# MOTIVATION TO DONATE SURPLUS FOOD IN MALAYSIA RETAIL INDUSTRY

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## 1. INTRODUCTION

In the food industry, waste occurs throughout the supply chain, with an estimated 35% occurring at the point of final consumption (FAO 2011, 2013; Lipinski et al., 2013). Reducing food waste is a challenge for food and waste policies. The quantity of food wasted varies between countries, primarily determined by income, industrialisation, and level of development (Abiad & Meho, 2018; Chalak et al., 2016). United Nations Food and Agriculture Organization estimated monthly waste per capita about 25 kilograms in Europe and United States, 18 kilograms in Latin America, and 10 kilograms in South and Southeast Asia (Gustavsson e al., 2011). Socio-cultural, economic, and infrastructure factors in food waste management can influence food waste generation throughout the food supply chain (Thi et al., 2015). In the United States, most food waste is generated at the retail and consumption stages (Garcia-Garcia et al., 2015). However, due to a lack of technology, transportation, and expertise in food preservation in Southeast Asia, most food waste is generated during the production stage (Yang et al., 2016). In Malaysia, the average household generates about 0.5kg to 0.8kg of food waste per day (Chien Bong et al., 2017). Food waste accounts for nearly 63.1 percent of total solid waste components (Karim Ghani et al., 2013). Thus, reducing food waste generated along food supply chains is critical for sustainable food waste management (SFWM). SFWM is a systematic approach in reducing food waste and its impact across the entire food supply chain, from production (agriculture), manufacturing, distribution and retail, consumption, and final disposal (EPA, 2021). Such efforts are consistent with the Sustainable Development Goals 12 (SDG), SDG Target 12.3 aiming to reduce global food waste at retail and consumption stages by half by 2030 (United National, 2015).

Albeit food goes to waste, it wastes everything that has been invested in its production, including water, land, and energy used in its production, processing, and distribution (Thyberg & Tonjes, 2016). In Malaysia, food waste disposal at a landfill is relatively inexpensive and straightforward to implement (Lim et al., 2016). Still, it causes various environmental issues such as groundwater pollution, toxic gas emissions, odour, and leachate (Karim Ghani et al., 2013). In landfills, the decomposing of food waste produces methane, a greenhouse gas that is 21 times more potent than CO<sub>2</sub> in terms of its contribution to climate change (Menna et al., 2018). Furthermore, once the landfill site's maximum capacity is reached, identifying suitable locations for new landfills becomes a severe issue (Mohamed et al., 2017). However, some initiatives should be considered to divert food waste directly to the landfill. The food retail



industry employs redistribution of surplus food to any food bank or charity organisation to achieve sustainable food waste management.

Food redistribution, known as food recovery or food rescue, is one of the essential strategies for commercial food businesses to address food waste as part of the more significant food supply challenge. Collecting surplus edible food and delivering it to charity organisations to feed the community who experience food insecurity would divert the food from being discarded to a landfill (Reynolds et al., 2015). Food redistribution has grown significantly over the last decade (Lipinski et al., 2015). Food redistribution organisations exist in over 25 countries across six continents (Reynolds et al., 2015). However, there is scant research on food redistribution in Malaysia. Without understanding the motivations and outcomes of food redistribution organisations, they cannot be developed or improved as a commercial food waste reduction strategy. This research is a component of a larger research project that investigates the impact of Malaysian food redistribution organisations and the experience of all stakeholders involved in food redistribution, including food industry donors, staff and volunteers at food redistribution organisations and charity agencies, and food recipients.

On the other hand, this study is concerned with a single stakeholder group: food industry donors. Numerous assumptions have been made about why food businesses donate their excess food, but this has yet to be empirically tested. Redistribute surplus food through donation has significant consequences for the food donors, the food recipients, the environment, and society. Thus, this paper aims to establish a conceptual framework that motivates the food retail industry to donate surplus food.

## 2. METHODOLOGY

A thorough literature review on articles published between the year 2002 until 2021 was conducted for this paper to gather relevant findings using appropriate keywords. Science Direct, Emerald Publishing, and Google Scholar were among the search engines to find articles for the literature review. The following keywords were used in the literature search: Retailer\*, "Surplus Food", and "Food Waste". The result of the existing literature search and analyses exposed a plethora of potential variables that could be linked to developing strategies for targeting and motivating people in the food retail industry to become food donors.

