



A review of Food Security Policies, Programs and Activities in Malaysia

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Abstract

Food is fundamental to human wellbeing, and human development is central to achieving food security. Almost 870 million people chronically undernourished in 2010–12 and the number of hungry people in the world remains unacceptably high. Malaysia is low in vulnerability in term of access to food as classified by FAO where the proportion of undernourished is about 3% and Malaysia does not face problems in terms of availability, accessibility and the utilization of food (Ministry of Agriculture and Agro-based Industry, 2008). The comprehensiveness of social and economic policy and programs contribute to food security. This paper reviews current studies regarding different aspects of food security in Malaysia comprising: food security policies, food security programs, and non-governmental organization's activities regarding food security. The study introduce several policies: New Economic Policy (NEP) (1970 – 1990), National Agriculture Policy I (NAP I) (1984 – 1991), National Agriculture Policy II (NAP II) (1992 – 1997), National Agricultural Policy III (NAP III) (1998-2010), Food Security Policy (DJBM) (2008-2010), National Agro-Food Policy (2011 – 2020), Rice Policy and trade policy that are the essential fundamental basements in a successfully adaptive and proactive food Programs. These programs include: production support program, poverty eradication program, and Nutrition Program has been implemented to ensure physical and economic access to sufficient, nutritionally adequate and safe food. Besides, the non-governmental organizations (NGOs) that are active in Malaysia food security have been discussed are: World Vision, World Food Programme (WPF), and DuPont. Each played an important role in helping to improve the food security situation in Malaysia. This study reviews current Policies, Programs and activities to identify first some challenges and gaps facing national food security and then some key elements that might be more considered supporting a successful food security.



1. Introduction

According to Food and Agriculture Organization (FAO), food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. It covers four main dimensions which include availability, accessibility, utilization and stability (Tey, 2010). Interpretation and definition for the food security concept are different for each level.

Malaysian agriculture sector which largely produces cash crops and little food has cause food self-sufficiency decreasing currently. Rice is the staple food of major population in Malaysia and recognizing the value of rice to food security and national stability, Malaysia government has stressed that food security is closely associated with rice security (Dano and Samonte, 2005). At least 65% of self-sufficiency in rice has been targeted in the recent national food production policy. Due to incompetency in food production, Malaysia still does not able to self-sufficient in many food items and the cost of importing food is lower than the production cost (Murad *et al.*, 2008). Despite that, Malaysia is self-sufficient in poultry, eggs, pork and fruit. For the fish and vegetables, the country is nearly producing sufficiently for the population (Khor, 2008).

Strong emphasis in Malaysia national development policy has been called for food security after the incidence of global food crisis. The policy objectives and instruments in Malaysia's paddy and rice sector can be stretched back as far as the First National Agriculture Policy (1984 -1991) to the Third National Agriculture policy (1998-2010) and the newly launched policies, which include Food Security Policy (2008-2010) and National Agro-Food Policy (2011-2020) (Tey, 2010).

1.0 Roles of Agriculture in Food Security

Malaysia is no different from other developing countries when come to rely on agriculture sector (including fisheries) for food sources. Agriculture sector is important in food security and the national economic development as it uses about 70% of the country's land area and provides job opportunities to about 33% of the country population as well as generates about 45% of national income (Akhir, 2009). Malaysia's populations keep increasing and this will obviously increase domestic food demand. Although importation of food can compensate the deficit, the declining food production and low self-sufficiency level for many food items which in parallel with increasing food price trend will aggravate the national food insecurity situation and thus lead to continual rise of national food import bills. Moreover, poverty is strongly related to food insecurity as the rising food price reduces the economic accessibility to food, especially by the vulnerable group (Akhir *et al.*, 2009). Hence, the agriculture sector should be enhanced to strengthen the food security situation in the country in terms of sufficient food supply and stable food price.

