Sustainability in the Restaurant Industry: A Cape Town Study

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1. Introduction
1.1 Research Background
The restaurant industry, as a key part of the food and beverage industry, has the ability to affect the food supply chain in a positive way with regard to sustainability. Insofar as restaurants are involved in the purchasing, preparation and sale of food to consumers, by moving to sustainability they can play a role in enabling consumers to consume less and differently. This can be through a range of activities from local procurement to recycling or energy efficiency. With regard to production, restaurants can source ethical food and support local procurement, sustainable farming and fishing. They can monitor energy usage with regard to carbon emissions and the supply chain, and implement measures to use energy more efficiently. They can support ecosystems through water usage, waste disposal and concern for biodiversity. They can be a conduit for communicating and imparting these issues to consumers and other stakeholders. Restaurants can influence consumers when they make decisions on a range of issues.

1.2 Aim/Motivation of Study
The proposed research aims to (i) investigate the key sustainability issues relating to the restaurant industry and (ii) provide recommendations for a supportive model to guide South African restaurants towards sustainable practices. The study will focus on Cape Town initially, with a view to extending the findings. The starting point is an assumption that there is scope for the restaurant industry to become more sustainable. This assumption was based on preliminary research which showed minimal information on the sustainability of Cape Town restaurants.

The research needs to address the following areas:
- Sustainability with specific regard to restaurants
- The status of the Cape Town restaurant sector
- The promotion of sustainability through the restaurant system in Cape Town

2: Literature Analysis
2.1 Introduction
The literature analysis aims to provide an understanding of the interrelated global issues that drive the need for sustainability and then narrows the focus to Cape Town, and specifically the sustainability of restaurants in the city

2.2. A Global Polycrisis
2.2.1 Aspects of the Crisis
The global landscape needs to be understood as a complex system in a state of crisis, economically, environmentally and socially. The global setting is predominantly urban as 2007 was the point at which half the global population became urbanised (UNEP, 2007B; UN-Habitat, 2006). The ecosystem services we are dependent on for our livelihood are being degraded and two thirds of these ecosystems are in decline (MEA, 2005). Globally our ecological footprint requires two planets at the current rate of consumption (Worldwatch Institute, 2010). Despite this, our consumption of resources such as fuel, energy and food escalate. This economic system functions on fossil fuels such as oil and coal as a key energy resource. Climate Change is another variable that threatens life as we know it and puts pressure on the environmental and economic systems (Stern, 2006:1).
2.2.2 Consumption and Distribution of Resources
A growing population is a critical factor in the scenario described above, as “the accumulation of people, their consumption patterns, travel behaviour and their urban economic activities impact the environment in terms of resource consumption and waste discharges” (UNEP, 2002:10). The global population has now reached seven billion and is predicted to reach 9.3 billion by the middle of this century. The rate of growth is declining though, and expected to stabilise at 10 billion in 2100 (UNEP, 2007b:27; UNEP, 2012:1). The UN Human Development Report of 1998 established that consumption of global resources has been unevenly distributed. Globally the richest 20 percent of the world in the highest-income countries account for 86 percent of total private consumption expenditures, while the poorest 20 percent account for merely 1.3 percent (UNDP, 1998:2). This top 20 percent persists today and is also referred to as the “global middle class”, which cuts through typical North –South divides. According to the Joburg Memo (Sachs, 2002:19), around 80 percent of this consuming class is found in North America and Europe. The rest is dispersed through elites in the South, particularly in newly industrialising countries.

2.2.3 Ecosystem Degradation
The pressure on global resources, particularly in the last fifty years, has contributed to the degradation of the environment and its ecosystems. The Millennium Ecosystem Assessment (MEA) of 2005 found that about 60 percent of the ecosystem services examined are being degraded at a substantial cost (MEA, 2005:16). Their findings were that “human activity is putting so much strain on the natural functions of Earth that the ability of the planets ecosystem to sustain future generations can no longer be taken for granted” (MEA, 2005:2).

2.2.4 Limits to Growth: Ecological Footprint Analysis
Ecological footprint analysis enables us to assess the ecological gap by comparing the ecosphere’s production with the economy’s consumption (Wackernagel & Rees, 1996:222). In just over forty years our global ecological footprint has increased threefold and we have exceeded the planets regenerative ability by 25 percent (WWF, 2006:14). It is the wealthiest twenty five percent of humanity who occupy a footprint as large as the entire biologically productive surface area of the Earth (Wackernagel-Rees in Sachs, 2002:19).

