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Feeding the Future: Achieving Food Security in Malaysia Through Trade Mechanism

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ABSTRACT:

Malaysia's food imports have almost doubled in 10 years, from RM35 billion to RM63 billion in 2021. In total, 26 food items have a self-sufficiency ratio (SSR) of 100% or above, according to the Supply and Utilization Accounts of Selected Agricultural Commodities, Malaysia, from the Department of Statistics (DOSM), but 24 other products still fall short of this mark. Moreover, Malaysia showed progress in the Global Food Security Index (GFSI) in 2021, moving up from the 48th rank (67.9 points) in 2020 to the 41st place (69.9 points) in 2022. Malaysia still has problems with food security, despite these encouraging signs. By employing a desktop research technique and secondary data from papers and publications, this concept paper seeks to investigate the landscape and trajectory of food security in Malaysia from 2017 to 2022. Further analysis is carried out on food security by focusing on the use of trade mechanisms in the four pillars of affordability, availability, quality and safety, sustainability, and adaptation. The analysis found that Malaysia faces several challenges in achieving food security, including increasing dependence on food imports, declining agricultural productivity, and income inequality. However, Malaysia has also made important strides toward enhancing food security, including diversifying its import sources, enhancing accessibility through price regulation, and intensifying its use of agricultural technologies.

KEYWORDS: Food security, trade openness, comparative advantage, agriculture trade

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INTRODUCTION

Food security and trade in agricultural goods play a crucial role in the security and sustainable development of any country. Due to extensive trade and the mobilisation of resources, every nation must become self-sufficient (FAO, IFAD, UNICEF, WFP, and WHO, 2023; Vorotnikov et al., 2019). "All individuals having access to affordable, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life on a physical, socially, and economically affordable basis" is the definition of food security (Food and Agriculture Organization, 2019). Two indicators of food security commonly used are the Global Food Security Index (GFSI) and the Self-Sufficiency Ratio (SSR).

The Global Food Security Index (GFSI), a metric for global food security, was developed by Economist Impact. It evaluates the degree of food security across 113 countries using 28 indicators grouped into four domains: affordability, availability, quality and safety, sustainability, and adaptation, with Finland obtaining the highest overall score of 83.7 in 2022. On the other hand, the percentage of food produced and consumed locally is measured by the self-sufficiency ratio (SSR). It demonstrates that the country is more self-sufficient if its ratio is higher. A country may have a good supply of food that is sourced locally if its GFSI and SSR are high. Another indicator to examine food security is by looking at the food import bill of a country. A high import bill suggests that domestic production is insufficient to meet demand (Akeremi, Nadia, & Sayef, 2023).

How accurate, though, is the assertion that a high GFSI and SSR indicate food security and that a large import bill poses a risk to it? Our GFSI indicates that the score has been improving in the Malaysian context, moving from 43rd place with 67.9 points in 2020 to 39th place in 2021 and 41st place in 2022 with a 69.9% score (Economist Intelligence Unit, 2023). The SSR also shows, according to the Department of Statistics Malaysia (2022), that only 23 food items receive a score of 100% or more, with the remaining 27 food items receiving scores of less than 100%, with mutton receiving the lowest score at 8.79%.

On the other hand, a high import bill suggests that domestic production is insufficient to meet local demand. Many agricultural economists have long advocated for open trade as a failsafe against domestic harvest failures, as a source of affordable food, and as a way to replace inefficient domestic production with much more efficient (albeit frequently subsidised) production originating from industrial agricultural systems. Trade openness is essential for sustaining supply continuity as it enables the production of goods in the most advantageous locations and the ability to be transported to nations with insufficient food sources. By balancing supply and demand, lowering price volatility, and increasing the quantity and diversity of goods available to the national population, each country can ensure a high level of food security (Dithmer, 2017). Additionally, by importing, each nation can choose to pay less than it would by generating the food resources it needs domestically. There is little evidence that imports are inherently riskier than domestic production, unless the benchmark is a crisis situation in which a government may be able to commandeer crop distribution and/or impose price controls (Schiavo, 2022).

Additionally, trade openness has a significant long- and short-term impact on sustainable economic growth through macroeconomic stability (Nguyen et al., 2023). According to Wacziarg and Welch (2008), trade openness provides access to bigger markets, which opens the door for taking advantage of scale economies, technological transfers, and knowledge spillovers. Even a high SSR cannot ensure food security, as seen by the supply shortages of chicken and eggs in 2022. On the basis of statistics from 2022, the Department of Statistics Malaysia estimates that Malaysia's chicken SSR is 93.39%. There are many elements beyond what is calculated for SSR that make the question of local production capacity, imports, exports, and storage capacities (stockpile) insufficient parameters to consider when it comes to food security.

