Strategies to Strengthen Livestock Industry in Malaysia

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Introduction

Livestock is a very important industry as it supplies the largest source of protein for Malaysian population. The ex-farm value for this industry was RM14.1 billion in 2013, of which 76% were contributed by poultry meat. In general, the livestock production is still inadequate to meet the demand, following the increase in population and consumption. For example, Malaysia produces 51,000 metric tons of (MT) beef, while the demand was more than 201,000 MT in 2013. The demand for mutton was around 28,000 MT, while the production was only 4,000 MT in the same year. On the other hand, the production of poultry, swine and eggs has exceeded the local demand. Hence, Malaysia can export these commodities, especially to its traditional market, Singapore.

The government has formulated various policies and strategies to improve the livestock industry, such as the National Agricultural Policy and the National Agro Food Policy. Despite many efforts and initiatives undertaken by the government, the production of livestock products still cannot meet the demand of the population. The development of commodities beef like and mutton (ruminants) was quite slow compared to non-ruminants such as pigs and poultry since 1960s to 2010. Malaysia is still highly dependent on the import of livestock products, especially beef and mutton, from various countries, such as Australia, New Zealand, India and Thailand. Imports of beef and mutton are increasing every year, and as a result; it also increases the trade imbalance of food products.

This paper discusses the scenario of the livestock industry in Malaysia. Specifically, it discusses issues and challenges faced by the industry and highlights some strategies formulated by the Malaysian government to enhance this industry. This paper hopes to provide some insights on the livestock industry in Malaysia.

Livestock Industry

In general, livestock is divided into two categories, namely ruminants and non-ruminants.

Ruminants
Livestock, which are included in the category of ruminants are cattle, sheep, buffalo, goat and deer. Ruminants sub-sector are in small-scale and generally produced by small-holder farmers. The industry is growing rather slowly in the 1996-2002 period, but began to grow rapidly in 2005-2012 period due to the efforts and initiatives of the government. However, the self sufficiency level for ruminants is still less than 30% because of higher demand than
the supply by local producers. Malaysia needs to increase livestock production to meet at least 50% of the local market needs.

Non-ruminants
Livestock that are included in the category of non-ruminants are chicken, duck, pig and eggs. Non-ruminant industry is very progressive, large-scale production and its ex-farm or the value farm received contributed more than 80% of the livestock industry in Malaysia. Poultry meat and eggs dominate the local non-ruminants production and reached more than 100% self-sufficiency, followed by swine, which is consumed by the non-Muslim population. Poultry meat production has increased from 1.30 million MT in 2010 to 1.5 million MT in 2013, with a growth rate of 12.5% per annum. Pork production on the other hand, has decreased from 234,000 MT to 217,000 MT in the same period.

The production of meat and meat-based products increases every year. Meat production increased from 1.6 million MT in 2010 and projected to achieve 2.1 million MT in 2020 with a growth of 2.7% per annum. Egg production is also expected to increase from 540,000 MT in 2010 to 773,000 MT in 2020 with a growth of 3.6% per annum (National Agro Food Policy).

Figure 1 shows the trends of the production of livestock products in Malaysia from 2005 to 2014. Most of all product output has increased during that period. The beef products has increased by around 78% (from 29,000 MT in 2005 to 52,000 MT in 2014), mutton (213%-from 1,400 MT to 4,500 MT), poultry meat (53% - (from 980,000 MT to 1,500,000 MT) and eggs 62% (443 million MT to 718 million MT). While pork production decreased by 1% for the same period (from 218,000 MT to 215,000 MT).

![Figure 1. Trends of livestock product output in Malaysia (2005-2014)](image)

Source: Malaysia Department of Veterinary Services
**Consumption of livestock products**

Demand for beef is increasing every year following the increase of population and consumption per capita. The consumption is expected to increase from 1.4 million MT in 2010 to 1.8 million MT in 2020 with a growth of 2.4% per annum. The demand for eggs also rose by 3.3% yearly from 468,000 MT to 649,000 MT.

Figure 2 shows the trend of consumption for livestock products from 2005 to 2014. The consumption of beef has increased by 44% (from 146,000 MT to 210,000 MT), 46% for eggs, (from 408,000 MT to 595,000 MT) and only 4% for pork (from 221,000 MT to 230,000 MT). The consumption of mutton and poultry meat increases with a bigger percentage, which is 106% for mutton (from 17,000 MT to 35,000 MT) and 82% for poultry meat (from 786,000 MT to 1,427 thousands MT).

