

Tourist's Perception of Buffet's Food Waste in Hotels in Bangkok

ความเข้าใจเกี่ยวกับขยะอาหารจากร้านอาหารแบบบุฟเฟต์ในโรงแรมของนักท่องเที่ยว ในกรุงเทพฯ

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Abstract

Food waste is a global phenomenon according to its consequences upon sustainability, which is considered as an inevitable spike of the hospitality industry especially in hotel's buffets. This descriptive study aims to find the awareness and contemporary thinking of tourists upon the food waste problems in Thailand including the motives and perception influencing tourists to eat at a hotel's buffet in relation to food waste. Furthermore, description of food service providers concerns and food waste management in the properties in relation to the government's campaigns and guidelines. This study deployed mixed methods of in-depth and semi-structured interviews, focused group discussion, personal observations and survey questionnaires, of which all data is analyzed by utilizing content analysis, color-coding and constant comparison analysis methods. The objectives of study were 1) to measure the degree of awareness and contemporary thinking amongst tourists regarding food waste from the hotel's buffet in Bangkok, 2) to understand the main motivations and perception that influence tourists travelling in Bangkok to have buffet in relation to food waste be in clustered, 3) to explore the food service providers' concern towards food waste problems in relation to government's campaigns, and 4) to find out the ways to manage the food waste of the food service providers with governmental supportive guidelines upon the leftovers. The results reflected that awareness of domestic tourists is low compared to international tourists, whilst the top three motivating factors arousing tourists to visit hotel's buffet are special occasion, value of money, taste and quality, and variety of food offered. Secondly, perception of tourists towards food products, service and dining experience were all mentioned including buffet's

promotion. For the hoteliers, the concern of general waste is more consider rather than food waste. The policy of food waste minimization has not been passed down to the operational staff and receives less support from government. The hoteliers have also faced a great challenge of value and expectation of the tourists seeking for full function of food service while payment has been made. Thus, additional practices of live cooking, food donation and giveaway, and waste sorting were suggested to be more practical.

Keywords: Food Waste, Hotel Buffet, Tourist Motivation, Perception.

บทคัดย่อ

ขยะที่เกิดจากอาหารนั้นจัดได้ว่าเป็นปัญหาระดับโลกปัญหาหนึ่งสืบเนื่องจากผลกระทบที่มีต่อการพัฒนาอย่างยั่งยืน ซึ่งปัญหาขยะอาหารนี้ถือเป็นปัญหาที่หลักเลี้ยงไม่ได้ในอุตสาหกรรมการบริการโดยเฉพาะอย่างยิ่งในบุฟเฟ็ตของโรงแรม การศึกษาเชิงพรรณนานี้มีวัตถุประสงค์เพื่อค้นหาความตระหนักรและความคิดร่วมสมัยของนักท่องเที่ยวเกี่ยวกับปัญหาขยะอาหารในประเทศไทย รวมถึงแรงจูงใจและการรับรู้ที่มีอิทธิพลต่อนักท่องเที่ยวในการใช้บริการร้านอาหารแบบบุฟเฟ็ตของโรงแรมที่เกี่ยวข้องกับขยะอาหาร นอกจากนี้ การรับรู้เกี่ยวกับขยะอาหารของผู้ให้บริการด้านอาหารที่เกี่ยวข้องกับการรณรงค์และแนวทางของรัฐบาล การศึกษาครั้งนี้ใช้วิธีการวิจัยแบบผสมผสานผ่านการการสัมภาษณ์ทั้งในเชิงลึก และแบบกึ่งโครงสร้าง การสนทนากลุ่ม การสังเกตส่วนตัว และการใช้แบบสอบถาม ซึ่งข้อมูลทั้งหมดถูกวิเคราะห์โดยใช้วิเคราะห์เนื้อหาและวิธีการเข้ารหัสสี และการวิเคราะห์โดยการเปรียบเทียบข้อมูล แสดงให้เห็นว่าการรับรู้เกี่ยวกับขยะอาหารของนักท่องเที่ยวในประเทศนั้นน้อยกว่าเมื่อเปรียบเทียบกับนักท่องเที่ยวต่างชาติ ในขณะที่ปัจจัยหลักที่กระตุ้นให้นักท่องเที่ยวใช้บริการบุฟเฟ็ตของโรงแรมนั้นมีสามปัจจัยคือ การใช้บริการในโอกาสพิเศษ ความคุ้มค่าของเงินที่มีต่อรสชาติและคุณภาพของอาหาร และความหลากหลายของอาหาร นอกจากนี้ การรับรู้ของนักท่องเที่ยวเกี่ยวกับผลิตภัณฑ์อาหารที่จัดเตรียม การบริการ และประสบการณ์การรับประทานอาหาร รวมถึงโปรโมชั่นบุฟเฟ็ตของโรงแรมนั้นยังถูกให้ความสำคัญเช่นกัน ในส่วนของด้านผู้ให้บริการอาหาร ความสำคัญจะมุ่งเน้นไปที่ขยะที่ว่าเป็นโดยรวมของโรงแรมมากกว่าขยะอาหาร โดยการลดเศษอาหารไม่ได้ถูกส่งต่อไปยังเจ้าหน้าที่ระดับปฏิบัติงานได้อย่างชัดเจน และการสนับสนุนจากรัฐบาลนั้นอยู่ในระดับน้อย รวมไปถึงปัญหาและความท้าทายผู้ประกอบการโรงแรมที่ต้องเผชิญคือความคุ้มค่าและความคาดหวังของนักท่องเที่ยวที่ต้องการใช้บริการอาหารอย่างเต็มรูปแบบเพื่อให้คุ้มค่ากับค่าใช้จ่ายที่ได้จ่ายไป

