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**FOOD SECURITY - A NATIONAL RESPONSIBILITY OF  
REGIONAL CONCERN: Malaysia's Case**

Azmi Mat Akhir<sup>1</sup>, Roziah Omar<sup>2</sup> and Hamidin Abd Hamid<sup>3</sup>

**ABSTRACT**

*Like in other countries, food security calls for strong emphasis in national development policy. Malaysia is still insufficient in many of the major food items. Malaysia relies on its agriculture sector (including fisheries) for basic food production and supply. However, the overall share of the sector to the Gross Domestic Product (GDP) had been declining since 1970, mainly caused by rapid economic transformation towards industrialization. Thus, despite various policies designed and implemented to achieve food security, the country has not been able to meet its self-sufficiency level in basic food items like rice (staple food), meat and other livestock products, vegetables, and fruits. Deficits in food items are being compensated for through imports of these products. Malaysia's annual food import bills are on the rise, especially during the recent global rises in food prices.*

*Accessibility to food, especially by the vulnerable groups, strongly connotes a coherent linkage between food security and poverty. While the national poverty rate is extremely low by historical standards – less than 5% in 2007, there are still substantial spatial and community variations. These have important implications on food security situation in the country, in terms of economic accessibility to food, when considering current increasing trend of food prices. Malaysia is enhancing rural development programmes to further raise the incomes of impoverished rural agricultural communities.*

*Food is every individual's lifeline. Ensuring food security is everyone's responsibility. It is the obligation of every household to secure enough food for every member of the family. At the national level, the Government needs to ensure a secure and safe food supply to the nation through the formulation of related policies and efficient implementation by relevant agencies. At the same time, the roles of the food producers, distributors and processors are by no means dispensable. Government policies should be oriented towards ensuring that producers and processors produce enough and safe food. Ensuring food security is also a regional and global concern. The important role of food security in keeping the regional and global stability and prosperity is well recognized.*

*Thus, the major objective of the paper is basically: (i) to highlight the current food security situation in Malaysia; (ii) to reflect on the extent of national poverty situation and its impact on ensuring food security and sustainable development; and (iii) to inform on Malaysia's involvement in regional cooperation plans on food security.*

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<sup>1</sup> Senior Research Fellow, Asia-Europe Institute, University of Malaya.

<sup>2</sup> Executive Director, Asia-Europe Institute, University of Malaya.

<sup>3</sup> Deputy Executive Director (Academic, Research and Development), Asia-Europe Institute, University of Malaya.

## **1. Introduction**

There have been many definitions of “Food Security” (Maxwell, 1996), but, as defined by the Food and Agriculture Organization (FAO) of the United Nations (FAO, 1983) and the United States Department of Agriculture (USDA, 1996), it is basically about availability (adequacy in food production, stability in food supplies), accessibility (both physically and economically) and the utilization of the food itself. More recently, the quality and safety aspects of food have also been regarded as important components of food security definition.

While physical and economic accessibility to food, especially by the vulnerable groups, strongly connotes a strong linkage between food security and poverty, other components of the definition of food security reflect the relationships between food security and the overall economic development, particularly agricultural development and the development of the food processing industry - along with the food supply and distribution system. Therefore, ensuring food security is everyone’s obligation, from the government down to the producers, processors and distributors, and to the individual households. The government, through the formulation and implementation of appropriate policies by its specified agencies ensures the availability, adequacy and proper utilization of food in the country. The producers, processors and distributors also play the roles in assisting the government ensures that every individual or household in the country has enough food of appropriate quality to consume.

## **2. Malaysia’s Food Production and Food Security Situations**

Since 1956, attaining food security has been an integral part of the Malaysia’s national development objectives (Nur Annizah & Pazim @ Fadzim, 2005). As in the cases of many developing countries, Malaysia relies on its agriculture sector (including fisheries) for basic food production and supply. However, the overall share of the sector to the Gross Domestic Product (GDP) had declined from 33.6 percent in 1970 to 22.2 percent in 1980, and further down to 8.5 percent in 2004 (Govt. of Malaysia, 2004), mainly caused by rapid economic transformation towards industrialization during these periods. Thus, despite various policies designed and implemented to achieve food security, the country still has to rely on imports to meet its self-sufficiency level (SSL) in basic food items like rice (staple food), meat and other livestock products, vegetables, and fruits.