2.2.5 Fossil Fuels Oil, Waste and Climate Change
It is predicted that oil production will start dropping and the price will increase due to oil not being as readily available and more costly to extract. The remaining oil reserves are going to be harder and costlier to extract, as well as fiercely contested (Kunstler, 2005:65). Increased oil prices will have widespread impact in a global economy dependent on cheap and plentiful fuel. According to the definitive Intergovernmental Panel on Climate Change (IPCC) greenhouse gases are being released into the atmosphere and are contributing to climate change (Stern, 2006:iii). The review concluded that “climate change will affect the basic elements of life for people around the world - access to water, food production, health, and the environment. Hundreds of millions of people could suffer hunger, water shortages and coastal flooding as the world warms.” (Stern, 2006:vi).

2.3 The Modern Food System
Despite its apparent power and reach, the global food system “is fragile because of the size of its ecological footprint, the resources needed to sustain it and the exploitation it requires” (Patel, 2007: 294).
2.3.1 Dependence on Inputs
The modern food system is dependent on high external inputs, fertilisers and pesticides which are predominantly derived from fossil fuels. (Altieri & Nicholls, 2005:16; Pfeiffer, 2006:69). Globalisation of the food system has also destroyed the diversity of local food cultures and local food economies (Shiva in Roddick, 2001:109). Fragility of the system is evident in our dependence on a smaller variety of crops (Madely, 2002:22-4). The system requires food to travel long distances from farmer to consumer, creating a dependence on fossil fuels. In addition the emissions of the fossil fuels needed to produce and transport food are a significant contributor to climate change. Moving to an industrialised food system has produced food, but has incurred associated costs in terms of energy usage, loss of biodiversity and the breakdown of local food economies.

2.4. Sustainability
One of the pathways to a sustainable system, which meets current needs and those of future generations, means addressing overconsumption and seeking equity within the system. Reducing material over-consumption by the rich minority can be achieved by reducing individual material consumption levels and/or by increasing the overall material and energetic efficiency of the economy (Gallopín, 2003:28). Resource use can be cut and other avenues can be explored.

2.4.1 Sustainable Food Systems
A sustainable food system would be one that “enhances the health and welfare of people and animals, improves the working and living environment, enriches society and culture and promotes equity” (Dalmeny & Reynolds, 2007:8). The process behind sustainable agriculture is to move from a linear system, which needs inputs and creates waste, to a circular system where the waste products go back into the system as inputs (Pretty et al., 1995:133). Maintenance and long term fertility of soil is important. Renewable resources are used in locally organized systems. A closed system of organic matter and nutrients is created. Living conditions for livestock need to be looked after, with animals being reared without drugs and antibiotics, pollution must be avoided and genetic diversity maintained. A safe working environment, satisfaction and an adequate return for the producer are also encompassed, as is the wider social and ecological impact of the system (IFOAM in Lampkin, 1999:4; Soil Association, 2011). All aspects of the system from production to distribution are critical to sustain this approach.

2.4.2 Local Food Economies
Despite the prevalence of industrialised food systems, there is evidence that “thousands of new and alternative initiatives are now flowering across the world to promote ecological agriculture, preservation of the livelihoods of small farmers, production of healthy, safe and culturally diverse foods, and localization of distribution, trade and marketing” (Altieri & Nichols, 2005:10). Local food systems can provide food security and economic stability (Crane & Swilling, 2008:284; Norberg-Hodge & Gorelick, 2002,31). Although the global food system is not going to be changed overnight, local food economies do and can exist within the global food system. These local food economies can be defined as a “flow of resources within a network of community-based enterprises involved in the production and distribution of food at the local scale for the purposes of local consumption including, but not limited to, financial, human, social and environmental capital and refer to local food initiatives at a community level within the context of a predominantly modern food system globally” (Schulsenk, 2010:60). Some of the initiatives that would support local food economies include farmers markets, community supported agriculture, urban agriculture, cooperatives and ethical retailers (Schulsenk, 2010:60-3). These initiatives can support the move to a shift in the food economy.
2.5. Cape Town

Cape Town is the third largest city in South Africa. According to the City of Cape Town’s Council Overview Report (2011:5) in 2010, Cape Town’s population was estimated to be 3.7 million and has enjoyed an annual growth rate of 3 percent. The current state of Cape Town’s resources needs to be understood as a benchmark for broad recommendations as well as laying the ground work for understanding the system restaurants are part of.

Energy

Local governments are responsible for the distribution of energy from which they derive income. In 2006 Cape Town consumed 3 090kWh per person for the year, which contributed 50-59 percent of the city's Carbon Dioxide Emissions. Current total consumption of electricity is 12 000Gwh (Spencer, 2010:140,150). The majority (95 percent) of Cape Town’s electricity comes from the Eskom grid with a combination of coal, nuclear, hydro and gas power stations (Crane & Swilling, 2008:268; Spencer, 2010:139). Some electricity is supplied from the Steenbras pumped storage system, and the Darling wind farm produces green electricity fed into the grid (Crane et al., 2010:82). There are energy supply issues - both in terms of capacity with the reserve margin being below 15 percent and usage skewed in favour of high income households (Crane et al., 2010:82), as well as the need to shift to more renewable sources of energy.

