

Green Practices in Quick Service Restaurants: Dimensions and Obstacles

Ahmed Saleh Saleh

Mansoura University, Egypt

Mohamed Ahmed Elsaied

Mansoura University, Egypt

mohamedalsaied19939@yahoo.com

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Abstract:

Environmental sustainability is become an essential part of business practices in all industries. The restaurant industry has tended to be slower to adopt green practices than other segments of the hospitality industry, but they are currently following suit and are adopting practices that are beneficial for the environment and reduce the negative impacts. This research aims to identify to what extent the investigated quick service restaurants (QSRs) chains in Greater Cairo implement the green practices. In order to achieve this aim, personal interviews questions were prepared with a random sample of the managers with 96 managers in investigated international QSRs chains in Greater Cairo. The results of the filed study showed that the majority of the investigated restaurants indicated that the level of implementation of green practices was moderate. Also the results showed that from the obstacles of the implementation of green practices; Lack of knowledge of the managers and employees with green practices and the dimensions of its implementation, lack of financial resources. Also the results showed that from the benefits of implementation of green practices; increase profitability by reducing operation, increase customer satisfaction by providing safe organic products.

Keywords: Quick Services Restaurants, Green Practices, Dimensions, Challenges.

ملخص:

أصبحت الإستدامة البيئية جزءاً أساسياً من ممارسات الأعمال في جميع الصناعات. تميل صناعة المطاعم إلى أن تكون أبطأ في تبني الممارسات الخضراء مقارنة بقطاعات أخرى من قطاع الضيافة ، ولكنها تحذو حذوها في الوقت الحالي وتعتمد ممارسات مفيدة للبيئة وتقلل من التأثيرات السلبية. يهدف هذا البحث إلى تحديد مدى تنفيذ سلاسل مطاعم الخدمة السريعة في القاهرة الكبرى للممارسات الخضراء. من أجل تحقيق هذا الهدف ، تم إعداد أسئلة المقابلات الشخصية مع عينة عشوائية من المديرين مع 96 مدير في سلاسل مطاعم الخدمة السريعة الدولية التي تم التحقيق فيها في القاهرة الكبرى. أظهرت نتائج الدراسة أن أغلبية المطاعم التي تم التحقيق فيها أشارت إلى أن مستوى تنفيذ الممارسات الخضراء كان معتدلاً. كما أظهرت النتائج أنه من العقبات التي تعترض تنفيذ الممارسات الخضراء ؛ عدم معرفة المديرين والموظفين بالممارسات الخضراء وأبعاد تنفيذها ، ونقص الموارد المالية. كما أظهرت النتائج أن من فوائد تنفيذ الممارسات الخضراء. زيادة الربحية عن طريق الحد من تكاليف التشغيل ، وزيادة رضا العملاء من خلال توفير منتجات عضوية آمنة.

الكلمات المفتاحية: مطاعم الخدمة السريعة، الممارسات الخضراء، الأبعاد ، التحديات.

Introduction

The hospitality industry will no longer be able to ignore its environmental responsibilities as it will have to respond to a number of pressures. For example, environmental management has become one of the most critical management issues facing companies in a wide range of industries, as well as hospitality firms as a result of growing environmental awareness among consumers, governmental and social groups and employees (DiPietro *et al.*, 2013).

Becoming green or "Going Green" has become a widespread slogan in several industries around the world. There are many business practices and products which are characterized as organic, sustainable, energy efficient, eco-friendly, locally produced and green. Many of these green terms are confusing and it is not easy for investors to make a decision to invest in these green practices based on the lack of information provided. Therefore, the hospitality industry implemented some of these practices in diverse forms. Restaurants have followed slower way to implement green practices compared to other sectors in the hospitality industry, however currently, there are pursuing the same approach and adopting green practices, that have positive impacts on the surrounding environment and reduce the negative impacts (Dutta *et al.*, 2008; First, 2008; Deveau, 2009 and Gise, 2009).

Review of literature

Schubert *et al* (2010) and DiPietro and Gregory (2012) defined green practices as "Those practices that used by organizations to minimize their carbon foot-print and reduce harm to the environment, including the over use of resources as well as any use of non-recyclable products, ineffective recycling processes, and harmful chemical products".

Jang *et al.* (2011) defined green restaurant as "The restaurant that implements green practices, including recycling and composting, water and energy efficiency, and waste management, as well as the option of locally grown or organic foods".

