooms or less and 70% had 100 rooms or less.

All the usable data collected from the interviews were transcribed verbatim and coded and analysed using Atlas.ti, a computer-aided data analysis software. The noticing, collecting, and thinking (NCT) approach suggested by Susan Friese (2014) was used for coding the transcribed data, which was subjected to qualitative content analysis (QCA). The QCA framework was deemed ideal for this study because of its characteristics of being flexible and sensitive to the content of the data. It also allowed for a thick description of the phenomenon under inquiry such that concepts and categories emerged, hence allowing for the development of a conceptual framework based on the data (Elo and Kyngäs 2008). This allowed for the comparability of findings with those in the literature. Using the NCT framework, codes were developed in accordance with themes aligned with the research questions, as well as those found in the existing literature. New themes were also allowed to emerge, based on the information provided by participants.

4. RESULTS AND DISCUSSION

4.1. Limitations to adoption of SRM practices

To analyse the factors that prevented or undermined SRM practices, participants were divided into two groups: those who had adopted some form of ES activities (adopters) and those who had not (non-adopters). The adopters were asked to identify the disadvantages they had encountered as a result of adopting these practices and the perceived challenges to implementing and running SRM practices in their establishments; the non-adopters were asked to provide reasons for not implementing any SRM activity; and both groups were asked why they thought other (third-party) establishments did not practice ES. The barriers/constraints to the adoption and implementation of ES practices as identified by the participants in the study are presented in Figure 1 and are discussed in detail.

4.1.1. Resource constraints

From the participants' views, cost implication was one of the major challenges that militated against their ability to both implement ES practices and ensure effective SRM. This challenge limited both non-adopters and adopters in terms of commencing the adoption process and ensuring the continued adoption of more practices and activities in order to achieve SRM. Specifically, the cost of obtaining SRM products, amenities and technological appliances (for example, energy-efficient light bulbs, motion sensor bulbs, heat pumps and A-rated appliances) were higher than that of conventional ones. Also, renewable energy from solar and wind sources were extremely expensive for TAEs, in comparison to coal-generated energy. Thus, replacing functioning appliances with more environmentally friendly devices was an expensive venture for TAEs. Sustainable devices were 'exclusively' reserved for establishments with huge finances. Participants

also stated that the payback period for switching to sustainable technologies and devices were quite lengthy and dissuaded them from pursuing SRM. This cost challenge to TAEs was not just the nominal cost of environmentally sustainable devices, amenities and technology but also their real cost in terms of relative prices and pay-back period.

Apart from cost challenges, participants highlighted that shortage of human power, staffing, time constraints and limited space at TAEs hampered the adoption and implementation of environmentally responsible activities. Staffing and time go hand in hand, as ES activities require going over and beyond the normal day-to-day activities of the industry and are ultimately tied to the cost constraint as human power and time cost money. Participants also referred to the availability of space as a significant challenge which results in establishments' inability to sort their waste at source, recycle, cultivate herb gardens for their kitchens or even plant trees to contribute to greening. This challenge was particularly severe for establishments situated in urban/city locations.

Figure 1: **Limitations to adopting and implementing SRM practices**

Source: Fieldwork (2015).

For an establishment with enough finances, however, this issue could be addressed by increasing the pick-up frequency of recyclable materials in order to reduce the amount of space required, or simply rent/purchase additional space for recycling and gardening. From the responses provided, resource constraints were primarily cost/finance related, which was attributed to staffing, time and space. These, however, could be resolved with extra finances.

4.1.2. Nature of the industry

According to the participants, the service nature of TAEs was the major factor undermining effective RM as well as the adoption of ES initiatives. This included guest behaviours and the industry's dependence on guest satisfaction for its continued existence. Various participants highlighted that guests were often inconsiderate, negligent and had a 'I don't care' attitude towards sustainable initiatives. One participant attributed this anti-sustainable behaviour to guests not being bothered about their behaviour away from their homes. The participant explained:

> A lot of people think because it's not their own homes they can do what they want. They leave lights on – they just don't care. The same with towels. I mean, people would go on…oh I didn't get clean towels today, and you don't say it in front of them, but you ask yourself: do you wash your towels at home every day? Do you change your linen every day? (2:40).