คำสำคัญ: ขยะอาหาร บุฟเฟ็ตโรงแรม แรงจูงใจของนักท่องเที่ยว ความเข้าใจ

Introduction

The hospitality and tourism sectors are considered as two main players in some countries as major revenue generators, which contribute their functions to the national

economic growth in multiple ways. Service-oriented enterprises cannot start their engines without tourists and tourists require shelters to re-boost their energy and vitally, food for living, which results in the need of businesses. In tourism, food is more than nourishment and extends to visitor experienced and attractions (Henderson, 2009). Problematic issues towards food wastage have been uprising from tourism and hospitality activities, which can be called hospitality waste, which negatively reflects the industry from a sustainability perspective. Food waste is responsible for an astonishing 8% of global carbon emissions (Hyland, 2020). Hospitality enterprises require the food and beverage suppliers to fully supply their products to serve the demand of the tourists at all levels. The intensity of food waste could rise tremendously due to the socio-cultural events of tourism activities with festive vibes promoting extra portions of food and over-supplied beverages for celebration in several traditional festivals and cultures. Cultural norms that portray food waste as reflecting good hospitality further aggravate the problem (Wang et al., 2017).

Thai hospitality reflects the tourists' perception upon good service, excellent fine-dining, glorious accommodation, which are delivered to the rest of the world during the length of visits through service mind of Thais. Generally, the accommodation of each country reflects the inherent service mind of the origin's cultures. Thailand's vibrant tourism and hospitality sector has played an increasingly important role in the economy in recent years, boosting many related businesses and helping compensate for slow growth in other sectors (Thailand Incentive and Convention Association, n.d.). Thai society has been also accepted for their cultural harmony; thus, Thais always celebrate the festivals of many cultures; not just their own. In addition, shopping accessibilities are widened from the mega shopping malls to local walking streets and night markets with scrumptious culinary experiences with a limitless range of food and drink choices especially buffets, which have been developed for long time under the concept of all-you-can-eat for a single price per person.

Buffet-style meal serving is a very popular method of serving food in the hospitality industry and an important part of the service quality in hotels (Wilkins, et al., 2007). Unfortunately, buffets often generate food waste, increase food consumption and costs because more food production to reach the demand of the guests. At buffets, people tend to overload their plates due to the wide variety and abundance of displayed food available

to them, at no extra costs (Kuo and Shih, 2016). From this context, demanding more food increases hospitality waste, and negatively affects the environment, because more food requires more produces of crops planting, transportation, cost of storing, and food process, which can be defined into two scopes are increasing in food consumption and production, and food waste for overloaded and unconsumed plates. When the food service providers have to produce more food, they would demand more ingredients. An average 5-star hotel buffet throws away up to 50 kgs of edible food during each service period (PATA, 2018). The study investigates how well tourists acknowledge and their main impetus influencing lavish consumption in buffet restaurants including how well do the food service providers' aware upon food waste management in compliance with governmental support. Perspective and actions of hoteliers implemented to prevent and/or reduce food waste of their food surplus in the hotel are also in an account.