2.0 Food Security Policies in Malaysia

2.1 New Economic Policy (NEP) (1970 – 1990)

The New Economic Policy (NEP) period (1970-1990) encompassing the Second Malaysia Plan until the Fourth Malaysian Plan witnessed strong government support for the agriculture sector. The Second Malaysia Plan period (1971-1975) saw the agriculture sector grow by 5.9% and though 150,000 new jobs were created, the sector registered a drop in total employment because of the more rapid growth in the manufacturing sector, which attracted workers from the rural areas. Food production increased during the Second Malaysia Plan because the government, startled by the world food crisis of 1972-1973, pushed for foods self-sufficiency (Ibrahim, 2009).



3.1.1 Objectives and Strategies

The objectives of NEP are eradication of poverty, irrespective of race, and the restructuring of society. Under NEP, the strategy for eradication of poverty consisted of three major components. The first aimed at increasing income and productivity of those in low productivity occupations through the expansion of their productive capital, and utilizing the capital efficiently. Secondly, the government aimed at improving the living standards of the low-income groups by providing a wide range of free or subsidized social services. The third component was to increase opportunities for inter-sectoral mobility from low productivity areas to high productivity areas (Anoma, 2004.).

3.1.2 Agriculture Sector – Rice Policy

Rice is regarded as the most important crop in the food sub-sector in Malaysia (Fatimah *et al.*, 2011). Since 1973, the paddy and rice policy focused on achieving three main objectives, that is, to attain a reasonable level of production and hence self-sufficiency in rice, to increase paddy farmers' income, and to ensure stable price and high quality rice to the consumers. These are achieved by a comprehensive set of market interventions in the form of price controls, input and output subsidies, import monopoly and production programs and other marketing restrictions.

3.1.3 Fishery Sector – Fishery Comprehensive Licensing Policy (FCLP)

Governments continue to put priority on fisheries development by instituting a variety of measures aimed at fostering the growth of the sector. Under the Fisheries Act of 1985, Malaysia introduced a FCLP, which aims at ensuring a more equitable allocation of resources, reducing conflict between traditional and commercial fishermen, preventing the over exploitation of the inshore fisheries resources, restructuring of the ownership pattern of the fishing units in accordance with the NEP, and promoting deep-sea and distant-water fishing. License Limitation Program is one of the integrated programs under the licensing program, with the basic idea is to restrict the number of fishing units entering the fishery so that catch can be maintained at some permissible level (Yahaya, 1988).

3.1.4 Achievements

The 20-year period of Malaysia's NEP ended in 1990. During the NEP period, the economy grew at an average annual growth rate of 6.7%. In the 1970's, the economy grew at an average annual growth rate of 8.3% as against 5.1% during the pre-NEP decade of the 1960s. Due to the depressive effects of the recession in 1985-86, the average annual growth rate in 1980's was slowed down to 6%. After recovering in 1987, the economy grew at roughly more than 8% annually until the financial crisis 1997 (Anoma, 2004).

As the result of NEP and other agricultural programs, there is a reduction in rural poverty from 58.7% in 1970 to 24.7% in 1984 (Azmi, 2012.). During this corresponding period up to 1980, agricultural output expanded by an average of 5.8% per annum with the gross value of agricultural exports rising to RM9b which in large part contributed to per capita income increasing by an average of 2.8% per annum. The agriculture sector by employing 42% of the Malaysian population in 1980 was the employment provider in the economy (Azmi, 2012).

2.2 National Agriculture Policy I (NAP I) (1984 – 1991)

In the agricultural sector, the incidence of poverty was reported as high as 43% with rubber smallholders, fishermen and padi farmers (Courtenay, 1987). Moreover, 24% of all households in Peninsular Malaysia would receive incomes below the poverty line (Courtenay, 1987). Non productive agricultural patterns and lack of consolidated land-holdings amongst the constraints were found is the causes that affect the productivity of Malaysian agriculture (Courtenay, 1988).



Therefore, the government appointed a cabinet committee on agriculture policy in 1978. This committee consisted of eight working groups on all aspects of agriculture. Based on the report of the two national committees on agriculture and fisheries respectively, the first National Agricultural Policy was unveiled in 1984 by the Ministry of Agriculture of Malaysia as an attempt to provide guidelines to help unify and direct the efforts of all those involved in agricultural development (Courtenay, 1987; Mohamed, 1991; Murad *et al.*, 2008).

