**Delineating Marxist Perspectives on Food System Activities and The Impacts Towards Food Security**

***Asiyah Kassim***

*Faculty of Administrative Science & Policy Studies,*

 *Universiti Teknologi MARA*

*asiyahkassim@gmail.com*

***A’isyah Hishamuddin***

*Faculty of Administrative Science & Policy Studies,*

 *Universiti Teknologi MARA*

*aisyahishamuddin@gmail.com*

***Huwaida Husna Mohd Tahir***

*Faculty of Administrative Science & Policy Studies,*

 *Universiti Teknologi MARA*

*huwaidahusna@gmail.com*

**ABSTRACT**

The problem of feeding an ever-increasing world population has captured the attention of many scholars across a wide array of disciplines, all seeking better explanations of food security. The complexity of the contemporary food security requires a comprehensive view of the global food system that not only draws on multiple disciplines but recognizes numbers of contributing factors beyond considerations of supply and demand. An understanding of the dynamics to food security inherently requires an understanding of contributing factors to food insecurity. Sociological view other than market and technological dimension provide a useful basis for examining food security issues. Hence, this article delineates Marxist perspectives as an avenue to understand issues in the food system activities particularly in the production, consumption and distribution level and the impacts they have on food security. In this regard, the issues analysed are: (1) struggle for land use for food and non-food crops in the production level; (2) exclusion of small scale farmers in the coordinated supply chain for distribution level and (3) demand for meat by the wealthy consumers in consumption level. Marxist views competition and struggle involving the bourgeoisie and proletariats as a means to explain the capitalism theory. This article concludes that Marxist’s theoretical analysis deliberated holistically on food system issues involving the activities and stakeholders not only from economic point of view but also considering the social dimension and distinction especially in different dietary practices which could serve as a basis to revisit measures of addressing food security issues.

**KEYWORD (S):** Marxism, food system, food security

**1.0 INTRODUCTION**

 The problem of feeding an ever-increasing world population has captured the attention of many scholars across a wide array of disciplines, all seeking better explanations of food security. The complexity of the contemporary food security requires a comprehensive view of the global food system that not only draws on multiple disciplines but recognizes a wide array of contributing factors beyond considerations of supply and demand. One must consider the food system as a whole and that includes the aggregate of all food-related activities and processes, be they natural, political, economic, or social. An understanding of the dynamics to food security inherently requires an understanding of contributing factors to food insecurity. Sociological view on top of market and technological dimension provide a useful basis for examining food security issues.

Food security occurs when everyone has obtained the physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (FAO, 2008). The major pillars of food security are food access which is having enough resources to obtain appropriate foods for a nutritious diet availability and utilization are very influenced by food system activities (Capone et al, 2014). The food system activities are grouped into four categories, production, processing and packaging food, distribution and retailing as well as consumption (Capone et al, 2014). While there is abundance of research on mechanisms to ensure food security, the focuses are mainly on technological, natural sciences and xxxxx aim to find solutions (Fox, Bissell, Peacock & Blackburn, 2018; Mc Carthy, Uysal, Badia-Melis, Mericer, O’Donnell & Ktenioudaki, 2018; Tiwari, Vaish & Singh (2017). Ironically, despite of modern technological assistance and major improvement in food production, hunger remains a chronic problem and food insecurity becomes a pressing concern among global community. Some social scientists even claimed that food security is now “wicked” problem characterized by major complexities and requires careful investigation especially from the grass roots (Rush, 2018; Moragues-Faus, Sonnino & Marsden, 2017; Candel, Breeman & Termeer, 2016).

 In the food system activities, this article identifies several concerns particularly at the production, distribution and consumption levels. In the production level, there is intense competition between food and non-food crops which further strain the farming industry and increase the price volatility of food (Ferrett, 2007); exclusion of small scale farmers in the coordinated supply chain at the distribution level (Van Der Meer, 2006) and the increasing trend of meat consumption which causes contention between meat and feedlots in the consumption level. This article seeks to understand these issues and make connections using a theoretical perspective. As noted by Crossman (2018), using theoretical perspective in research is crucial to organize our thoughts and ideas therefore, ultimately making it clear to others. Furthermore, it helps to frame and focus our views on the issues addressed (Crossman, 2018). Taking this lead, this article utilises theoretical perspective and frame the discussion on issues particularly on the levels in the food systems activities and its impact on food security.

