

## Food production strategies for improving household food security amidst rising food prices: sharing the Malaysian experience

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**Abstract:** Food and fuel prices have soared in recent years affecting most adversely the poor and those with fixed incomes. Since 2000, wheat price in the international market has more than tripled and maize prices have more than doubled. The price of rice, the staple of billions in Asia, has tripled in the past year. The surge of food prices has been blamed on multiple factors including higher energy and fertilizer costs, greater global demand, drought, the loss of arable land to biofuel crops, and price speculation. In light of the spiraling rise in food prices, there is the prospect of increasing rates of under-nutrition worldwide. As it is, 800 million are estimated to be suffering from chronic malnourishment, with another 2.1 billion people living close to subsistence levels on less than US\$2 a day. Some perspectives of the food production experience of Malaysia are shared here as a case of a country that has built up capabilities and resources through high level of foreign and domestic investment leading to a diversified economy. In response to the recent surge in the price of rice, the Malaysian government announced the setting up of a dedicated fund amounting to US\$1.25 billion to increase production of food including fruits and vegetables, and targeting 100% self-sufficiency in rice, by growing rice on a massive scale in Sarawak. During the current five-year development plan for the period of 2006-2010, (Ninth Malaysia Plan), the role of the agriculture sector is considerably enhanced to be the third pillar of economic growth, after manufacturing and services. Among the measures taken, are those aimed at increasing incomes of smallholders and fishermen mainly through improving productivity. These measures include encouraging more rice farmers to participate in mini-estates and group farming, providing financial assistance to rehabilitate cocoa, pepper and sago smallholdings, enhancing the capabilities of coastal fishermen, and setting up of a special program to assist poor households in the agriculture sector to diversify their sources of income. The various socio-economic programs in Malaysia that have been put in place over the years may have cushioned to some extent so far the severity of the dramatic hikes in food prices.

**Keywords:** Malaysia, food production, food price increases, household food security

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### INTRODUCTION

#### *Rising food prices*

Food prices have been rising in recent years but have accelerated in the past year or so. For example the price of rice, which is the staple diet of billions, has more than doubled from a year ago. The soaring food price is eating into the incomes and savings of people around the world. People living in poverty and those with fixed incomes, such as pensioners and welfare recipients are among the most seriously affected by the escalating food prices and high cost of living. The sharp rise in food prices has fueled public protests and fractious demonstrations in many countries.

“In December 2007, Mexicans rioted in response to an enormous jump in tortilla prices, which

quadrupled in some parts of the country” (IFPRI, 2008).

“In February 2008, protesters in three major towns in Burkina Faso, angry about the rising cost of food and other basics, attacked government offices and shops” (IFPRI, 2008).

“On world Labour Day, volatile crowds rallied in Manila, Jakarta, Bangkok and Singapore, carrying signs saying “Expensive Rice Prices, Cheap Labour Wages” and demanding “Lower Food Prices Now” (The Star Malaysia, 2008).

The prices of major staple foods have soared since 2000. The price of wheat has more than tripled, maize prices have more than doubled, while dairy products, meat, poultry, palm oil, and

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cassava have also experienced price hikes (von Braun, 2008).

The price of rice has jumped to unprecedented levels in 2008. In Thailand, the world's biggest rice exporter, the benchmark rice (100% B-grade white rice) was traded at US\$1000 a tonne in May, triple the price of US\$325 a year ago. Vietnam, the second largest rice exporter, was setting prices at US\$460 a tonne in February, up more than 50% from a year ago (McElderry, 2008). The price surge has been blamed on multiple factors including higher energy and fertilizer costs, greater global demand, drought, the loss of arable land to biofuel plantations, and price speculation. In response to the economically and politically volatile situation, Thailand initiated the idea of banding together with Laos, Myanmar, Cambodia and Vietnam to set up an OPEC-like cartel for rice. The spokesman for the proposed Organization of Rice Exporting Countries (OREC) was quoted as saying:

“Though we are the rice center of the world, we have had little influence on the price. With so much increase in oil price, we import expensive oil but sell rice very cheaply, and that's unfair to us and hurts our trade balance.”

However, the proposal met with strong opposition by rice importing countries in the region, and the formation of OREC appears to have been stalled. The move might have benefited a few countries but would not have solved the rice price crisis.