3.2.1 Objectives and Strategies

The objectives of the NAP I are to maximize income from agriculture through efficient utilization of the country's resources and the revitalization of the sector's contribution to the overall economic development of the country (Mohamed, 1991; Nair, 2007). NAP I were emphasize in increasing the farms productivity by choosing remunerative crops and employing the most efficient technologies (Mohamed, 1991; Murad *et al.*, 2008).

3.2.2 Fishery Sector – National Fishery Development Plan (1985 – 2000)

In Malaysia, the fishery development policy conforms very closely to that of the National Agricultural Policy which encompasses the fishery sector. For the fishery sector, the National Agricultural Policy clearly identifies fish as the important source of protein for the country (Omar *et al.*, 1992).

A consultative and planning committee which comprises government bodies, private sector and academics was set up by the Ministry of Agriculture to translate the policy into plans and fishery development. In 1985, the National Fishery Development Plan detailed the development of the strategy, programmes and expenditure required for the fishery sector to achieve the objectives outlined by the NAP I (Mohamed, 1991).

The plan comprises five main components, which are the inshore fishery, offshore fishery, aquaculture, developmental support and social and institutional development. Malaysian Fisheries Act 1985 act as legal instrument to enable this programme to function. This act was amended in 1973 to include comprehensive provisions for the protection of fisheries, rationalization of use, safeguarding the interests of fishermen and administration of fishery activity (Mohamed, 1991).

3.2.3 Achievements

NAP I has enabled the agricultural sector to attain a growth rate of 3.2% per annum. However, it was failed to look into increasing income and productivity disparity between the agriculture sector and the rest of the economy, especially the manufacturing sector (Murad *et al.*, 2008). Only 2% of the total land developed by the private sector was by joint venture with government agencies while the private sector which was basically planting crops of commercial or industrial value had increased tremendously (Umakanthan, 2002).

The NAP I have generally been effective in guiding resource allocation, cropping pattern and so on. There is growth of the value-added for the agricultural sector from 3.1% in the period of 1981 – 1985 to 4.6% in the period of 1986 – 1990 (Harron *et al.*, 2001). However, the disparity in labor productivity for the agriculture sector versus that of manufacturing is growing bigger. Labor productivity ratio for agriculture to that of manufacturing was decreased from 0.51 in 1985 to 0.49 in 1990. Labor productivity ratio differences have direct implication on comparative income and thus, it is obvious indicates that total employment in the agricultural sector was declined over years (Harron *et al.*, 2001).

Under National Fishery Development Plan, total production of the fisheries industry was RM1451.9 million, contributing to 2.3% of gross domestic product (GDP) and representing an increase of 45.3% as compared to 1984. These statistics give a good indication of some of



the successes in the fish catching sector of the industry since the implementation of the Fishery Development and Management Plan (Mohamed, 1991).

3.3 National Agriculture Policy II (NAP II) (1992 – 1997)

The Second National Agricultural Policy (1992 – 1997) was introduced upon realizing the shortfalls and inefficiencies of the NAP I (Murad *et al.*, 2008). It put greater emphasis on increasing productivity, efficiency and competitiveness in the context of sustainable development and linkages. There was also a greater emphasis on a bigger role of the private sector participation in short and medium term food production, marketing reform, importance of biological diversity and conservation of sustainable natural resources (Harron *et al.*, 2001; Nair, 2007).

3.3.1 Objectives and Strategies

The objectives of the NAP II are to achieve a balanced development with that of the manufacturing sector, to enhance integration of the sector with the rest of the economy, to achieve a higher level of development of the food industry and to attain sustainable development in agriculture (Harron *et al.*, 2001; Nair, 2007). The policy stressed to large-scale production, rural industrialization and commercial interests (Nair, 2007). The NAP II concentrated on the integration of small farms into bigger cooperatives to become more competitive and the encouragement of investment in agricultural commodities that would support the industries (Umakanthan, 2002). In the rice sector, the target self-sufficiency level was 65%, and the government sought to develop highly efficient and mechanized large-scale farms to produce more using lesser land area (Nair, 2007).