According to Pacific, Gas and Electric's Food Service Technology Center, restaurants consume a large amount of total energy consumption in all over the world; this is compared to the consumption of other commercial buildings (Jeong *et al.*, 2014). In addition to that, the restaurants and food service facilities use 2.5 times more energy per square foot than other commercial buildings (Dewald *et al.* , 2014). In addition, restaurants especially QSRs generate a greater amount of garbage daily than most other retail businesses (Horovitz, 2008). Restaurants are responsible for about 33% of the total energy consumed in the US and the average consumption of the water in restaurants about 200.000 gallons annually (DiPietro *et al.*, 2013). Therefore, the negative impact on the surround environment which is produced by the operation process in restaurant industry will be serious if the green practices are not implemented (Chou *et al.* , 2012).

As part of the environmental programme enhancement practices, human resource managers have to encourage employees to participate and initiate green and eco-friendly ideas through empowering employees (Ahmad, 2015).

Sloan et al. (2013) indicated that the Green Restaurant Association (GRA), a US non-profit organization, with the mission of creating an ecologically sustainable restaurant industry, established several environmental guidelines for restaurants and promoted examples of best practices to facilitate achieving environmental sustainability. Any restaurant want to get green certification it must apply the seven environmental categories as follow; water efficiency, energy, sustainable food, waste reduction and recycling, sustainable furnishings and building materials, chemical and pollution reduction and disposables.

Carbonara (2007) mentioned that it was previously thought that implementing green practices in restaurants were very expensive, and these will an opposite in front of the production of high quality products. But with increased demand for eco-friendly products, this has become easier to implement and less expensive. This is due to the union of restaurant operators to negotiate on prices when purchasing raw materials and equipment for the operation, and get them at the lowest prices and high quality. So, it is become easy to implement green practices in recent times.

Energy Conservation Practices

NRA (2010) mentioned that restaurants consume 5 times more energy per square foot compared to other organizations, kitchen consume five times more energy than other departments. In addition, energy costs represent 30 % of annual budgets of buildings. A 10% decrease in energy costs has an equivalent impact on operating income as a 1.26% increase in sales. Taking all of this into consideration, energy conservation is a wonderful place to start when greening your restaurants operations (**Energy Star, 2011**).

Food Service Technology Center (2011) and Sustainable Food Service Consulting (2013) stated some practices to save energy such as: Utilize Energy Star equipment which that Energy efficient equipment can cost more upfront but will save money in the long run. It helps restaurants to calculate energy cost for equipment's, establish a comprehensive energy management program, implementation of the periodic maintenance plan for equipment's and devices according to the schedules, upgrade lighting systems by use LED's on exit signs and LED's or CFL's for all other lighting, install occupancy sensors, Set operating schedules for all devices and equipment's for optimum usage when these devices are not in use. The same goes for lights and water left on.

Water Conservation Practices

According to **U.S. Environmental Protection Agency (2012)**, the hospitality industry adds to this problem by accounting for 15% of the total water use in commercial and institutional facilities in the United States.

Department of Environment and Natural Resources (2011) stated that leaky faucet or toilet can lead to more than just a high water bill. Leaks also raise a restaurant's sewer bill and electric or gas bill if it is a hot water leak.

From rationalizing practices of water consumption in the restaurants mentioned by **Holland Board of Public Works (2011) and Robinson (2011)** is to start by: Promoting behavioural changes for the restaurant staff and start by reducing the amount of loads ran through a dishwasher each day by only running full racks through the machine, save money

and water by turning off faucets when they are not in use, thawing frozen food in the refrigerator rather than under running water.

Sustainable Food Practices

LaVecchia (2008) showed that food is a way to vitalize and deliver green practices to consumers in the food service sector. In general, organic, locally, and sustainably grown food can be considered to constitute green food.

According to **Dalmeny and Reynolds (2007)**, 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. 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, fair trade, and smaller suppliers.

Waste Reduction and Recycling Practices

Waste defines as "A material that is not used, wanted, or damaged; unusable remains or by products of something"(Waste definition, 2013).

Chen et al. (2009) added that in the restaurant industry, food and beverage involve pre consumer (preparation), post- consumer (leftovers), and packaging waste. Strategies around reducing, reusing, and recycling waste can be employed by restaurants e.g. composting, and co-procurement.