Whatever the case, given the slight increase in SSR for the major food items, the only way to meet rising food demand is to increase imports. The five-year trend demonstrates that there is a growing reliance on imports to meet local demand. Figure 1 shows that the import-export gap and the trade deficit both grew between 2017 and 2021.

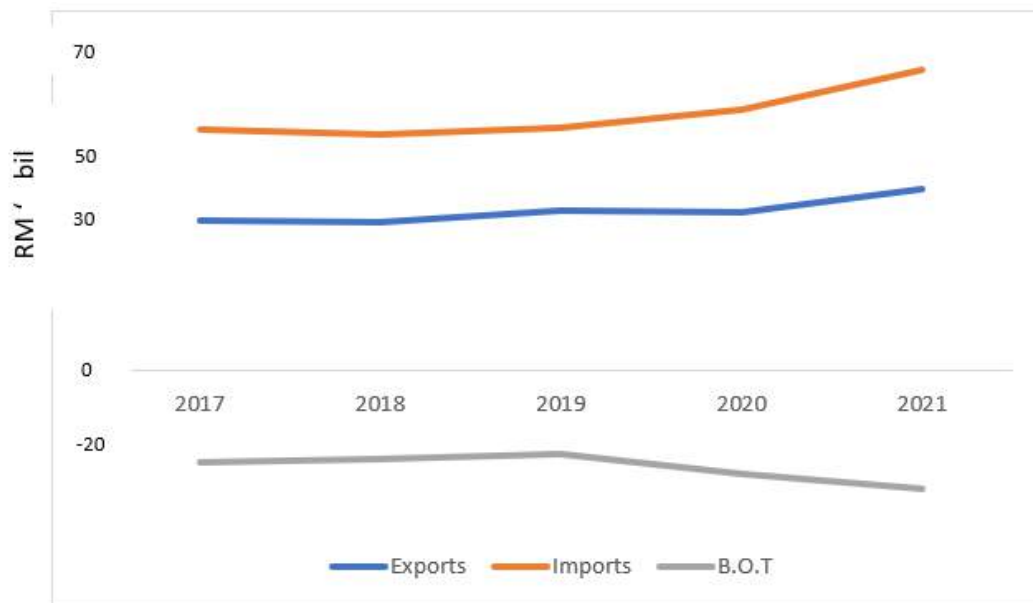


Figure 1 Malaysia Food Export, Import and Balance of Trade (2017-2021)

Despite the importance of the subject, there are few studies that examine the relationship between trade and food security (to name a few: Gnedeka & Wonyra, 2023; Wang et al., 2023; Singh, & Kumar, 2022; Wonyra & Gnedeka, 2022; Sun, & Zhang, 2021). This article is a part of increasing discussions on food security and trade openness, particularly in the context of Malaysia, a small but significant trading nation, and is in line with the midterm review of the Twelfth Malaysia Plan and the implementation of the National Agrofood Policy 2030. Specifically, this paper uses a desktop research technique and secondary data from papers and publications to assess the landscape and trajectory of food security in Malaysia from 2017 to 2021.

Further analysis is carried out on food security by focusing on the use of trade mechanisms in the four pillars of food security, namely, affordability, availability, quality and safety, sustainability, and adaptation. This approach enables us to take a broader perspective and to focus comprehensively on food security in Malaysia.

LITERATURE REVIEW

Since the Russia-Ukraine war put downward pressure on some nations that significantly rely on imports of agricultural input, food security has emerged as a key problem in the framework of trade policy in recent years. Hassen and Bilali (2023) concurred that the Russia-Ukraine war, as a struggle between two powerful agricultural nations, has a number of detrimental socioeconomic effects that are already being felt globally and could get worse for the security of food globally. Hassen and Bilali (2023) noted that if the conflict continues, the food crisis would exacerbate and present a problem to many nations, particularly those that depend on food imports, such as those in the Middle East and North Africa (MENA) region. At the same time, the battle coincided with a difficult period for the world's food markets, with food prices already high as a result of COVID-19-related supply chain disruptions, high global demand, and subpar harvests in some countries.