 In addition, this article identifies some of the contributions on theoretical approach or using concepts for understanding but only limited to the issues on food security. For example, Otero, Pechlaner and Gurcan (2013) criticized the food security to be “uneven and combined dependency” between developing and advanced capitalist countries based on food imports and exports promoted by the neo-liberalist. Philips (n,d) explored problems of the increased problem of food insecurity and its specific implications for women’s health using feminist analysis. Young (2004) reconceptualized the concept of food security and linked it with globalization and health.

 Therefore, this article aims to enhance the understanding and perspectives that linked food systems activities issues and its impact on food security using the Marxism theoretical approach. In this regard, this article poses a question on how Marxism views food systems activities and the impacts on food security? The first part of the article briefly reviews the general concept of Marxism theory and its relation towards food system. The second section outlines how Marxism views the issues arise in food system activities specifically in the production, distribution, and consumption level and the impacts they have on food security. The final section of this article will summarize and assert the importance of adopting a Marxist framework in addressing and understanding current food systems issues and impacts on food security.

**2.0 MARXISM AND FOOD SYSTEM**

 The central idea of Marxism was from Karl Marx, a German economist and philosopher in the 18th century who was influenced by the Industrial Revolution. Marx emphasizes that the international system is driven by economic factor characterized by class struggle (Wolff, 2017). The class competition involves the bourgeoisie and proletariats where he argued that the capitalist bourgeoisie exploited the proletariat. He also described that the work carried out by the proletariat contributed to the wealth of the capitalist bourgeoisie. (Marx and Engels ,1886 reviewed by The British Library Board, n,d). Apparently, the capitalist food regime at the time of the Industrial Revolution was far less developed and hence had only just begun to be theorized, by Marx or others. Nevertheless, Marx was such a keen observer of the political economy of capitalism and the metabolism of nature and society that lack of an analysis of food and this has represented a surprising and significant gap in his work. Marx has developed a detailed and sophisticated critique of the industrial food system in Britain in the mid-nineteenth century, in the period in which historians have called “the Second Agricultural Revolution.” Not only did he study the production, distribution, and consumption of food; he was the first to conceive of these as constituting a problem of changing food “regimes”. This has led to an idea that has since become central to discussions of the capitalist food system.

 The food system as in the capitalist system helps to identify the actors involved, their responsibilities and the dynamic interactions between them (Capone et al, 2014). Linking with the Marxism theory, the class struggle exists between the bourgeoisie and proletariat involving the capitalist regime. Examples of Bourgeoisies in the food systems activities are oil companies at the production level, dominant companies in the coordinated supply chain at the distribution level and wealthy consumers at the consumption level. Meanwhile, the proletariats are small scale farmers, small producers and poor consumers. The struggle and competition of these classes involve the exploitation of the capitalist regimes towards proletariats in the food systems activities which puts them in vulnerability to achieve food security. These will be discussed in the following sections.

**3.0 PRODUCTION LEVEL**

 In recent decades, there is a growing demand for an alternative supply of energy fuel to reduce dependency over depleting fossil fuels. This led to the introduction of Agrofuel as an alternative to non-renewable sources of fossil fuels. Agrofuels or also known as biofuels are similar to fossil fuel except that they are derived from plants that are grown today such as rapeseed oil, palm oil and soybean oil (Scheer & Moss, 2018). Even though it is being considered as an ‘energy saviour’, debates and criticism started to arise from critics who claimed that it is creating intense competition between food and non-food crops .This will further strain the farming industry and increase the price volatility of food (Ferrett, 2007). In this section of the article, discussion will be made on this particular issue at production level in order to highlight Marxist’s explanation of the devastating impacts of competition between food and fuel crops on farmers and consumers alike.