Motives of Implementation of Green Practices

Making a decision to implement environmentally friendly practices is a crucial decision in the hospitality industry (**Best, 2008**). So what motivates managers or owners to implement environmentally friendly practices? These motives are divided into three broad categories; the first motive: efficiency and cost motives. The second motive: external pressures and influence. The third motive: internal forces (**Bramwell and Alletorp, 2001; Bohdanowicz, 2005 and Ayuso, 2007**).

Obstacles of Implementation of Green Practices

According to **Chan (2008)**, there are three obstacles to the implementation of green practices. The first obstacle; lack of knowledge, understanding and availability of advice. The second obstacle; lack of resources. The third obstacle; high implementation and maintenance cost

Benefits of Implementation of Green Practices

Schubert et al. (2010) mentioned that commitment with green practices resulting many benefits for organizations such as increasing customer attraction to businesses. Previous literature has shown that the implementation of green practices has an impact on the

sustainability of natural environments (Dutta *et al.*, 2008), Reduce operating costs (First, 2008; Schubert *et al.*, 2010 and Susskind, 2014), Improving the image of the organization (Hu *et al.*, 2010 and Namkung and Jang, 2013), increased purchasing intentions of consumers (Manaktola and Jauhari, 2007).

Research Methodology

The population of this research consisted of the managers of international QSRs in Greater Cairo which classified as tourists restaurants. The investigated restaurants were chosen for these reasons. Firstly, because the number of branches of QSRs chains in Greater Cairo (124) is greater than the rest of other Governorates (60), according to the statistic of the Chamber of Tourism Establishments (CTE) (2017). Secondly, restaurants consume a large amount of total energy and water consumption in all over the world this compared to the consumption of other commercial organizations (DiPietro *et al.*, 2013 and Jeong *et al.*, 2014), and generate large amounts of waste daily compared to waste generation of other establishments (Horovitz, 2008).

Table 1: The investigated Sample of International QSRs chains.

No	Restaurants chains	Population	The Investigated Branches	Number of Managers
1	MacDonald's	35	14	28
2	Pizza Hut	23	9	18
3	Tikaa	10	6	12
4	K.F.C	32	15	30
5	Hardees	6	3	6
6	Domino's Pizza	1	1	2
Total		107	48	96

According to CTE (2017), the total numbers of QSRs chains branches in Egypt are 184 which are affiliated to international chains and that got the tourist classification from CTE. In Greater Cairo there are about 14 chains of tourists QSRs chains and there are 124 branches of these chains. A sample of six (43%) chain and 48 (44.9%) restaurants were selected randomly from 107 restaurants branches from branches of investigated chains to adopt the filed study.

Research Aims

This research aimed to study the extent of the implementation of green practices in the investigated restaurants. This aim achieved through several objectives as follows:

- ❖ Measuring managers awareness towards Environmental Issues.
- ❖ Studying the implementation of green practices in investigated restaurants.
- ❖ Determining the motives, benefits, and obstacles of implementation of green practices.

The personal interviews questions consisted of three parts; the first part intended to reveal awareness of managers towards environmental issues. The second part aimed to study the implementation of green practices in QSRs. The third part aimed to study the motives, benefits and obstacles of the implementation of green practices in QSRs.

Results and discussions

The following part presents the response of the managers on the study dimensions.

Part One: Awareness of Managers towards Environmental Issues

1.1 Does the Restaurant have any Environmental Goals? If your Answer is yes please mention those Goals.

Table 2: The Manager's Answers on The Question "Does the Restaurant have any Environmental Goals?".

Answers	Freq.	%
Yes	43	44.8
No	53	55.2
Total	96	100%

The results of this question showed that 44.8% of managers have environmental goals in their restaurants and 55.2% of managers don't have environmental goals. The majority of managers who don't have any environmental goals were focused on gaining customers satisfaction while providing a quality product and increasing sales rate.

On the other hand, the responses of managers who have environmental goals indicated that, from the environmental were as follows; working on the use of the policy of separating waste and recycling again and encouraging employees to do that and customers to reuse their products, some restaurant managers also mentioned that the use of solar energy in all chains of restaurants in the long- term in 2030 are among their environmental goals, and a few of managers mentioned that among their environmental goals are obtaining the green certificate. A few of managers mentioned that some of the chain's branches had obtained the green certificate from LEED and that the management of the chain aims at having all branches to get green certificate.