This behaviour was closely tied to guests' expectation of what had to be provided given that they were paying for the service, thus establishment survival was overwhelmingly dependent on them. Ultimately, this restrained the establishments from implementing sustainable initiatives, especially those likely to have direct implications on guest satisfaction. The concern for guests' satisfaction was, however, more prominent among bigger establishments with a higher star rating than backpackers or smaller guesthouses with low or no star rating. In addition, some participants indicated that where technology had been implemented to ensure appliances were automatically turned off when not in use, guests found ways to circumvent the technology, thereby minimising its potential. Furthermore, where notices had been placed in guests' rooms soliciting their cooperation with sustainable initiatives, these often got ignored. Indeed, correcting guests' attitude was extremely challenging, mainly because of the brief duration of their stay (often one-time stays).

It is worth mentioning that the need to ensure that TAEs were ready at all times to receive guests including those without an online reservation, as mentioned by a participant, was a limiting factor for SE initiatives. This implied that TAEs had to keep most of their equipment and devices fully operational regardless of whether their rooms were occupied or empty. Even where appliances in guest rooms could be turned off when the rooms were empty, facilities in other public areas (such as the kitchen and swimming pool) would constantly have to be in a ready state, with most electrical appliances on in anticipation of guest arrivals.

4.1.3. Lack of enabling environment

The lack of an enabling environment was highlighted by participants as a factor that drastically impeded the implementation of SE activities. The environment-related barriers that were identified included the absence of policies encouraging sustainability initiatives, inadequate infrastructure/support, establishments' location in the city and the characteristics of certain hotel group/chain policies.

Kasim (2007a) indicates that this is one of the barriers to adoption in the Malaysian accommodation industry. From the participants' perspective, government policies greatly influenced the extent to which ES initiatives could be implemented, as some policies targeted at TAEs to provide guidance on business operations inherently dissuaded establishments from pursuing such initiatives. An example is the policy regarding the protection of historic structures. Speaking about the impact of historic structures' preservation on sustainable initiatives, a participant indicated:

> We can do a lot to be more sustainable, to be quite honest. It is just not very possible for us. (Establishment X) is located in one of the historical buildings in Stellenbosch and this specific building was one of the first buildings built in Stellenbosch, so you are not allowed to make any changes to the building, like any big structural changes, so in order for us to rewire the whole electrical system and all that, including installing solar panels to go green (is not something that I believe would be granted to us). (23:11)

This barrier, however, was common to establishments located in the Stellenbosch area and did not come up among participants in the Cape Town area, indicating that it was location specific. Another example is the TGCSA's policy on the grading requirements of accommodations. The challenge associated with the TGCSA cut across the board and applied to situations such as lighting, where the participants thought of reducing the number of light bulbs in a room but was restricted due to council requirements. Other participants indicated that certain laws on self-generation of electricity discouraged initiatives such as the installation of solar panels. Another participant indicated that to get water directly from the water table (by installing wells or boreholes on the premises), the establishment would have to apply to the municipality for approval. In most cases, however, this was not approved.

Another environmental factor that limited adoption was the non-availability of adequate infrastructure/support. Inadequate infrastructure and support structures, as documented by Kasim (2007a) and El Dief and Font (2010), deter those who might want to engage in SRM practices. The participants identified the lack of public recycling pick-up and/or drop-off facilities in close proximity to the establishments and the unreliability of the energy and water utilities as key obstacles to SE initiatives. Speaking about the challenges of recycling, one participant pointed to the lack of support from the government:

> I can say our government doesn't help us one little bit. It's expensive for us to recycle. We have to get another company that we have to pay to come and collect our waste, whereas it could happen right here at our front door when they collect our general waste. The municipality, the government, they don't help you in any way. (13:37)

Given that recyclable facilities are unavailable as public services, establishments willing to recycle had to do so at an extra cost, which discouraged continued practice for those who had already kick-started the process as well as those willing to do so in the future. With regards to reliability issues pertaining to energy, some participants emphasised that occasional voltage fluctuations caused the (more expensive) energy-efficient bulbs and other sustainable appliances installed to become faulty more readily. There was, therefore, a dilemma when replacing such devices, given their high cost relative to conventional ones. The establishments might end up opting for the cheaper, less energy-efficient devices, given that their life span was already shortened by the voltage fluctuations.

The city location of some establishments was highlighted as an environmental barrier to adoption in terms of space requirements and consciousness levels. Three participants suggested that establishments located in non-city locations such as farms and townships tended to be more conscious of managing the environmental impact of their activities, especially with regard to SRM (i.e. energy and water consumption and waste emission). They indicated that this was driven by the fact that city establishments were often unaware of the impact of their activities beyond the supply by the distributing authorities.

