

Evaluation of Sustainable Amenities Management at Restaurants' Sector in Kurdistan Region of Iraq

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Abstract—The topic of sustainability is becoming an essential and concerning issue for organizations in today's business environment. Especially in the food and restaurant industry. Sustainability emphasizes on satisfying the needs of the current period without conceding the capability of future consumers to meet their desires. Yet, an inclusive adoption of Sustainability is lagging in the restaurant and eatery industry in emerging market such as Kurdistan Region, Iraq. Therefore, this research focuses on the current practices of sustainable amenities in restaurants and lodging businesses in Kurdistan Region, Iraq.

Design – The researchers conducted unstructured interview for the data collection from (10) restaurateurs managing and working in 5 luxurious restaurants and 5 fast-food ones

Methodology – The restaurants selected were categorized as luxurious restaurants and fast food restaurants, the topics of the interviews were related to energy, waste and water. The data were analyzed by using frequency

Approach – the main approach in data gathering was qualitative. The interview queries were taken from related articles and divided into 3 sections: awareness plan, strategic planning, and restaurants' criteria of SAM. A content analysis method was used to identify the trend from previously published literature.

Findings – The result showed that luxurious restaurants do apply sustainability in their operations, while fast-food restaurants lag behind.

Originality of the research –Finally, recommendations of this study can be of help to all restaurants in Kurdistan area by introducing a proper practice of sustainability to improve and develop their businesses to meet customers' needs and gain competitive advantages ahead of their competitors.

Index Terms—Sustainability, Sustainable Amenities, Restaurants Management, Waste Management, Energy Management

I. INTRODUCTION

The protection of the earth from the pollution is of utmost importance due to the great effects that humans are causing on the planet (Massoudi et al., 2019). Environmental protection organizations have begun to identify the great danger that man

causes and the result of industrial development including food industry that has been reflected negatively on the natural the environment. Sustainability is a new concept that keep popping and presented itself by organization all over the world, nonetheless what is the effect of applying sustainability in the restaurant industry? Imagine a restaurant fully operated on renewable energy, produce no waste, manage its water supply sensibly, gets its meats and vegetables from organic source. A report from World Economic Forum 2017 showed that third of the carbon in our planet was generated from the food we consume. Also, Waste Research Company WRAP indicated that food waste, counting food, packaging and other supplies made of harmful material, three million tons of waste every year. Half of the generated waste is being recycled. One million tons of the food thrown away can be eaten or donated to charities. The rest comes from food service packaging such as plastic and one-use kitchen paper (Meager, 2019).

Recently, the term restaurant sustainability can be defined as the process of operating and managing a restaurant in a way that shields, protect, and conserves the environment. Also, encourages social well-being of the people in society, and promote economic wealth to everyone in the community. (Prigge, 2017). Applying sustainable practices in the restaurants and hospitality sector can be very helpful in decreasing the operational cost and enhance the image of the business by protecting the environment. According to Hodges & Kriticos, (2012) the sustainable amenity management (SAM) is a process that integrates all processes in the restaurant operations to enhance the financial standing of the firm and increasing the social benefit to all citizens in society.

In Kurdistan Region, restaurant industry is too slow in adopting sustainable amenity management (SAM) in its restaurants. The main reason is the Kurdish culture. For example, in many Kurdish restaurants you will see a trash bin at the side of every table. When you're done eating your meal, that is most often too large for one person, all leftovers and plastic plates/cutlery are wiped into the bin. It is shameful to ask for to go bag, because it signals that you cannot afford to waste the food. That mentality is problematic, because there

should be more shame in wasting perfectly fine food rather than saving it.

The objectives of this study are shedding the light on Kurdistan Region Restaurants in regard to sustainable practices. A brief overview of sustainability management in the restaurants industry. finally, we will give some recommendation to restaurateurs in the region to initiate the process of sustainable practices in their facilities.

II. LITERATURE REVIEW

A. SAM Awareness and Policy Preparation

SAM strategic planning is the first activity in initiating environmentally friendly restaurant. The strategic planning of SAM in a restaurant is process of interpreting its strategy, or path, and rating decisions by assigning the resources to pursue this strategy (Mintzberg, 1996). Hitherto the majority of family owned restaurants have no sustainable plan, but for these restaurants strategic planning is applied on ad hoc bases. For survival, strategic planning and policy implementation is a must to avoid failure and shot down. According to Melissen, et al., (2016), sustainable policy can improve and influence SAM and help staff in doing their job efficiently and effectively.