During NAP II, the authorities have developed new agricultural land to enable the establishment of economic farm units. Efficient agricultural practices have been fostered and land has been provided to agricultural farmers for growing new crops. Institutional development of land was also carried out in order to resolve the problems of uneconomic farm sizes, uneconomical crops and low levels of productivity. Agricultural support services such research, extension, marketing, fiscal incentives and social and institutional development were also provided by the Ministry of Agriculture (Murad *et al.*, 2008).

3.3.2 Achievements

Since implementation of the NAP II in 1992, the added value to agriculture had increased from USD3.13 billion in 1985 to USD4.26 billion in 1995. Exports have also increased from USD3.66 billion to USD9.31 billion in 1995 (Ahmad, 2006). However, the rapid liberalization of the agricultural trade and the financial crisis of 1997 that further liberated the financial market, had made the currency market volatile and highly vulnerable to speculation. This negatively affected the stability and security of Malaysia's food supply. Such a situation may lead to serious social and political implication if left unchecked. The NAP II did not anticipate such dramatic changes in the domestic and international economy. (Harron *et al.*, 2001). Furthermore, even though import substitution for food crops was stressed under NAP II, imports continued to increase and food production remained relatively low compared with the production of cash crops. The implementation of NAP II therefore resulted in decreased food production (Umakanthan, 2002).

3.4 National Agricultural Policy III (NAP III) (1998-2010)

Third National Agricultural Policy (NAP III) was introduced and implemented in 1998 after the 1997 financial crisis. The purpose of NAP III was to make sure food security in Malaysia (Indrani, 2001).



3.4.1 Objectives & strategies

The main objective of NAP III is to enhance food security, increase productivity and competitiveness of the sector, deepen linkages with other economic sectors and create new areas of growth for agriculture (Indrani, 2001). NAP III is also used to conserve and utilize natural resources on a sustainable basis (Third NAP Executive Summary, 1999). The overriding objective of NAP III is to maximize national income through maximum agriculture's contribution to the income. This is also including with maximizing of producer's income (Khor *et al.*, 1998).

The implemented strategies include the intensify of the usage of land through introducing of integrated agriculture which is more focus on agroforestry, rehabilitation of marginal land and better soil and water conservation. To achieve this strategy, organic farming and usage of organic matter were highly promoted together with composting, conservation measurement to increase the fertilization of the soil. Available agricultural waste also can be used to produce organic fertilizers (Ahmad, 2001).

3.4.2 Agriculture Sector – National Biotechnology Policy (2005)

National Biotechnology policy launched in 2005 has helped the agricultural to face challenges and limitation in their production. The inputs of biotechnology in agricultural is able to reduce the importation of food, feed and nutrition, and to support new economic growth. The purposes of this policy are to increase national food security and nutritional value of the food and food products. Utilization of biotechnology can help in promoting sustainable agricultural production (Ministry of Agriculture and Agro-based Industry, 2008).

3.4.3 Fishery Sector – Role of Fishery Sector under NAP III

There is an increment in fisheries production from 1.3 million tones (1998) to 1.6 million tones (2004), with the most contribution from aquaculture sub sector (Ishak and Othman, 2005). The government has promoted deep sea fishing in the recent years with 25% rise in deep sea fish landing from 2000 to 2005. The involvement of high tech instruments in deep sea fishing gives the opportunity of capturing fish in the deep sea (Arshad *et al.*, 2008). This type of fishing will be further supported by processing, marketing network, comprehensive human resource development (HRD) and R&D programmes.