Objectives

The main objectives of this study are 1) To measure the degree of awareness and contemporary thinking amongst tourists regarding food waste in the hotel's buffet in Bangkok, 2) To understand the main motivations and perception that influence tourists travelling in Bangkok to have hotel buffet in relation to food waste be in clustered, 3) To explore the hotel's concern towards food waste problems in relation to government's campaigns, and 4) To find out the ways to manage the food waste of the hotel with governmental supportive guidelines upon the leftovers.

Scope of research

This research is intended to focus on the tourist's perception against food waste that have been generated by food service providers, the stimulus that influence tourists to consume food extravagantly, concern about food waste and government promotion of food service providers and the actions of the providers upon the food waste management of the leftovers in the properties situated in Bangkok, Thailand.

Conceptual Model

The conceptual model has been adapted based on the theoretical theories of Environment and Food Consumption Theory (Wansink, 2004) as figure 1. The framework focuses on both side of tourists and food service provider. For the tourists, *self-motivation* of

eating habits, eating atmospherics, eating effort, eating with others, and eating attractions upon making decision to dine at hotel's buffet in order to know the stimulus of partaking and volume of consuming food at the restaurant. Whilst *food environment of services provider* of salience of food, variety of food, size of portion, shape of food equipment, food presentation, and quality of service, is considered in order to glimpse the attraction in relation to the volume of food that tourists load on the plates and number of leftovers. Furthermore, the influence of government's food waste reduction initiatives and promotions that could reduce to volume food waste generation by increasing tourists' self-awareness upon the consumption of food as well as the hotel's buffet restaurant's awareness in term of the ways to serve the tourists and leftovers management at the back of the house.

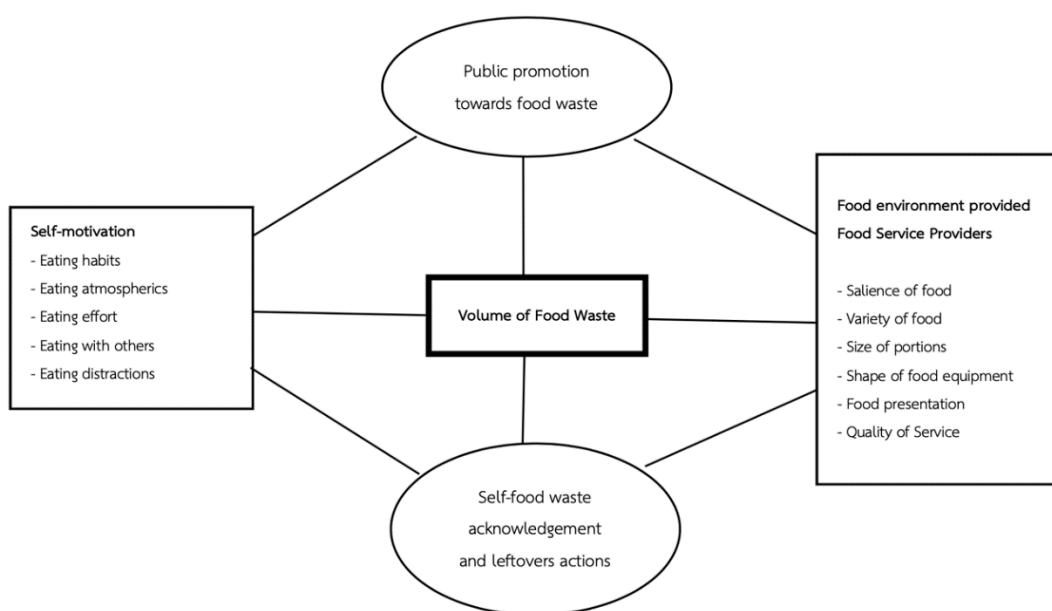


Figure 1 An Extended model explains the nexus of tourists and food service providers in food waste.

