

The Effect of Water Crisis on Fine Dining Restaurant Entrepreneurs in the Cape Town Metro

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Abstract

The water crisis of 2017/ 2018 posed challenges to the brink of shutting down of fine-dining restaurants in Cape Town. The purpose of this paper is to analyse the effect of water crisis on fine-dining restaurants in Cape Town. Using the concepts of entrepreneurship and eco entrepreneurship, the study analysed strategies that fine-dining restaurant managers used to overcome the drought in Cape Town. Data for the study was gathered through semi-structured interviews with the fine-dining restaurant managers. The findings revealed although the majority of fine dining restaurants implemented water saving strategies e.g. buying and using water saving equipment, closing large swimming pools, using grey water systems and using bore holes and water tanks. The perceived impression created by the media about the Day Zero in Cape Town motivated visitors to stay away during this period. Cape Town municipality imposed high water tariffs that affected the fine dining restaurants and the lack of government assistance one of the major challenges. The study offers insights on strategies that fine-dining restaurants managers can take in addressing droughts that are prevalent in the context of South Africa.

Keywords: Water crisis; combat crisis; fine dining restaurant; entrepreneurship; tourism; Cape Town; South Africa

Introduction

Cape Town relies on tourism as its major form of income generation. About 10 million tourists visited Cape Town in 2016 (Rogerson & Rogerson, 2020). The iconic sights of Table Mountain, the city's long sandy beaches, beautiful wine farms and a home to the major Cape Town International Airport attracts thousands of tourists to the city of Cape Town. Furthermore, the city is also recognised as one of the most beautiful cities in the world with good food and wine, scenic nature, history, an overall good time and the third largest city in South Africa (Welter, 2012). Warner and Meissner (2021) view Cape Town as an aspiring global city thriving on tourism and hospitality sectors. As a major tourist-focused city, Cape Town has about 20% of the country's restaurants. There are over 159 restaurants found in Cape Town alone, offering the best restaurants found in the world and home to seven of the country's top chefs. The restaurant sector of Cape Town is competitive (Warner & Meissner, 2021).

Benatar (2019) suggests that "Cape Town is where new restaurants open faster than one can envisage". This makes Cape Town an area where entrepreneurship is significant. According to Petzer and Mackay (2014), the restaurant businesses significantly believed to be 45% income contributors of the hospitality industry in South Africa. Chen and Elston (2013) agree that the restaurant businesses are major contributors to job creation, and economic revitalisation and rely on their entrepreneurial businesses as the main source of family income. These findings require careful consideration when considering the development of the

restaurant industry. The study directly addresses existing research gaps in understanding fine dining restaurant owner's effective ways of dealing with water crisis.

The municipality of Cape Town predicted diminishing of visitors because of the announcement of Day Zero in April 2017. Western Cape Province is known for being a region of water scarcity with a mean rainfall of about 348 millimetres. The rainfall was below 75% contributing to the city's worst fear from both businesses and residents at large (Jansen & Schulz, 2006). The municipality implementation of restrictions on water usage by 30%. Further, water tariffs increased significantly, and the average bath water usage reduced to 60 litres per person per day (Muller, 2017). In 2018, the water situation worsened, and the restrictions intensified even further to level 6b which meant allocation of 50 litres per person. The hike in water tariffs for businesses increased from R26 to R40 per litre (Donnenfeld et al., 2018). Consequently, some restaurants reported to be at the brink of shutting their doors due to the water crisis challenges. Literature reveal that success of a fine dining restaurants depend on meeting the certain criteria considered by customers for consumer satisfaction e.g., consumer quality, ambience of the restaurant and quality of the food served (Petzer & Mackay, 2014; Uslu & Eren, 2020). Having to consider the standards of fine dining, the study focused on investigating the strategies implemented for fine dining long- term survival. The fine dining restaurants proved to be an under researched area of study and water crisis was an inevitable situation that required to be understood for the benefit of entrepreneurs in decision making (Lee et al., 2016; Madanaguli et al., 2022).

The restaurants in the Cape Town heavily reliant on the influx of tourism during the summer periods, however the months of November to April 2017/2018 challenged tourism businesses (La Vanchy et al., 2019). The water crisis left some businesses gravely concerned about the future, which left panic erupting as some threatened to leave the city of Cape Town until the water crisis was over (Le Page, 2018). The announcement of the Day Zero in 2017 was inflicting the tourism sector in the Western Cape. While there were studies that had looked at the water crisis in the context of South Africa (Hedden & Cilliers, 2014; La Vanchy et al., 2019), there were few studies that focused on fine dining entrepreneurs' strategies to overcome the water crisis in Cape Town. Taing et al. (2019) suggest that Cape Town needs to transform into a 'Water Sensitive City' (WSC). This means changing stakeholders' relationships concerning how water is planned, sourced and used in the city. The aim is to reduce future risk, contingency plans to be prepared, and funds made available for the development of decentralised water resources (Taing et al., 2019). However, perspectives of fine dining entrepreneurs on strategies for dealing with water crisis are missing in literature. This aim to address this knowledge gap.