1.2. What do you think are Fields of Future Growth and New Initiatives that can help the Restaurant to achieve its Goals?

Findings of these interviews showed that some managers suggested maximizing opportunities for operational efficiency and minimizing environmental impacts in their restaurants. They also stated that addressing the issue of energy is a key priority. This means adopting best practices, investing in energy, saving equipment's and exploring options for the utilization of renewable sources, and adopting a slogan "A Collective Commitment towards Clean Energy".

1.3. Do you agree that there are Negative Impacts of QSRs on the Surrounding Environment? If you agree, what are the Negative Impacts?

Table 3: Agreement or Disagreement of the Managers with the Negative Impacts of QSRs on the Surrounding Environment.

Answers	Freq.	%
Agreement	83	86.5
Disagreement	13	13.5
Total	96	100%

The results showed that the frequency and percentage of the respondents are illustrated in Table 3. The results stated clearly that the majority of respondents 86.5% agreed that the QSRs have negative impacts on the surrounding environment.

It is clear that the majority of the managers agreed that there are negative impacts. Some of these impacts were as follows; fumes rising from QSRs that have not been treated well may have a negative impact on the surrounding environment, cooking oils used (shorting) that is discharged directly into drainage, waste of food that is disposed of directly in the environment, solid waste from plastic, paper, and glass which is disposed in the surrounding environment of the restaurants.

1.4. Do Restaurants encourage Managers to Communicate with any Local Suppliers?

The results showed that some managers do not have any contact with the companies contracted with the chain, but all contracts are between the management of the chain and the supply chain. They also have limited knowledge of some of the names of those chains. On the other hand, some of the manager mentioned that management chain encourage their chefs and managers to stay in communication with local suppliers. They also confirmed that reaching out to local suppliers whether for food raw materials or supplying the equipment's to the restaurant has many advantages and positive benefits, including knowledge of local food information materials, being able to answer customers' questions, in addition to knowing the optimal usage of environmentally friendly devices and equipment's.

1.5. In your Opinion, What is the Appropriate Description of the Concept of "Green Practices"?

It was noticed from the results of the interview with the managers of QSRs that their level of knowledge of the concept of green practices may be low for some investigated managers. But, on the other hand, a few managers have a good knowledge of the concept of green practices .Some common concepts among managers who are aware of green practices are the following concepts:

- Some managers see green practices as "Environmentally friendly practices which aims to minimize negative impacts on the surrounding environment".
- Others also believe that green practices are "Practices that are implemented in order to rationalize the consumption of water and energy as well as rationalizing the consumption of resources".

On the other hand, the responses of the managers who have a high knowledge of green practices were as follows "Environmentally friendly practices that are implemented in restaurants to conserve energy and water, to recycle waste, to use local food, and to reduce chemical pollution to become green restaurants or eco-friendly restaurants".

1.6 Do you have Knowledge of Green Practices? If Yes, What do you know about the Dimensions of the Implementation of Green Practices?

Table 4: The Knowledge of the Managers with Green Practices.

Answers	Freq.	%
Yes	33	34.4

No	63	65.6
Total	96	100%

The percentages of the respondents of the managers as illustrated in Table 4 show that the respondents of the managers who had knowledge of green practices in investigated restaurants were 34.4%. This result indicating that the percentage of knowledge with green practices is low. Compared to the rest of the managers' answers, which showed that they hadn't knowledge with green practices 65.6%. These answers agreed with the previous question. When a question was asked to find out what is the appropriate description of the concept of green practices, their level of knowledge was weak.

Part Two: The Implementation of Green Practices in QSRs

2.1 Do you think that Green Practices can be implemented in Restaurants?

Table 5: The Appropriateness of implementing Green Practices in QSRs.

Answers	Freq.	%
Yes	62	64.6
No	34	35.4
Total	96	100%

Table 5 revealed that, 64.6% of the managers agreed that green practice can be implemented in restaurants. On the other hand, 35.4% disagreed that green practices can be implemented in restaurants.

From the previous results, it is clear that the majority of managers believe that green practices can be implemented in restaurants, reflecting the extent to which these practices can be implemented. This helps to know what benefits are expected from the implementation of green practices and what are the obstacles that prevent restaurants from implementing green practices.