In light of the spiraling rise in food prices, there is the prospect of increasing rates of under-nutrition worldwide among people living in poverty and on low earnings. As it is, 800 million are estimated to be suffering from chronic malnourishment, with another 2.1 billion people living close to subsistence levels on less than US\$2 a day (Ahmed *et al.*, 2007). There is serious concern that food price inflation could push at least 100 million more people into poverty, wiping out all the gains the poorest billion have made during almost a decade of economic growth (CGIAR, 2008). The situation is grave and will be further exacerbated as food aids from within countries and international agencies are diminishing in the face of dramatic food and fuel hikes.

#### *Sharing the Malaysian experience*

The experience of Malaysia is shared here as a case of a country that has built up its capabilities and resources across several sectors. The country is one of the world's largest exporters of semiconductor

devices, electrical goods, and information and communication technology products. It is a leading global producer of palm oil, rubber, pepper and tropical fruits. The country is self-sufficient in several food commodities including poultry, eggs, pork and fruits, and close to producing sufficient fish and vegetables for the population (Table 1).

Nonetheless, over the years, the agriculture sector has been experiencing challenges including the problem of labour shortage. Young Malaysians prefer to seek employment in other sectors especially in urban areas. The labour gap is being filled increasingly by foreign workers, yet the total workforce in agriculture has decreased from 1.52 million workers in 1995 to 817,000 workers in 2005. Employment in this sector is expected to contract further in the future (EPU, 2006).

Another challenge faced by the agriculture sector has been the shortfall in the production of food commodities in meeting domestic demand, despite annual positive food production e.g. increase of 4.2% per annum during 1985-1995. Consequently total food import has escalated from RM3.5 billion in 1985 to about RM10 billion in 1997 (US\$3.1 billion). If this trend continues unchecked, the food trade deficit is expected to reach RM12.4 billion by 2010 with food imports at RM27.3 billion, far outweighing exports worth RM14.9 billion (EPU, 2006). Rising food imports can be attributed to increased demand for food in general, and changing preferences for imported foods, reflecting increasing per capita income.

Thus, for a resource-rich country that is undergoing rapid economic development, but burdened with a huge food import bill and subsidies for food and fuel, what are the measures taken by Malaysia to safeguard food security at the national and household levels amidst rising food prices?

**Table 1:** Self-sufficiency levels (%) in food commodities, 2000-2010

Commodity	2000	2005	Projected by 2010
Rice	70	72	90
Fruits	94	117	138
Vegetables	95	74	108
Fisheries	86	91	104
Beef	15	23	28
Poultry	113	121	122
Eggs	116	113	115
Pork	100	107	132
Milk	3	5	5

Source: Ninth Malaysia Plan (EPU, 2006)

**Country background: socio-economic and health status**

Malaysia with a total land area of 329,749 sq. km. is home to a population of 27.2 million in 2007. Out of this, 50.2% are Malay, 24.5% Chinese, 11% indigenous people, 7.2% Indian, 5.9% non-Malaysian citizens and others 1.2%. Almost one-third (31.7%) of the population are below 15 years of age while 4.7% are 65 years and older. Primary education is free for all children, and adult literacy is high at 93.5% (Department of Statistics Malaysia, 2008).

Since attaining independence in 1957, Malaysia has recorded commendable economic growth rates. Real gross domestic product (GDP) grew by an average of 6.5% per year from 1957 to 2005. High levels of foreign and domestic investment played a significant role as the economy diversified and modernized. Once heavily dependent on primary products such as rubber and tin, Malaysia today is an upper middle-income country with a multi-sector economy based on services (employs 51% of the workforce), and manufacturing (28.4%).

The health statistics of the population are comparable to those of developed countries. Life expectancy at birth for female is 76.2 years and male 71.6 years. Meanwhile, the mortality rates for infants and children below 5 years are respectively 6.7 and 8 per 1,000 live births in 2006 (Department of Statistics Malaysia, 2008). Maternal mortality rate has decreased markedly over the decades and is about 28 per 100,000 live births. The substantial progress in these health indicators has been attributed to (i) secular or non-health factors including almost universal accessibility to piped water (98% of urban population and 87% rural), and improved sanitary system (all in urban and 99% of rural population); (ii) overall general health service development, including availability of rural health services, and (iii) specific maternal & child health (MCH) initiatives (High Level Forum on the Health MDGs in the Asia Pacific, Tokyo, 2005).