Malaysia’s population is expected to reach almost 27 million by 2010 (Basir, 2006). This will obviously increase domestic food demand. Although the foreseen deficit can be overcome by food imports, the national food insecurity situation will be aggravated in view of the declining domestic food production and low SSL for many of the food items. Moreover, the rising food import bills will certainly lead to a drawdown of the foreign exchange earnings.

The production of sufficient food for the population featured prominently in the First National Agricultural Policy (NAP1) – 1984-1991 and subsequently in the Third National Agricultural Policy (NAP3) – 1998-2010. The NAP1 aimed at achieving at least 80 percent self-sufficiency level (SSL) for major food items. However, the SSL of rice, the staple food for the country, decreased from 91 percent in 1972 to 72 percent in 2005 (Fadzim @ Pazim, 2005), mainly due to the increase in population and reduction in agricultural areas due to changes to non-agricultural uses over the same period. In view of these, the current NAP3 again aims at increasing domestic food production and sourcing of food strategically to ensure adequate supply of and accessibility to safe, nutritious and high quality food at affordable prices (Govt. of Malaysia, 2000). The agricultural sector shall be enhanced through the promotion of agro-businesses, including agro-tourism etc. to improve trade balance, as well as strengthen the food security situation in the country.

### ***Roles of Agriculture in Food Security***

Malaysia's agriculture is characterized by a dichotomy between subsistence/small-holder agriculture and plantation or estate crop agriculture. In addition, shifting agriculture is still being practiced to a certain extent in the remote inland areas of Peninsular Malaysia, Sabah and Sarawak, mainly by some small groups of indigenous communities.

Subsistence/smallholder agriculture is the most important and constitutes the main type of agriculture practiced by Malaysian farmers, in terms of cultivated acreage. It is characterized by small farm plots of 1 to 2 hectares, worked on by family members in a traditional way or with low investment and mechanization to produce food crops for family consumption and the excess, if any, sold within the local community. Agricultural products processing, if any, are done using facilities provided by the government. The types of crops grown under this type of agriculture include subsistence food crops such as rice, fruits, vegetables and corn, as well as commercial crops like oil palm, rubber, pepper and cocoa (Dept. of Agriculture, 2009). Plantation or estate agriculture, on the other hand, are those covering land areas of more than 40 hectares, owned by big plantation companies for producing commercial crops such as rubber, oil palm and tea. This type of agriculture is characterized by high labour and other production inputs like fertilizer and other agricultural chemicals and using good quality planting materials, with modern mechanization technology. The high crops yields obtained are mainly for export.

The important role of agriculture in food security and the overall national economic development is reflected in the fact that the sector utilizes about 70% of the country's land area and provides employment to about 35% of the country's population (more than 2 million people are involved with agriculture) (Dept. of Agriculture, 2009), and contributes to about 45% of national income. Agriculture has also made Malaysia one of the main exporters of world's palm oil products and natural rubber and, most importantly, it supplies food items (rice, vegetables, fruits, etc.) and helps reduce the incidence of poverty especially in the rural areas of the country. Almost a quarter of

foreign exchange earning comes from agricultural products (from the export of palm oil, rubber, pepper, pineapples, and copra). Agriculture also promotes the development of food processing industry.

As with the case of most Asian countries, rice is the staple food crop of Malaysians. Rice growing areas covers about 10% of the country's agricultural land. Paddy or wet rice occupies about 86% of the cultivated area for rice, while hill rice or dry land rice takes up the remaining areas (Dept. of Agriculture, 2009). Despite registering an overall decreasing trend from 91% in 1972 to 72% in 2005 (Fadzim @ Pazim, 2005), the national rice self-sufficiency level (SSL) in rice has actually risen from around 70% in 2000 (9<sup>th</sup> Malaysia Plan, 2006) to around 85% presently (Dept. of Agriculture, 2009). The targeted SSL for rice by the end of the Ninth Malaysia Plan (i.e. at the end of 2010) is set to be 90%. Malaysia is a net importer of rice, and is currently importing rice from Thailand, China, India, Myanmar and even the United States to fulfill its national need.

### **3. Food Security and Poverty in Malaysia**

The linkage between food security, or insecurity, and poverty is inextricable. The rising prices of food items increase food insecurity by reducing economic accessibility to food. This, in turn, directly increases the incidence of relative poverty among vulnerable groups of the community and may further push those already within the poverty groups into the absolute poverty realm.