Clapp (2015) said in her report to Food and Agriculture Organization that proponents of agricultural trade liberalisation, such as the World Bank, the World Trade Organization, the Organization for Economic Co-operation, and several industrialised nations, see trade as a chance to improve food security. Both the World Trade Organization (2023) and the Food and Agriculture Organization

(2023) expressed confidence in the potential of trade to improve food security by moving food from nations with surpluses to those with deficits, increasing food availability, lowering costs, and fostering it. Those who are sceptical of trade liberalisation, such as several governments in developing nations, the food sovereignty social movement, and a number of civil society organizations, typically perceive trade as a threat to food security. Those who support the idea of food self-reliance, or trading as a way to guarantee food security, frequently base their arguments on economic theories (Food and Agriculture Organization, 2003). The reduction of trade distortions will improve food security (Food and Agriculture Organization, 2023a; World Trade Organisation, 2023) as it increases efficiency, and produce net gains for the liberalising nations.

According to Asche et al. (2015), who studied trade for a major protein source, seafood, the pattern of exporting higher-value seafood and importing lower-value seafood largely confirms Bennett's Law as well as Engel's Law in that people substitute for cheaper and less nutritious food when income is higher. In other words, the fact that developing countries acquire lower-value seafood from developing countries while exporting higher-value seafood to developed countries demonstrates how the market system works to redistribute scarce resources to those who can afford to pay the most. This is further supported by Fusco's (2020) finding that the most resilient nations are those with the highest per capita incomes.

The results were also in line with a study by Fusco (2020) conducted in European Union nations, which found that commercial openness, in an economically developed context, can have a positive impact on supply security as well as the nutritional quality of the same. This shows the success of the commercial model put forth by the European Union, where the food industry is seen as a crucial resource from an economic, social, and cultural perspective.

Clapp (2015) underlined that some nations have increased their use of trade-relevant policy tools, such as price controls, export restrictions, and public stockholding programmes, to enhance domestic food security since the start of the food crisis in 2007. Countries in Africa, Asia, and the Gulf announced actions to improve domestic food security so that they would depend less on international markets for their food supply. These kinds of controls have been fiercely resisted by proponents of trade because they think they erode rather than enhance food security. They argue that more trade is required, supported by more liberal trade policies, in order to promote food security.

Those who contend that trade liberalisation improves food security frequently use the concept of comparative advantage (Lamy, 2013; Food and Agriculture Organization, 2003; Zorya et al., 2015). The underlying premise is that access to and availability of food should increase along with efficiency through trade and specialisation. Consider the following issues:

- Trade restrictions should be removed because they promote market competitiveness and specialisation based on comparative advantage (as determined by labour, technology, natural endowments with respect to land, climate, etc.).
- Crops are planted in nations with the lowest opportunity costs to increase the efficiency of food production.
- More food supply on a worldwide scale is a result of more efficient agricultural output, which also boosts economic growth and job creation.
- A larger amount of food that is freely exchanged should increase availability and decrease food prices in all countries, resulting in better access to a wider variety of foods and improved food security, according to the dynamics of supply and demand.
- Increased productivity leads to economic growth, which supports the availability and security of food, creates jobs, and raises salaries.

The Gains from Trade: Theoretical Perspective

Many theories touch on and argue about trade liberalization, taking into consideration the level of productivity and cost of production between nations and emphasising the reasons why it is advantageous for nations to embark on and engage in trade.

The Heckscher-Ohlin (H-O) theory is one of these theories, and it provides a generally accepted description of trade patterns according to countries with different factor endowments and factor requirements for various types of goods. The theory emphasises that a condition for trade is that countries differ based on the availability of production-related inputs. This theory significantly considers additional inputs of production, such as labour, land, and human capital, in addition to the traditional focus on the misallocation of physical capital (Jaud, Kukenova, & Strieborny, 2023). According to the theory, countries where there is an abundance of labour have lower price ratios of labour-intensive goods to capital-intensive goods than countries where there is an abundance of capital.