2.2. What are the Energy Rationalization Practices that the Restaurant Management is interested in implementing?

The personal interviews with the managers showed that the implementation of energy rationalization practices were not optimal. The results showed that an acceptable number of investigated restaurants cared about the implementation of energy rationalization practices. On the other hand, the responses of some managers revealed that their restaurants don't care about the implementation of energy conservation practices and don't have any plans to invest in such of these practices.

From energy rationalization practices implemented in different levels among restaurants which were care about the implementation of these practices were as follows:

- Usage of the operating schedules of the equipment's (Fired-up schedules) to rationalize the consumption of energy.
- Periodic maintenance of devices and equipment's used in operation, usage of LED energy-saving bulbs compared to fluorescent bulbs.

- Separating air conditioners in places where there are no customers in the restaurant to reduce energy consumption.
- Usage of posters to encourage employees to rationalize energy.
- A few of restaurants use environmentally friendly equipment's that consume less energy.

Some of the managers in restaurants interested in implementing green practices mentioned that their restaurants depended on natural lighting throughout the daylight by using motion sensors for outdoor lights. That is, when the daylight goes out, the bulbs begin to brighten. This is implemented in a few numbers of restaurants of the total number of investigated restaurants. The results of other respondents clearly showed that all the QSRs in the malls don't care about implementing of energy conservation practices, because any rationalization of consumption does not benefit the management of the restaurant, but returns to the mall. This is because the consumption bill for the mall is dividing on all restaurants and shops within the mall equally.

2.3. What are the Water Rationalization Practices that the Restaurant Management is interested in Implementing?

The results of discussion showed that the implementation of water consumption rationalization practices in QSRs may be somewhat limited compared to energy conservation practices that QSRs seek to implement. Some of water rationalization practices were implemented by the majority of investigated restaurants in different levels was as follow:

- Use of triple washes basins to rationalize water consumption, rather than using running water, use of water taps when needed to rationalize consumption.
- Use of posters to encourage employees to rationalize water consumption to reduce waste, continuous monitoring of the water consumption.
- Use of pressure water taps for a5 seconds or 10 seconds according to their preparation in order to control the quantities of used water.

On the other hand, the results of managers in restaurants which care about the implementation of green practices showed that these restaurants work on installation of automatic shut-off valves operated by sensors through infrared radiation, and installing low-flow faucet in the restrooms. In their answers, some managers stated that the implementation of energy and water conservation practices differ from restaurant to another in the same chain. This depends on the location and target market as well as sales volume for the restaurant.

2.4. What are the Sustainable Food Practices that the Restaurant Management is interested in Implementing?

Out of the results of interviews with managers, the results showed that the vast majority of investigated restaurants don't care about the implementation of sustainable food practices sufficiently and said that the management of restaurants does not have any long-term plans to invest in this type of practices. They also said that this is due to the high cost of investing in implementation of sustainable food practices, which if implemented, will lead to an increase in prices of products and items sold. This reflects which reflects in the impact on the decision to buy with customers.

Some managers said that some restaurants implement some sustainable food practices such as:

- Purchasing locally sourced food products used for food preparation.
- Adjusting the menu to use seasonal food products and purchasing food directly from the local farms.
- Contracting with certain companies of high quality to supply the raw materials used in operating processes.

2.5. What are Waste Reduction and Recycle Practices that the Restaurant Management is interested in implementing?

The results of the personal interviews with the managers revealed that many restaurants are interested in implementing waste reduction practices in order to reduce the negative impacts on the environment in addition to achieving the financial gains from reducing waste. In these practices include; the approach “reduce and reuse” is followed, grease and oil waste is collected and properly disposed or reused and staff and suppliers are trained accordingly. And the majority of restaurants use sensor dryers in toilets to reduce waste of tissue paper, which they mentioned as one of the most consumed materials, resulting in loss and are not used again. Using this alternative has helped to save on operating costs to manage the restaurant.

As for recycling in restaurants, all managers agreed that QSRs didn't recycle the waste, but some restaurants began to apply this approach through implementation of the waste separation policy. Some restaurants started recycling policy by sorting and collecting for waste with separate boxes exist and contracting with certain companies to recycle that waste with a known revenue. In addition, some restaurants that are concerned with the implementation of waste reduction and recycling practices which are concerned with collecting waste of food and oils used and contracting with certain companies for safe disposal without any negative effects on the environment and recycling fryer used oil.

