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### Food Insecurity: The Affects of Socioeconomic and Food Consumption

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#### ABSTRACT

“Food security” is one every of major factors of progress and poverty alleviation and has been the goal of many worldwide and country wide public organizations. The worst food crisis since 1974 broke out in 2007 - 2008 where agricultural commodity prices for world markets had reached their highest levels within 30 years (The State of Agricultural Commodity Markets’s report, 2009). As an example, the price of wheat, rice and soybeans rose by over 40 percent, 60 percent and 40 percent. The food crisis directly affect one of the most primary human rights which is the right to be free from hunger and malnutrition and it is clear that the food policies is necessary to ensure that people have access to safe, sufficient, nutritious, and sustainably grown food; and it must go beyond traditional agricultural production. Indeed, household in Asia, especially Malaysia, consume rice as their main food. These hikes in population, shrinks natural resources and food production and causes Malaysia to increase food importation. When Malaysia is having too much import than export, our economy will be affected or becoming worst. This situation should be a major concern for all Malaysian now whereby there were only few studies on household food insecurity, limited to poor and marginalized communities. According to Bajagai (2016) the dimension of food security are food availability, food access, food utilization, and stability. However, there are other dimensions of food security according to different researchers. This paper is about the determinants global food crisis contributes to food insecurity at selected hypermarkets in Malaysia.

**Keywords:** Food Crisis, Socioeconomic, Food consumption, Food Security, Food Insecurity.

#### 1. INTRODUCTION

There are four basic necessities in life: air, food, water and shelter. According to Maslow’s hierarchy theory, human needs physiological in order to survive. If these requirements are not met, the body cannot function well (Hasmat et. al., 2015). Food, it is not only important to function both physically and socially, but also plays an important economic role in society (Calender, 2015; Mohebalian, & Alizadeh, 2016; Mohebalian

and Alizadeh, 2016; Kusoom. 2016). Living with lack of food or no food is a form of scarcity that can influence human's health. Besides air, water, food and shelter, human is also need for security. Security here means it is not only from any danger of physical attack but it is all about danger or protection in life.

Defining food security precisely is very difficult. There are more than 200 definitions and 450 indicators of food security (Bajagai, 2016). According to World Food Summit, "food safety exist when people, at all times, have physical and financial access to sufficient, secure and nutritious food that meets their dietary wants and food preferences for a lively and healthy life" (World Food Summit, 2016). The United States Department of Agriculture (USDA) defines food security as "access by all people at all times to enough food for an active, healthy life" and the United Nations Food and Agriculture Organization (FAO, 2015) defines food security as a situation that "exist when all people, at all time, have physical, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life". Food crisis is where people were concerned about how a shortage in the global food supply could threaten political stability. Based on United Nations Conference on Trade and Development's report in 2008, the cause of food crisis is not only because of the rise in oil prices, climate conditions, speculations, nor bio-fuels production, it is also the consequences of changing demographics and consumers' patterns and years of systematic failures of development strategy.

## **2. PROBLEM STATEMENT**

Food security is a main concern agenda of every country and it involves all level including household, national and global players. Report from Global Food Security Index for 2016 stated that over 89 out of 113 country in the GFSI has experienced food security improvements over the past five years. It is show that there was decreasing in the case of food hunger. However almost 800 million people which is over one in nine people is still remain hungry, and food security remain to be one of the major global challenges for the future. The Economist Intelligence Unit's Global Food Security Index (GFSI) has provided a common framework in understanding the causes of food insecurity. Since it is very difficult to list down the cause, GFSI has themes down to their core which is affordability, availability, and utilization in 113 countries around the world. (GFSI, 2016).

According to Bajagai (2016), effective food method contributes positively to all dimension of meals protection. These dimensions are food availability, food access, food utilization and stability where availability is whether adequate food is ready at people's disposal while access addressed whether or not the households or individuals have adequate assets to accumulate a proper number of satisfactory meals. Utilization is whether human body is adequately ingested, digest and metabolize the food. Lastly stability address other the stability of three dimensions (availability, access and utilization) over time. Food insecure has been reported in Household Food Security in the United States in 2014, where 19.2 percent of U.S. households with children (7.5 million households) have being food insecure which is half of these households both adults and children were food insecure. The study also show that between 2001 and 2013, the threat for hunger among seniors increased by 45 percent (60 percents more likely than other seniors to experience depression)

While in Malawi, from July 2016 to March 2017, they face a hazard-related food security and nutrition emergency coming on top of the devastating floods in 2015. Since Malawi's economy is not sufficiently diversified because of most of their citizens is highly depend on agriculture sector, food insecurity is remain

alarmingly high. This is according to 2016/2017 Food Security Respond Plan Report of Republic Malawi. Among the issues on food insecurity, Malaysia needs to rely on its domestic market to move forward (Hasmat et. al., 2015). Malaysia has formulated the National Agro-Food (DAN) 2011-2020 which emphasizes on expanding food production to ensure food supplies are sufficient, better in quality, edible safe and nutritious and at affordable price. DAN aims to ensure that the core level of food supply is ascertained.