In summary, this was scoped to the study on perception, self-acknowledgement and tourist's self-motivation of tourists themselves in general as well as motivations that attract tourists to have a meal at the buffet restaurant from the food environment of the hotel upon food waste from hotel's buffet. In addition, this is to see how government could assist tourists' thinking and support hoteliers about food waste management.

Definition and Terms

Awareness and contemporary thinking

This term means tourists' understanding of the meaning and dynamic of thinking process upon the issue of food waste in the society.

Culinary experience

The nostalgia experience in term of eating myriad kinds of food in the particular local residency of the destination while traveling. The culinary experience bursts culture understanding between tourists and all components in the area such as history, heritage, ways of life, local ingredients and recipe, exotic tastes and precious cultures hidden in the culinary indulgence.

Food Service Providers

This refers to the hotel buffet restaurants both located at the hotel and other places.

Food Waste

It refers to the leftovers of the produced foods and will be thrown away after the shop closes for safety and freshness concerns including unfinished food that tourists taste and discard after they find themselves unflavored of the tastes.

Hospitality waste

This refers to the waste that has been generated by the hospitality and tourism activities in their daily functions.

Perception

The understanding towards the existence of food waste and action of buying steps of tourists.

Self-motivation

This refers to the tourist's inner influencers in making decision to have a meal at the hotel's buffet restaurant.

Literature Review

Similarities of the studies are the degree of waste of food depends on the level of perception, awareness of tourists per their inner stimulus and personal factors, which strongly and relevantly link to problems of food waste including consumers' behaviors of over preparation, surplus purchase, and incorrect conservation of food. The problem is not solely relying on consumers side, but the entrepreneurs and businesses are involved as

well in term of waste managerial skills, trad-off, increasing profitability by reducing food loss, and awareness of waste reduction of the top management team in all areas of the buffet restaurant. The degree of the awareness depends on the external factors arousing tourists to take actions and the inner factors of each guest coming from different countries also influence the eating habits based on the reviewed literatures.

Hospitality Business's Perspective: This seems like hoteliers opine that food wastage management has greatly impacts for hotel operations. Hoteliers cannot reach the zero food waste level due to the inherent characteristics of the industry (A. Rudmi Chehanika Sandaruwani, W.K. Athula C. Gnanapala, 2016), because of the diversity of tourists behaviors. A variety of foods is expected to be tasted in the hotel restaurant as well as the attitude of the amount of the food presented inside the restaurants represents the hotel's quality as per tourist's satisfaction. Furthermore, consumerism behavior or negative eating habits make the issue worsen in either way. Therefore, the error of sustainable practices in hotel businesses has been challenged by the leftovers. Nevertheless, the cost of energy can be reduced by the use of the food waste in several ways. In addition, this problem is totally under the vision of the top management team of the hotels in term of reducing the cost of energy and maximizing profit margin generated from the hotel's leftover by every feasible means.

In line with this, food waste problem is not just only for the consumers/tourists, retailers and food providers can be a part of the waste reduction like two-way communication. Only holding the consumers accountable and expecting them to solve it will not solve the problem of food waste; marketing and retailers should also consider ethics when it comes to food distribution (Bravi, L., Murmura, F., Savelli, E., & Viganò, E., 2019).

Food and Socio-culture: Tourism activities also play a crucial role upon the psychological drivers including the perception of learning local integrity, and identity via culinary experience, and local festive hype. Changing eating habits during certain periods of the year and food surplus have a strong impact on food waste behaviour (Aktas, et al., 2018). The over-preparation of food for festival cerebration provides variety of choices for tourists, but it also leads negative effect towards sustainability, when tourists do not intend to consume all of those choices causing leftovers. Local food consumption moderates the relationship between tourist perception of local food and destination image (Mohd Zahari,

Mohd Salehuddin & Hanafiah, Mohd & md zain, nur adilah, 2018). Food provided by local citizenry contains socio-cultural legacy, which glorify the destination image. It also arouses tourists to try various kinds of food available in the area, on the other hands, venders tend to express their hospitality power by offering variety of food choices causing over-preparation and food surplus especially during local festivals.