**Evidence of household food insecurity**

Whilst socio-economic development programs and resource allocation have led to much improvement in the overall quality of life of Malaysians in general, there remains a noteworthy segment of the population living in poverty with its associated health and nutritional inadequacies. The incidence of poverty in Malaysia, as defined by poverty line income (PLI), is reported to have plummeted from 49.3% in 1970 to 5.1% in 2002 (EPU and UN Country Team, 2005). (The PLI is defined as an income sufficient to purchase a minimum basket

of food to maintain household members in good nutritional health and other basic needs. The PLI is updated annually on the basis of the Consumer Price Index). There is a higher prevalence of households living in poverty in rural areas and the interior (11.4%) than in urban areas (2%). Poor households experience food insecurity through inability to purchase or produce sufficient foods to meet the calorie and/or nutrient requirements of all household members. The health and nutritional status of the more vulnerable members especially children, pregnant and lactating women and the elderly, may be impaired over time.

In Malaysia, there are only few studies on household food insecurity, limited to poor and marginalized communities. One such community is in the district of Sabak Bernam located about 150 km from the capital city, Kuala Lumpur. This district ranked high among the districts for recipients of government welfare allowances provided to households living in poverty. Using the Radimer/Cornell Hunger and Food Insecurity Instrument, which had been previously translated and validated, Zalilah and Khor (2004) found that more than half of the households (n=200) in Sabak Bernam live with varying degrees of food insecurity, including 34.5% child hunger and 9.5% individual food insecurity. Thus, more than one-third of the households may be described as having hungry children as judged by their parents. A common factor among food insecure households is large family size, indicating that their limited earnings are spread thinly on food and other basic requirements. In the Sabak Bernam study, it was found that the food insecure households spend 80-90% of total expenditures on food and housing compared to the food secure households (60-70%). A follow-up study on coping measures showed that the food insecure households would resort to various means to bring food to the table, including borrowing money, pawning jewelry, receiving foods from relatives and neighbors, reducing the number of meals a day, and cooking whatever food is available at home (Zalilah and Khor, 2008).

Food insecurity has also been recorded among low income households in Kuala Lumpur. In a community study, Zalilah and Ang (2001) found 28% household food insecurity, 11% individual food insecurity and 27% child hunger. Evidently, a serious level of household food insecurity exists in poor rural and urban areas amidst rapid economic development in Malaysia.

Food insufficiency is reported not only in developing countries but also in developed countries. In the United States, the third National Health and Nutrition Examination Survey reported

that the overall prevalence of food insufficiency was 4.1% from 1988 through 1994 (Alaimo *et al.*, 1998). In 2003, it was reported that 11.2% of all households, representing more than 36 million people primarily among low-income people, were experiencing food insecurity in 2003 (Nord *et al.*, 2004; Laraia *et al.*, 2006). In the 1995 Australian National Nutrition Survey (NNS) and the Australian Bureau of Statistics Population Survey Monitor, 5% of the total samples screened were food insecure. The risk was much higher in specific groups; unemployed (23%), single parent households (23%), second lowest income quintile (20%), rental households (20%), young people (15%) (Moon *et al.*, 1999).

#### **Food insecurity and risk of malnutrition**

There is an apparent paradox of people living in food insecurity and suffering from overweight and obesity, as shown by studies in developing and developed countries (Olson, 1999; Alaimo *et al.*, 2001; Townsend *et al.*, 2001; Tanumhardjo *et al.*, 2007). In Bangladesh, while the prevalence of chronic energy deficiency (CED, BMI < 18.5kg/m<sup>2</sup>) remains a major nutritional problem among female adults, Shafique *et al.* (2007) reported that 9.8% of urban poor and 5.5% of rural poor were overweight (BMI ≥ 25.0 kg/m<sup>2</sup>) between 2000-2004. In 15,061 men and women from the 1996 Health Survey for England, it was found that the risk of obesity was 40% higher in those in receipt of benefits, after adjusting for age, marital status and ethnicity, for both men and women (Wardle *et al.*, 2002). In a review on the paradox of poverty and obesity, Burns (2004) reported the risk of obesity is 20 to 40% higher in individuals who are food insecure, and that the situation is true for women only regardless of income, lifestyle behaviours or education across US, Europe and in Australia.