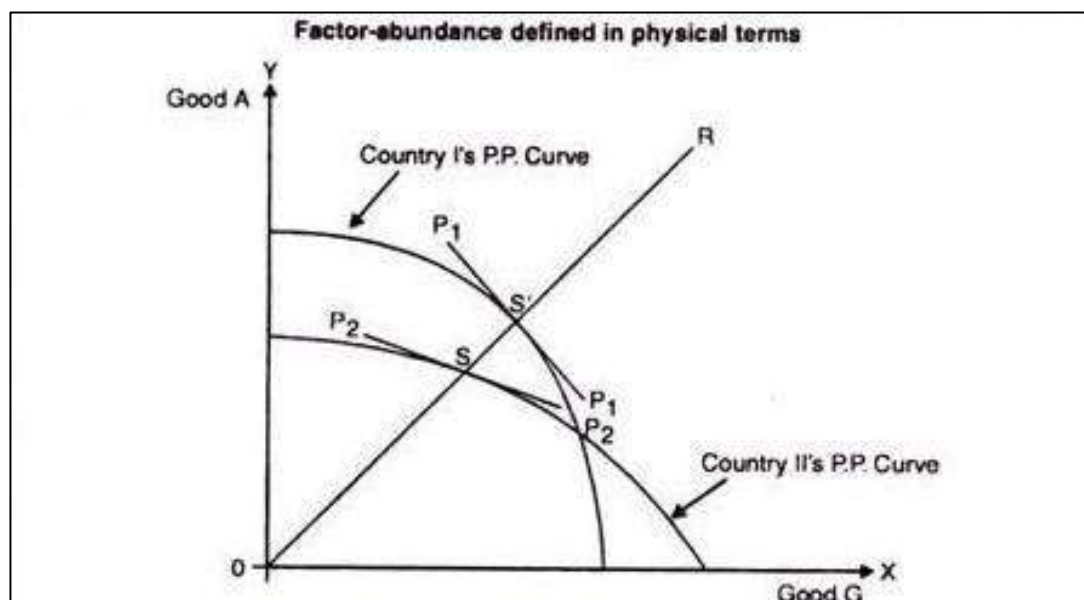


Figure 2 The Heckscher-Ohlin (H-O)

The model emphasises that, from the perspective of international trade, a country would export commodities or resources it has in excess, and it would perceive any particular natural resource it possesses as an advantage in producing associated goods such as capital, land, and human capital. If an abundant element exists, Verter (2015) agreed that there is definitely a benefit to making more intensive use of it, particularly in the agricultural sector. The H-O model predicted that a country with an abundance of capital would export capital-intensive goods and would typically buy goods that required labour. Similar to that, Verter (2015) and United Nations Conference on Trade and Development (2013) explained that a country with an abundance of labour would export labour-intensive goods and import capital-intensive ones in exchange.

Reduced household income (Bakeri et al., 2023; Food and Agriculture Organization, 2022; United Nation World Food Programme, 2021) and a failing food system (Committee on World Food Security, 2023) in a particular nation are the main causes of the declining food security status, which is mostly a local catastrophe. If food prices increase, food security becomes a major problem and attracts the attention of economists and the media. Thus, government action is urgently needed to restrain price increases (Mekonen et al., 2022). The Malthusian Trap is a circumstance in which an increase in food production as a result of modern agricultural practises and technology leads to an

increase in population. Assume, for instance, that a new discovery doubles agricultural production, increasing food consumption per person by another twofold.

As a result of high-quality nutrition, health, life expectancy, and longevity rise along with the survival rate (Fernández-Ballesteros et al., 2021; Wickramasinghe et al., 2020). The Malthusian theory of population demonstrates the impossibility of economic development, and the Malthusian theory of population growth may not have held because of the presence of social and practical restrictions on the size of families (Tisdell & Svizero, 2015).