Food and Economy: Culinary experiences portray critical roles as an income generator promoting economic growth in the area and nearby vicinity. Food also creates employment and income to local community due to the fact that this job excels feasibility of granting high income in the hotel. The production of food preparing for buffet requires multiple suppliers from different areas, this generates income to several suppliers at a place.

The waste has generated negativities of food and waste management costs of the hotel as well as natural pollution caused by the leftovers. In the countries where food waste is widely acknowledged, they have implemented some policies of penalty and fine of having leftovers.

Research Methodology

This study aims to study the awareness and thinking of tourists and service providers' opinions towards food waste and its impacts to the economy, nature, and socio-culture under the lens of culinary experiences in Thailand through the mixed-methods. A survey, on-site personal observations, focused group discussion, semi-structured and in-depth interview are used for the study in order to gain data from the selected site. There were 37 informants comprising of 14 international tourists, 12 domestic tourists and 10 trainees, 1 former Food and Beverage Manager, intended to be targeted as sampling frame as well as personal observations at the 5-star hotel. Semi-structured questionnaire was utilized to investigate the 26 tourists regarding the acknowledgement upon problem of food waste, and motivations of having buffet at the hotel. The in-depth interview was implemented to acquire information from the trainees and a former Food and Beverage Manager including focus group discussion amongst trainees. Questionnaires were distributed with questions about reasons and perceptions.

The data collection extracted from the interviews was based on nonprobability sampling and purposive sampling technique for this study because this technique eased the researcher to contact and define the related respondents. There were 10 questions asking about awareness upon food wastage problem including contemporary thinking and motivations that

influence the tourists' eating habit to have a meal at the hotel with 5-point Likert scale (strongly agree, agree, neither agree nor disagree, disagree and strongly disagree) asking about their perception, motivation that influenced to partake at the hotel's buffet. Food waste awareness and implementation of 10 hospitality trainees finishing 6-month internships at several 5-star hotels all across the Thailand especially focusing on the kitchen and front of the house sections, and an experienced informant are critically needed to be comprehended upon pre and post actions for the food preparation, leftovers and food surplus guided or related the government agency via in-depth interviews and focused group discussion of trainees who have completed internships in different properties to seek for different practices. Self-participant observation was applied to glimpse the data from both wings of the problem. Furthermore, secondary data has been collected by reading through published literature under the scope of food waste problems and management as well as tourists' perception, motivation and behaviours. References from the websites available including news, both academic and general journals, researches, and other related sources from the internet are included. The collected data were analysed by deploying constant comparison analysis, content analysis and colour coding to pinpoint the key findings.

Results

The results have shown in two sides of the food waste generation, which are tourists and food service providers sides, where both players are indirectly in relation to the government promotion.

Awareness and Contemporary Thinking

This section was a result of doing a distribution of the questionnaire to the tourists. For the tourists, there are different in degree of knowing about the food waste problem between foreign and Thai tourists respectively. Most of foreign tourists knew some campaigns and initiatives promoted by other government agencies and other organizations, while Thais were absent, but they were able to identify impacts of the food waste under sustainability and feasible solutions.

Motivations and Perception of Having Hotel's Buffet

The top three reasons and motivation visiting hotel's buffet are special occasion, value of money for perceived taste and quality and perceived variety of food offered. Perception of the hotel's buffet was focused on three sub-topics are food products, service

and dining environment. For the food products, variety of menu choices and pleasing salience of food were importantly marked respective and for freshness of food and flavourful taste, these two elements importantly selected equally. Service, efficiency of service, helpful staff, product knowledge of staff and friendliness of staff were vitally chosen respectively. For dining experience, most of the respondents preferred relaxed atmosphere and ambience, where layout, location, and appearance of the staff working at the buffet restaurants were important respectively. In addition, promotion is also important for decision making as well. This was the result from a distribution of the questionnaire to the tourists.

Food Service Providers Concern about Food Waste

This scope of result was analysed based on the information obtained from practicing in-dept interviews with trainees and a former Food and Beverage Manager. This was identified as self-practice and indirectly minor influenced by the government. The hotels did the waste reduction in order to gain the certificates and supportive money, where food waste was a fragment of the total waste of the hotel. The cost of investment for food waste program was too high to do separately.