People living in poverty may have access to sufficient calories through consumption of cereals, root crops and refined sugar products. However, their diets are lacking in variety and quality to promote optimal health and prevent chronic disease. In the study in Sabak Bernam, a finding of significant difference between the food secure and food insecure households was the lack of dietary diversity among the latter. The poor can afford only limited food choices, and tend to consume cheaper food items that are more likely to be high in fat and energy-dense contributing to overweight problems. This may explain the higher prevalence of overweight and obese subjects among food insecure households. More than 50% of the food-insecure women were overweight and obese

compared to women from food-secure households (38%) (Zalilah and Khor, 2005). Similarly, more food-insecure women (32–47%) had at-risk waist circumference (≥88 cm) than food-secure women (29%).

In contrast to overweight and obese adult subjects in food insecure households, children from low income levels tend to be undernourished. In Malaysia, the national prevalence of underweight and stunting among children are highest among households in the lowest income category. According to the third National Health and Morbidity Survey (2006), households earning less than RM400 per month (US\$125) have underweight prevalence of 21.4% (95% CI: 18.9-24.2) and stunting at 24.2% (95% CI: 21.2-27.4) among children aged below 18 years, compared to 7.1% (95% CI: 5.8-8.8) and 9.2% (95% CI: 7.2-11.6) respectively for households earning more than RM5000 per month (>US\$1500). There is also geographical disparity in the prevalence of underweight and stunting in children. Poorer states such as Sabah and Kelantan have a higher percentage of undernourished children compared to children in the more developed states of Penang and Selangor.

Malaysia is thus shown as a country of contrasts, displaying on the one hand, health indicators that rival those of developed countries, but on the other hand, there are communities that eke out a subsistence level of living bearing the double burden of malnutrition – overweight adults and underweight children in the same household. In the current situation of soaring food prices, what are the government's actions to extend food-based safety net interventions particularly to food insecure people?

#### **Agriculture and food production strategies**

Agriculture was the mainstay of the Malaysian economy when the country attained independence in 1957. However, in the ensuing decades, other sectors particularly manufacturing, construction and services overtook agriculture in terms of growth rates and contributions to the country's gross domestic product (GDP). The share of the agriculture sector to the GDP declined markedly from 23% in 1980 to 8.2% in 2005 (EPU, 2006). However, the total agriculture value added has increased in recent years from RM18.7 billions in 2000 to RM21.6 billions in 2005 (US\$6.8 billion, US\$1.00 = RM3.20).

The serious economic downturn in 1997 triggered the government to re-examine its priorities in economic development. The agriculture sector was re-vitalized and the national agriculture policy

was substantially revised, particularly pertaining to food production. The Third National Agricultural Policy (NAP3) (1998-2010) was formulated with new strategic approaches and policy thrusts to enhance the economic contribution of the agricultural sector to national development. The thrust of the NAP3 is to increase food production on land and sea, through the optimization of resources in a sustainable manner. The policy is oriented to be market-driven and private-sector-led to ensure efficiency of food production for domestic needs as well as for export (NAP3, 1998).

During the current five-year development plan of the Ninth Malaysia Plan for the period of 2006-2010, the role of the agriculture sector is considerably enhanced as the third pillar of economic growth, after manufacturing and services (EPU, 2006). The overall policy thrusts of the agriculture sector, as stated below, bears focus on greater commercialization and the creation of high-income farmers.

1. Increasing agricultural production including venturing into new sources of growth with increased private sector participation
2. Expanding agro-based processing activities and product diversification
3. Strengthening marketing and global networking
4. Enhancing incomes of smallholders, farmers and fishermen
5. Improving the service delivery system

The first, second and fourth thrusts are elaborated below as they have direct implications on the topic being discussed in this article.

**(i) Increasing agricultural production: rice**

Rice production in the past was capped at a self-sufficiency level of 65-70%. This is because it is more economical to import rice from neighbouring countries where the cost of production is lower than that in Malaysia. Moreover, there is strong local demand for imported rice. Malaysia imports 480,000 tonnes of rice annually from Thailand, which accounts for 60% of total rice imports. However, it is not in the long-term interest of the country's food security to be dependent on external sourcing for food, especially staple foods like rice. In line with the Ninth Malaysia Plan, which commenced in 2006 before the recent surge in the price of rice, the production of rice in Malaysia was already projected for a substantial increase toward meeting increasing domestic demand. Hence, the domestic supply of rice is targeted to achieve self-sufficiency level of 90% by 2010 (Table 1).

