

# **Policies and Economic Development of Rice Production in Malaysia**

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## **INTRODUCTION**

Rice is a staple food and a strategic industry in Malaysia. Due to its importance, rice industry has received special attention from the government. Besides its social-economic-political significance, such as poverty eradication, rice was recently placed as the most important food crop for ensuring the nation's food security.

The annual growth rate of rice production from year 2000 to 2013 was about 1.47%. Rice production increased from 2.14MT in 2000 to 2.63 tons in 2013. Despite fluctuated in the harvested area from 698,702 hectares to 688,207 hectares during the 1990-2013 period, the average annual yield has consistently increased from 3.064 tons/hectare in 2000 to 3.820 tons/hectare in 2013. Thus, the self-sufficiency level (SSL) of rice has increased from 70% in 2000 to 73.5% in 2013. The annual growth rate was around 0.26%. However, the import of rice has considerably increased from 596,200 tons valued at RM698.3 million in 2000 to 876,100 tons valued at RM1.5 billion in 2013, due to increase in total consumption which resulted from an increase in population.

To ensure that rice supply is sufficient for the nation, the government has formulated various policies that will advance this industry. The policy formulation and economic development in this country has always been revised depending on the current local situation and also that of the world rice market. For example, instability in the rice prices of world market such as during the 1970s, 1980s and 2008 food crisis had a negative impact to the industry. Thus, the government has to look at the impact of this situation to paddy farmers in terms of increasing in cost of production and the possibility of decrease in their income. This paper highlights the government policies and their impact on farmers and rice production in Malaysia.

### **Policies on rice**

Many policies were introduced by the government for the development of the rice industry in Malaysia. The paddy and rice development policies started before the independence era and continued after independence in 1957. During the pre-independence, there were no significant support programs especially in terms of infrastructure development and research and development (R&D). During the colonial era, there were some policies introduced as a measure to enhance the industry such as the formation of rice cultivation committee, program to restrict labor or farmers left out from rice cultivation and the introduction of food security measures. However, this policy failed to increase the production of rice where the SSL below was stagnated below 50% (Ariffin *et al.*, 2004).

After the independence era, the SSL for Peninsular Malaysia increased to 54% because of the introduction of new supportive programs for farmers and industry as a whole. The significant cornerstone of the paddy rice industry was the construction of the Muda Irrigation scheme in the First Malaysia Plan (1966-70). The large scale public investment has enabled

double cropping and thus increases the rice production. Since then, several other irrigation schemes were constructed in other states. The rice production policy was then supported by the R&D policy where MARDI was established in 1969. Since its establishment, MARDI has had produced several high-yield varieties (HYV) to boost rice production. To facilitate the technology transfer and adoption among paddy farmers, agriculture extension was widely emphasized and undertaken.

The objectives of the rice policy during that era were as follows:

- i. To ensure food security for the nation
- ii. To raise farm income and productivity
- iii. To ensure food supply for consumers at reasonable prices
- iv. To reduce the foreign exchange resulted from importation.

The government's effort to enhance the rice industry continued through formal policy which is known as the National Agricultural Policy (NAP). The NAPs was formulated to address the agricultural issues including issues in paddy and rice industry. The NAP I was introduced in 1984 and ended in 1991, the NAP II period was from 1992-2010, and the NAP III was implemented in the period from 1998-2010. Due to the importance of the development of food sector and enhancement food security, the NAP was replaced with the National Agro-food Policy (NAFP) which to be effective from 2011 to 2020. The NAP I and NAP II were developed for the overall agricultural sector where the objectives were to maximize income from agriculture sector through resource utilization and to increase agricultural productivity. Efforts were further increased to improve the efficiency and competitiveness of the paddy industry. Meanwhile, more focus was given to issues and problems in paddy and rice industry in the Third National Agricultural Policy (NAP III). The development of eight granary areas as the designated national paddy production hubs gave significant impact in increasing rice productivity.

Similarly, strategies to enhance the efficiency and productivity of paddy yield and cropping intensity had also contributed to increase in rice production. The National Agro-food Policy also focuses on strengthening the economic aspects especially in the areas of research and development (R&D), extension and advisory services, irrigation and drainage facilities, credit, marketing and farmer's institutions. Another strategy is sourcing of rice from offshore investments especially in low cost rice producing countries and promotion of sustainable development of the rice industry by adopting environmentally friendly farm practices.