Furthermore, the policy of food waste was set but did not much transcend to the operational staff. The food in the buffet restaurant was depended on the guests' satisfaction and expectation. Hotels were unable to deny serving food or reduce the portion of the food because the guests' value was already paid, which created the dilemma for the hotels to choose between lost the cost and reduced the food waste or lost the guests and lost income. Furthermore, hospitality waste was inevitable especially in food preparation process where inedible parts were thrown away.

Hotel's Buffet Restaurant Implementation upon Food Waste

Hoteliers have attempted to reduce the waste of food, but it did not completely work. Besides, reducing the salience or food choices were not unappreciated, because these were depended on the tourists' demand. Thus, the best ways to reduce the waste were under hoteliers' responsibility. Implementations of live cooking, waste sorting, food donation, selling and giveaway, were implemented to reduce the waste of food.

Discussion and Conclusion

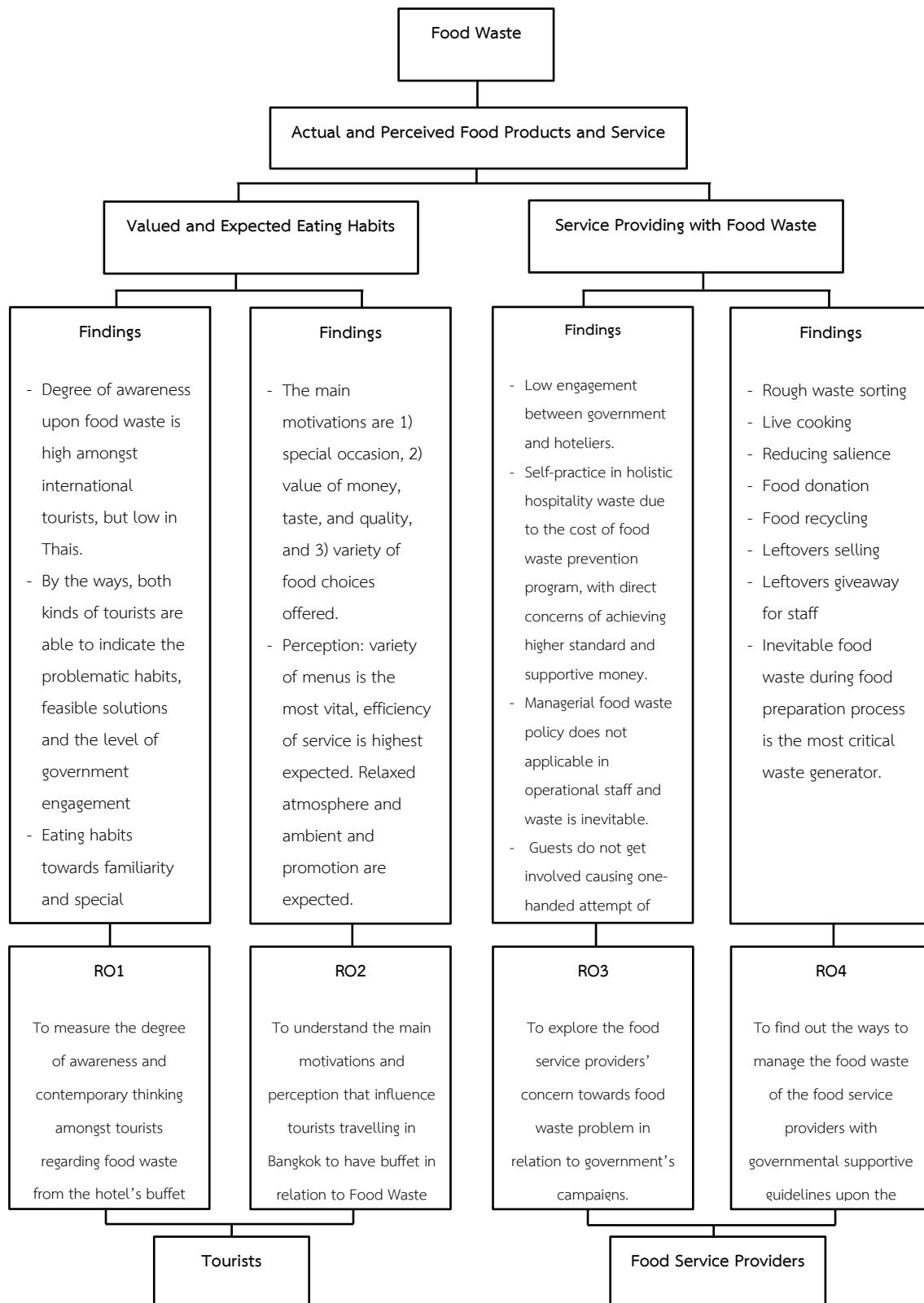


Figure 2 Derived Model of Key Findings and the Issue.

Above figure elicits all of the findings and the linkages of the research objectives, findings and the issue, which are deeply explained respectively.

For the research objective number 1, awareness and contemporary thinking amongst tourists regarding food waste from the hotel's buffet in Bangkok obtained by the survey, tourists already know the impacts of the food waste towards sustainability. The waste can generate harmful impact to nature as piles of garbage and toxic substance. In addition, the problems of scarcity, hunger and unprivileged issues are highlighted from the tourists' opinion. Lastly, cost of production of food producing is mentioned in terms of hotel operation itself as well as in national level. Feasible and basic practices that tourists could do to reduce the food waste are about limitation of the food plating, which is needed to be in appropriate amount in the concern of eating habits changing, and awareness uprising. Furthermore, the recommendations for the service providers were suggested such as food tasting, made-to-order serving style, take home for the leftovers, and food donation and food recycling for the people in need. Financial penalty of extra charge is also recommended against the and over-plated case and leftovers.