B. SAM Action Plan

Restaurants and food industry should expect that rules and regulations authorizing sustainable act can lead to knowledgeable and trained employees and can satisfy either internal or external stakeholders. Numerous studies that researched restaurants and food services showed that an organized SAM strategic plan in any business can result in evolving reputable collaboration among restaurants' staff which will lead to a successful enterprise in the long run (Alonso-Almeida et al., 2017). Never the less, sustainable modification in business environment requires the engagement of all staff to maintain effective work flow including the lowest ranking employees in the restaurant. Sustainable plan creates cohesive teamwork among staff and reinforce collaboration and progress assembly. This indicates that restaurant's staff perform an essential role in SAM in restaurant running. A contemporary study in the restaurant industry designate that the issues related to sustainability are much of interest and concern of customers in particular and society as a whole. (Zaiton et al., 2016). Currently, numerous restaurants around the world started to pledge a reply to sustainability in the restaurant industry.

C. SAM Criteria Implementation

Previous literatures have indicated that the main issues or criteria related to SAM in the restaurants business are water, waste and energy. First criteria in the implementation of an environmental strategy involves time management and an investment expenditure to attain sustainability in the long run (Alonso-Almeida et al., 2017). The investment plan starts by

applying water saving features in faucets, dishwashing machines and toilets. These activities may cost some money in the short-run, but in the long run it can result in reducing the water bill and water consumption. To decrease water consumption, restaurants can install a low flow toilets, faucets and dishwashers (Bruns-smith, et al, 2015). A study done by Bruns-smith et al., (2015) showed that the installation of water-efficient toilets can save thousands of water gallons annually. Also, low flow faucets can save hundreds of dollars per month for each restaurant studied. In addition, the utilization of gray water for irrigation purposes can decrease the water usage by the third. Finally, educating customers to use water efficiently can help also in lowering the water expenditure.

The second criteria are waste. Food waste is associated with the restaurant industry. According to a study done by National Restaurant Association 2018, 48% of restaurants do not track their food waste, 22% donate their foods, and 14% compost their food waste. Waste can be reduced substantially if restaurants use recycling methods. Recycling can take many shapes including food, paper, plastics, oil, aluminum, and glass. hitherto the culture of recycling in Kurdistan restaurants are lagging behind. In their study, Bruns-smith et al., (2015) found that small numbers of restaurants endorse recycling in their facilities.

The final criteria are energy consumption. Energy saving in the restaurant business can save large amount of money from the electric bill. Introducing sustainable equipment and technologies by restaurants can lower the cost of expenditures and expenses. Brundtland International Institute for Sustainable Development, 2017 stated in their report on sustainability that 3% to 5% of total operating expenses are related to energy and energy efficiency technologies in restaurant may reduce energy cost by up to 20%. In the restaurant industry, Alonso-Almeida et al., (2017) had point out that SAM practices can help a restaurant to lower costs on waste, water and energy consumption. The essential purpose of implementation SAM holistically in restaurants is to generate and distribute food and services with cost-efficient and at the same time decreasing its impact on the environmental. Lastly, this study focused on investigating present practice of SAM implementation in restaurant industry in Kurdistan Region of Iraq. This study can contribute some recommendations to the Kurdistan Ministry of Tourism and other food sectors in the region to contribute to implement SAM in restaurants to lessening the damage to the environment.

III. METHODOLOGY

The primary data of this study were collected direct observation of the study sample, also unstructured interview was done with 10 restaurants managers in Erbil governorate, Kurdistan Region of Iraq. The researcher chose 5 fast food restaurants and 5 luxurious restaurants (see table 1). Thus, the main approach in data gathering is qualitative. The interview

queries were taken from related articles and divided into 3 sections: awareness plan, strategic planning, and restaurants' criteria of SAM. A content analysis method was used to identify the trend from previously published literature.

The population of this study are restaurants operating in Erbil area of Kurdistan Region which were registered under Kurdistan Health Ministry. Londoño et al., (2016) indicated that luxurious restaurants have considerable interest when asked about sustainability issues. Also, the franchise name can inspire the restaurant's ability to adopt suitable sustainable practices. thus, the study sample was divided into two categories, luxurious and fast food restaurants. To clarify, the fast food restaurants is a small restaurant, generally owned by one person and his staff operate alone without management interventions. In the other hand, luxurious restaurants are big enterprise with large cadre of employees who report directly to upper management. These centralized businesses have management support systems that aid the restaurant manager to be expose to sustainable agendas (Kechiche & Soparnot, 2012). The list of the 10 interviewed restaurants are shown in table 1 including work experience for each manager.