Other participants indicated that space was a challenge in city locations, especially with regard to implementing sustainable waste management initiatives such as composting and waste sorting. This was because landed property was more expensive in these locations, hence space came at a premium. Farms and townships, however, had the advantage that population densities in these locations were much lower, hence the demand for and cost of land space were not as high as in the cities. Another unconducive environment identified was associated more with internal establishment dynamics. Some establishments that belonged to a hotel/business[2] group or a hotel chain pointed out that because their activities were governed by the group/chain's policies, often times, certain decisions had to be approved by and for the whole group before they could be implemented. A participant speaking about plans for the adoption of ES initiatives in their hotel group said:

> You see, if you do that, it will be a group decision. Everything that we do is a group decision; it's not every hotel decides what they want to do. It's a group decision and all the hotels do the same thing. (4:18)

[2] Some participants were part of a business group which had hospitality as part of their core business focus but were also involved in other business types.

Another participant indicted that this challenge was particular to hotel/business groups, as opposed to independent hotels:

> And I mean, yes there's lots of stuff that we can probably do on our own, but you know, our group might not allow it. Where independent hotel like (Mr C) in his hotels... you know, the sky is the limit with them. He is fortunate that he's got owners that's very passionate about saving the planet and those kind of things…He can do so much…with us, a bit more corporate environment, so you kind of have to follow the rules. (2:36)

This participant did not say that they were incapable of implementing any ES or SRM practices. Based on the interview background, the hotel group had already launched a sustainability programme, to be adopted by the whole group in phases. The participant's challenge was hence the bureaucracy involved in getting some things done when the establishment was a member of a group, as opposed to independent hotels. Also, the fact that certain initiatives might not be approved because they were a 'selling feature' or part of the 'brand image' of the hotel was a major challenge for this group. For some hotels in the study, their lighting type, bath size or even shower pressure were selling points on which the group would not compromise for individual hotels as it was one of their brand differentiation and marketing tools.

4.1.4. Staff attitudes

The inability to obtain staffs' buy-in to ensure positive behavioural modification was identified as a major factor that prevented establishments from achieving effective SRM and the adoption of ES initiatives. Since behavioural change is largely dependent on staffs' cooperation, securing their buy-in is crucial to the success of any initiative that is implemented.

Consistent with the findings of Kasim (2007a) for Malaysian hotels, managers in the study indicated that their staff viewed such activity as extra work which they could not justify. Some participants argued that this problem stemmed from the staffs' limited knowledge on issues of environmental conservation and sustainability. Consequently, solving this problem would entail finding people with the right mindset to make it easier for the management to engage in sustainable activities. Another solution would be to constantly train staff members and conscientize them. However, training might be time consuming, especially when staff members resign and are replaced with new ones, a feature symptomatic of TAEs (Ineson et al. 2013).

4.1.5. Lack of knowledge/required skills

The dearth of knowledge/necessary skills on management's part was pinpointed as a factor that undermined the adoption and implementation of SRM activities. This drawback, associated with non-adopters, was deeply rooted in governance structure of the establishments. From the responses of non-adopters, it became clear that managers were oblivious to the concept of SRM and sustainability, especially in terms of the potential benefits to their establishments, and had not reflected on the possibility of

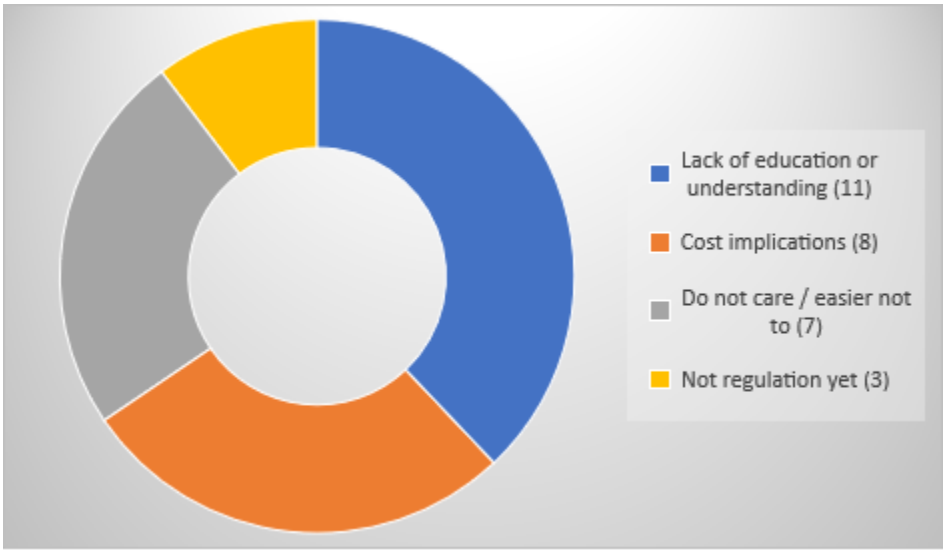
implementing initiatives aimed at achieving sustainability. Some participants' explained that some managers were helpless to act because the owners seemed more concerned about guest satisfaction and profitability. This response, however, highlights the unenthusiastic nature of some managers to SRM, as there were managers in other establishments who had implemented basic behavioural modifications in a quest to be sustainable despite the owners' lack of interest. Some of these managers had carved out ways to overcome the owner's passivity by saving up their operating expenditure allocations and investing in sustainable solutions such as energy-efficient light bulbs, among others.