2.6 Has the Restaurant you manage got Green Certification? If Yes, please specify, Which Organization has the Restaurant been accredited from?

Table 6: Managers' Answers on getting the Green Certification.

Answers	Number of Restaurants	%	Number of Managers	%
Restaurants that has got the green certification.	3	6.3%	9	9.4%
Restaurants that hasn't got the green certification.	45	93.7	87	90.6%
Total	48	100%	96	100%

The data in Table 6 indicated that total numbers of restaurants which have implemented green practices, and has got green certification from green certifiers' organization were very

limited 6.3% compared to the rest of investigated restaurants 93.7% hasn't got the green certification.

The results also indicated that all managers of the QSRs which are implementing green practices and had got green certification said that the management of the chain has got the green certification from green certifier organization LEED.

Part Three: The Motives, Benefits, and Obstacles of the Implementation of Green Practices in QSRs.

3.1. What are the Motives of Implementation of Green Practices in QSRs?

The results of the personal interviews showed that the motives of implementation of green practices were represented in the following motives:

- Reducing operation costs such as cost of water consumption, energy consumption and raw materials through the optimal usage, which is reflected in the increase in restaurant profit rate.
- Using of raw materials from a good supply chains according to standard specifications.
- Improving of the restaurant image in front of customers as well as increase customer satisfaction.
- Increasing the market share and benefit more than competitors,
- Compliance with laws and the reduction of the negative impacts on the surrounding environment,
- Keeping up of global changes in the implementation of environmentally friendly practices.

3.2. What are the Benefits of Implementation of Green Practices in QSRs?

The results of the interviews with the managers indicated that the benefits of implementation of green practices in restaurants were represented in the following benefits:

- Increase profitability by reducing operation costs (as a result of rationalizing water and energy consumption and reducing waste).
- Increase interests of employees of eco-friendly practices, resulting in optimal use of available resources and cost reduction.
- increase the interest in the environment and reduce the negative impacts on the environment, Increase customer satisfaction by providing safe organic products.
- Getting a larger segment of green customers from target markets.
- The chain that obtains green certification gets a competitive advantage compared with other chains.

3.3. What are the Obstacles of the Implementation of Green Practices in QSRs?

The results of respondents of this question indicated that the obstacles that face the implementation of green practices in investigated restaurants were mentioned in the following obstacles;

- Lack of knowledge of the managers and employees with green practices and the dimensions and benefits of its implementation.

- Lack of financial resources to implement green practices in QSRs.
- Lack of qualified and trained employees to implement green practices.
- The majority of customers don't support the implementation of green practices significantly.

One of managers said that in the malls the management of the mall divide the bills of consumption of all the restaurants and shops which are located in the mall equally, and therefore the implementation of water and energy conservation practices in the restaurants did not back benefit to the management of the restaurant, but the benefit goes back to the management of the mall. So, this is considered barrier in front of the restaurant chain on the implementations of green practices.

Conclusion and Recommendation

This research aimed to study awareness of managers with environmental issues and to study the extent of the implementation of green practices in QSRs in Greater Cairo. Also aimed to identify the motives, benefits, and obstacles of implementation of green practices. From the previous results it clear that manager's awareness of environmental issues were moderate level. The results also showed that the investigated restaurants care about the implementation of energy conservation practices and waste reduction and recycling; on the other hand not care about the implementation of sustainable food practices.

It's clear that, from the motives that push the restaurants to implement green practices improving of the restaurant image in front of customers as well as increase customer satisfaction. Also the results showed that from the benefits of the implementation increase profitability by reducing operation costs (as a result of rationalizing water and energy consumption and reducing waste). And it concluded that, from the obstacles of the implementation lack of financial resources to implement green practices in QSRs.

Recommendations for Ministry of Tourism and Chamber of Tourism Establishments

- Establishment of a special unit in Ministry of Tourism responsible for the implementation of green practices in restaurants similar to the green unit responsible for the implementation of green practices in hotels sector.
- Continuous cooperation between Ministry of Tourism and the green certifier's organizations in order to improve the performance of managers and employees towards the optimal implementation of the standards of green practices.
- The authorities responsible for the restaurant industry should update and develop documented databases on water and energy consumption within the restaurants sector, with the adoption of standard indicators of water and energy efficiency, and rates of use of the unit of the product, and the issuance of encouraging standards for this.