Literature review

Defining crisis

There are five main crisis categories of crisis: general-economic crisis, industry-specific crisis (commission crisis), domestic security crisis, global terror crisis and health crisis (illnesses such as swine flu and COVID-19) (Yaron et al., 2011). Aviad et al. (2003) defines industry-specific crisis and health crisis in tourism and hospitality as events that jeopardise the steady operations of tourism businesses and impose harm on a tourism destination. Crisis may force private businesses to seek government assistance in the hospitality and tourism industry. In some cases, governments may also develop strategies to counter threats of crisis e.g. water crisis. The hospitality industry is composed of risk management and marketing plans that incorporate strategies for crisis mitigation. The crisis management practices are to improve the position performance of the firm for long-term sustainability.

South Africa and water crisis

South Africa is a water-stressed country and has 7 million people with no access to drinkable water, especially in rural areas and the major problem in South Africa is thermoelectric power generation as the large driver of industrial water demand. Many power-generating stations are located in water-stress areas resulting in over-exploitation of water and potential contamination from industrial activities (Donnenfeld et al., 2018). South Africa is in an arid and semi-arid zone, with an average rainfall of 464 millimetres (Warner & Meissner 2021). In the year 2017 South Africa's Eastern and Northern provinces experienced severe droughts with significant numbers of livestock dying and crops being lost to drought, and this was visible in the provinces of Limpopo, North West, and KwaZulu Natal. In addition to this problem, Western Farmers had to receive stock feed donations from the province of Mpumalanga. South African farming was hit significantly as the cost of production for fruit and vegetables, e.g. wine, potatoes, onions, and tomatoes dropped by 15% each year due to water shortages. Mukheibir and Ziervoge (2007) stated that Cape Town, South Africa, was at risk from projected climate-influenced warming and changes in rainfall variability. This prediction's accuracy is a reality as the city is experiencing a water crisis, posing challenges to its residents and businesses.

A record-breaking three-year drought hit Cape Town in 2015, resulting in the threat of 'Day Zero', the day was when all domestic taps expected turned off (Warner et al., 2021) argues that the so-called crisis type we will refer to as a manufactured crisis and never existed. Warner et al. (2021) reveal that scientists considered the depth of the drought a rare and severe meteorological event. The Department of Water and sanitation in Cape Town late notices the loss of water revenue by R2 billion in 2018, city officials introduced increases in water prices to compensate for the shortfall and proposed new water tariffs in the same year. These tariffs affected every business that relies on water for its survival.

The water crisis problem ranked the third most concerning global risk according to the World Economic Forum and currently poses a major threat (Hedden & Cilliers, 2014). Two years after identifying the risk, an inevitable drought that could leave Cape Town without water affected tourism visitor numbers and knocked out economic growth, as tourists instead stayed away from Cape Town. This had a direct impact on residents and businesses in the city for a number of reasons. The water tariffs increased to R40 per litre from R22.38 per litre in 2017, leaving many residents astonished. The average bath water usage reduced to 60 litres per person. Hotels had to compromise their standards by asking guests to limit showers to two minutes or less, while some restaurants switched to disposable cups and ditched table linen. The overarching impact of these water-saving techniques brought nothing other than financial strain on restaurant businesses (Warner & Meissner, 2021).

Tourism and fine dining

Tourism in South Africa contributed R402bn or 9.3% of South Africa's GDP and is an important economic growth sector in the Western Cape as well as the biggest employment creator in the province. Water crisis affected Cape Town, a city that contributed towards the economy of the country. Warner and Meissner (2021) reveal that the situation of water crisis was so dire in such a way that according to the Climate System Analysis Group at the University of Cape Town on 30 April 2018, water storage in the six storage dams in Cape Town dropped to 191 million litres. This situation was followed by a tremendous decrease in South Africa's gross domestic product by 3.2% during the first quarter of 2019. The decline was an indication of the largest economic drop in 10 years. The massive decline in the economy was believed to be from load-shedding and the water-crisis. The Western Cape economy had reduced by 1% from its national contribution of 13% per annum, and a 0.13 % growth reduction came from domestic products. The massive decline in the economy was believed to be from

load-shedding and the water- crisis. In attempts to raise awareness of the water crisis, the Cape Town municipality implemented water demand management strategies in 2018 by extremely increasing water tariffs for business and residents. According to Warner et al. (2021) the first strategy was water tariffs increments to reduce water demand from 1000 million litres to 500ml a day, through cooperative endeavours to get residents and businesses to implement behavioural water-saving initiatives. For instance, people were encouraged to shower for no longer than 2 min while city officials promoted the use of recycled water.

The role of fine dining restaurants in the total tourism experience of traveller's affirms that food service contributes to the overall tourism experience and that is a major determinant of the quality of a vacation experience for a visitor (Nield et al., 2000). This is the determinant of the crucial role that fine dining restaurants play in strengthening the economy for the tourism sector in Cape Town. However, the restaurant sector faces many challenges, with businesses struggling to succeed in the midst of high competition, low barriers to entry, price conscious consumers, rising food prices, government regulation, and high labour costs, survival rates in the industry are low, with only half of the businesses that were operating in 2009 still trading in 2013 (Lee et al., 2016).