For the research objective number 2, the main motivations and perception that influence tourists travelling in Bangkok to have buffet obtained by the questionnaire were shown that having meal at the hotel's buffet mostly happens on a special occasion, as well as variety of food choices and value for money, taste and quality perceived, which in coherent of the hotel's side. The perception towards hotel's buffet is also indicated in three scopes are food products, service, and dining experience. Variety of food assortment is the most preferable, efficiency of service is expected and relaxed atmosphere or eating ambience is also in a factor. Promotion and dining packages are also one factor that influence tourists to visit a hotel's buffet. For food service providers, variety of food offered leads the packs of other motives followed by quality of food and service, promotion and dinning ambience. As the nature of the hospitality industry, hoteliers are expected to provide full function for the guests, because the payment has been made, thus, the quantity of the salience of food on the counter must be spot-on to reflect the value and the fee. In addition, the full scale of appearance of the food shown also influence the guests to visit the restaurant causing the dilemma of food waste from preparation and the income. Furthermore, the intake of food is diverse due to the familiarity and eating habits

if the guests, where the most preferable menu is on high demand is unexpected. From the personal observation, familiarity of food is one of the most factors that influences eating habits of the guests. Special occasion drives the food consumption and over-grab behaviour, guests' birthday and family meeting increase the enjoyment and derive spoil behaviour leading to leftovers.

For the research objective number 3, food service providers' concern towards food waste problems in relation to government's campaigns on the tourist's sides extracted from the in-depth interview with a former Food and Beverage Manager, most of Thais do not have any acknowledgement of the government initiatives towards food waste in the country, in contrast foreign tourists have acknowledged all schemes and practices of food waste prevention of other countries. From the food service providers' perspective, there is some acknowledgement of the food prevention in management level whilst staff in operational and trainee level do not perceive much about the food waste. In fact, the campaigns are initiated by the hotel itself for achieving the ISO14001 benchmarks, where food waste is partly considered as well as gaining supportive cashback from TCEB is the main motive of practicing, not the core problems of the food waste.