Water and Sanitation

In the Western Cape, urbanisation, industry, agriculture and tourism are fuelling increased demand for water. If demand for water grows at 3 percent/annum then supply will be exhausted by 2025 (Crane & Swilling, 2008). Between seventy to seventy five percent of water is obtained from dams outside Cape Town, such as the Berg River Water Scheme (Winter, 2010:104). Water is used wastefully insofar as potable water is used for all usage requirements (Winter, 2010:1109).

Waste

The City of Cape Town’s waste management service covers 96 percent of households and businesses. There are only three landfill sites that will be filled in ten to fifteen years with new sites increasingly difficult to source. Despite initiatives to reduce waste only 14 percent of waste volumes were recycled in 2003 (Crane et al., 2010:82). The city’s model is to reduce waste to landfills. The Integrated Waste Management Bylaw (2009) requires networked thinking regarding the waste cycle with collaboration by the stakeholders (Engeldow, 2010:180).

Food

Cape Town has a significant food footprint and requires 1,48 million hectares to feed its population, equivalent to 10.52 percent of South Africa’s arable land. This is based on the 2010 estimated population of 3 700 000 and international norm of 0.4 hectares of arable land to feed a person (Based on Haysom 2010:214; City of Cape Town, 2011:5). The food required to feed Cape Town means that “1.3 million tonnes of food are imported from a land area equivalent to 112 000 square kilometres that stretches across the whole of South Africa, and beyond. Middle and high-income households may be able to afford prices that include the cost of transporting all this food (fuel, cold storage, packaging, energy, etc.), but this is certainly not the case for poor households” (Swilling, 2006:37). The food footprint necessitates a look at the strategies around food production in order to create food security for the region.

2.6. Restaurants

2.6.1 Sustainable Restaurants

Sustainable restaurants are the focal point of this analysis. The restaurant is a buffer between the consumer and the food they consume. The restaurant takes on responsibility for where the food comes from and how it is prepared. The restaurant sector is in a position
to contribute towards sustainability as it is part of the food system and uses resources such as energy and water, as well as producing waste. The sector also employs people in a range of positions from dishwashers, cleaners, waiters and managers. It thereby creates employment opportunities in food supply, preparation and service and related services and industries. By moving to sustainability in resource usage and management; addressing social issues in workers and community; and engaging with consumers, the sector can contribute to its own sustainability and impact on the broader sustainability of cities.

2.7. Sustainability and the Restaurant System in Cape Town

A restaurant can move toward sustainability if it reduces resource use and environmental impacts while building social capital with employees and communities and engage with consumers on these changes. Intervention points may include menus, transportation, energy usage, food sourcing, waste disposal, staff remuneration, Broad-Based Black Economic Empowerment (BBBEE) compliance, community engagement and communication. In the light of the above, (i)food, (ii)resources, (iii)people and (iv)communication have been identified as areas which provide an underlying framework for restaurants moving to sustainability.

2.7.1 Restaurants and Resources

Apart from food and labour, the primary resources a restaurant uses are connected to energy, water and waste, transport and materials. Restaurants moving towards sustainability can approach their operations by endeavouring to reduce material flows through design, construction, energy consumption, food sourcing and transportation. In addition to reducing resource flows, restaurants can also move from linear to circular metabolisms (where waste can be reused). They can also look to switching from non-renewable fossil fuels to renewable resources such as solar energy.

Energy in Restaurants

Globally, the energy used in the hospitality industry is primarily based on fossil fuels or nuclear energy (Chen et al., 2009:14). Restaurants in varying degrees are dependent on fossil fuels for transport, food production, and resource use and energy. Restaurants use more energy/area than any other commercial building (Katsigris and Thomas, 2006:11), which makes them vulnerable to rises in energy cost, but also provides opportunities for saving.

Water in Restaurants

Water can be conserved by fittings and efficiencies in the kitchen, restrooms and gardens. Grey water systems can be installed to reuse water. Grey water comes from bathrooms and kitchens while black water comes from toilets and contains harmful pathogens (Chen et al., 2009:45; Robinson, 2011:93). Rain water can be harvested and used for irrigation. (Robinson, 2011:84). Low flow heads on dishwashers can be installed. Taps can be installed with conserving devices such as aerators and timers. All pipes and taps can be in good repair to avoid leaking. In the restrooms water-saving toilets can be installed. Signs can be used to remind staff and customers not to waste water (Chen et al., 2009:42; Katsigris & Thomas, 2006:175). Food contamination is a problem and so it is of importance that use of water is offset by necessary hygienic standards.