Although rapid economic growth and structural change since the early 70s have transformed Malaysia into a prosperous, urban and industrialized economy, around half of the country's households were living below the national poverty line when the country achieved its independence in 1957 (Sulaiman and Leete, 2009). About 49% of the households were poor then, but this rate had fallen below 10% at the end of the last century, and to less than 5 percent in 2007. According to Sulaiman and Leete (2009), this progressive reduction in poverty was attributable to the country's enviable economic growth record and the national commitment to a more equitable distribution of income after 1970s. Although it is manufacturing, rather than agriculture, that has been primarily responsible for the country's export successes in recent decades, particularly through the exports of electrical and electronic products, successful sustainable rural development programmes has also contributed appreciably to raising the incomes of impoverished agricultural communities.

Despite having been successful in lowering the national poverty rate over the years, Malaysia recognizes the fact that there still remain relatively large numbers of poor individuals living in poverty in the rural areas of the States of Sabah and Sarawak, as well as the rural areas of the States of Terengganu, Kelantan and Kedah in Peninsular Malaysia. No doubt, absolute or persistent poverty is present in Malaysia (Johnleemk, 2007). The Eight Malaysia Plan, 2001-2006 specifies the poverty line for Peninsular Malaysia as RM540 per month (approximately USD155) for a family of five individuals, and for Sabah and Sarawak the poverty lines are even higher. The actual current national

poverty rate may be higher than estimated due to the conceptualization of rural and urban poor households on the basis of a single poverty line income (Nair, S., 200...). Moreover, the definition for poverty line as used by Malaysia may have also underestimated the real number of poor households in the country. When using the definition used in Britain and several other countries in the European Union, where the poverty line is defined as one half of the average household income, then Malaysian households earning less than RM1,600 per month (USD450) would be considered as poor (Jeyakumar, D., 2004). This would have significant implications on food security situation in the country, in terms of economic accessibility aspect, when considering current increasing trend of food prices. Nevertheless, Malaysia is set to improve the poverty targets set through the Millennium Development Goals (MDGs). The current Ninth Malaysia Plan - 2006-2010 (2006), repeats the country's commitment to achieve growth with distribution and set targets of reducing the overall poverty rate to 2.8 percent and eradicating absolute poverty by 2010.

#### **4. Regional Concern and Approach**

The important role of food security in keeping the regional and global stability and prosperity is well recognized. Thus, Malaysia has been actively involved in various bilateral as well as multilateral initiatives and cooperation activities on food security matters. During the 14<sup>th</sup> Nikkei International Conference held in Tokyo in May 2008, Malaysia invited Japan to cooperate in agriculture to ensure food security, especially in areas of high-tech agriculture and biotechnology to raise quality crop yields and production of canned processed food via related manufacturing activities, large-scale "halal" industries in the plantation or aquaculture sectors, and livestock farming especially in Sabah and Sarawak (Bernama, May 26, 2008). Towards this end, the onus is with the private sectors of both countries to join hands and explore the opportunities in this traditional but potentially lucrative agriculture sector, given the present food security crisis. Later, in July the same year at the Summit of Developing Eight (D-8) in Kuala Lumpur, Malaysia suggested to other D-8 members to consider joint investments in projects such as a fertilizer plant to help secure food supplies (Jalil Hamid and Sing, L.Y., 2008).

Within the ASEAN cooperation sphere, Malaysia, together with other ASEAN Member States, is implementing the existing regional food security instruments and taking a strategic and comprehensive approach to put in place new concrete regional policy measures in promoting and maintaining regional food security catering to the long-term needs and potential emergency situations through increased food production and innovation, while ensuring food market efficiency and trade facilitation (30<sup>th</sup> AMAF, 2008). Currently, ASEAN has existing mechanisms that are directly related to food security cooperation in the region, namely the *ASEAN Food Security Reserve (AFSR)* and the *East Asia Emergency Rice Reserve (EAERR)* comprising ASEAN Member States, China, Japan and Korea under the ASEAN Plus-Three cooperation framework. These mechanisms are designed mainly for sharing of rice stocks among countries in times of disasters and other natural emergencies. In addition, ASEAN has also established an

information network on food security among ASEAN Member States, i.e. the *ASEAN Food Security Information System (AFSIS)*.