Furthermore, restaurant owners lack skills, experience, and resources, and they fail because business owners do not have the skills, experience, or resources to sustain business long term. Most restaurant entrepreneurs lack realistic knowledge of the costs, responsibilities and medium to long-term requirements of a business. However, as many business owners fail to plan correctly, many entrants do not understand the financial requirements of a business such as VAT, tax, costing, financial controls, and other obligations that are part of the business mix. Poor calculations of profit margins and cash flow often lead to crippling pressures on the business. Lack of service orientation and dedication to the service industry is a means of ensuring the success of a restaurant business (Nel et al., 2018). Restaurateurs should continuously assess their product and service delivery to strengthen clients (Nel et al., 2018). Fine dining restaurateurs must pay attention to perceived quality in an attempt to meet customer expectations (Petzer & Mackay, 2014). The restaurants in the city of Cape Town are to ensure that their businesses offer the expected customer service satisfaction without forgetting to implement water-saving strategies. The efforts made by the South African government to pressure society in conserving water have pushed some citizens to consider grey water and water harvesting systems (Taing et al., 2018). In attempts to limit economic damage that could lead to job losses in South Africa, SA Tourism and government agencies embarked on a global roadshow to reassure potential visitors to help the city against the fight for water security (Le Page, 2018).

Categories of hospitality/ restaurants

Taste, service and location can be used to determine the category of restaurants. Fine dining restaurant refers to an expensive eating establishment targeting the middle to high-end consumers (Uslu & Eren, 2020; Yoo & Ha, 2022). The fine dining are sit-down restaurants with a formal atmosphere, most of them have a dress code. Fine dining serve customer in a formal way providing highest quality foods, offering wine lists to help consumer with food and wine pairing. Yoo and Ha (2022) believes that the fine dining restaurants serve high-quality food and offer exceptional service with well-trained staff and the restaurant's physical surroundings adds value for money charged by fine dining. The only difference between fine dining and casual dining restaurant is the price and the ambience (Yoo & Ha, 2022). Fine dining restaurants offers more expensive services and unique customer experience. Fine dining restaurants are usually distinguished by the high quality of three factors are food, décor and customer service. It is imperative to note that the price that comes with fine dining needs to

meet customer's expectation. The dining environment is considered a critical factor that affects customer satisfaction, mainly because the response of customers to the environment is part of their consumption experience. Tourism is an important economic growth sector in the Western Cape and is the biggest employment creator in the province (Rogerson & Rogerson, 2020). For tourism to generate income, service providers such as restaurants, hotels, and attractions must focus on service excellence and customer satisfaction to ensure competitiveness and business growth. The South African fine dining restaurants play a vital role in creating a tourism experience. Both hospitality and tourism cannot operate in isolation, as one cannot function without the other for the benefit of the visitor's experience. The water crisis/restrictions in Cape Town leave the restaurant customers with concerns about saving water when using the restaurant environment.

Context of Cape Town and water crisis

Cape Town is a heart of South Africa's wine producers that export 113 million gallons amounting to 428.5 million litres of wine to Europe and United States of America in 2016 (World Water Council, 2018). The Western Cape Province produces most notably world-class wines and spirits produced from a myriad of vineyards across the province. International futures model has revealed that by 2035 the overall forecast in demand for water will increase due to population growth, urbanization, rising income, irrigation expansion, non-renewable electricity generation and growth in the manufacturing sector (Donnenfeld et al., 2018).

Cape Town depends only on water conveyance from remote sources through pipelines and six dams makes it reliance on a complicated network of inter-basin transfer schemes to supply it with water. This delinquent caused considerable technical challenges as decreasing dam levels required management in a technically sound manner to ensure an equitable allocation for all sectors that rely on water for survival. The statement "water is life" is often taken for granted, however the challenging circumstances around the water crisis in Cape Town have compelled entrepreneurs in the hotel and restaurant industry to appreciate the need to conserve water. This statement came into reality when the city of Cape Town was confronted with the fear of closing down some of the restaurant businesses due to the water shortage that built up over a period of 4 years since 2015 (Muller, 2017).

The water crisis is inevitable, meaning the businesses are to find ways of sustainability or suffer the dire consequences of high-water tariffs. The emphasis currently is the environmental consideration for any business practices to ensure long-term sustainability for businesses (Baldwin, 2009). Agreeing with Venter and Rwigema (2004) in order to ensure that the businesses comply with the environmental regulations, well-trained employees to follow diligently the business sustainable strategies are required (Baldwin, 2009). According to the Cape Chamber of Commerce and Industry water crisis was motivated by "*too much politic and too little sound planning.*" Poor planning is the main reason for the premature failure of small businesses in South Africa. Warner et al. (2021) agree that the staging of existential issues in politics to lift them above dramatized and presented as an issue of supreme priority. In an attempt to adhere to water restrictions and the accompanying penalties in the form of increased water tariffs, some fine dining restaurants continuously sought measures and ways of reducing water usage and its associated cost.