Waste in Restaurants

In the restaurant industry, food and beverage involve pre-consumer (preparation), post-consumer (leftovers) and packaging waste (Chen et al., 2009:28,9). Strategies around reducing, reusing and recycling waste can be employed by restaurants e.g. composting, co-procurement, food donations (Chen et al., 2009:31). The priority is to reduce, then reuse and finally to recycle waste. There are a number of initiatives restaurants can use to reduce resource use which can be adapted depending on the nature of the restaurant or circumstances. One approach to source reduction is to buy less food to prevent waste from food needing to be thrown away. However as an overall sustainable system this needs to be
offset against the energy costs of food transportation. Inventory can be computerised to plan ordering or control usage on a “first in-first out” approach (Katsigris & Thomas, 2006:234). Restaurants can buy products differently to save on packaging.

2.7.2 Restaurants and Food
Food is a critical focal point for restaurants moving to sustainability. In terms of the global polycrisis food can impact on poverty and inequality, resources, ecological degradation and peak oil and climate change (IAASTD, 2008:3)

Food Sourcing
Restaurants can supply food onsite as far as possible. This can be in the form of a kitchen garden or a more extensive garden that provides the restaurant with fresh produce. Food sourced offsite can adhere to the following principles:
- The use of healthy quality food
- The support of local and low impact food production
- Boost local economy in a environmentally beneficial way
- Fish from sustainable sources
- Meals from a diverse range of crops
- Reduced meat consumption
- Animal products sourced by welfare and environmental standards (Dalmeny & Reynolds, 2007; SASSI, 2010a)

Sustainable food choices – local, seasonal, organic – often overlap as restaurants make complex choices guided by a number of factors from cost, convenience, availability and demand. A food item may be local, organic and seasonal, yet in other cases tradeoffs may be required. Many restaurants begin their sustainability journey by sourcing local and seasonal food (Dalmeny & Reynolds, 2007:18). Restaurants can support local food economies with the attendant environmental, social and economic benefits. Some of the options open to restaurants supporting local food economies are: growing their own food, farmers markets, Community Supported Agriculture (CSA), Fair Trade and smaller suppliers. The trade-off to address with these options is securing supply and passing on costs if they are higher.

There are a number of initiatives around the sustainability of food accessibility in Cape Town. These include the South African Sustainable Seafood Initiative (SASSI) and Biodiversity Wine Initiative (BWI). SASSI in South Africa.

2.7.3 Restaurants and People
Contributing to sustainability means not only concerning oneself with the issues of food and resources but having consideration for the network of people affiliated to the restaurant. Restaurants can endeavour to build up human capital by looking after the individual health, knowledge and skills of their employees as far as viable. Employees need to be productive within optimal working conditions. (Forum for the Future, 2011; Andriof & McIntosh, 2001:16). Social Capital is built up by supporting the surrounding communities.

2.7.4 Communication
Restaurants can communicate their efforts to consumers to encourage demand for sustainable food. SASSI and BWI are both examples of initiatives that restaurants can use to communicate sustainable choices to their consumers. A menu is a good way to communicate sustainable values as it is one of the customer’s first points of contact and may influence their ordering.
2.8 Conclusion
The literature analysis has located the restaurant industry of Cape Town within the specifics of the city and the converging forces of the global polycrisis. Pathways to sustainability have been identified as a response to issues that impact on our current resource lifecycles. People, food, water, energy, waste have been isolated as resources critical to the restaurant industry coupled with the need to communicate these resource flows. Restaurants need to be looked at as a system that connects with consumers, suppliers, local communities and other stakeholders.

3: Methodology
3.1 Introduction
The starting point of the research is the idea that restaurants in Cape Town can be assisted to become more sustainable. This research problem led to the formulation of a progressive succession of research questions that could address the research problem. These questions are:

- What is the significance of restaurants with regard to sustainability?
- What is the status of the Cape Town restaurant sector?
- How can sustainability be promoted through the restaurant system in Cape Town?

The first question addresses the connection of restaurants to sustainability and requires an understanding of the issues underpinning the need for sustainability, which is then funnelled down to connect restaurants and sustainability issues. The second question locates the broad issue in a specific urban context, Cape Town, and provides background into the city and the sector. The third question looks to a solution to promoting sustainability within the specific Cape Town restaurant situation.

3.2 Research Design
The nature of the research is Applied Research insofar as the aim of the research is to contribute to solving particular issues with a social application through a situation analysis and business model (Terre Blanche, Durrheim & Painter, 2006:45). The defining goal of the research is primarily exploratory in nature, as exploratory studies employ an open, flexible and inductive approach to research, as they attempt to look for new insights into phenomena (Terre Blanche et al., 2006:44).