 The growing demand of Agrofuel have led to the increased competition for land. Land owned by small scale farmers used to grow food crops have been lost significantly to estates owned by big oil companies. In Liberia for example, land access to grow food has reduced significantly in Grand Cape Mount when Sime Darby decided to established oil palm plantation. The same goes to access to forest which offer an important supply of food (Balachandaran & Herb, 2012). In Sierra Leone, households lost their land to grow as a result of ‘land grabbing’ by plantations established for sugar cane and palm oil. This reduces the area grown for food crops (Baxter & Schaefter, 2013).

 There is however, argument that goes to support farmers of fuel crops who would benefited more from the sale of these crops as fuel crops are assumed to command higher prices than basic food crops. Although fuel crops are considered more profitable than staple food crops, a general concern is that returns are less stable due to the increased exposure to volatile market prices as its inputs and outputs rely on the market. Smallholders might be forced to rely on commodity chains and bigger firms with market power who would in turn use this against them to increase the cost of inputs or to reduce the prices paid (Wiggins, Henley, & Keats, 2015). In addition, rising interest to Agrofuel have also stimulated the food price spike as can be seen in the year 2007 to 2008. The increased competition over resources such as land and seeds has become one of the contributing factors that led to the increase in food price (von Braun & Meinzen-Dick, 2009).

 According to Karl Marx, the class struggle of production was enforced on every capitalist by the force of competition. Capitalist production was not made under the subordination of social production to social need, instead, the purpose of capitalism is to expand the capital. The pressure of competition pushes capitalists to constantly develop the forces of production which led to a series of consequences. This include constant technology innovation, cheaper production processes and most importantly, better exploitation of economies of scale by large capitals than small capitals (Clarke, 1995). As an outcome of capitalist competition, individual capitals get bigger over time, not only by increasing in size as earnings are reinvested in larger and more prolific operations, but also because the ‘big fish swallow the little fish’ analogy. This happened when large capitals buy out smaller ones or the ones that have failed to compete with them. As Karl Marx argues, “one capitalist always kill many” (Marx, 1867). This process involved the concentration of bigger units and centralization of fewer units of the capital. It has to be noted that this process does not necessarily mean that small businesses vanish, but it does mean that they become less economically competent and significant (Bober, 2008).

 In addition, Marxism also believed that capitalism not only imposes a division of labour, but also the separation of the means of production such as the machinery, tools and physical plant required for production from the workers. As soon as this separation happens, the working class or the majority will be forced to sell their labour to the minority, the capitalist class that has accumulated these means of production into its own. This indirectly means that the owners of these means of production, consequently will be in control of the products of labour and the profits from their sale (Bober, 2008).

 In relating back this Marxist view on the competition between food and fuel crops, small scale farmers as the proletariat and large oil companies as the bourgeoisie, it is understood that the relationship created under such system allow one which own the capital and the means of production to be the winner while the one depending on them to be the loser. Furthermore, competition between the two and the domination of large oil corporations affect the stability of food prices and access to food which in turn affect the end consumer at large. This is especially a concern to those living in poverty and small scale farmers who rely on food crops as a means to survive. In short, the existence of competing demands between food and fuel crops creates instability of food access which contribute to food insecurity.

**4.0 DISTRIBUTION LEVEL**

At distribution level, the change in consumer demand, food safety concerns and the emergent of modern retail system are the prominent driver of global food market changes. These changes influenced food (in)security with the existence of coordinated supply chains and exclusion of small scale farmers in these chains.

Together with higher income and shifting lifestyles, the demand has leaned towards more variety, higher quality, continuous supply of fresh produce, convenience and value added food. In addition, increasing awareness regarding social and environmental conditions where food is produced have also led to the increase in food safety concerns among consumers (Van Der Meer, 2006). Plus advancement in information technology, logistics, food processing machinery and postharvest handling have significantly contributed to the development of global retailing and sourcing (Diop & Jeffee, 2005). In order to keep up with these changes in the global food market, supermarkets, food industries, and food services compete to capture the market share and gain the market power.