Determinants of the water crisis in Cape Town

Figure 1 below, depicts the situation on dam levels during the water crisis in Cape Town. The average dam storage levels in 2015 were around 50,7% followed by 2016 when there was a massive decline to 29.1% that stunned the whole country and that did not end there because in 2017 dam storage levels were 20%. This created panic among the people of Cape Town and

the city was nearing a Day Zero leading to water restrictions increased to level 6b, meaning a person was allocated only 50 litres per day per person and those that do not abide by the rules were subjected to punitive tariffs. The dams' storage levels in 2018 were still averaging 32% as the drought was intensifying and the commercial properties had to reduce water usage by 45% and businesses had to implement new water-saving strategies to keep doors open.

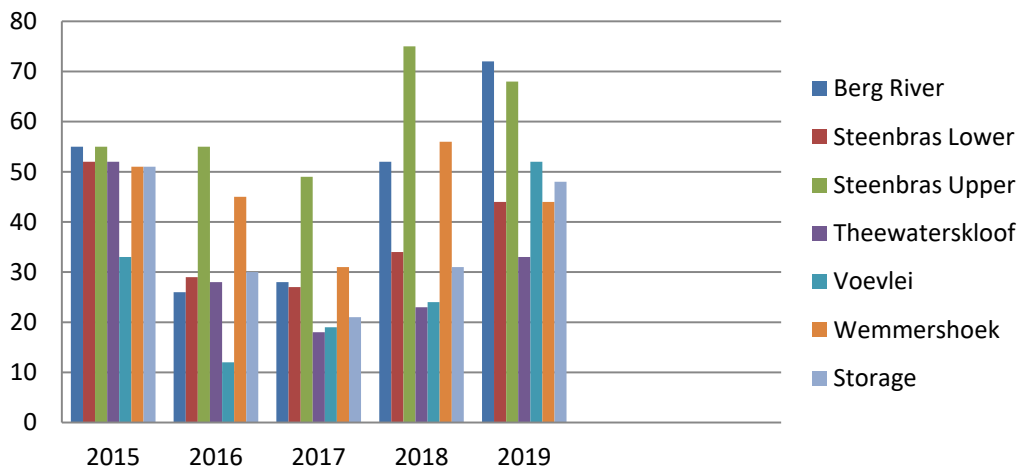


Figure 1: Storage dam Levels in Cape Town - 10th June 2019 (Source: City News, 2019)

By 2019, the Dam levels were around 49% showing a little relief and the city could see there was an increase in dam levels and the rainfall seasons were back to normal. The above figure clearly indicates that the dam storage levels were extremely low between 2016 and 2018 leading to panic in 2019. One would ask, why Cape Town waited until the announcement of Day Zero before planning to put measures in place to curb the water crisis. Nevertheless, there is no evidence that fine dining restaurants businesses devised any sustainable strategies in order to save water due to the water crisis pandemic. The study embarked on determining the strategies implemented by fine dining restaurants to solve the water crisis for long-term survival.

Theoretical perspective to the study

Entrepreneurship strategies

The study used Entrepreneurship Theory (Mishra & Zachary, 2015) that suggest that entrepreneurship relate to creation of a business and understanding of entrepreneurial process. It involves the entrepreneur in identification of external opportunity, use of resources and sustained value. The theory also considers the competencies of an entrepreneur that include the ability to identify opportunities, take risks and deal with uncertainties in the business environment and ensure business success (Piperopoulos, 2018). Entrepreneurs develop skills that can support entrepreneurial process. The skills are self-efficacy, passion, adaptability, flexibility and resiliency (Mishra & Zachary, 2014). Due to environmental changes, entrepreneurs identify business opportunities that will give them a competitive edge in the ever-changing market needs. Entrepreneurship defined as a process of creativity in which opportunities observed and sources mobilized to bring change in pursuit of financial benefits. Kyro (2015) agreed with the above, asserting that the core of entrepreneurship is innovation, combining resources in an innovative manner to create some-thing new. It is clear that creativity and innovation go hand-in-hand with Entrepreneurship. Entrepreneurship continues to play a vital role in the economies of many developing countries, including South Africa (Rogerson, 2018).

Despite the risks, hard work, challenges, hostility from society, resentment from any opposing views, and any hindrances they may be facing, they press on and keep creating, they keep on producing and trading against all odds. It is therefore imperative that under significant challenges micro-entrepreneurs and small-scale entrepreneurs are continuously devising methods for their continued existence (Van Aardt & Bezuidenhout, 2014). The stride taken by fine dining restaurateurs to achieve sustainability is the research gap that this study seeks to unearth. The business can either be innovative to reach the maturity phase or fail to be creative and innovative and then eventually reach the decline phase. The change that the study focused on is the environmental/ climate change causing the water crisis in Cape Town, motivating some of the restaurant entrepreneurs to create new ideas to achieve sustainability in their businesses. The implementation of new strategies to survive for long-term requires a special innovative strategy by restaurant entrepreneurs. This study will focus on the strategies that restaurant entrepreneurs took to overcome water crisis in Cape Town (Mishra & Zachary, 2014).