The challenge was to create a research design that would provide the relevant answers to the three research questions (Mouton, 2001:49). The intent from the outset was to create a viable business model to address the question of how to promote sustainability through the restaurant system in Cape Town.

Both primary and secondary data was collected. Although secondary research employed quantitative data the primary research conducted is qualitative in nature. Secondary data is used in the literature analysis and the business model from academic papers, internet sources, restaurant guides, magazines and social media. Primary research was conducted through semi-structured interviews, and observational research. Empirical research was conducted through interviews that formed the basis for case studies. Empirical research, based on existing secondary data is used to profile restaurants and customers. Non-empirical research is conducted via the literature analysis (Mouton, 2001:57).

3.3 Situation Analysis and Business Model Methodology
The situation analysis is an assessment of environmental factors which will impact on strategic decisions (du Plessis et al., 2009:2; Kotler & Keller, 2012:76). This will provide an overview of the issues driving the formation of a mechanism to support restaurants. The situation analysis can be distilled into a SWOT analysis (Kotler & Keller, 2012:70), which culminates in goals or objectives as a response to the findings of the analysis. This analysis relied on both primary and secondary data.

All relevant secondary data needed to be collated and supplemented with primary data where necessary. Restaurant data is based on official data via Statistics South Africa, and
industry information in the form of online restaurant guides and databases. Statistics South Africa (StatsSA) produces a monthly national food and beverage report which can be used to understand the sector nationally, and give a rough indication of the size of the restaurant sector in Cape Town.

The SWOT analysis is a marketing tool that distils the research findings of the situation analysis into a coherent workable tool. The SWOT analysis involves interpretation of existing data to arrive at strengths, weaknesses, opportunities and threats (du Plessis et al., 2009:392; Kotler & Keller, 2012:70). Once the SWOT analysis has been created, objectives can be set. These are derived from the findings of the SWOT and form the basis of the business model.

The business model is captured in a pre-defined canvas by Osterwalder and Pigneur (2010:44) and deals with the following integrated elements: Customer Segments, Value Propositions, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities and Cost Structure. The canvas is a reflection of the research findings and recommendations for the study.

3.4. Results
The results of the research are summarised in a situation analysis and a business model. The situation analysis parallels the literature analysis and provides a basis for the business model as expressed by the objectives.

4. Results
4.1 Situation Analysis
4.1.1 External Factors
Demographic
Cape Town has a rapidly expanding population of 3.7 million and has around 910 000 households (Pieterse, 2010:82; Cape Town, 2011:5). There is increased pressure on resources and “the massive and rapid urban growth of Cape Town has not been coupled to investments in the kinds of urban infrastructure, like energy and transportation systems that are appropriate for a world that is running out of atmosphere, water, oil, and sinks for liquid, solid and airborne waste” (Swilling, 2010:7). This means that restaurants in Cape Town can contribute to alleviating this pressure on resources by changing their patterns of resource consumption. It also highlights the importance of embracing social issues (needs of the working class) to contribute to alleviating the social imbalance.

Politico-Legal Factors
The City of Cape Town and the Western Cape Province is governed by the Democratic Alliance (DA) but central government is controlled by the African National Congress (ANC). This can be a cause of conflict. There are also impending laws regarding carbon taxes and waste. The restaurant industry in Cape Town would need to work within the framework of existing initiatives within the City of Cape Town and national legislation. The Industry may need to make changes to be compliant with impending or existing legislation nationally or locally, for example waste management. Conversely the industry should lobby or take advantage of any tax benefits or incentives.

Economic Factors
Since the economic collapse of 2008 we have been in a recessionary environment. There have been steep increases in city rates and tariffs. There is potential for energy demand to outstrip supply. This energy is predominantly supplied by Eskom. Cape Town has experienced power outages and steep cost increases. Energy and transport interventions are a necessary part of restaurant strategic initiatives. Although expenses incurred through implementing efficiencies may seem costly in the short-term these may prove to be a saving in the longer term.
Socio-Cultural Factors
South African Trend Forecaster Dion Chang (Chang, 2011) of Fluxtrends commented on how 2011 saw the rise of the artisan eater, “the new ‘foodies’ who are interested in consuming local, hand-made products bought at small scale urban markets.” He ties this trend in with nostalgia, a reaction to industrialised food systems and a culture of ethical eating. “The use of local ingredients to diminish the effects of food transportation – in the attempt to reduce our ‘carbon-footprint’ – is an example of consumption that is consciously reflexive of effects of eating on the ecosystem” (Chang, 2011).