TABLE I:
INTERVIEW RESPONDENTS

Type of Restaurants	Restaurants	Description	Work Experience
Fast Food Restaurants	R1	ONYX/GM	7
	R2	Basilico/GM	10
	R3	Al Bustan/GM	6
	R4	Casper & Gambini's/GM	6
	R5	Naranj/GM	6
Luxurious Restaurants	R6	Pizza Hot/Manager	13
	R7	Windys/Manager	12
	R8	Kabab Najjar/Owner	10
	R9	Damasqino /Owner	7
	R10	KFC/Manager	9

Source: (Created by researchers)

As shown in table I above, the respondents to the interviews are either general managers or owners with work experience ranging from 6 to 13 years. This indicates that all the respondents have full knowledge in the restaurant business. thus, the interviews were attempting to understand the respondent's experienced and views their opinion in regards to SAM. The restaurant types (luxurious and fast food) were taken into consideration to explore its sustainable operation whilst identify their significant category on employing the sustainable efforts. This notion corresponded with Nicely (2018), the longer are the work experiences of the restaurant

managers, the better are the decisions making process taken by managers to solve problems and avoid work conflicts. The respondent's backgrounds indicate an appropriate experience and knowledge. This play a substantial role for managers and owners to better considerate SAM practices. Therefore, this study aims to discover the existing practice of SAM in Kurdistan region restaurant industry.

IV. RESULTS & DISCUSSION

The results of this paper are summarized in (Table II) below. The findings explained the following current practices: SAM awareness, Planning for sustainability and SAM criteria and the frequencies of its implementation in Kurdistan Region restaurants.

First, all of our respondents concurred that contemporary restaurant managers have to take sustainability practices in their restaurants into account. Based on the result, the different categories of restaurants in column (Table II) shows luxurious restaurants have the high frequency in implementing SAM compared to fast food restaurants. This show that luxurious restaurants having more positive attitude and participation concerning on the SAM practice.

According to the results of table II, the following restaurants R8, R9, R10 showed that none of the fast food restaurants respondents have an outline policy regarding sustainability. Yet, these restaurants are conscious and aware of current environmental issues that must be recognized in their future plans. However, the following restaurant respondents R1, R2, R3, R4, R, 5 and R6 from luxurious restaurants category had started the campaign for becoming sustainable restaurants and presented sustainable policy to be implemented shortly. Regardless of the differences in vision and mission of each restaurants, the aims of these restaurants are alike in striving for the reduction of the carbon footprint. In this case, it is expected that the luxurious restaurants are concern and encourage their managers to adopt SAM principles with outlined policy and awareness plan .

Moreover, all the restaurants showed that staff training in SAM modules were conducted as an education exposure and consciousness enhancement among these employees in managing SAM accurately within their daily scope of work. Based on owners and managers responses, tackling the employees by primarily disseminate the knowledge and understanding of SAM is significant within the restaurants management for them to appreciate the restaurants mission as the foremost priority in becoming sustainable. This means that, the SAM awareness and strategic plans are essential in leading staff to work on improving sustainable programs. Although, it is contradicted with the fast food restaurants where restaurants R8, R9, and R10 do not implement any training for the employees. With this intention, it showed that fast food restaurants are indirectly discourage the employees to understand the significant value of sustainable practice in this regard. Table II shows the implementation of SAM by Kurdistan Region restaurants.

TABLE II
SAM IMPLEMENTED IN KURDISH RESTAURANTS

Types of Restaurant	Luxurious Restaurants					Fast Food Restaurants					F Q
	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	
Respondent											
Current practice											
1. Awareness planning											
Sustainable policy	✓			✓	✓	✓	✓				5
Sustainability Awareness	✓	✓	✓	✓	✓	✓	✓				7
2. SAM Action plan											
Introduce awareness to staff	✓		✓	✓	✓	✓	✓			✓	7
Employees' training	✓	✓		✓	✓	✓	✓				6
3. SAM Implementation											
a) Energy Management											0
Energy consumption	✓		✓	✓	✓	✓	✓	✓	✓	✓	9
Renewable solar power	✓										1
Energy saving equipment				✓	✓	✓					3
Air Conditioning Thermostat	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10
CFL lighting	✓	✓	✓	✓	✓	✓	✓			✓	8
Shut-down schedules for kitchen appliances	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10
Programmable HVAC thermostats	✓	✓			✓						3
b) Water Management											
Faucet aerators	✓	✓	✓	✓		✓		✓			6
Rainwater collecting											0
Low-flush toilets	✓	✓	✓	✓	✓		✓				6
Water saving friendly reminder (signs)	✓	✓	✓	✓	✓	✓	✓			✓	7
Minimize change of tables covers	✓	✓	✓	✓	✓	✓	✓	✓			8
c) Waste Management											
Cardboard or paper recycling	✓	✓	✓	✓	✓	✓				✓	7
Composting food waste											0
Recycle	✓	✓	✓	✓	✓						5