![Figure 2. Trends of livestock consumption in Malaysia (2005-2014)](source)

**Livestock self sufficiency level**

In general, self-sufficiency level (SSL) can be defined as the ability of someone to supply his own needs without any aid from others. In the context of the livestock industry in Malaysia, SSL refers to the ability of the local production to supply the demand by localized consumers, and it is measured by percentage. For example, if the local production of beef is only able to supply about 30% of the local consumption, the SSL for beef production is 30%. If the percentage exceeds 100%, this shows the local production exceeds the local consumption.

The self-sufficiency level (SSL) of beef, mutton and eggs has increased from 2005 to 2014, whilst it has decreased for poultry meat and pork (Figure 3). The SSL for mutton has increased from 9% to 13%, while the SSL for beef has increased from 21% to 25% of the same period. At the same time, the SSL for eggs has increased from 109% to 121%. The SSL of poultry meat had decreased from 125% to 105%, and SSL for pork had decreased from 99% to 94% of the same period. The SSL percentages in excess of 100% for poultry meat and
egg production showed the high competitiveness of these commodities. This allows the export of these products to traditional markets, Singapore.

Figure 3. Trends of livestock product self-sufficiency level in Malaysia (2005-2014)
Source: Malaysia Department of Veterinary Services

Issues and challenges of livestock industry

Issues and challenges faced by the industry are the lack of quality breeds, high feed prices and lack of arable land for grazing.

- Lack of quality breeds
  In general, the local cattle and goats are small and produce low quality meat. The low production of meat is related to the productivity per unit production and efficiency level in the farm production operation. The major breeds of beef cattle in Malaysia are Kedah-Kelantan (KK), Brahman Crosses and the European-KK-crossbreeds. The KK cattle is the most important indigenous cattle in Malaysia. The cattle is small-sized breed ranging in matured weight of 300 kg to 312 kg for male, and from 219 to 240 for female. In comparison, the mature weight of Brahman cattle from India is between 800 and 1100 kg.

- Higher cost of animal feeds
  The main issue that prevented the industry from growing is the cost of animal feeds. In general, the cost of animal feeds accounts for more than 25% of the total cost of production. The cost of animal feeds that contribute to the total cost of production is between 5.4% and 19.3% for cattle, 22.9% - 31.6% for goats and 58.9% - 71.2% for poultry. The main factor that contributed to the higher cost of animal feed is the raw materials, which is imported from other countries. The main ingredient of animal feed is corn which is imported from Thailand Argentina and Brazil.
Lack of land area
Grazing reserves are land officially allocated by the government for use by farmers to rear ruminants, such as cattle, buffalo and goat. Natural grassland in Malaysia has generally low productivity resulting to very poor carrying capacity. The competition in using land with other industries and this has resulted to lack of land area for the livestock industry. At the same time, farmers prefer to use their land for more productive agricultural activities such as palm oil, fruits and vegetable cultivation. In certain cases, farmers also change their livestock activities from ruminant to poultry meat production that promise a better return on investment.

Policies that support livestock industry
Policies that addresses the way forward of livestock industry is formulated in the Third National Agriculture Policy (1984-2010) and the National Agro-Food Policy (2011 - 2020). This policy was designed specifically to ensure the industry remains significant as one of the important sectors in its National economic growth.

Among the strategies to develop the livestock industry as well as address the issues and challenges are as follow:

- Increase the efficiency of the ruminants industry.
  Through this strategy, the focus is to increase the efficiency of meat production and become environmentally friendly. Efforts also focus on increasing productive ruminant populations through effective breeding services. Improve quality of local breeds through public-private partnership research.

- Increase the production of animal feeds.
  Local animal feed production is needed to meet the growing demand from the livestock industry. The government has provided incentives to encourage farmers and the private sector to produce fodder for ruminants and non-ruminants. At the same time, MARDI also strengthened the R&D on animal feed production by using local raw materials and agricultural by-products. These animal feed formulations should be of high quality while maintaining its competitive prices.

- Toward a free-diseases nation
  Government efforts are toward foot and mouth diseases (FMD) free nation through vaccine programs. Nine zones have been recognized to be Newcastle disease free and five quarantine area for birds and pigs have also been established in five production zones.
CONCLUSION

Livestock is still an important industry in the agricultural sector in Malaysia despite of its long time non-resolved issues and challenges. This industry still needs government interventions, especially in the R&D activities because it requires a big investment. Issues and challenges in this industry need extensive intervention by the government to ensure all parties are involved and in accordance with a predetermined strategy

REFERENCES


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