Technology and Environmental Factors
There are also innovations in the space of energy, food, water and waste. There are rapid changes in communication technology, with consumers using technology and sharing information via blogs and social networking. there is degradation of the environment and pressure on ecosystem services through aspects such as unsustainable resource use, inefficient use of water, pressure on wastewater systems, carbon emissions and land and soil degradation

Restaurants need to respond to changing consumer patterns. They must cater for and use technology to reach these consumers. Consumers are also empowered through their ability to use social media to voice their opinions. A sustainable restaurant’s strategy should be to help restore and enhance ecosystems through food procurement, renewable energy, reduced transport and other sustainable initiatives.

4.1.2 Restaurant Industry
The Retail value of food passing through the restaurant system is R16,808 million and beverages of R2,392 million totalling R19,200 million for year ending June 2011.(StatsSA, 2011) The true cost of the food is closer to R5,603 million (including VAT and beverages R797 million. According to Fedhasa (Franco, 2012) it can be estimated that Cape Town restaurants could represent as much as 20% of the national average given the concentration of restaurants in the tourist-focused city. Based on the assumptions of Cape Town representing 20 percent of the National Market and Food and Alcohol being marked up on average at 200 percent an estimate can be made for the size of the Cape Town sector. The retail value of food and drink passing through the restaurant system in Cape Town annually can be estimated at R3.84 billion which represents 1.4 percent of Cape Town’s GDP (2010). The cost of food and drink passing through the restaurant system in Cape Town annually can be estimated at R1.2 billion.

Findings From Individual Restaurants
Organic at Heart is an organic restaurant in Plumstead, Cape Town, housed in a national monument. It has an extensive vegetable garden which supplies the restaurant with most of its vegetables and herbs.

At a more elaborate level, Babyonstoren’s restaurant, Babel, draws its fresh produce from an eight acre garden developed by Patrice Taravella from France. The garden has over 300 varieties of edible plants which are grown organically where possible. The fruit and vegetables are harvested year round for use in the restaurant. The organic matter is recycled as compost for their own use (Babyonstoren, 2012).

Dear Me in the City Bowl which opened in 2010 “decided that sourcing all our ingredients locally as far as possible was non-negotiable. It’s been tough, but we have managed to find local suppliers for almost all our food.” (Taste Magazine, 2011).

Mike Basset from Myoga in the Vineyard Hotel also prefers fresh produce from people that rotate their crops and chooses organic wherever possible (Taste Magazine, 2008:78).

A restaurant in Cape Town, Starlings started a small urban farmers market in their garden in July 2011. The idea behind it is to help smaller suppliers reach consumers directly and also to showcase the produce the restaurant uses on their menu.
Fyndraai is a restaurant on a wine estate in Stellenbosch that is attempting to connect with its cultural heritage (Solms Delta, 2011). The estate has a two hectare culinary garden, Dik-Delta, that has been created to preserve the food heritage of the Cape; Afrikaner, Khoi and Cape Malay (Solms Delta, 2011).

Superette in Woodstock is a restaurant that helps the local community. Food is sustainable as “the menu changes daily to showcase locally sourced market produce ‘fresh from farm to plate’ (Eat Out Guide, 2011:161, Superette, 2011)”. Wherever possible, the fittings were sourced from neighbourhood suppliers (Munro, 2010). It can be argued that the consequences of the venture, together with similar investments, are good for the locals in the working class neighbourhood as a derelict area has now increased in value. (Munro, 2010).

Bird Boutique cafe (Villanueva, 2010) is known for its local and organic food. The Eat Out review highlighted that “the menu on butchers paper taped to the wall is filled with light healthy options made from local/organic ingredients” (Eat Out, 2011). These are examples of restaurants within Cape Town and nearby regions that show an interest and concern for people, whether through heritage, community support or staff upliftment.

**Integrated Sustainability**

A restaurant that aims for a holistic model of sustainability is Spier’s Eight. Eight is a farm to table restaurant on the Spier Wine Estate with a focus on local and organic food and wine. The idea of the restaurant was the offshoot of the biodynamic farm started in 2009 by Angus Macintosh, as a way to supply the public with the produce that was being grown on the farm (Heyns in Landman, 2011:93). Eight was chosen as the restaurant’s name to signify balance, abundance, harmony and cycles (Spier, 2012). Eight as a logo is horizontal to evoke the infinity sign. There is a lot of natural light and ventilation created by windows and skylights which saves energy. Furniture has been reused and restored and the artwork by local artists is for sale. The lighting was designed by artist Heath Nash who used over ten thousand white flowers as sparkling lights which were fashioned from recycled milk bottles. The menu at Eight is “short and seasonal, nutritious and wholesome”. (Taste, 2010:84).