Further strategies for paddy and rice industries are also mentioned in National Agro-food Policy (NAFP, 2011-2020). The objective of NAFP was to strengthen the paddy and rice industry through six strategies along its value chains. These strategies are listed below:

1. To increase productivity and rice quality
2. To increase efficiency mechanization and automation
3. Intensifying the use of by-products from rice
4. Strengthening rice stockpile management
5. Restructuring the incentive and subsidy for rice
6. Strengthening the institutional management of paddy and rice.

These strategies are meant to be implemented in both granary and non-granary areas. The current government policies are undertaken through production incentives, development of

irrigation infrastructure, research and development and mechanization programs and projects. In terms of production incentives, government has introduced Guaranteed Minimum Price (GMP), paddy price subsidy and input subsidy.

### **Guaranteed Minimum Price (GMP)**

This policy is implemented to ensure paddy farmers receive a reasonable minimum farm income and at the same time reduce poverty incidences. The price guaranteed by the government is to ensure paddy price should remain above the GMP or at GMP level as the worst-case scenario. The first GMP price was introduced in 1949 at the rate of RM248 per ton. However, recently the government has revised this policy and increased the GMP rate to RM1, 200.00 per ton in 2014. The revision was carried out due to partly the increase in input prices and labor costs.

### **Price subsidy**

Meanwhile, price subsidy is a price support to increase income of paddy farmers. The program was introduced in 1980, at the rate of RM165 per ton. This rate was then revised and increased to RM248.10 per ton in 1990 and still in effective until now. This price subsidy was implemented to increase market price of paddy for increasing farmer's income and improve the farmer's livelihood. The price support gives more impact to farmers' income and quality of live.

### **Input subsidies**

Malaysia is a high-cost producer of rice and for this reason, government give input subsidies to paddy farmers. In the year 2014, the average cost of production in the granary area is about RM3, 024.00 per hectare. Input subsidies which are provided by the government to paddy farmers in Malaysia were divided into two categories such as fertilizer and chemical inputs. The objective of this incentive is to reduce the increasing costs of production, particularly factor costs. The fertilizer subsidy scheme was implemented since 1979. Through this scheme, farmers receive about 100 kg/ha or 240 kg/ha compound fertilizer and 40 kg/ha or 80kg/ha urea fertilizer per hectare of cultivated rice. Besides to reduce the cost of production, this incentive is also meant to encourage farmers to use fertilizers properly according to the recommendation by government institutions such as the Department of Agriculture or MARDI. Farmers also receive a coupon for chemical inputs valued at RM200 per hectare for buying weeds and pest control.

Through this policy formulation, Malaysia has taken steps to modernize rice farming in order to address the problems faced by the rice industry. The impacts of government intervention on the rice sectors are multiple. The major changes were the improvement of infrastructures, enlargement of land parcels by land consolidation, reorganization of the size and shape of individual lots, introduction of mechanization, and subsidies. After three decades, paddy production increased from 1.564 million ton in 1983 to 2.627 million ton in 2013, an increase of 68%. Besides that, paddy farmers were the most impactful from government interventions through increase in income and out of poverty level.

## Conclusion

Malaysia's paddy and rice industry has always been given special attention by the government from pre-independence to post-independence times for various purposes such as to alleviate poverty and improve the SSL. The rice industry in Malaysia has improved in terms of yield and SSL after many efforts are taken by the government. Paddy farmers are the most people who benefited by all these incentives and economic development in paddy and rice industries. Income and status of living of paddy farmers were increased since incentives and subsidies are introduced. The additional focus of today's policies toward paddy rice industry is on food security objective. Various incentives have been introduced with the aim to develop and strengthen the country's rice industry. In addition, the provision of incentives is also to protect the paddy farmers in particular, and the industry in general. The solid efforts by the government in the rice industry are to boost the rice industry and to achieve the 100% SSL by 2020.

## References

- Anon, (1984). National Agricultural Policy, (1984-1991), Kuala Lumpur: Government Printers.
- Anon, (1992). National Agricultural Policy, (1992-2010), Kuala Lumpur: Ministry of Agriculture.
- Anon, (1998). The Third Agricultural Policy (1998 – 2010). Kuala Lumpur: Ministry of Agriculture.
- Anon, (2011). National Agro-food Policy, 2011-2020. Ministry of Agriculture.
- Anon, (2013). Paddy Statistics of Malaysia. Department of Agriculture, Peninsular Malaysia.
- Ariffin, T., *et al.*, (2004). The Review of the Paddy and Rice Industries in Malaysia, report submitted to Economic Planning Unit, Prime Minister's Department, Serdang: Marditech Corporation Sdn. Bhd.

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