Besides rice, several food commodities important to the Malaysian diet are also targeted for increased growth (Table 2). During the Eighth Malaysia Plan (2000-2005), rice production had out-performed the projected annual growth rate of 0.2%, by increasing at an average rate of 2.3% per annum instead. This achievement was attributed to the on-going effort to consolidate rice smallholdings through the group farming concept, and the implementation of the ten tonnes/hectare project. Adoption of Good Agriculture Practices and better farming management are said to also contribute to the improvement. Meanwhile, under the Ninth Malaysia Plan, rice production is expected to grow at an annual rate of 5.9%, through improvement in efficiency and productivity as well as expansion in

**Table 2:** Production of food commodities, 2000-2010

Food item	Metric tonnes (thousand)	Average annual growth rate (%)	Eighth Malaysia Plan	Ninth Malaysia Plan
		Target	Achieved	Target
Rice	3,202	0.2	2.3	5.9
Fish	2,071	7.2	1.6	5.6
Beef	45	18.0	10.2	9.6
Pork	241	6.6	5.5	2.9
Poultry	1,295	4.7	6.5	5.7
Eggs	600	4.0	2.1	6.3
Milk	68.4	8.9	6.9	10.7
Fruits	2,555.7	3.1	9.8	10.0
Vegetables	1,133.3	0.6	13.8	8.0

Source: Ninth Malaysia Plan (EPU, 2006)

hectare. While the current labour productivity in the agriculture sector is only about 60% that of the manufacturing sector, it is expected to double during the NAP3 period. Efforts to enhance productivity are to be undertaken through the utilization of high yielding clones and improvements in agronomic practices among smallholders, as well as increased mechanization.

The above plan for increasing rice production has been unsettled by the recent sudden surge in the price of rice, triggering the Malaysian government to announce a series of measures that include:

- Setting up of a dedicated fund amounting to RM4 billion (US\$1.25 billion) to increase production of food including fruits and vegetables
- Targeting for 100% self-sufficiency in rice, by growing rice on a massive scale in Sarawak, making the state the new “rice bowl” of the country
- Studying the feasibility of subsidizing local rice

With the price of Thai rice tripling in the last 18 months, consumers are expected to switch to local rice, whose price has so far remained stable. Local rice is a relatively cheaper grade of Malaysian rice that contains varying percentages of broken rice grain, as indicated on the label (e.g. Super 15%). With increased consumer demand, it is reported that an additional 9,000 metric tonnes of Super 15% will be produced each month that is, in addition to the 11,000 metric tonnes marketed. While the Malaysian government currently does not subsidize local rice, it provides free fertilizers and other concessions to farmers to ensure the price remains under control. However, these concessions are high, exceeding RM900 million (US\$281 million) in 2007, and plans are afoot to re-channel the subsidies on petrol and diesel to food subsidies. Malaysia has one of Asia’s lowest petrol and diesel prices, fixing them well below market rates and paying subsidies to fuel retailers to compensate them (current petrol costs about 85 US cents a litre),. However, the cost of fuel subsidies come at very high costs to the country, about RM40 billion (US\$13 billion) in 2007.

#### **(ii) Expanding agro-based processing activities and product diversification**

The major focus of agro-based development is on increasing utilization of agricultural produce leading to the production of high value-added products. The private sector is encouraged to invest in agro-based processing activities, and with this

respect, farmers and fishermen associations and cooperatives are included. Focus is on increasing the participation of individual farmers and fishermen in agro-based processing activities (EPU, 2006). The agricultural products targeted for increased downstream processing into industrial commodities are rubber, cocoa, pepper, palm oil and saw logs. Almost 40% of rubber, 20% of pepper, 10% of palm oil, and 75% saw logs produced are targeted for processing into end-products by 2010.

Taking pepper as an example, the move is to transform the pepper industry from production of raw pepper to that of specialty and valued-added pepper products for export. This is a strategy to enhance its competitiveness against low-cost producers in the global market. The Malaysian Pepper Board calls pepper a “new industrial crop, that has great potential to be explored such as for pharmaceutical applications” (MIDA, 2007). Towards this end, in 2006 the world’s largest grinding plant was set up in Sarawak, the state that produces 95% of the country’s pepper. Meanwhile, as part of the strategic plan to revitalize the industry, the pepper cluster farming concept is implemented actively and with this farming method, the country’s annual production is expected to increase from the current 20,000 tonnes to 30,000 tonnes by 2010. In line with the intention of the government in developing agro-based products, it is important that smallholders and cooperatives also benefit from the transformation of food crops into industrial end-products.