In order to lead the competition and ensure that consumers’ demand are being met, most companies increased their control of the supply chain from farm to table. They preferred to abandon open markets and the involvement of unknown suppliers and instead turn to coordinated supply chain. Coordinated supply chains refers to durable arrangements between traders, producers, processors and buyers in regards to what and how much to produce, delivery time, safety and quality conditions, and price (Van Der Meer, 2006). These arrangements are often initiated by investment of food companies or private traders, who play the role of chain leaders. An example of this can be seen in the operation of UK giant supermarket, Tesco in which control and arrangements over production, processing and wholesaling of products falls on its own hand. Indeed, coordinated supply chains are efficient for logistics requirement for fresh and processed perishable food. It also allows companies to better manage the quality and safety of food in their own hand. Furthermore, coordinated supply chain can also be a tool for companies in competitive strategies, such as branding, labelling and sales promotion (Van Der Meer, 2006).

Coordinated supply chains however, often exclude small scale farmers in their widespread small scale segments. This is highly due to some of the weaknesses of small scale farmers themselves. They have lack of knowledge about modern technology, appropriate use of modern inputs and modern markets. Small scale farmers also face restricted access to capital which can be a barrier for them to upgrade from production for local markets and direct consumption, rather than to more demanding market. The product quantities are relatively small and heterogonous in quality, making it more difficult to serve high-end modern supply chains. Risks of food safety can be high when working with small scale farmers because of their lack of awareness and ignorance in the application and usage of illegal agrochemicals (Van Der Meer, 2006). With these weaknesses, it is highly unlikely that small scale farmers will be able to participate in coordinated supply chains for high-end markets without the necessary support from traders and processors. Traders and processors will only include them if they expect the benefits to exceed the costs. In coordinated supply chains, the most important factors to be considered by the chain leaders are the perceived costs, benefits and risks. As a result of this exclusion, small scale farmers will be ousted from the competition, experience market failure and the loss of stable income (Van Der Meer, 2006). Ultimately, this will cause them and those living in similar situation to experience food insecurity where access to food are controlled and being taken over by large corporation with large market power. These corporations then could easily impose higher prices of food since they have the upper hand of controlling the amount of supply available for the public.

 In explaining such scenario, bourgeoisie economist would try to argue that such system is created to serve the purpose of the capitalist market which simply aimed to facilitate the distribution of products from producers to consumers. However, Marxists would disregard such argument and instead they would claim that the form of production and market formed by Capitalist is ultimately for profit-making instead. This is because, according to Karl Marx, the ideal way of marketing and producing should be based on the formula of C-M-C (commodity-money-commodity), or selling in order to buy (Bober, 2008). This is described in the way where most people sell their labour in order to buy their necessities. However, for capitalist, the main purpose of selling is not simple distribution or to end up with other things of equal value because that would be a waste of effort and time. The real aim is to end up with more than what they started with. Capital, indeed, in Marx’s aphorism, a “self-expanding value” (Marx, 1867). In order to gain revenue, capitalists must first be able to sell their products on the market and there must be a demand for these products. However, individual capitalist does not control the market, rather, it is the market that controls them. The anarchic nature of the market pushes businesses to compete with one another to gain market share. It is this competition that influence capitalist to constantly revolutionize the means of production in order to reduce cost, increase the benefits and reduce risks in order to outrun their competitors. On desperation of being outsell by their competitors, capitalists must be able to not only sell their products, but they must be able to sell it at a profit. A part of this profit in turn, must be reinvest to expand production and outrun the rest of their competitors (Bober, 2008).

 Therefore, in coordinated supply chains, it can be seen that small-scale farmers are simply the victim of harsh capitalist competition. As fellow competitors, they are being driven into extinction by the chain leaders who dominate the market. As producers, or in Marxist term, as proletariat, they are being disregarded by the bourgeoisie who own the means of production simply because they do not have the required skills and knowledge for the bourgeoisie who are constantly in the run to outsell their competitors in the capitalist market. In the end, the whole scenario lead to food insecurity in which availability of food and access to food are only possible for high-end consumers while small-scale farmers and those alike faces insecurity due to their loss of income and limited access to food.