Recommendations for Restaurant Chains

- Establish a separate department within QSRs chains which follows the quality department. It will be responsible for evaluating and following up the implementation of green practices within chain restaurants according to green accreditation standards.
- Raising the level of employees' performance to be more effective and efficient through: establishing a set of training courses and programs that help employees and managers to improve their personal, practical, and behavioral skills to have a high level of implementation of green practices.
- Linking employees' incentives with actual performance for implementing green practices in restaurants, which motivate them to increase their interests of the optimal implementation.

References

- ❖ Ayuso, S. (2007). "Comparing Voluntary Policy Instruments for Sustainable Tourism: the Experience of the Spanish Hotel Sector. *Sustainable Tourism*, Vol.15, No.2, PP.144-159.
- ❖ Ahmad, S., 2015. Green human resource management: policies and practices. *Cogent Business & Management*, 2, 1030817.
- ❖ Bramwell, B. and Alletorp, L. (2001). "Attitudes in the Danish Tourism Industry to the Roles of Business and Government in Sustainable Tourism". *Tourism Research*, Vol.3, No.2, PP.91-103.
- ❖ Bohdanowicz, P. (2005). "European Hoteliers Environmental Attitudes: Greening the Business. *Cornell Hotel and Restaurant Administration Quarterly*, Vol.46, No.2, P.188.
- ❖ Best, M. (2008). "Environmental Management in the Accommodation Sector in the Anglophone Caribbean. University of Florida, PP.221- 224.
- ❖ Carbonara, J. (2007). "It's Not Easy Being Green -- Or Is It?" *Food Service Equipment and Supplies*, .60(9), PP. 13-13.
- ❖ Chan, E. (2008). "Barriers to EMS in the Hotel Industry". *International journal of Hospitality Management*, Vol.27, No.2, PP.187-196.
- ❖ Chen, J., Legrand, W., and Sloan, P.(2009). "Sustainability in the Hospitality Industry". *Principles of Sustainable Operations*. Oxford. Elsevier.
- ❖ Chou, C., Chen, K., and Wang, Y. (2012). "Green Practices in the Restaurant Industry from an Innovation Adoption Perspective": Evidence from Taiwan. *International Journal of Hospitality Management*, Vol. 31, No.3, PP.703-711.
- ❖ Chamber of Tourism Establishments. (2017). "Statistics of quick service restaurants". Unpublished. Electronic copy.
- ❖ Dalmeny, K. and Reynolds, B. (2007). "One Planet Dining: London's Growing Market for eating out sustainably". London: Sustain, P.18.
- ❖ Dutta, K., Umashanker, V., Choi, G., and Parsa, H. (2008). "A Comparative Study of Consumers' Green Practice Orientation in India and the United States": A Study from the Restaurant industry, *Journal of Foodservice Business Research*, 11(3), PP. 269-285.
- ❖ Deveau, D. (2009). "Fight the Power". *Food Service and Hospitality*, 41(11), PP. 47-52.
- ❖ Department of Environment and Natural Resources. (2011A Fact Sheet for Restaurant Waste Reduction". Division of Pollution Prevention and Environmental Assistance. P2pays.org. NC, Oct. 1999. Retrieved from web.7Apr.2011.<<http://www.p2pays.org/ref/03/02790.pdf>
- ❖ DiPietro, R. and Gregory, S. (2012). "A Comparative Study of Customer Perceptions Regarding Green Restaurant Practices": Fast Food vs. upscale Casual. *FIU Hospitality Rev.* 30(1), PP.1-22.