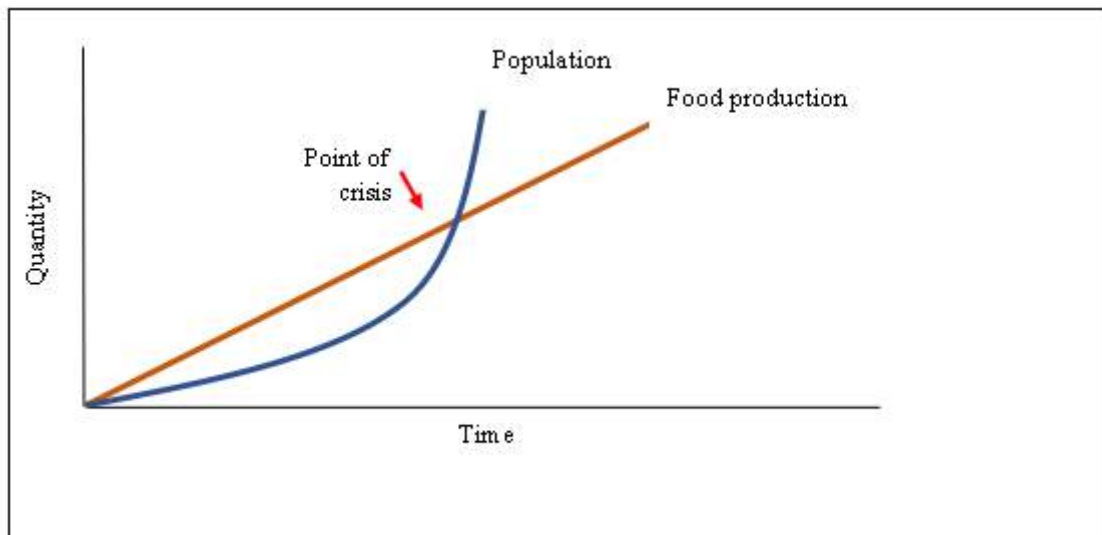


Figure 3 The Malthus Theory

DISCUSSION

The 1974 World Food Conference is where the phrase "food security" first developed, and it was described as the distribution of a global food supply of basic food stuffs that is always satisfactory, nutritious, varied, stable, and assessed to support the routine growth in consumption and stability in generation and prices (Thomas, 2003). The challenges of supply and demand were then included in this basic model. For everyone to live a physically, socially, and financially feasible existence, they should have access to reasonably priced, secure, and nourishing food that satisfies their dietary requirements and cuisine preferences (Food and Agriculture Organization, 2019).

The drivers of food security in 113 nations are analysed in terms of cost, availability, quality, and safety, as well as resilience and natural resources, through the use of the Global Food Safety Index (GFSI) (Economist Intelligence Unit, 2020). Since 2012, it has been published annually and compares each country's degree of food security to that of other nations. This result was reached after comparing 113 countries' data sourced from the Economist Intelligence Unit database as well as World Bank, Food and Agriculture Organization, United Nation World Food Programme, and World Trade Organization indicators. The index makes use of 28 indicators grouped within the four dimensions of food security. Figure 4 shows the Malaysian score over the previous five years.

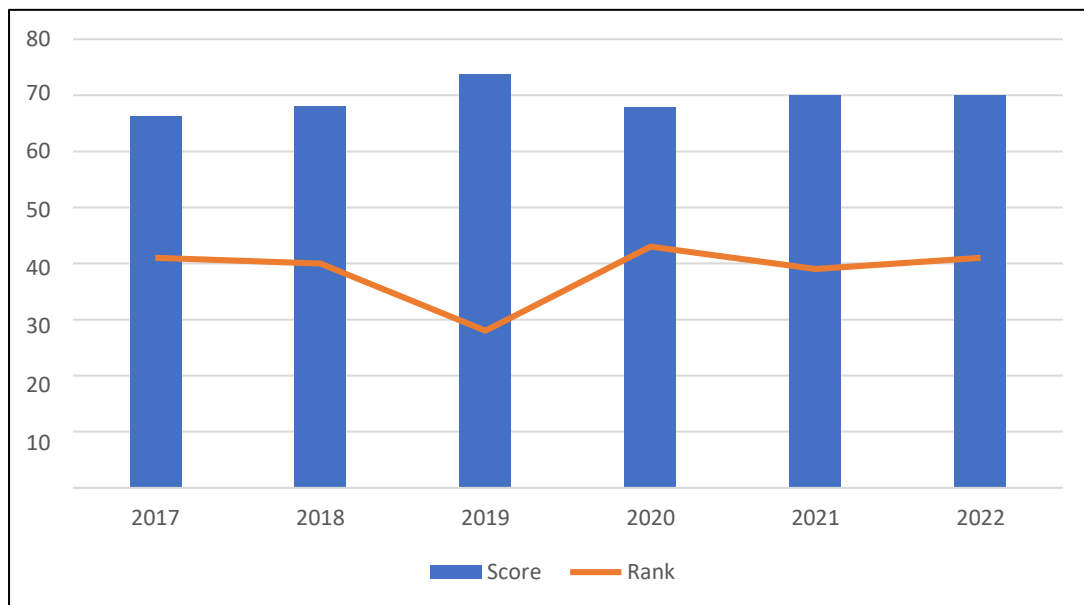


Figure 4 Malaysia's Performance in GFSI 2017-2022

The Economist Group (2022) in the Global Food Security Index 2022 highlighted that food security is primarily supported by four domains: affordability, availability, quality and safety, as well as sustainability, and adaptation. The security of food is jeopardised when a shock takes place in any of the domains aforementioned. In its simplest form, food security can be defined as the ability to adapt to future disruptions or shortages of essential food supplies caused by a number of risk factors, such as droughts, transportation delays, fuel shortages, the global economic downturn, and conflicts.

Food self-sufficiency is not a new policy strategy in Malaysia, as the country has historically focused on supporting domestic production to obtain a high degree of self-sufficiency (Ali, 2018). Despite the fact that self-sufficiency and food security are related, the government's stance on self-sufficiency is generally misconstrued as relating to food security. The Food and Agriculture Organization defines food security as a country producing enough food to cover its own needs, closing borders, embracing complete autonomy for the food sector, and the extent to which a country can satisfy its food needs from its own domestic output (Food and Agriculture Organization, 2016; Clapp, 2017; Food and Agriculture Organization, 1999).