Ecopreneurship

Ecopreneurs are entrepreneurs that focus on sustainable development, economic growth, and social welfare. Through ecopreneurship, companies have capabilities to achieve the creation and development of profitable businesses (Kyro, 2015). An effective ecopreneur ensures that the entire organization, including employees, is aware of the environmental values and trained on the benefits of environmentally focused business strategy. The company should emphasize the effective implementation of such business strategies (Kyro, 2015). Sustainable entrepreneurship involves the motivation to make a profit whilst aiming at improving environmental conditions within the business by creating social values in addition to the economic and environmental benefits of the enterprise (Kyro, 2015). The convention agreement, the Kyoto Protocol, increased strict environmental regulations and has motivated many businesses to take into consideration the environment and emission of gases when deciding on the business practices, for environmental protection and to improve business activities (Kyro, 2015). The climatic changes lead to environmental disasters like the water crisis as experienced by many countries globally. To ensure that the businesses comply with the environmental regulations, well-trained employees need diligently follow the business sustainable strategies (Baldwin, 2009). The R's strategies to reduce environmental impact, re-use, recycle, and recover water usage, further stating that an estimated amount of 50-60% of food process water can be reused (Baldwin, 2009).

Sustainability for entrepreneurs is necessary to address over-consumption of water through the cutting of resources and other avenues explored (Welter, 2012). An effective ecopreneurs ensures that the entire organization, including employees, is aware of the environmental values and trained on the benefits of environmentally focused business strategy and companies should emphasise the effective implementation of such business strategies (Kyro, 2015). The business need commitment from all the employees to ensure environmental sustainability within the organization. Scholarly studies reveal that ecopreneurship contributes to successful long-term sustainability of any business and is a vehicle for social change. The study explored the fine dining restaurant entrepreneurial strategies during water crisis in Cape Town of South Africa. The scientific theory stated that the warming of the earth is increasing water losses from evaporation, meaning less water is reaching the taps even if rainfall is continuous (Le Page, 2018). Even if the water crisis may seem diverted, the water scarcity issue is still highly relevant in the long-term (McKenzie & Swails, 2018).

There is a direct link between implemented environmental policies and profit gain in hotels (van Rensburg, 2015). Environmental management requires businesses to monitor their

operations on a regular basis and reduce any effect on the environment. The process also known as the “*carbon foot print*” has encouraged many hotels to implement new strategies to ensure the reduction of carbon footprint and the damage to natural surroundings (van Rensburg, 2015:13). Welter (2012) further stress the vitality of the sustainable restaurants strategy that will respond to the changing customer patterns. The hospitality industry’s sales strategy is through focusing on service delivery, achieving customer loyalty and meeting guest’s needs with the aim of making profit (Welter, 2012).

Combating water crisis

The apparent outcome of the water crisis in Cape Town led to a sharp decline in tourism visitor numbers between 2015 and 2018 in Cape Town (Visser, 2018). The results of the study revealed that water crisis was acerbated by the media reports on severity of the Cape Town water crisis especially to overseas markets, consequently decreasing the foreign visitors. The visitors felt compelled to rather stay away from Cape Town and travel to other destinations where water was not a matter of concern. The case of water crisis in Cape Town which directly affected businesses that rely on travellers for financial sustainability such as Hospitality and Tourism business including hotels, restaurants and airline devised strategies to survive during the water crisis prolonged period (Rogerson & Rogerson, 2020). When the government declared the Cape Town water crisis as a pandemic in 2017, resulting to Day Zero announcement (meaning residents as well as hotels will not have water supply in Cape Town) motivated a study to measures implemented strategies by fine dining restaurants to survive over a long-term.

Hospitality crisis requires businesses to develop strategies that are committed to the main marketing principles such as sustainability, profitability over a long- term and consumer orientation (Erasmus et al., 2019). Johann (2022) redirect strategies towards supporting businesses, employees, society and the market environment in which tourism and hospitality businesses operate. The dynamic environment needs businesses to effectively develop strategies to counter threats, crisis is one external challenge that directly affects businesses ability to make profit. The hospitality and tourism management implement the sustainable and innovative programs and solutions in order to achieve the business objectives and to develop plans as set apart strategy that places the business in a competitive advantage. Johann (2022) argues that building relationship capital during a time of crisis is indispensable for the company’s survival, recovery, and future growth. Hospitality has been among the travel and tourism industries greatly affected by the pandemic. The tourism and hospitality industries most vulnerable to all various crisis requiring effective and sound management to counter the threats posed by the dynamic external environment. According to Maslow’s theory, addressing rising basic needs from the crisis such as food security, sanitation, hygiene, clean air, water and economic security. It is crucial to demonstrate the firm’s ability to cope with a crisis, focus on protecting business, employees and the environment. The businesses are to adjust the business strategies in order to meet all business stakeholders (Erasmus et al., 2019). Therefore, continuous scanning of the environment is required. The rising uncertainties as results of pandemic and other crisis situations requires strategic management interventions. This also applies to Cape Town businesses that almost led to the bleak of shutting down their doors to customers because of the water crisis.