This study thus attempts to propose the determinant of global food crisis that contributed to food insecurity. The following section considers overview of definition of food security and food insecurity in the world followed by socioeconomic and demographic characteristics and food consumption. In the following section, further discussion on food crisis and food supply in Malaysia. Lastly, the proposed framework of determinant of global food crisis that contributed to food insecurity has been presented by a conclusion and recommendations.

### **3. LITERATURE REVIEW**

#### **Food Security and Food Insecurity**

Food can be view by two different perspectives: food security and food insecurity. The United States Department of Agriculture (USDA) defined food security as access by all people at all times to enough food for an active, healthy life. There are four levels of food security based on the USDA which is high food security, marginal food security, low food security and very low food security. High food security means that no reported indications of food access problems or limitations (USDA, 2014). While, food insecurity is defined by the USDA as report of reduced quality, variety, or desirability or diet and little or no indication of reduced food intake. While, according to the World Bank, food insecurity is “the lack of capability to produce food and provide access to all people at all times and having enough food for an active and healthy life” (World Food Programme, 2009).

Food insecurity was first introduced in the early 1970s as a result of the need to address a food crisis (Calender, 2015) where in 1980s, US President Ronald Reagan started to develop a task force in order to find ways to assess the scale of hunger and to find the methods that would help to improve food assistance program.

People in developing country such as Latin America, Africa, Asia and the Caribbean have higher prevalence rates of food insecurity. Lachance et. al. (2014) stated that food insecurity is defined as a lack of regular access to adequate and nutritious food and according to Runnels et. al. (2011) it happened because of low income, high cost of food, or when purchasing nutritious food. Based on Global Food Security Strategic Plan 2010-2016 (2013), there are some main drivers essential to ensure food security in UK and globally which are global population growth, demographic change, and increase affluence and urbanization, global climate and other environmental changes, environmental impacts, social, economic and political. The shortage in the number of food supply will give a huge impact to all people and can lead to hunger and can affect one healthy life. Therefore, food insecurity will affects people from all ages, races and ethnicities in every area of the country (Nord, Coleman-Jensen, Andrews, and Carlson, 2011).

#### **Socioeconomic and Demographic Characteristic Contributes to Food Insecurity**

Based on study, socioeconomic and demographic is one reason of food insecurity. The variables consist of annual income, the household size, respondent’s educational level, employment status of respondent and

spouse, current saving and house ownership. Lachance et. al (2014) stated that low household income is the strongest predictor of food insecurity and the source of income (social assistance vs. employment) as well as the type of household (single parent) also plays a role in determining food insecurity. Furthermore, several socioeconomic factors are linked to a higher risk of food insecurity such as the income below the poverty-line, illiteracy, unemployment, rented housing and women heading the household (Economic Research Service, 2013). Majority of households in developing countries depend on the agricultural sector to provide the main source of food consumed in households, employment and income (Habyarimana, 2015). Based on report of Food Insecurity 2015 prepared by Calender, income inequality is often the main cause for many health disparities in the U.S. and affordability of healthy foods in low income communities are also consistently contributes to such disparities. Labour force status such as unemployed or underemployed is also contributed to food insecurity which is about 12-15% percent. There is another factor which is during a downturn in economic; there is an increasing in the food price, while the income remains also that leads to food insecurity. However, when the recession ended, the food prices remain unchanged. Socioeconomic is the key in measuring the capabilities of one person to manage their income and spending. The intake of healthy food such as fruits, milk, and fresh meat was low by those suffered from food insecurity as compared to individual with high income level. More studies will identify the prevalence and risk factors of food insecurity at Malacca.

### **Food Consumption**

Food expenditures are shown as a percentage of total personal consumption expenditures reflecting individuals spending on goods and services in the domestic marketplace. The food consumption score (FCS) is based on the response given by adult members in the household. This formula is based on a standard method designed by the World Food Programme (WFP, 2009). To calculate the Food Consumption Score is by taking into account the quantity (frequency of consumption) with quality (type of food) of food consumed by a household in one week, and assign weights, based on the type of food consumed. The latest year for information to be compare is 1994, where Americans spent 7.4 percent of their personal consumption expenditures for food while Canada 10.3 percent and United Kingdom is 11.2 percent. In less developed countries such as India and Philippines, their food expenditures was account for more than 50 percent of household's budget (UN System Of National Accounts).

In Malaysia, according Datuk Johari Abdul Ghani, Second Finance Minister of Malaysia, and the current situation is about 31.2 percent of their disposable income on food and food away from home (New Straits Times, 2016). It's also shows that one third of their income is spending towards food consumption.

Jensen, Nord, Andrews and Carlson (2012) stated that one of contributor to food insecurity is occurs because of lack of money and other resources to purchase food. Most of the time, food consumed by household members is either purchased from supermarket or grocery to be cooked and to be eaten at home or buying outside and be eaten outside the home.

## **4. CONCLUSION**

Food insecurity gives a real impact based on the nature of every single country. Food insecurity and lack access of healthy food affect the health and well-being of low income in most developing countries especially for those with lower income. When people do not have enough resources to buy food for them to consume,

it will give an impact toward purchasing power. The increasing number of hunger people could threaten the stability of political for particular country GFSI, 2016). Hence most of the countries are coming with their own program to assist and to improve the situation.

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