Contrarily, as was previously said, food security is concerned with the four dimensions of food affordability, availability, quality and safety, sustainability, and adaptation. Since self-sufficiency does not mention the source of the food, it is distinct from food security and expresses a different set of ideas. Food self-sufficiency should be evaluated against the benefits of cheaper imports (World Bank, 2012). In order to be self-sufficient, domestic food consumption must mostly come from domestic production rather than imports, but self-reliance calls for a wider range of supply sources, including imports (Luo & Tanaka, 2021).

In fact, self-sufficiency has also been claimed as an outcome when a country prioritises political decisions over economic rationale in food policy choices, which is characterised by conflict between interests that support local production and those that believe self-sufficiency is a costlier path and thus worsens public investments (Clapp, 2017). By placing a strong emphasis on the self-sufficiency aim, the government is diverted from urgent issues with food security. The level of self-sufficiency

was emphasised in the National Agrofood Policy 2021-2030 (NAP 2.0) when establishing future orientations for the food sector (Ministry of Agriculture and Food Industries, 2021).

Food insecurity is strongly correlated with a nation's degree of development, which is further influenced by the government's political stability and climate change (Wischnath, 2014). Middle- and low-income groups are particularly vulnerable to food insecurity, which, along with epidemics like COVID-19, can have a devastating impact on the nutritional status of a sizable fraction of the world's population (Kakaei et al., 2023). The United Nations Foundation (2023) predicts that by 2030, global food output could drop by 30% if the climate changes by 30%. The four dimensions of food security provide support for food security (Food and Agriculture Organization, 2021). Agricultural modernization, social capital, technological appliances, and global shocks are a few examples of how these variables are related. Food security and sustainable food and agricultural sectors are linked in a larger sense, where the needs of the present and future generations are met while taking into account the environment, society, and the economy (Food and Agriculture Organization, 2014). Sustainability and food security go hand in hand. The idea of sustainability is linked to sustainable development, which holds that civilizations can advance without compromising present or future generations (Berry, 2015).

With regard to the Sustainable Development Goals (SDGs), one of the goals outlined is objective two, which aims to eradicate hunger and ensure food security (Brooks, 2016). While urbanisation is growing, there are high rates of chronic hunger (Mekonen et al., 2022). Yet, the pandemic setting creates new obstacles for these global goals by exacerbating the world's food issue (Kakaei et al., 2022) and, as is predicted, worsening child malnutrition (Agostoni et al., 2023). However, the question at issue is whether the various sustainability pillars are addressed in a particular way by the four pillars of food security.

It is anticipated that the global population will keep growing, especially in urban areas, which would boost demand for food (Arezki & Matsumoto, 2017), as explained by the Malthusian Trap. Individuals and governments may soon confront even more difficulties as a result of rising urbanisation (Food and Agriculture Organization, 2023b). The composition of food demand is influenced by urbanisation. Since urban eating habits differ from those of rural areas, it is projected that the demand for staple foods like rice will decrease. In contrast, demand for produce and animal- and protein- rich meals like milk and meat will increase. These changes in the demand mix can be attributed to rising incomes and widespread lifestyle changes among urban populations (Food and Agriculture Organization, 2014).

Affordability

Food must not only be available but also accessible to houses and people. To support the timely movement and delivery of essential food supplies to district and local market centres, infrastructure for transportation and storage, in addition to other logistical arrangements, must be developed. Easy access to residences is required for the provided food. Food accessibility refers to access by individuals to adequate resources or entitlements for acquiring appropriate foods for a nutritious diet (Shamsul et al., 2023; Weldemariam, Sakdapolrak, & Ayanlade, 2023). Social, economic, and physical factors, such as one's health, the cost of food, and one's proximity to food sources, all have an impact on one's ability to acquire food (Falls, 2012).

Access to food is dependent on the functionality of food markets or trade systems and the flow of information. Another crucial aspect that impacts access to food is income (Committee on World Food Security, 2023; Food and Agriculture Organization, 2022; Atuoye et al., 2019). Infrastructures such as the availability and condition of road networks, telecommunications infrastructures, and community market frameworks are examples of physical infrastructure. The distance to these market

centres also has a significant impact on determining food accessibility (Nandi, Nedumaran, & Ravula, 2021). According to Abdullah et al. (2021), access to food is also influenced by social variables or social safety nets such as welfare payments, social protection, and financial transfers, including pensions and transfers for the elderly, the sick, the young, and other vulnerable social groups.