The tourism and hospitality industry prerequisite to review their marketing strategies in order to survive the dynamic changing environment posed by external environmental factors. There are a variety of business practices that can be used to combat crisis (Yaron et al., 2011). In order to cope with decline in international visitor’s numbers, the local hospitality industry in Israel amplified its reliance on the domestic market by offering a variety of package deals as

a turnaround business strategy (Aviad & Arie, 2003). Marketing was also a basic management function that was critical to sustain any businesses financially. The crisis posed a major threat to businesses. However, government support through financial bailout demonstrated to be an effective remedy for dealing with the crisis. The strategies for addressing the crisis considered integrated system approach for tourism and hospitality management.

Research methodology

The qualitative approach is used to discover the underlying meaning of events and activities when studying a phenomenon and uses in-depth interviews, observations, participants, narratives, etc. (Uys, 2017). This study used a qualitative approach to gather more in-depth understanding of strategies that fine dine owners took to overcome the water crisis in City of Cape Town Metropole. Qualitative research was used to in order gather subjective opinions on how managers dealt with the water crisis (Myers, 2019).

The study used purposeful sampling to select participants who provided data that was relevant to the study (Myers, 2019). There were 29 participants that participated in the study and were fine dining restaurants located in the Cape Town metropole. The participants included managers, owners of fine dining restaurants. The participants were identified as having a specific character of a formal establishment following a specific dining trend. Few restaurants in the Cape Town Metropole are actually fine dining establishments. The researchers confirmed with the participants that restaurant was indeed a fine dining restaurant before collecting data. Few restaurants in the Cape Town are fine dining establishments. Another sampling method used in this study was snowballing or snowball in recruiting the participants to study (Jennings, 2010). Once the researcher identified one member of the population, the participant in the study introduced other members with the fine dining restaurants network. The fine dining restaurant managers and owners referred to other restaurants that were willing to participate in the study. Overall, the responses represent crisis management practices on water crisis for fine dining restaurants from 29 fine dining participants. The responses from managers and owners who held management positions in restaurant chains with multiple branches. The research could not be conducted to a large sample due to lock-down regulations of COVID-19 pandemic in 2020.

The data collection done using interviews (Myers, 2019). The interviews supported gathering of subjective opinions related to business management strategies that the fine dining restaurants in Cape Town innovated for long-term survival. Further, participants provided details on the impact of the water crisis on the financial performance of fine dining restaurants. Semi-structured interviews were conducted with restaurant owners or managers of the fine dining restaurants in their business premises. The face-to-face interviews and an interview guide with open ended questions was used. During the interviews, the data was audio-recorded and later transcribed. The interviews were scheduled for a maximum of one hour per interview. The data collected during the research study was analysed using content analysis (Elo, & Kyngas, 2008). The information collected was arranged into categories, sub-categories and themes. The process was repeated to improve the quality of findings. At the end, a report was produces and the findings were presented using verbatim quotations to demonstrate the direct responses from the participants.

Results

The findings were presented using verbatim quotations and this helped in providing direct responses. The findings presented in this section are the results of responses based on questionnaires drawn to fulfill the objectives of the study.

Water saving strategies

Participants were asked to elaborate on the business management strategies implemented during the water restrictions/water crisis for long-term existence and operational procedures to guide employees towards achieving a sustained existence. The aim was to establish whether water crisis affected the fine dining restaurants financially and if they have implemented the water- saving strategies due to water crisis, considering the customer’s expectations of fine dining. The participants indicated diverse responses on the water saving strategies. The studies revealed that the water crisis posed a threat to Cape Town restaurant businesses, those that successfully survived the water crisis had to build dynamic capabilities that would maintain them for the long-term. The participants’ ideas about the reality of the water crisis were different, but 99% indeed implemented new business strategies to survive the water crisis for long- term survival. Forty percent of the participants confirmed that Cape Town municipality actually forced them to implement water-saving strategies, stating that the problem started when the government and the city of Cape Town took too long to comprehend the extent of the problem of water crisis. One participant shared his sentiment about water crisis in Cape Town stating that “the water crisis problem was a close call with almost running out of water and the problem started when the government and the city of Cape Town took too long to realize the problem.”

Participants explained that they were not scared of the water crisis but had to implement new water- saving strategies otherwise the municipality of Cape Town would have cut off their water supply. The literature revealed that too much politicking and too little sound planning Times live (2018) motivated the water crisis in Cape Town. About 40% of participants indicated that their business believed in sustainable entrepreneurship (ecopreneurship), which included financial development, longevity and sustainability of the business (Kyro, 2015). One participant asserted, “One of our company values as the business is to save water.” The business not forced to save water but used sustainable entrepreneurship as a differentiating strategy for their business. Sustainability deemed necessary to address overconsumption of water through cutting of resources and other avenues explored (Welter, 2012).