**5.0 CONSUMPTION LEVEL**

Despite living in the 21st century, with the advancement of food production and technology, global hunger continues to be a huge challenge for the humankind. In 2016, it is estimated that 815 million people are undernourished while one out of four or 155 million children under the age of five suffers from stunt growth as a result of chronic child malnutrition. On the other hand, child overweight and adult obesity are on the rise in some parts of the world. Various forms of malnutrition are coexisting, with countries undergoing concurrently high rates of adult obesity and child undernutrition (FAO, 2017). Such scenario of food insecurity can actually be explained with regards to unequal consumption of resources between the poor, the middle-incomes and the rich in their choice of diet.

 In recent years, there have been an increasing demand for meat consumption together with the rise in income especially for middle class. This trend however is marked by extreme disparities. As such, it is noted that, United States, Australia, New Zealand, Argentina, Canada and Western Europe altogether accounts for only 12% of world’s population but makes up 30% global meat consumption and 34% global meat production. On the other hand however, Southeast Asia, Africa and South Asia altogether accounts for half of the world’s population but they only makes up 1/6 of the world meat consumption and production (Weis, The Meat of the Global Food Crisis, 2013). Rising trend of meat consumption is seen as problematic as it is responsible for world food price volatility, reduce supply of staple food and enforces environmental degradation. Unequal and rising meat consumption and its driving force, industrial livestock production is central to understand food crisis.

Industrial livestock production creates a large ‘ecological hoofprint’, which is a concept referring to the multidimensional resource budget and environmental burden linked to the large usage of industrial grains as feedlots to feed the rising population of animals (Weis, 2010). The livestock sector is responsible for roughly 14% of the total global greenhouse gases emission (Bailey, Froggatt, & Wellesley, 2014). Such emission is concerning as it also leads to global warming, making more people especially poor farmers vulnerable to food insecurity as a result of extreme weather and poor harvest. Not only that, on a global scale, majority of course grains, soybeans and rapeseeds are consumed as fed to livestock. This is making less agricultural inputs and food being directed for human consumption. As more grains went to feed livestock, food becomes less available and more expensive for the poor (Weis, 2013). Such scenario is sickening as this is an outcome created by the demand and the choice of people who had the privileges to consume food according to their preferences at the expense of the poor who do not have any choice and barely living with what are made available for them.

According to Marx, commodities is central to understand the social condition under which capitalism particularly their production and exchange covered the real social relations (Marx, 1867). Drawing upon this idea, Veblen further argued that as wealth accumulation and class distinction grow further in society, consumption is an important indicator to symbolically represent social distinctions (Veblen, 1899). As such, the wealthy upper classes determine the ultimate standard for status distinction through excessive display of leisure and luxury. The poor lower class then try to estimate these symbolic markers of status, but in an inadequate and downward manner (Veblen, 1899). Furthermore, in capitalist market, the demand of the have’s or the bourgeoisie is also being prioritized as it is significant for the profit making capitalist (Bober, 2008). Instead of provide everyone for their needs, capitalist market is mainly directed and dominated by those who can afford to help the businesses to expand and stay afloat. This symbiotic relationship between the wealthy consumers and businesses are causing the poor to be left out of the equation. The needs and wants of the poor lower class are being put second to none since there would little or no return to investment if the capitalist reach out to their needs and wants. Indeed, this goes back to the main purpose of capitalist, which is to gain profit and expand with little consideration for the have not’s (Bober, 2008).

Marxists’ argument fits perfectly to explain the unequal consumption of food particularly meat across the globe. While there is a rise in meat consumption in some areas, there is still persistent food crisis occurring in other areas. This systematically reflects the reality of class differences between the haves and the have’s not. Those with enough income can afford to enjoy better quality of food while those who have little in their pocket, barely have anything to eat. Worse yet, these different scenarios are not foreign to each other, but indeed, they are interrelated with one another. The sufferings of the global poor are not independent of the enjoyment of the global rich and this can be simply based upon their choice of diet. Environmental degradation, volatile food price and limited supply of food associated with increase in the demand of meat consumption of the haves are making the have’s not to be especially vulnerable to food insecurity.