The proportion of the population that has access to food is greatly influenced by the poverty line, income levels, and the cost of a typical diet (Bai et al., 2021; French et al., 2019; Muhammad et al., 2017). The ability of a household to buy food is improved by the establishment of jobs, increased income, and savings. In the affordability dimension of GFSI, Malaysia's score shows a marginal decrease from 28th in 2021 to 30th in 2022 (Ministry of Agriculture and Food Security, 2022), mainly due to robust performances in key indicators such as food safety net programmes and the proportion of the population living below the global poverty line, with scores of 100 and 92, respectively. Other indicators, namely changes in average food costs and agricultural trade freedom, also scored commendably, scoring slightly lower at 92 and 80.5, respectively. It is important to highlight that while there exists significant variation in performance across different indicators, all aspects within affordability dimension exceed the global mean average. This confirms affordability as Malaysia's strongest domain, emphasizing the needs to focus efforts on sustaining this outstanding achievement.

Availability

When discussing availability, it is important to note that it involves comparing the supply of food at the national, district, neighbourhood, and family levels to the needs or demands for that food. In the availability dimension, food security is attained when the food supply meets or exceeds the food demand (Oluwole et al., 2023; Sundaram, Gen & Khalidi, 2019). The national food supply and demand are measured based on kilocalorie equivalents. A specific amount of food provides a person with this amount of energy.

Food supply and availability are mostly dependent on agricultural output, carryover supplies, food donations or aid, commodity exchanges, and trade. These criteria should encompass the necessary resources for food production, such as animal feed, seeds, fertilisers, and stockpiles, while also accounting for losses during production and waste during consumption. Agriculture and food security are inextricably linked since agriculture is one of the sources of food security (Abdul Sani et al., 2019). For a nation like Malaysia, agriculture is the main source of food supply at any given time. In turn, food crop output is governed by productivity or yield rates (amount produced per hectare) and the area (hectare) devoted to food crop cultivation (Food and Agriculture Organization, 2017). Agricultural productivity in Malaysia is low and less than half that of high-income countries, especially among small-scale farmers (World Bank, 2019).

This is brought on by a variety of factors, such as reliance, inadequate and inappropriate use of technology, poor extension services, high production costs as a result of high input costs, labour shortages, pests and diseases that affect crops and livestock, and poor agricultural and fisheries resource management practises that lower the productivity of the resource base. The output of agriculture has also been negatively impacted by a lack of investment in the sector, inadequate funding, and a high cost of credit (Abidin et al., 2022).

Malaysia experienced a chicken scarcity from September 2021 to July 2022 as a result of increasing chicken production costs (Tan, Bakar & Ahmad, 2023). It gets worse because the ongoing Russia-Ukraine War disrupts the global supply chain and raises prices significantly in 2021 and 2022 (Reuters, October 10, 2022). The government's intervention actions to safeguard food supply security have paid off when the price of chicken has stabilised. The intervention measures included removing the authorised permit (AP), stopping the export of poultry, and creating buffer supplies for both fish

and chicken. By taking these steps, the government for the first time gave chicken breeders subsidies totalling RM1.6 billion to alleviate their burden, ensure a sufficient supply of chicken and eggs, and guarantee price stability (The Edge Markets, March 1, 2023).

Quality and Safety

The quality and safety pillar addresses dietary requirements. A focus is placed on improving the health of the population so that individuals have bodies that absorb and utilise food nutrients efficiently. In order to meet the nutritional needs of human bodies and enable individuals to have regular, healthy lifestyles filled with activity, the food must also be of the proper sort and quality. This necessitates the diversification of basic foods and consumption patterns at the national and household levels (Masipa, 2017). Yet, an abundance of food does not guarantee that everyone has access to wholesome foods and has inexpensive, safe, diversified, and healthy diets (Ruel, 2020).

Food security, nutrition, and health are directly related. Empirical research has demonstrated that among the main repercussions of food insecurity are poor health and malnutrition, not only in Malaysia but also in other countries (Van Meijl et al., 2020). Therefore, ensuring food security is crucial for advancing nutrition and overall health (Cuenca et al., 2023). On the other hand, a balanced diet and increased nutritional content of the foods consumed can benefit food-insecure households. This is made possible by proper nutrition, hygiene, and health care practises. To support the human body's optimal absorption of dietary nutrients, the food quality and safety pillar demands the promotion of food processing and value addition.

The NAP2.0 was introduced by the Malaysian government to address the issue of food security (Ministry of Agriculture and Food Industries, 2021), namely:

1. Promote modernity and intelligent agriculture.
2. Expand export-oriented, high-demand output and strengthen the local market.
3. Cultivate talent to meet the needs of the industry.
4. Improve sustainable agriculture and food systems.
5. Provide a business-friendly atmosphere and a solid institutional framework.