In relation to food products diversification efforts, the government is targeting the market for convenience and functional foods. This strategy is attributed to changing consumption and preference patterns in response to increased health awareness. In this regard, there will be increased promotion of ready-to-use seafood, livestock products, fruit and vegetable-based convenience food (EPU, 2006). The government’s contributions include facilitating the application of modern processing technologies, innovative packaging and branding to meet varying consumer preferences and market demand at home and abroad. Again, it is emphasized that the small and medium industry should not be marginalized in this effort to diversify utilization of food products.

#### **(iii) Enhancing incomes of smallholders, farmers and fishermen**

Several measures have been identified to increase incomes of smallholders and fishermen mainly through productivity improvements. These include:

1. Encouraging more rice farmers to participate in mini-estates and group farming activities; an

estimated 25,000 rice farmers are expected to benefit from this program, with their average income increasing from RM3,900 to RM7,800 per hectare per year.

2. Replanting programs of rubber and oil palm smallholdings using high yielding clones
3. Applying mini-estate and group farming concepts to smallholdings
4. Incorporating mixed farming including integration of livestock in plantations, aquaculture and off-farm economic activities
5. Providing financial assistance to rehabilitate cocoa, pepper and sago smallholdings in the states of Sabah and Sarawak
6. Improving the quality of life of coastal fishermen through socioeconomic programs
7. Enhancing the capabilities of coastal fishermen through upgrading of boats, engines and fishing equipment
8. Setting up of a special program targeting poor households in the agriculture sector with the primary aim of diversifying their sources of incomes

The eighth item is directly aimed at improving incomes of small food producers such as farmers, livestock breeders, and fishermen. It is estimated that some 70,000 poor families will benefit from this special scheme (EPU, 2006). Toward this end, it is crucial to establish appropriate mechanisms to monitor the effectiveness of these programs in order to ensure that the benefits reach the target groups.

## **CONCLUDING REMARKS**

A multitude of factors including population growth, climate change, use of arable land for biofuel crops, and high energy prices, have progressively transformed the costs of food production and consumption. These macro dimensions have converged, culminating in the current dramatic increase in food prices. The failure to prevent the sharp rises in energy and food prices has been blamed to some extent on the current international setup for agriculture, food and nutrition (von Braun, 2008b). The author called for a new international architecture for governance of agriculture and food through engaging new players in the global food system namely, the private sector, non-government organizations and large foundations.

As the impact of price increases affect most adversely the poor and food insecure households, it is thus imperative for countries to expand their safety nets, and address the local micro dimensions

contributing to the spiraling cost of living in their own countries. The various socio-economic programs in Malaysia that have been put in place over the years may have to some extent, so far cushioned the severity of the dramatic hikes in food prices. These socio-economic programs include improved facilities, services and opportunities, especially in rural areas, for maternal and child health, family planning, education, agriculture extension, and community nutrition programs. Nonetheless, the escalation of prices of a wide range of goods and services in recent years has affected not only the lifestyle but also the quality of life of many, especially households in the middle income and lower strata.

While the Ninth Malaysia plan may be commended to be far-sighted with respect to its strategies aimed at uplifting the welfare and earning capability of the low-income group through agriculture and other sectors, unfortunately these plans take time to realize. In the meantime, however, the economic hardship faced by the people calls for timely action, as rapid increases in prices of food can fuel emotional and political discontent among the masses. Populist interventions such as cash rebates and food coupons are some short-term measures taken to ameliorate the plight of the needy.

In the long term, the viable road ahead is for increased mobilization of resources for food production in the country, through improved technologies in boosting crop yields, while at the same time safeguarding the environment. Food production may be undertaken on a large scale, as exemplified by the proposal of a multi-national corporate organization to diversify into rice production in Sarawak. Initially, 7,000 hectares will be cultivated using Chinese agriculture technology, which is expected to produce higher yields than the present production average. Food production also can take the form of home gardens by households, schools, and welfare homes for disadvantaged groups. These efforts whether modest and ambitious, may contribute toward reducing the country's enormous dependence on imported foods. Efforts to enhance food security at the national and household levels are deserving of support from all sectors.

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