The *Agreement on the ASEAN Food Security Reserve (AFSR)*, signed among ASEAN Foreign Ministers in 1974 in New York, the core component of which is the *ASEAN Emergency Rice Reserve (AERR)* (ASEAN Secretariat, 1988) has been lauded as the first ever regional agreement on food security at the time. Although the Agreement has never been invoked, the AFSR constitutes a symbolic understanding among Member Countries to help each other in times of emergency. The *East Asian Emergency Rice Reserve (EAERR)* arrangement was established on 1 March 2004, initially for three years, has been extended until end of 2010. Partially meant to augment the AFSR arrangement among ASEAN Member States, the EAERR mechanism focuses on contributing toward food security in the broader East Asia region through food (rice) aid programmes.

To further enhance regional cooperation in food security, Malaysia joined its ASEAN members to adopt the *ASEAN Integrated Food Security (AIFS) Framework – 2009-2013* and its medium-term *Strategic Plan of Action on ASEAN Food Security (SPA-FS)* at the 14<sup>th</sup> Summit on 1 March 2009 in Cham-an, Hua Hin, Thailand. Given that high food prices are likely to persist in the medium-term, such a regional coordinated approach is needed to address the issue, to allow for a more appropriate set of responses for protecting the poor and ensuring food security in the region. Thus, the main goal of the AIFS Framework is to ensure long-term food security and to improve the livelihoods of farmers in the ASEAN region (ASEAN Secretariat, 2009). The Framework, supported by the SPA-FS, is crucial and timely, considering the importance of food security in the process of the ASEAN Community building and the currently unfolding world financial crisis.

The AIFS and SPA-FS are compatible and consistent with the *Comprehensive Framework for Action of the UN High Level Task Force on the Global Food Crisis (HLTF-CFA)* and, hence, ASEAN and the UN have agreed to work together in a cohesive manner in strengthening food security at the ASEAN and global level, and to ensure effective implementation. Partnerships and cooperation arrangements with international organizations and donor agencies such as the FAO, International Rice Research Institute (IRRI), International Fund for Agricultural Development (IFAD), World Bank, and the Asian Development Bank (ADB) would be encouraged and promoted (ASEAN Secretariat, 2009).

In short, ASEAN is ready to implement the abovementioned measures to tackle the rising food prices and ensure longer-term adequacy of rice supply to prevent any adverse impact on the ASEAN economies.

## **5. Current and Future National and Regional Directions to Attain Food Security**

The increase in the prices and decreases in the supply of food at the global level had triggered food crisis in several countries. Nevertheless, with the current available supply of food in the country, including those from imports, Malaysia is still sufficient to

cover its domestic demands. In the face of rising world food prices since early 2008, the Government of Malaysia has undertaken immediate steps to ensure that the national food supply is always adequate and at reasonable prices for the consumers. Towards this end, the Government has launched the *Food Security Policy* on 2 May 2008 (Dept. of Agriculture, 2009) the main objectives to: (i) increase production and productivity of the agro-food sector to self-sufficiency level; (ii) ensure that the farmers and agricultural entrepreneurs receive appropriate incomes and no decrease in food production; and (iii) ensure sufficient supply of good quality and safe foods.

To ensure that the objectives of the *National Food Security Policy* are achieved, the Government, through its Ministry of Agriculture and Agro-based Industry (MOAAI), has formulated programmes and projects for implementation during the 2008-2010 period (Dept. of Agriculture, 2009). These include:

- i. Increasing rice production through Good Agricultural Practice Scheme, Rice Seed Certification Scheme, Idle Land Development Project, and Rice Field Leveling Project;
- ii. Establishment of buffer stock for rice;
- iii. Programme for Increasing Production and Productivity of Crops, Fisheries and Livestock;
- iv. Development of Agro-based Industry Entrepreneurs through provision of incentives;
- v. Strengthening of agricultural marketing system to ensure market and distribution of agricultural products;
- vi. Implementation of the “Green Earth Programme” (growing food crops and vegetables for own household consumption); and
- vii. Development of aquaculture areas to increase production.

Being the staple food as well as a security crop for the country, the Government of Malaysia has been undertaking continuous steps towards increasing rice production through national agricultural research and extension, marketing, and farmers’ organization institutions and the agricultural bank. Big irrigation projects have enabled double-cropping of rice in the major rice-producing areas of the country. Research institutions have produced high-yielding varieties and strains, good agronomic practices and modern integrated pest management techniques. Reclamation of coastal and swamp areas has increased the areas cultivated under rice, counter-balancing the reduction in existing areas due to changes into other land use types, especially into new settlement areas. The government’s agricultural marketing agency assists farmers in marketing and control of the price of rice. The Government has long established the Farmers Organization Authority (FOA) and Area Farmers’ Association to assist farmers market their rice at reasonable prices and abolishing the role of the middlemen.