## 3. RESULT AND DISCUSSION

The comprehensive literature review discovered considerable evidence demonstrating the potential variables of the decision to donate and drivers that motivate people in the food industry to be food donors. The articles in each category were then examined further to produce a conceptual framework. A conceptual framework is an analytical tool designed to construct conceptual distinctions and organise ideas that have several variations and contexts (Yacob et al., 2017), as shown in Fig.1. The proposed conceptual framework involves significant variables that drive food donors to donate. The variables are four (4) items: knowledge, organisational culture, financial condition, and government policy and practices. The first variable is knowledge. Knowledge consists of five (5) variables; food donors aware of Sustainable Development Goals (SDG) and concern with food security motivated to donate surplus food to the food bank (Bekkers & Wiepking, 2011b). The second variable, the social responsibility for the people in need does influence donations from food retailers (Schuyt et al., 2004). The third variable, it is believed that retail companies deserved to get public

recognition if they donate more food inventory (Bekkers & Schuyt, 2008). The fourth variable, the donation experience drives food donors to donate again (Guy & Patton, 1989). Lastly, variables of concern towards the environment, such as diverting food surplus from landfills, could induce donating to the food bank (Goodman-Smith, 2020).

On the other hand, organisational culture involves five (5) variables; the first variable some food donors donated to maintain their brand's reputation (Bekkers & Wiepking, 2011c). The second variable, altruistic feelings among food donors drives charitable donations (Germain et al., 2007). The third variable, empathy towards the recipient influences food donation (Lee & Chang, 2007). The fourth variable, obligated feeling to help marginalised communities help food donors to donate (Hibbert & Horne 1996), and the last variable, food donors who have excellent networking and are loyal to a food bank motivate to donate (Sargeant, 1999). Moreover, the financial condition comprises two (2) variables. The first variable, retail stores which become regular donators, have financial stability in their corporations (Guy and Patton, 1989). The second variable, food retailers who save money on disposal and landfill fees when donating (Baglioni et al., 2017).

Besides, the last driver for food donors to donate is government policy and practices. The government policy and practices include liability legislation that protects donors (Gruber, 2016). Second, tax incentives as one way to encourage donors to donate food inventories. Incentives received on waste tax-deductible encourage retailers to donate surplus food (O'Connor et al., 2014). Next, a food donation policy specifically on safety, nutrition, and health are essential to ensure that all donated food is of good quality and safe (foodbanking.org). Lastly, government grants for food recovery initiatives, infrastructure, and organizational support can assist existing donations. Grants can also support innovations and emerging technologies that will improve the efficiency and sustainability of food donation. However, the absence of knowledge and guidance in many countries to apply for food safety on donations has become a hindrance. Yet in Malaysia, the deficiency of government policy and practices as the food bank idea proposed officially by the government is still new. It can be summarised that government assistance should be prioritised by considering relevant variables. Therefore, induced the feeling of donations among food donors.



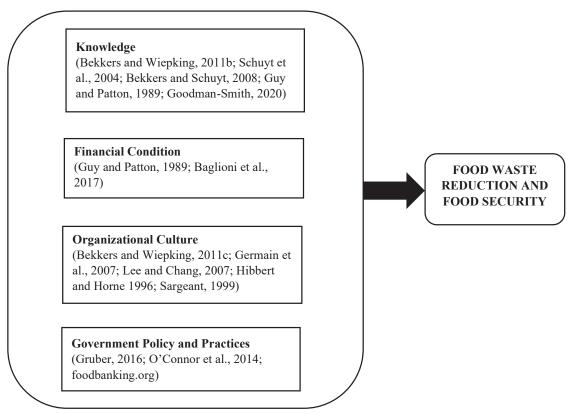


Figure 1: Proposed Conceptual Research Framework

#### 4. CONCLUSION

This study presented an overview of retailers' motivation for donating surplus. The findings of this review led to the development of a conceptual framework comprised of four (4) components, including Knowledge, Financial Condition, Organizational Culture, and Government Policy and Practices. However, empirical research is recommended to analyse and critique. The research focuses on the concept of ideas for food donors to donate. The analyses rely on previous research and literature, which have provided valuable insight to scholars and researchers. Future research can replicate the proposed conceptual framework to develop an analytical model that can be used as a guideline for analysing the data. The concept is still relatively new, but it has the potential to expand in the future. As a result, to achieve the research objective, the participant's prospect will be from a retail company that involved a donation of surplus food to the food bank program.

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