**6.0 CONCLUSION**

This article has explored and delineated the Marxism perspectives towards issues in the food system particularly in the production, distribution and consumption level as well as the impacts towards food security. The main findings in this analysis (as demonstrated in Table 1) presented the Marxist views which mainly involve the competition between bourgeoisies such as large oil companies, chain leaders who dominate the coordinated supply chain market and the wealthy consumers whilst proletariats mainly involve the small scale farmers or producers and poor consumers. Marxist views also include the strategies taken by the bourgeoisies to control the market by excelling in land competition to swallow the smaller companies in production level , using marketing and producing strategy of C-M-C in the coordinated supply chain and prioritizing the demand of the wealthy consumers in diet lifestyles in the consumption level. Food insecurity occurs mainly involving areas of food accessibility, availability and food that is sufficient for dietary needs.

Table 1: Marxism perspectives towards issues in the food system activities and its impact towards food security.

|  |  |  |  |
| --- | --- | --- | --- |
| Food System Activities | Issue (s) | Marxist perspectives | Impacts on Food Security |
| Production | * Growing demand on agrofuel causes land owned by small scale farmers lost to estate owned by big oil companies.
* Competition for land use for food and non-food crops further strain the farming industry and increase price volatility
 | * Bourgeoisie : Large oil companies
* Ploretariats : Small scale farmers.
* Large capitals buy out the smaller ones or the ones that have failed to compete in the capitalist competition.
* Division of labor causes the working class to sell their labour to the capitalist.
 | * Increases in food prices, low access to food for those who live in poverty and small scale farmers who rely on food crops to survive.
 |
| Distribution | * Changes in the global food market and shifting lifestyles
* Small scale farmers could not cope with the high demand due to low capital and lack of knowledge on technology and market inputs.
* Exclusion of small scale farmers in coordinated supply chains
 | * Bourgeoisie : Chain leaders who dominate the market
* Proletariat : Producers or small scale farmers.
* Capitalist market created to facilitate distribution from producers to consumers for profit making.
* Ideal way of marketing and producing based on the formula C-M-C (commodity-money-commodity)
 | * Food only available to high end consumers
* Limited access to food due to loss of income among small scale farmers and low income consumers
 |
| Consumption | * Demand for meat consumption together with the rise in income especially for middle class.
* Choices of the diet for the rich leading to malnutrition in low income countries and global hunger.
 | * Bourgeoisie : Wealthy consumers (the have’s)
* Proletariat : Poor lower class (the have’s not)
* Wealthy upper class determine the ultimate standard for status distinction
* In capitalist market, the demand of the have’s being prioritized as it is significant for the profit making capitalist
 | * Those with enough income can afford to enjoy better quality of food.
* Limited supply of food caused by environmental degradation, volatile food price and limited supply of food.
 |

 Although this study draws on Marxism perspectives towards issues in the production, consumption and distribution level in the food system activities, it does not mean that its findings do not have implication for other levels. Placing other levels of food systems activities such as disposal of food, which was beyond the scope of this article, may be a the next step in understanding the dynamics of Marxist theory analysis on the current food system issues.

 The argument in this article on Marxism views towards issues in food systems activities provide an important lesson on the authenticity of Marxism which remain relevant in today’s world although it was introduced in the 1800s and provide a useful basis for examining food security issues. Furthermore, Marxim’s theoretical analysis discussed holistically on food system issues involving the activities and stakeholders not only from economic point of view but also taking into account the social distinction especially in different dietary practices. For all these reasons, theoretical analysis using Marxism theory is ideal to understand the issues pertaining to food systems activities and impacts on food security from sociological perspective and could serve as a basis to revisit measures of addressing food security issues.

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