These findings are consistent with those of Van der Merwe and Wöcke (2007) for South Africa, Chan (2008) for Hong Kong and Kasim (2007a) for Malaysia. El Dief and Font (2010) also highlight that managers of hospitality establishments who do not adopt SRM and ES practices are often unaware of the potential benefits of these practices as it relates to the industry. Education and knowledge development on issues of sustainability, as well as existing standards and guidelines, are therefore a prerequisite for the adoption and implementation of sustainable activities in TAEs (Kasim 2007a).

4.1.6. Third-party perceptions on limitations to adoption

To obtain an industry-wide perspective on barriers to the adoption of SRM and ES practices in the accommodation industry, participants were asked for their perceptions on why TAEs did not embrace ES initiatives. The responses of the participants provided vital information on general industry challenges regarding ES practices. The third-party barriers identified from the analysis of responses are presented in Figure 2.

Figure 2: **Third-party perceptions of the motivation for the adoption of SRM and ES practices**



Source: Fieldwork (2015).

Participants opined that some members of the industry were ignorant of the importance and benefits of ES and hence did not practice it. This relates to the problem of awareness discussed in the previous section. The majority of participants alluded to this 'ignorance' factor as a possible reason for non-adoption, suggesting that there was still an education gap in the industry, which applies to local establishments (i.e. those not part of international chains) and smaller establishments.

However, some participants indicated that the cost implications associated with SRM activities were a reason for some establishments not adopting them. This suggests that some of the non-adopting establishments were willing but financially handicapped to adopt SRM practices. Some participants were also of the opinion that regardless of any barrier, when an establishment does not adopt any sustainable activities, it is because there is a lack of concern somewhere, regardless of whatever other barriers exist. This suggests that in some cases the lack of will is the most important barrier to implementing sustainable activities. This idea is anecdotally supported by the fact that there are SRM activities (especially behavioural ones) that do not cost anything but do save on consumption (e.g. switching off lights when not in use to conserve energy and washing only full loads of laundry and dishes to conserve energy). However, these activities involve extra effort as they require behaviour change and hence the motivation of 'caring', either about the environment, or costs, or attracting customers. This reason is exacerbated by the fact that in South Africa, as yet, there are no regulations governing environmental actions in the accommodation industry. This is discussed further below.

In addition, some participants argued that some establishments needed external incentives in the form of regulations to motivate their adoption of ES initiatives. The non-existence of environmental regulations in the industry, be it punitive or rewarding, served as a barrier to the adoption of such initiatives. This suggests that it might be necessary for the government to put in place some form of environmental regulations in the industry, however, the small number of participants suggesting this indicates that other more important factors were driving non-adoption in the industry and if these were addressed, regulation might not be necessary.

It is important to note that all participants mentioned more than one factor when responding to this question. Their responses were therefore a combination of two or more of the factors presented in Figure 2. This indicates that the barriers to the adoption of SRM and ES activities in the industry are complex and diverse, and often overlap. Consequently, addressing one factor can proffer solutions to other factors. For example, educating ignorant members on the potential cost-saving advantages of ES would solve the problem of lack of education and cost, and could potentially motivate those who do not care to take action.