3.4.4 Achievements

Under NAP III, there is improvement in production of agriculture sector, value added and exports, commercial production, and group-farming systems. Agriculture has increased in value from USD4.12 billion in 2004 to USD4.67 billion in 2007. There is a total of 12.9% improvement of value which is contributed by four sectors. The first sector is paddy sector where the self sufficient level (SSL) has been increased from 70% (3.4 metric tonne) to 72.2% (5.2 metric tonne). The second sector is crop sector where the production of fruits has a 27.5% increment to 1.95 metric tonne in 2007. The third sector is fisheries sector where this sector has an improvement of 21.9% in sea fishing and 20.8% in aquaculture. The last sector is livestock sector where the sector recorded a 32% increment in beef production and 33% in mutton production (Ministry of Agriculture and Agro-based Industry, 2008).

3.5 Food Security Policy (DJBM) (2008-2010)

Due to the rising of food prices and shortage of food supply, Malaysia government has launched the Food Security Policy on 2 May 2008 to ensure sufficient food supply for the country and at a reasonable price for the consumers.



3.5.1 Objectives

The main objectives of this policy are to achieve self-sufficiency level by increasing production and productivity of the agro-food sector, to ensure appropriate incomes are received by the agriculture producers and no decrease in country's food supply, and to ensure sufficient supply of good quality and safe foods for consumers (Akhir, 2009).

3.5.2 Programmes and Projects

Several programmes and projects have been formulated by Ministry of Agriculture and Agro-based Industry to achieve those objectives. These include increasing production of rice, crops, fisheries and livestock as well as set up of buffer stock for rice. In addition, incentives are given to agriculture entrepreneurs and agriculture marketing and distribution system has been strengthened too. There is also implementation of Green Earth Programme in which households are encouraged to grow food crops and vegetables for own consumption. Moreover, aquaculture areas are developed to increase production (Akhir, 2009).

3.6 National Agro-Food Policy (2011 – 2020)

National Agro Food Policy is the subsequent of the NAP III which placed under the Ministry of Agricultural. This policy has been implemented to address the issue of food supply in Malaysia. Formulation of National Agro-food Policy is result from global scenarios that include increase in food price, agriculture input price, global population, utilization of food commodities for bio-energy and impacts of climate change (MOA, 2012).

3.6.1 Objectives and Strategies

The objectives of the National Agro-food policy are to ensure adequate food security, to make agro food industry as a competitive and sustainable industry and to increase income level of agro based entrepreneur. There are 7 strategies of National Agro-Food Policy (2011-2010), which are (1) to ensure national food security, (2) to increase the contribution of agro food industry, (3) completing the value chain, (4) empowering human capital, (5) strengthen the activities of R&D, innovation and the use of technology, (6) creating the environment for private sectors led businesses, and (7) strengthening the delivery system (MOA, 2012).

3.6.2 Target until Year 2020

The target of this policy is to increase the production of key food commodities from 3.7% per year (2000 – 2010) to 4.0% per year (2010 – 2020), to increase the agro-food production from 7,584,000 million tonnes in 2010 to 11,175,000 million tonnes in 2020, and to achieve agro-food labour force of 4.6% from total labour force (MOA, 2012).

3.7 Rice Policy

Rice policies have been developed to maintain the paddy and rice industry in Malaysia. During 1971 – 1990, the rice policy developed was to improve farm household income through productivity. Then, the rice policy was reviewed and reducing the self-sufficiency level to 65% with rice growing to be concentrated in the major granary areas (Najim *et al.*, 2007). Three primary objectives of different rice policies adopted by government is ensuring food security, raising farm income and productivity, and ensuring food supply to consumers at reasonable costs (Dano and Samonte, 2005).

3.7.1 Price Policy



a) Production Policy

The 3 main objectives which guide the implementation of rice production policies in Malaysia include food security, equitable distribution of income and overall price stability. During 1900s-1930s, the production policy on rice was at low-security level but had evolved to high-security levels after the World War II. Through the years, government has lowered the target for rice self-sufficiency due to the decision to diversify and intensify agriculture with the focus on industrial crops. Acknowledging that an acceptable level of rice self-sufficiency had to be maintained, a minimum 65% of rice self-sufficiency has been set (Dano and Samonte, 2005).