Much of the produce used at Eight is grown either on Spier using biodynamic farming techniques, or is sourced from nearby farmers who meet their standards. (Landman, 2011:91). The restaurant uses biodynamic eggs as well as chickens and vegetables sourced from farm. Seafood is on the SASSI green list. Trout is sourced from nearby Franschhoek. Additional vegetables are sourced from neighbouring farms. Suppliers are vetted to ensure environmental best practice. Lamb is free range and sourced from the Karoo. Fresh juices replace carbonated drinks on the menu. (Heyns, 2010; Taste, 2010:84). An external distributor Three Peas sources fresh produce that is primarily local and organic, or if from further afield organic, or if neither from BBBEE companies or fair-trade suppliers. (Landman, 2011:96). Eight recycles 100 percent of its waste water and 80 percent of its solid waste (Taste, 2010:84) which is part of the bigger Spier sustainability vision (Spier 2012).

Although Eight experiences the challenges of finding sustainable suppliers and building consumer demand to be economically viable (Landman, 2011:94) Eight provides a blueprint of a restaurant that is trying to integrate sustainable practices into their brand as a continuous process.

**4.1.3 SWOT Analysis**

The SWOT Analysis is derived from the macro and micro analysis and looks at the restaurant industry in Cape Town with a view to its capacity to move to sustainability.

**Strengths**

- The restaurant industry is concentrated, particularly in clusters e.g. Waterfront, Atlantic Seaboard.
- There is evidence of innovative sustainable practices within Cape Town and surrounding areas.
- There is availability of fresh and seasonal produce.
- Cape Town is close to a wine producing region.

Weaknesses
- There are relatively few sustainability initiatives within the industry.
- There are economic pressures on restaurants to survive.
- The industry is reliant on tourists and seasonality.
- There isn’t strong support yet via legislation to move to sustainability.

Opportunities
- There is a global move to sustainability which can be capitalised on.
- The restaurant industry can lock into local food economies.
- It is relatively easy to implement changes in energy, waste and water usage.
- Consumer demand shifting to sustainable restaurants.

Threats
- Economic viability as a major force.
- Energy prices becoming exorbitant.
- Pressure on food supply and prices.

4.1.4 Key Objectives
These objectives are derived from the situation analysis and are based on what is needed to enable the industry to move towards sustainability.
- Create a business that can help restaurants, consumers and other stakeholders move to sustainability using restaurants as a point of influence
- Create a brand identity for the support mechanism
- Identify innovators as opinion leaders within this environment – restaurants, chefs, consumers and other partners
- Provide a space for consumers to voice their needs
- Create alliances with like minded parties
- Create an online presence that can assist restaurants in Cape Town to move toward sustainability
- Support this presence by means of social media
- Create events that can educate restaurants about sustainability and provide opportunity to network
- Provide a space for interested parties to communicate online
- Provide an avenue to market suitable products for sustainable restaurants by suppliers

4.2 Structure of the Business Strategy
4.2.1 Business Model Canvas
Restaurants need to be helped to progressively move towards sustainability. The business model canvas will structure the strategy needed to assist restaurants to do so. This approach allows for a simple, straightforward analysis of the business logic behind a brand and creates a blueprint for strategic application via the structures, processes and systems of the business (Osterwalder & Pigneur, 2010:15).
4.2.2 Value Proposition

What is the Value Proposition?
*To provide a space, physically or virtually, for Cape Town restaurants and relevant stakeholders where they can be informed, educated and inspired; and can collaborate and be helped to move to sustainability. Restaurants will be helped towards sustainability within the areas of food, resources (energy, water, waste) people and communication.* (based on the literature analysis).

The initiative will be branded as the Longtable project (www.longtableproject.com) alluding to the need for collaboration by multiple stakeholders within the restaurant industry.

4.2.3 Customer Segments

The primary customers are the restaurants themselves. However the value proposition must look after other customers who have different needs. These include local consumers and tourists; partners and other stakeholders (e.g. NGOs, the City Bloggers, tour operators, concierges). The customer of the business model is any restaurant within the Cape Town region that is looking for information, collaboration, support or ultimately certification. Ideally innovators and early adopters can be targeted and to a large measure can be assessed by existing moves towards sustainability, e.g. local, organic, seasonal, and recycling. Within this, food clusters can be grouped as their requirements are different, as per restaurant type segmentation.