The hospitality leaders were aware of the financial sacrifices to ensure environmental preservation that indicated tension between tourism development and sustainable tourism. When the Cape Town municipality announced a problem about the dams drying up, the majority of the businesses implemented new water-saving strategies as follows:

- *Purchasing new equipment:* by digging deep into their pocket to buy the new equipment. The participants confirmed that they started buying a lot of water and power-saving equipment. Installing wind energy equipment: One participant went as far as informing me that he was the first person to install the sixty wind energies for both businesses before the Hotel Verde in Cape Town Airport at an enormous cost.
- *Using small swimming pools:* The respondents stated that they had to close down the big swimming pools and only operated with the small swimming pools.
- *Using less water intensive equipment:* The strategies includes closing the ice machines, one coffee shop was closed temporarily, use of disposable serviettes, reduced use of ice, use of ice bricks instead of ice machines, switching off some ice machines, removed bath plants, timers in the showers, buckets in showers for reuse by house keepers, water bottles in rooms to collect used water to reuse water for gardens.
- *Use of grey water systems:* The use of the ArcAqua system that uses ultra-violet light, spray and disinfected water, reuse water, use big steamers instead of boiling to avoid using more water.
- *Using bore holes and water tanks:* Use of bore holes, reservoir tanks and massive water tanks were also undertaken to reduce water usage.

Compliance-based environmentalism was due to government rules and regulations whereby companies forced to comply with mandatory environmental regulations. The regulations may improve internal efficiency in businesses through innovative resource productivity (Kyro, 2015). The driving forces in the implementation of the business water- saving strategies were the regulations by the city of Cape Town and the hike in water tariffs for businesses from R26 to R40 per liter (Le Page, 2018). The literature also warned that it is crucial that fine dining restaurateurs pay attention to perceived quality in an attempt to meet customer expectations (Petzer & Mackay, 2014). The participants explained that there were a number of challenges to consider when working in the kitchen in a fine dining restaurant, especially health and safety issues. The majority of the respondents had bought water tanks to reduce use of water from the municipality and to curb water usage. All the participants implemented effective water saving strategies to sustain their businesses.

Effects on financial performance due to the water crisis

It was noted that high water tariffs affected the financial performance of fine dining restaurants. Although the fine dining restaurant owners could not disclose the actual amounts in implementing water- saving methods due to water crisis, the study reveals that a lot of money was invested in water-saving methods in order to sustain the fine dining restaurants during water crisis.

The participants commented that “the perceived impression given to visitors by media about the water- pandemic in CPT reduced the visitor numbers during the water crisis.” This meant that the revenues of fine dining restaurants also reduced. The participant further elaborated that:

If the city continues to make this water crisis our problem by increasing rates on us by 15% annually, as we pay a lot to the municipality, high electricity, high water tariffs and carrying on like this we will result in losing our businesses and I will have to reduce the staff. As much as I am dedicated to my staff, that I have for a long time, some of them have been with the business for 26 years since it started, it is difficult for me as it means less revenue, less staff, and loss of business.

The participant felt that it has become an unrealistic foundation to start a business having to spend a lot of money, estimated at R800.000, to implement water-saving methods. Similarly, another participant noted that:

Before starting to compete with the rest of the world, it costs a lot of money that is a demotivating factor rather than the push for new creations. We lost 10 % of the business turnover each year since the water crisis in Dec 2017- 2019 March. The rates that I used to pay for 4 years was less than what I pay now, the increased rates by municipality to 20% a year after evaluating our businesses for the purposes of rate increases is a problem because the higher the rates, the higher the rental. The business suffers and it is crazy to pay such exorbitant amounts and still maintain the business. Having to buy water tanks from Yoyo business proved to be a rip-off as they charged exorbitant amounts of money during the water- crisis scare.

This meant that implementing water-saving was already a costly exercise and high water-tariffs worsen the financial performance of fine dining restaurants.

Another participant commented that:

the water-saving methods gave us enough water and we are not relying on municipality water, the business water allocation was not affected by the water crisis as we used our other sources of water- supplies.

It was clear indication that water crisis is inevitable. There were high water bills although the water tariffs increased by 40% and the top 20% of customers decided to stay away due to the water crisis in Cape Town. The increase in water tariffs, according to the literature, to prevent the water- wastage problem, the government must increase water and energy prices to reflect the true cost of water and energy (Howe et al., 2012). The members of staff in the fine dining restaurant were not getting tips because there were fewer customers. One participant believed that visitor numbers reduced by 40% and the businesses were suffering, not because of the water crisis but because the economy was suffering.