b) Subsidization Policy

Several subsidization policies have been implemented to support the rice sector. These interventions include the policy of Guaranteed Minimum Price (GMP), Paddy Rice Subsidy Scheme (PPS), Fertilizer Subsidy Program, and Credit Program. Introduction of GMP at 1949 was served as incentive to production and to raise farm incomes by guaranteeing a floor price for paddy. All local paddy was guaranteed purchased at the GMP for good dry paddy with moisture content of not more than 14%. Due to realization that rice farmers have the highest poverty incidence among the rural sector, it has lead to the launching of the PPS in 1980 which aimed at raising farmers' income to at least within the RM300 per month national poverty line. On the other hand, under the Fertilizer Subsidy Program (1952-1974), a subsidy rate ranging from 10-50% of the per-acre value input in Peninsular Malaysia was given. The government provides direct subsidies in the form of fertilizer and cash as the support to paddy producers. Credit Program was supervised by the Bank Pertanian Malaysia (BPM) for the disbursement of production credit to rice farmers at a commercial rates. From the loans of RM462 which approved by BPM between 1971 and 1980, 27% has went to paddy producers and 21% to plantations (Dano and Samonte, 2005).

c) Price Stabilization Policy

National Paddy and Rice Institute (now known as BERNAS) was established in 1970 to centralized and systematic price control and stabilization in rice. Price stabilization was achieved by establishment of import monopoly and fixing domestic prices. The rice stockpile scheme was played the role of price stabilizer to improve the rice self-efficiency and to ensure that rice in stockpile is sufficient to sustain the population in Malaysia for 3 – 6 months. The quantity of stockpile is based on the estimation by the Institute of Medical Research (IMR) of per capital consumption of rice at 300g per person per day. In order to provide incentives to farmers for involved in paddy production, the government support the farm prices at rates above the world market levels. However, this pricing policy is bear to the implication for both producers and consumers (Dano and Samonte, 2005).

3.8 Trade Policy

Trade policy is a set of rules and regulations which pertain to trade and it can help a nation's international trade run smoothly. According to the WTO trade statistics, total merchandize exports and imports for Malaysia was achieved US 228,086 million (f.o.b) and USD 187,473 million (c.i.f) respectively in 2011 (WTO, 2011). Therefore, international trade plays important role in the Malaysia's economic growth. Malaysian trade and investment policies are being shaped by multilateral, regional and bilateral trade agreements (Arshad *et al.*, 2008).

3.8.1 Objective

The objective of Malaysia trade-related policy is to promote and safeguard Malaysia interests in the international trade arena, to spur the development of industrial activities, and to enhance further Malaysian economic growth towards realizing Vision 2020.



3.8.2 Trade Agreement and Arrangements

Malaysia is committed to the trade liberalization process and negotiations through the rules-based multilateral trading system under the World Trade Organization (WTO), in order to ensure markets remain open. Besides that, to enhance economic growth and complement its push for greater market access, Malaysia also seeking closer economic relations at both regional and bilateral level (Arshad *et al.*, 2008).

3.8.3 Policies Related to Agriculture

One of the main policy goals of the Malaysian government is the modernization of agriculture. In order to make Malaysia as a competitive global producer of high quality and safe agriculture product that meet international standard as focused in Ninth Economic Development Plan of Malaysia, a number of agriculture trade regimes have been implemented. These include providing tariffs and tariff rate quotas, import license; export and domestic subsidies; export, taxes change and levies; developing Halal certificate; and requiring nutritional labeling (Arshad *et al.*, 2008).

4.0 Conclusion

Food is every individual's lifeline and ensuring food security is responsibility of everyone. Therefore, government need to ensure a secure and safe food supply to the nation through implementation of related policies by relevant agencies. Malaysia has emphasizes more on availability of food by introducing more short- and long term policy measures to increase the rice production from first National Agriculture Policy (1984 -1991) to the Third National Agriculture policy (1998-2010) and the newly launched policies, which include Food Security Policy (2008-2010) and National Agro-Food Policy (2011-2020). These policies are enacted to assure food security at a sufficient level in fulfilling the food needs of a nation.

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