- ❖ DiPietro, R., Gregory, S., and Jackson, A. (2013). "Going Green in Quick-Service Restaurants: Customer Perceptions and Intentions", *International Journal of Hospitality and Tourism Administration*, Vol.14, No.2, PP.139-156.
 - ❖ Dewald, B., Bruin, B., and Jang, Y. (2014). "US Consumer Attitudes towards "Green" Restaurants", *Anatolia: International Journal of Tourism and Hospitality Research*, 25(2), PP. 171-180.
 - ❖ Energy Star. (2011). "ENERGY STAR for Retail". Home: ENERGY STAR. Retrieved from web. 01Apr. 2011. <<http://www.Energy.star.Gov/index.Comic=retail.Bus.retail>>.
 - ❖ First, D. (2008). "The Greenest of them all". Retrieved from http://www.boston.com/lifestyle/food/articles/2008/12/03/the_greenest_of_them_all/.
 - ❖ Food Service Technology Center. (2011). "Fisher-Nickel, Inc, Retrieved from Web. 01 Apr. 2011. <<http://www.fishnick.com/>>.
 - ❖ Going Green. (2008). "Nation's Restaurant News", 42(49), P. 55.
 - ❖ Gise, M. (2009). "Eco-friendly Baby Steps can grow Green Initiatives". *Nation's Restaurant News*, 43(21), P. 44.
 - ❖ Horovitz, B. (2008). "Can Restaurants go Green, earn Green? USA Today, Retrieved from http://usatoday30.usatoday.com/money/industries/environment/2008-05-15-green-restaurants-eco-friendly_n.htm
 - ❖ Hu, H., Parsa, G., and Self, J. (2010). "The Dynamics of Green Restaurant Patronage". *Cornell Hospitality Quarterly*, Vol.51, No.3, PP. 344-362.
 - ❖ Holland Board of Public Works. (2011). "Water Conservation", Retrieved from Web. 1Apr. 2011. [Http://www.Hollandbpw.com/Site Collection Images/ Water/ Water %20Conservation.jpg](http://www.Hollandbpw.com/Site%20Collection%20Images/Water/Water%20Conservation.jpg).
 - ❖ Jang, Y., Kim, W., and Bonn, M. (2011). "Generation Consumers' Selection Attributes and Behavioural Intentions Concerning Green Restaurants", *International Journal of Hospitality Management*, 30(4), PP.803-811.
 - ❖ Jeong, E., Jang, S., Day, J., and Ha, S. (2014). "The Impact of Eco-Friendly Practices on Green Image and Customer Attitudes": An Investigation in Cafe Setting, *International Journal of Hospitality Management*, Vol.41, PP. 10-20.
 - ❖ LaVecchia, G. (2008). "Green: the New Gold. *Restaurant Hospitality*, Vol. 92, No.4, P. 36.
 - ❖ Manaktola, K. and Jauhari, V. (2007). "Exploring Consumer Attitude and Behaviour towards Green Practices in the lodging industry in India". *International Journal of Contemporary Hospitality Management*, 19(5), PP. 364-377.
 - ❖ National Restaurant Association. (2010). "Restaurant Industry Operations report". Retrieved from [www.restaurant.org/research/ operations/ report.cfm](http://www.restaurant.org/research/operations/report.cfm).
 - ❖ Namkung, Y. and Jang, S. (2013). "Effects of Restaurant Green Practices on Brand Equity Formation: Do Green Practices Really Matter?" *International Journal of Hospitality Management*, Vol.33, No.2, PP.85-95.
 - ❖ Robinson, B. (2011). "Decoupling Infrastructure Services from Unsustainable Resource Use: Cases from Cape Town Mphil Thesis". Stellenbosch University.
 - ❖ Schubert, F., Kandampully, J., Solnet, D., and Kralj, A. (2010). "Exploring Consumer Perceptions of Green Restaurants in the US". *Tourism and Hospitality Research*, Vol.10, No.4, PP. 286-300.
 - ❖ Sloan, P., Legrand, W. and Chen, J.S. (2013). *Sustainability in the Hospitality Industry: Principles of Sustainable Operations*, Rutledge, retrieved February 10, 2017.
 - ❖ Sustainable Foodservice Consulting. (2013). "Energy Conservation. Retrieved from <http://www.sustainablefoodservice.com/cat/energy-efficiency.htm>
 - ❖ Susskind, A. (2014). "Guests Reactions to in-room Sustainability Initiatives: An Experimental look at Product Performance and Guest Satisfaction. *Cornell Hospitality*, Vol.55, No.3, PP. 228-238.
 - ❖ U.S. Environmental Protection Agency. (2012). "Saving Water in Restaurants (EPA-832-F-12-032)". Retrieved from website: <http://www.epa.gov/watersense/commercial/>
 - ❖ Waste Definition. (2013). "Merriam-Webster Dictionary and Thesaurus". Retrieved from <http://www.merriam-webster.com/>.
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