Another point was the change in suppliers. It also affected the financial performance due to re-negotiation of prices and some farm suppliers shut down due to the water crisis. It was reported that:

Cape Town municipality continues to make this water crisis our problem by increasing rates on us by 15% annually, we pay a lot to the municipality, high electricity, high water tariffs and carrying on like this we will result in losing our businesses and I will have to reduce the staff turnover.

Darpro (2015) revealed that restaurants that implemented water-efficient practices decreased their operating costs by 11%, energy by 10%, and water use by 15%. The hike in water tariffs for businesses from R26 to R40 per litre also added extra costs to businesses.

Discussion of the findings

The Western Cape Province is known for being a region of water scarcity with a mean rainfall of about 348 millimetres per annum (Jansen & Schulz, 2006). Cape Town's most rainfall is during the winter season, while the period between October and March is the dry season leading to the City's authorities to restrict water usage by 30% (Jansen & Schulz, 2006). The studies indicated that there is a need for a conservative approach to water management to achieve future sustainable growth hence the businesses that rely on water for survival have to devise methods that will ensure customer satisfaction to make a profit. The study embarked on sustainable entrepreneurship.

The restaurant participants unanimously agreed that the perceived impression given to visitors about the water crisis in CPT reduced the visitor numbers during the water crisis. The water-saving strategies implemented strategically taking into consideration the fine dining restaurant expectations from customers. The majority of participants all agreed that the water crisis scare in Cape Town compelled their businesses to implement new business strategies to sustain the required water-saving and to achieve sustainable growth. The water crisis was believed to be real, but it was portrayed as a massive problem by the media causing a scare to the restaurant visitors traveling to Cape Town. This water-scare problem drove restaurateurs to practice sustainable entrepreneurship. The implementation of new business management strategies to address the water crisis forced businesses to dig deeper into their pockets making it difficult for small businesses to survive, as the costs of buying new water-saving methods proved to be expensive. The municipality of Cape Town worsened the situation for the businesses by increasing the water tariffs, exerting so much pressure on the fine dining restaurant businesses. The increased water tariffs, 15% annually by the Cape Town

municipality, posed a threat as restaurant businesses were among the most vulnerable businesses affected by the water crisis and high-water tariffs (Darpro, 2015).

Some participants believed that the solution to this water crisis was the introduction of desalination plants, although they are expensive. The threats from the municipality to businesses forced the restaurant entrepreneurs of fine dining restaurants to carry out new procedures and product/ service to create wealth under conditions of the water crisis challenges (Piperopoulo, 2018). Only one business from the restaurant participants interviewed, confirmed that they did not introduce water- saving methods because they are a small business and they did not have water-saving requirements, although the business was experiencing a downfall. The fine dining restaurants had to be strategic in implementing the new water-saving plans for long-term sustainability and to avoid customer dissatisfaction.

The study had some limitations. The fine dining restaurant owners / managers often have busy schedules as their restaurants in Cape Town are known as the best food and wine dining in South Africa making it difficult for the researchers to arrange their participation in the study. The majority refused to assist because they were busy due to the nature of their business, and it was a peak season for Tourism during the time of the study. The study ended with a small sample because of the start of COVID19 lock down in South Africa. However, the interviews were worthwhile, and participants were more engaging to share their views and experiences related to the water crisis.

The study suggests the following recommendations. Water crisis posed a major challenge for the businesses that rely on water for survival, especially the announcement of Day zero in Cape Town. It is clear that water crisis was a lesson for the fine dining restaurants that rely on Tourism, leading to the majority of the fine dining restaurants to develop dynamic capabilities to ensure long-term survival in the midst of water crisis. South African businesses need a new paradigm that embeds water sustainability and resilience in day-to-day practices by protecting water systems and reducing the environmental footprint of growing populations. To accomplish this, government, the private sector and consumers need to work together to realise the development and implementation of new water -saving methods as well as instruments that will transform water planning, supply and demand to ensure water security in times of drought or plenty. Some participants in the study believe that the best thing that the country of SA can do to help businesses as seen in Dubai, is the use of desalination plants as water is melting and it was possible, but the country does not want to improve the infrastructure. The introduction of desalination plants is the best solution to the water crisis problem although they are expensive (McEvoy, 2014). The restaurants also suggested that the aided assistance by the government regarding the relief of financial obligations such as rates and water tariffs would help, as it is difficult for the small businesses to survive during the time of the pandemics.

Conclusion

The study revealed that the restaurant businesses are among the most vulnerable businesses affected by the crisis challenges in South Africa. The water crisis remains inevitable due to environmental challenges. Not all fine dining restaurants confirmed that harsh water tariffs aggravated the implementation of the expensive new water-saving strategies, and this meant the survival of the fittest in the industry. The overstated condition of the water crisis by the media, as believed by fine dining restaurant participants, affected the tourism visitor numbers, and the reduction in Tourism visitor numbers depicted in literature and financially affected the fine dining restaurants during the water crisis. The perceived impression about the water-crisis in CPT compelled visitors to stay away from Cape Town during this period. Further studies can explore the impact of water crisis on fine dining restaurants in South Africa.

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