4.2.4 Key Channels

A website is a space where multiple needs can be fulfilled. A website is multifunctional. A website can be a reflection of the tools and support the Longtable project will offer. These will be based on the needs of the various stakeholders. These will range from:
- Information
- Advocacy

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**Figure 1: Business Model Canvas**

Source: Osterwalder & Pigneur, 2010:44

<table>
<thead>
<tr>
<th>KP</th>
<th>KA</th>
<th>VP</th>
<th>CR</th>
<th>CS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Partnerships: Network of suppliers and partners</td>
<td>Key Activities: Most important things to do to make the business work</td>
<td>Value Propositions: The solution to the customer problem</td>
<td>Customer Relationships: Types of relationships created</td>
<td>Customer Segments: Group/groups served</td>
</tr>
</tbody>
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<thead>
<tr>
<th>KR</th>
<th>CH</th>
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<tbody>
<tr>
<td>Key Resources: Assets to make the business model work</td>
<td>Channels: How to reach the customer segments</td>
</tr>
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<tr>
<th>CS</th>
<th>R$</th>
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<tbody>
<tr>
<td>Cost Structure: Costs of operating the business model</td>
<td>Revenue Streams: Income generated from each segment</td>
</tr>
</tbody>
</table>
• Education
• Tools
• Listings
• Opportunities for collaboration
• Links to social media platforms

A website can also be easily updated and accessed.

4.2.5 Customer Relationships
As a consultancy the Longtable Project is a social enterprise as the purpose of the project is to use a business-like approach through offering a service to achieve a social and environmental purpose (Legal Resource Centre, 2011:2). However there is no legal definition or legal business form in South Africa for the establishment of these enterprises (Legal Resource Centre, 2011:2). While the enterprise is starting to develop it makes sense to run it as a sole proprietorship for the ease of establishment..

4.2.6 Key Activities
The key activities are derived from the needs that have been identified. These include:
• Education of restaurants with regard to sustainability
• Training of restaurants with regard to sustainability
• Creation of events for the industry relating to sustainability
• Consulting with restaurant via assessment tools
• A listing of all restaurants on a website
• Stories of restaurants moving towards sustainability on a website
• Consumer comments on sustainable restaurants on a website
• Reviews of restaurants
• Social Media Activity via platforms such as facebook, twitter, google+ and instagram
• Link to social media feed on a website
• Links to relevant parties: e.g. SRA
• Supplier Listing on a website
• Relevant articles and academic papers on the website

4.2.7 Key Resources
These resources are what make the business model work. They “allow an enterprise to create and offer a value proposition, reach markets, maintain relationships with customer segments, and earn revenues” (Osterwalder & Pigneur, 2010:34).
The key resources needed by Longtable Project are:
Financial: Start up capital to fund the setting up of a website and brand development as well as necessary supplies for communication and operational expenses.
Physical Assets: These include a vehicle for transportation, office space and computer equipment
Intellectual: These include the brand, website, proprietary knowledge and databases and other information
Human: Key persons who can run the website, consult with restaurants and market the Longtable Project.

Initially the impetus will be to get the business started using minimal finance until it is in a position to demonstrate viability to potential sponsors/funders. This interim period will also help assess demand for the service and allow opportunity for flexibility.

4.2.8 Key Partnerships
The model for the business is one that provides information and directs restaurants to key players in the industry who are able to deliver needed services. This model enables the business to benefit from pre-existing skill sets in the marketplace as well as optimising the allocation of resources and activities (Osterwalder & Pigneur, 2010:39). The key insight is that for restaurants sustainable issues are still low down on their agenda given economic
pressures and lack of know-how and information on sustainability (Metcalfe, 2010). The system includes
- City
- Suppliers
- Consumers
- Restaurant owners
- Chefs
- Staff
- Tourists
- Local Communities
- Government
- Media
- Bloggers
- Tourist Agencies
- Accommodation agents and owners

4.2.9 Costs
The Longtable will need start up capital to fund the setup as outlined in the resources. These include:
- Brand design and development
- Website design and development
- Development of audit tool
- Set up of office equipment.
- Initial PR campaign
- Training materials
- Launch event

5. Conclusion and Recommendations
5.1 Introduction
This study has investigated the Cape Town restaurant industry at many levels and through a range of research methodologies. The industry has been located within the global polycrisis and the conditions unique to the city. Quantitative and qualitative analysis has been used to cluster restaurants and identify characteristics and stories of individual restaurants within the system.

5.2 Conclusion and Recommendations
Cape Town is a city that has the objectives of a green economy coupled with responsible tourism initiatives. A more sustainable restaurant industry can contribute to a more sustainable Cape Town, which in turn addresses global issues such as climate change, peak oil, ecosystem degradation, industrialisation of food and disparities in consumption and resource usage. Through the Longtable Project the Cape Town restaurant industry can be helped to move to sustainable practices through collaboration with farmers, suppliers and other stakeholders, which will impact on the goals of the city as well as reduce energy and resource usage. Shifts in menu options can promote sustainable food choices and support local food economies. These initiatives can be coupled with staff and community upliftment and be communicated to customers, tourists and other stakeholders.
References


Swilling, M. 2004. Rethinking the Sustainability of the South African City, *Development Update, 5(1)*