4.2. Synthesis of identified limitations

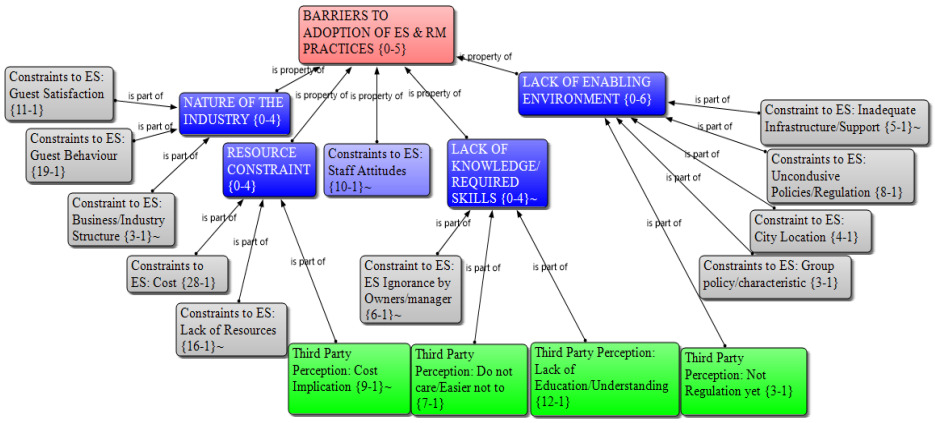
The results provided details about the challenges operators of TAEs faced in adopting initiatives aimed at effective SRM. The majority of the limitations that were identified applied to those who were willing to implement SRM initiatives but were unable to due to a plethora of factors (see Figure 3). Figure 3 also maps the third-party perceptions to the four main themes identified for the first-party responses. From the results, resource

constraints were identified as the major challenge impeding TAEs from implementing SRM practices. Resource constraints in this context refer to lack of finances to address the time constraint and shortage of human power, as well as the cost implications associated with implementing any SRM initiative.

Participants' views regarding the inability of some of their peers in the tourism accommodation sector not to implement SRM practices confirm the industry-wide resource constraints challenge. Kasim (2007a), for example, acknowledges that it is often quite expensive to kick-start and implement a SRM project, especially when it involves purchasing new devices (e.g. renewable energy devices, as well as energy and water-efficient devices) or setting up completely new sustainable systems (e.g. the installation of new building management systems or recycling systems). Furthermore, even where the huge financial implications can be overlooked by TAEs, the cost of keeping and operating such systems to guarantee efficiency may prove daunting (Chan 2008).

The participants' perception about cost constraint indicates that it is relative in nature. They revealed that the cost of implementing environmentally sustainable schemes was more costly compared to those required for non-sustainable schemes. For established businesses, the cost of implementing a new viable SRM scheme nearly doubles because it inherently means that the sunk cost of existing installed systems to be replaced will be lost. Thus, to enact policies aimed at upscaling the adoption of SRM initiatives in TAEs, a critical starting point for the South African government (especially in the Greater Cape Town Region) should be aimed at cost reduction. This could be achieved by subsidizing the cost associated with purchasing and implementing sustainable appliances and materials, as it did to encourage the uptake of solar water heaters in domestic homes (Eskom 2011; South African Government 2015).

Figure 3: **Network view of the barriers to adopting ES and SRM practices among participants**[3]



Source: Fieldwork (2015).

[3] The occurrence of ~ after for example *{10-1} implies that the code is annotated in the coding software.

It is, however, noteworthy to mention that the industry's nature was pinpointed by participants as the single most daunting challenge to which they could not offer a decisive solution to address the issue.

With regard to the 'nature of the industry', it is documented that the 'soft industry' characteristic, industry's vulnerability, service nature of the industry and the short tenure of managers in the industry are factors that militated against the adoption and implementation of sustainable practices. This study, however, revealed that the key obstacle inhibiting the adoption of ES practices was the service nature of the industry. Specifically, this challenge revolved around the need to satisfy guests' expectations in order to stay competitive and profitable, as well as guests' behaviours regarding sustainability initiatives.