From the viewpoint of economic accessibility to food, oil palm and rubber, the two Malaysia’s main commercial and export crops, also qualify as food security crops as they generate cash income that farmers could utilize to purchase foods. Oil palm produces cooking oil for the population of Malaysia. It is the main commercial crop of

the country, covering about 4.48 million hectares of land in 2008 (Mohd Basri, W., 2009) which places the country among the main suppliers of world's oil palm products (constituting palm oil, palm kernel, palm kernel cake, oleochemicals, biodiesel, and finished products). The bulk of Malaysian palm oil is exported to China, Pakistan, USA, India, Japan, and Ukraine, which accounted for 10.15 million tones or 65.9% of total Malaysian palm oil exports in 2008. *Rubber* occupies almost 2 million hectares of agricultural land (28%) of the country, 85% of it is in Peninsular Malaysia, and is grown under estates and smallholdings. The country produces about 40% of world's natural rubber, third largest after Thailand and Indonesia. Rubber constitutes an important export commodity for the country, with Japan, US, Europe, China, and Singapore as the main export destinations. *Pepper* is the main commercial crop for the State of Sarawak, which produces 90% of the country's production. Malaysia exports 30% of the world's pepper, and it is third world's largest producer after India and Indonesia. Most of Malaysian pepper is exported to Japan, Germany, Singapore and Hong Kong.

Successful sustainable rural development programmes have helped raise the incomes of impoverished agricultural communities. The Government's encouraging roles include opening up new areas through its land development and land consolidation and rehabilitation as well as replanting schemes. Most importantly, the efforts help increase employment opportunities and provide land for the landless local population. Oil palm, rubber and pepper productions also provide important employment opportunities for the local rural population, generating incomes and ensuring economic accessibility to food items. The Government will continue to ensure sustainable development of the agriculture sector so that it can continue to play its role in sustaining rapid national economic growth, especially during times of global economic recession when the manufacturing sector usually suffers a setback.

At the ASEAN level, this region is fortunate in that, collectively, the region is a net exporter of several food commodities and has sufficient amount of food for its people and to supply the world (Surin, P., 2009). The region has more than enough in rice, sugar, and several oil-seed production to feed the region and meet the growing regional as well as global demand. Three of the ASEAN Member States, namely Thailand, Vietnam and Myanmar, produce surpluses of rice. Data derived from the *ASEAN Food Security Information System (AFSIS)* shows that total ASEAN production of rice has increased steadily from 120.7 million metric tons in 1993 to 178.8 million metric tons in 2006. The region's exports of rice (mainly from Thailand and Vietnam) also play an important role in the world market, accounting for almost 50% of the total global exports, based on the 2006/2007 production year. According to Surin (2009), if ASEAN Member States manage their food production, processing, storage and distribution well, this region can also help relieve the world's anxiety and pressure by sharing its food surpluses with other regions.

Indeed, high food prices have already caused concerns in many countries, particularly those which are net importers of food. Obviously, continuous concerted efforts are needed to further strengthen regional and global cooperation in food security to increase food production and stabilize food prices. Both short-term and long-term

measures have to be implemented to stabilize market prices and maintain proper levels for food stocks that are beneficial for both producers and consumers.

The policy implications are similar for both the national and regional levels when considering measures to strengthen and maintain food security. The agriculture sector as the primary source of food should be seen beyond its basic production role. Agriculture should be seen as a business enterprise to increase the yields of high value food crops through modern but environment-friendly cultivation practices, as well as to promote and increase production of high value-added agriculture-based food products through good processing technologies. These would certainly call for farmers who are more knowledgeable in production and producers who are associated with high-tech agro-processing activities. While concerted farmer empowerment programmes would need to be undertaken by the Government in order to achieve the former, to achieve the latter, i.e. enhancement of the development of agro-based industries would need proper and appropriate packages of incentives by the Government to attract the involvement of the private sector. For both cases, however, there must be a strong emphasis on the important role of every stakeholder to ensure sustained food production for food security through greater awareness programmes on sustainable environmental management.

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