toiletries											
Refill toiletries	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10
Recycling rigid plastics containers	✓	✓									2
Paperless technology											0
Biodegradable Accessories											0
Frequency	18	14	13	16	16	14	11	6	4	8	

Source: (Created by researchers)

In regard to SAM criteria implementation, all managers share the intention of reducing the three criteria: energy, waste and water. The results are clearly stated in table 2. First, the implementation of energy management where the majority of the restaurant's respondents try to reduce energy consumption 9 out of 10 restaurants use energy saving bulb and CFL lighting. The air condition is controlled by thermostat where the temperature increase or decrease automatically. This action reduces energy consumption greatly. Also, all respondents agreed to the idea of installing Energy Consumption Monitoring technology in the future. One notion showed that all respondents also agreed on fire up and shut-down schedules for kitchen appliances. In regard of renewable solar power, only R1 use renewable solar power and the rest were thinking of installing this technology on restaurants' roof.

Secondly, in regard to saving water usage by restaurants customers and staff, most luxurious restaurant save water by using many methods including Low-flush toilets, Faucet aerators, and Water saving friendly reminder (signs). We mentioned the idea of collecting rain water for irrigation purposes, this idea was not desired and preferred by managers due to health issues and Ministry of Health regulations. Also, the respondents indicated that it is hard to implement this practice since the installation of such practice since it requires the construction of a piping system that cost too much money.

Finally, in regard to waste management. The highest responsiveness can be seen in luxurious restaurants where the frequency of recycling programs is implemented, but none of the 10 restaurants has an idea of composting food waste, the majority of these restaurants through the extra food in the trash bin. It is worthy to mention that the luxurious restaurants have eliminated plastic plates, forks, and other accessory entirely from their operation. In other hand, fast food restaurants depend entirely on plastic bags, plates, and spoons and forks. Also, biodegradable accessories and paperless technology are not available completely in the Kurdistan Region restaurants.

CONCLUSION

The objective of this study was to discover SAM practices in Kurdish restaurant industry. This paper has presented three SAM common practice 2 categories of restaurants in Kurdistan Region a fast food and luxurious restaurants. The

result showed that the luxurious restaurants category applied good SAM practices compared to fast food restaurants. Luxurious restaurants did better job but not entirely, this was due to the connection between luxurious restaurants and international brand. These restaurants try to imitate big chain restaurants which have been working on sustainable policy in their facilities as part of their support to the global environmental issues. On the contrary, fast food restaurants are very slow in adopting sustainable practices. This might be due to the ignorance and lack of knowledge of the concept of sustainable practices of SAM. Nevertheless, many restaurants are raising the issue and trying to achieve SAM in their operation to become environmentally friendly enterprises.

Although SAM is a new concept in Kurdistan Region, the researchers can offer the following recommendation that will help restaurants in the region to be environmentally friendly:

Presenting a recycling programs can minimize waste. Also, buying packaging/supplies with recycled or compostable content can increase sustainability. Likewise, manage food waste by donating leftover food and creating composting facility for composting food waste, Finally, restaurants can focus on serving locally sourced food to support their local communities.

In addition, the researchers have found that the majority of Kurdish restaurants are aware of the SAM in general and SAM criteria in specific (reducing energy, waste and water management). Although the participation of SAM practices was minimal in the restaurants understudied. Several managers claimed that the high financial cost of investing in SAM practices within the restaurants are preventing them from adopting these practices, basically several restaurants cannot afford the high costs of construction and makeovers to become environmental-friendly restaurants. Nevertheless, we found numerous ways to apply sustainable practices without paying high amount of investment. For instance, CFL lighting, energy efficiency light bulbs, eliminate plastic containers, recycling paper and cardboards, donate perishable food and composting waste.

Adopting SAM key initiatives for the restaurants industry in Kurdistan Region can be a proposal for future study. This involves all restaurant categories. The data can be recovered from luxurious, chain, fast food, and small restaurants that involved in SAM practices and who are registered in Kurdish Ministry of Tourism and Ministry of Health.

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