The participants vehemently emphasised that the need not to jeopardise guest comfort levels trumped the variety of initiatives that could be introduced to ensure SRM and ES. This was exacerbated by some guests being completely unaware of, or opposed to, the concept of sustainability initiatives. Hence, they were not prepared to compromise their convenience in the least possible way. In general, such initiatives include the need to minimise resource use (e.g. use of water as well as lighting and ventilation facilities) in order to meet sustainability objectives. This underscores a crucial gap in the need to explore alternatives for addressing this challenge and providing alternatives enable TAEs to adopt measures aimed at reducing consumption while simultaneously seeking innovative ways to ensure guests' collaboration in implementing SRM initiatives. The findings also indicate the need to address the challenge of comfort and luxury demands of guests that are not environmentally sustainable. A possible solution would be to extend the use of behavioural economic tools such as those prescribed and tested by Schultz et al. (2008; 2007), Göckeritz et al. (2009) and Goldstein et al. (2007; 2008) for linen reuse associated with the 'cleaniness aspect of the luxury requirement' in the industry to influence the 'comfort luxury requirement' as well (Idahosa et al. 2018).

The participants also explained that the nature of their establishments constituted an obstacle to the implementation of ES activities. From the data analysis, the four main environmental obstacles identified include unconducive policies/regulation, insufficient infrastructure/support, the location of some TAEs and the features of some hotel group/chain policies. These obstacles that limit establishments that are willing and capable of implementing sustainable initiatives are somewhat consistent with Kasim's (2007a) findings. She argues that the adoption of SRM procedures will be low whenever there is a dearth of appropriate policies and regulations that strongly encourage and advocate for ES initiatives in the tourism industry. This is valid given that such practices often involve a move away from the normal way of business operations, and often involve extra financial investments (El Dief and Font 2010). Consequently, an external nudge in the form of government policies and regulations may be necessary to boost the adoption of these practices, both in the study sample and in similar developing countries where resource constraints are generally an issue. It is, therefore, recommended that existing policies and regulations should be reassessed in order to evaluate their effectiveness on the environment and new ones enacted in consideration of, and to promote, the sustainability of the environment. It is important to highlight that participants' perception about the largest drivers of resource consumption unravelled

priority areas where appropriate policy interventions could be injected. In the context of power consumption, for example, space conditioning was underlined as the largest driver, a finding that is consistent with the literature (Hotel Energy Solutions 2011; Placet et al. 2010). In terms of water consumption, most participants stated that water consumption when guests showered was the largest driver. Participants' views suggest a sense of frustration due to their inability to effectively address this issue because they could not dictate the length of time a guest spent in the shower, which was underpinned by the service nature of the industry. The gap in some managers' education and knowledge on ES issues was also flagged, highlighting the need for both increased awareness education and more formalised/academic education on ES issues.

5. CONCLUSION AND RECOMMENDATIONS

The consumption of natural resources by TAEs is overwhelmingly high. This, coupled with increasing population and declining resources in developing countries, has catalysed the need for TAEs to pursue and implement strategies aimed at achieving SRM. Yet, as the literature suggests, adopting and implementing ES and SRM initiatives in TAEs have largely been unsuccessful. In the current state of affairs, the continuous high consumption of natural resources could have huge ramifications for developing countries where tourism contributes substantially to the GDP. Using the Greater Cape Town Region in South Africa, which has some of the most visited tourist attractions in the country, as a case study, this study set out to identify the challenges faced by TAEs in implementing and adopting strategies, especially as it relates to sustainability, and to identify these stakeholders' perceptions of the drivers of resource consumption (especially of energy and water) in the industry. While the generalisability of the findings are limited due to the unique context of the Greater Cape Town Region of South Africa, the study does contribute significantly to the literature on ES and RM in the tourism accommodation contexts of the Global South.

The findings indicate that resource constraints, the nature of the industry, an unfavourable environment, and managers or decision makers with limited or no knowledge of ES and SRM were obstacles to the adoption of SRM in the case study, with the cost of implementation being the most significant obstacle. The participants identified the service nature of the industry as the primary factor stifling the adoption of SRM practices and expressed a feeling of helplessness due to their inability to intervene. The barrier involves guests' behaviours and the industry's dependence on their satisfaction for survival. The implication, therefore, is that the resource-saving potential of the industry is reduced significantly when guests who are apathetic to environmental issues lodge in an establishment because of their unwillingness to compromise their comfort (Chan 2008; Kasim 2007a). Thus, there is an urgent need to explore options to address this challenge and proffer solutions that allow TAEs to adopt consumption reduction initiatives without compromising the comfort of guests. In addition, the key energy and water drivers identified by the participants provide primary focus areas for policy and practical interventions to reduce industry consumption towards more sustainable levels. Finally, the results presented here provide a useful guideline for researchers, policy makers and industry experts to formulate strategies to address the

SRM challenges in establishments, as well as some policy recommendations to kick-start the process.

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