In the Malaysian context, improved food security is crucial to the sustainable development of a country because a country's development is built on people, who require a sustainable way to acquire food to survive. Social and emotional unrest would make the country defenceless if there was no food security. The nation would become hopeless and put progress on the back burner, as its very survival was in jeopardy.

Sustainability and Adaptation

The GFSI incorporates a category on "Sustainability and Adaptation" as a main pillar (Economist Intelligence Unit, 2022). The term "sustainability and adaptation" refers to the temporal aspect of food and nutrition security, or the time period utilised to quantify food and nutrition security. Garcia Diez et al. (2021) argue that when the household supply is steady year-round and over an extended period of time, stability is attained. Food, cash, and other material resources are included in this pillar. Additionally, it is crucial to reduce external threats, including wars, epidemics, price volatility, natural disasters, and climate change, by taking steps to strengthen household resilience.

Protection of the environment, crop insurance against drought, and sustainable use of water, soil, and other natural resources are a few examples of such measures. The affordability domain, which refer to the idea that readily available and easily accessible food should be priced at a level that is affordable

to the majority of people, are also supported by the sustainability and adaptation pillar (Aborisade & Bach, 2014). This pillar of food security includes a poverty and economic component, necessitating that the majority of people have income-based access to basic food supplies. Due to the inconsistency of their income and the unpredictability of the prices at which they must purchase food, shelter, and other necessities, those in the lower socioeconomic brackets are at risk of falling into poverty, incurring debt, and being unable to meet even their most basic needs (United Nations World Food Programme, 2021).

Better Food Security through Trade Mechanisms

When discussing food security on national and global level, the conventional and dominant focus has always been on the supply side of the food equation. This primarily involves assessing a country's ability to ensure a sufficient food supply that meets the needs of its population, achieved through either domestic production or imports. However, the macro dimension of food security extends beyond issues solely related to agricultural production and international trade. It acknowledges the intricate connections between the food sector and the broader economy. Various factors within non-food sectors and macroeconomic policies significantly influences a nation's food supply. This perspective extends beyond the notion that merely having an adequate food supply ensures food security.

While there is a concern to boost food production, there should be a focus to shift towards embracing a more holistic food security approach. Policy tools such as trade and market intervention can be implemented to further enhance the accessibility and affordability of a variety of foods, thereby expanding choices for consumers and encouraging diversity in daily dietary intake. Additionally, trade and market interventions can address the challenges of adapting to climate issues by facilitating the redistribution of food from surplus regions to those experiencing deficits. On the other hand, export restrictions can safeguard domestic industries from competition with imported products, which can be aligned with campaigns that advocate buy locals' campaigns.

The safety and quality of food has gained greater apprehension and required production of agricultural goods that are not only safe but also of high quality. To be more competitive in both domestic and international markets, the imperative to deliver safe and higher quality agricultural products has gained prominence. This involves strict adherence to safety standards and ensuring that the quality of products meets the expectations of consumers. There is also a noteworthy shift in consumer preferences where individuals opt for healthier dietary lifestyle. This transition is characterised by preference of products that are not only nutritious but also of higher quality. As consumers' preference has shifted, the agricultural products also need to be aligned to these values.

In terms of using food self-sufficiency as the direct indicator of food security, the two may be interrelated but does not fully signify food security. More often than not, the concept of food self-sufficiency is motivated by national security concerns and political agenda, seeking to guarantee availability of essential food for its population produced locally. The concept of food self-sufficiency, driven by national security concerns and a country's political agenda, aims to ensure the availability of essential food for its population without depending on external sources. While it is a desirable situation, the self-sufficiency itself has become the foundation for shaping policies, geared towards self-reliance in food production. These policy needs to be viewed and assessed on the merit of economic efficiency.

CONCLUSION

Even though it is a difficult goal to achieve, guaranteeing food security has far-reaching ramifications for the economic, political, and social systems of a country. This is true despite the fact that achieving food security is a demanding quest. A significant increase in Malaysia's support for agricultural technology, legislation, and investments in research and development should be made, and the country's residents and private businesses should be encouraged to participate in efforts to reduce the amount of food that is wasted.

It is possible to assure a stronger, healthier, and more resilient Malaysia in the future by making food security a top priority and adopting an approach that emphasises collaboration not only with government agencies but also with the corporate sector.

Malaysia is able to strengthen its resistance to interruptions in the supply chain and protect its food security by implementing a variety of legislative policies, making investments in research and development, and forming collaborations with the corporate sector. With that, a comprehensive approach encompassing robust strategy, planning, implementation, and success measures is required to achieve better food security in Malaysia, shifting from good to great.

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