Lastly, for the research objectives number 4, the ways to manage the food waste of the food service providers upon the leftovers is not directly intended to reduce the hospitality waste acquired from the in-depth interviews and discussion of trainees, therefore, the practices are loosened in some area especially in the small units of the kitchen. Food preparation process is the unit that creates lots of food waste due to inedible parts of ingredients. Practice of the guests is zero due to the maxim that they expected high level of value of food, beverage and service, because the guests pay high price for the meal. Uncontrollable guests' behavior is highly rated, which is diverse depending on each guest's perception and preference of eating habits. The existing food waste policy of the hotel does not reach down to the low-level staff and in reality, this is extremely hard to sort every type of hospitality waste, because there is not solely restaurant that generates waste. If all single type of waste is sorted, this practice wastes of time and manpower. Waste sorting is work for some properties where the relationship between the hotel and food waste buyers are strong such as farming, and charity. Live cooking promotes freshness and fancy cooking abilities showcasing in front of the guests. Food service providers are

benefited from the stockpile for other meals, reputation as the CSR, fantasy cooking demonstration showing potentiality of service, whilst there are also some dilemmas of cost control because live cooking requires more staff standing by at each station. In addition, if the smaller size of portion incites greater guests' dissatisfaction as drawbacks of attempting to reduce food waste.

According to the result, the findings gained from the food service provider side from the business perspective share the same result with the research of A. Rudmi et al., 2016, stated that this seems like hoteliers opine that food wastage management has greatly impacts for hotel operations. Hoteliers cannot reach the zero food waste level due to the inherent characteristics of the industry. This happens because the hoteliers need supply all the guests' wants to reduce the dissatisfaction. Reducing the amount of food on the counter greatly impacts the tourists' satisfaction in term of value that has been made. Consequently, the failure of sustainable practices upon food waste management in hotel businesses has been challenged by the leftovers and the attitudes and eating behavior of the tourists.

The concept of all-you-can-eat is quite popular in Bangkok, where tourists can witness multiple of buffet restaurants. The concept drives the misunderstanding of eating habits and reduce importance of food surplus and food leftovers as food waste. The more consuming leads more food production and preparation, which is the most function that creates food waste.

Managerial Implications and Recommendations

For Hospitality Businesses

Hospitality and food wastes are ones of the severe topics that all service-centric businesses have to encounter as their specific traits, promising to serve the guests at their maximum service capability as the expectation of the guests. Reduction of the things that guests have been experience and well as portions that appeared in the promotional pictures emerge instant complaints, which is also important for hospitality industry. Hoteliers should intend to compile prevention of food waste on their sides with alternative ways in buffet line. Live cooking and giving staff food surplus and leftovers are good practice as well as made-to-order service. Decoration, structural layout of counters as well as food portions can be reduced by putting more decorative items. Serving containers could be

reduced to create illusion and influence to return to the seat faster because their plates are full as well as food tasting for guests, who desire to experiment on different menus in small portion. Research of group of the guests' nature getting from the seat booking is also recommend, for instance, Thai guests' fondness for seafood and Japanese food, therefore, noodles, creamy soup or other Western food production must be reduced including the guests' food familiarity. Crucially, food waste from food production process could be alleviated by the menu design by the chefs to seek for the menu that requires less preparation but still look fantasy

For the Government

This study shows that domestic tourists of Thai are lack of knowing about food waste in general. Pollution Control Department in collaborating with other agencies both public and private sectors could rise the awareness and contemporary thinking towards the impacts and reduction of the food waste massively. For example, integrating food waste knowledge and prevention with popular cooking television programs, that reach a lot of views and rating both in television and online platforms such as MasterChef Thailand, Iron Chef Thailand, Top Chef Thailand, etc. Hopefully, the indirect messages of food waste could be seeped and acknowledged. Furthermore, launching more campaigns and collaboration with hotel enterprises is suggested to obtain critical information with the hospitality and tourism businesses to see the real situations for better and practical schemes.

For General Public

Self-learning of the world sustainability is important. Discontinuation of being greedy and serious focus on the value of money could be diminished by knowing yourself how much you are able to eat. If the plates do not fulfill the hunger, just walk and grab some more. This is to delay the consumption and reduce risk of leftovers. The value of food and quality is still remaining the same because the buffet service providers are still serving their guests foods. Being open-minded to care the world more than ourselves is positively suggested.

For Hospitality and Tourism Schools and Colleges

Education and self-learning are also paramount and play vital roles to increase the awareness of food waste thinking and the perception of the hospitality waste issue

especially the food related one. When the younger generation has garnished the issue from the school's courses, since their young ages, there is high possibility that the knowledge will have an ongoing effect and be reflected in their future eating habits.

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