



Competitive Ability and Potentiality for Business Operation of Pon Yang Khram Livestock Cooperative Limited

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Abstract Pon Yang Khram Livestock Cooperative Limited (PYK Coop) is a business organisation located in Sakon Nakhon Province, Thailand. PYK Coop has an essential economic role in assisting the farmer and the community by creating a fair income distribution. The present study aimed to analyse the competitive ability and potentiality for business operation of PYK Coop and to establish strategic planning to improve PYK Coop business that has an impact on social and community. Porter's five forces of competitive analysis were applied by using primary and secondary data collecting from an in-depth interview with 30 cooperative stakeholders and available annual PYK production reports. The results reveal that PYK Coop has somewhat highly competitive ability and potentiality for business operation. PYK Coop has strength on the bargaining power of suppliers and buyers. Whereas, their weakness is on the underlying technology in the cattle business. PYK Coop has faced with the threat from the external factor on free trade agreements. Overall, the strategic planning suggested for PYK Coop is a co-planning between all stakeholders in the whole supply chain to identify target customers and to create a product differentiate. The suggested strategies will help to improve the competitive ability and potentiality for the business operation of PYK Coop.

Keywords five forces of competitive analysis, Pon Yang Khram Livestock Cooperative Limited, fattening cattle, Thailand

INTRODUCTION

In Thailand, the cooperative is a crucial business organisation that involves all shareholders starting from growing, processing, retailing/selling and till consuming. If the cooperative has a competitive ability and potentiality for business operation, they will be the vital driving force for economic growth in Thailand or other developing or under-developed countries. This is because the cooperative provides the members with considering incomes through a reasonable price and fair trading. The organisational structure of cooperatives is based on the self-help, self-responsibility, democracy, equality, equity and solidarity. This makes the cooperative a vital tool to develop the country in the areas of economic, social and political.

Pon Yang Khram Livestock Cooperative Limited (PYK Coop), was established in 1980, located in Sakon Nakhon province, North-eastern of Thailand. It aims to produce good quality beef products to the market. In 2017, PYK Coop consisted of 6,400 members, who are mainly from Sakon Nakhon province and some come from the neighbourhood, Nakhon Phanom province. Based on available data from 2013-2017, the number of fattening cattle in PYK Coop is on the rising trend; however, there is a decline in the number of fattening cattle being slaughtered (Fig. 1). In 2017, there were approximately 6,500 from 11,800 fattening cattle being slaughtered, which was only accounted for 50% of the total fattening cattle. As a consequent, the members of PYK Coop have been facing financial problem due to an increase in feeding expenses as they must prolong the feeding periods costing as high as 125.30 million Thai Baht. This reflects the lack of competitive ability and potentiality for the business operation of PYK Coop that has an impact on the whole community. The current study aimed to analyze the competitive ability and potentiality for business

operation of PYK Coop and to establish strategic planning to improve PYK Coop business that has an impact on social and community.

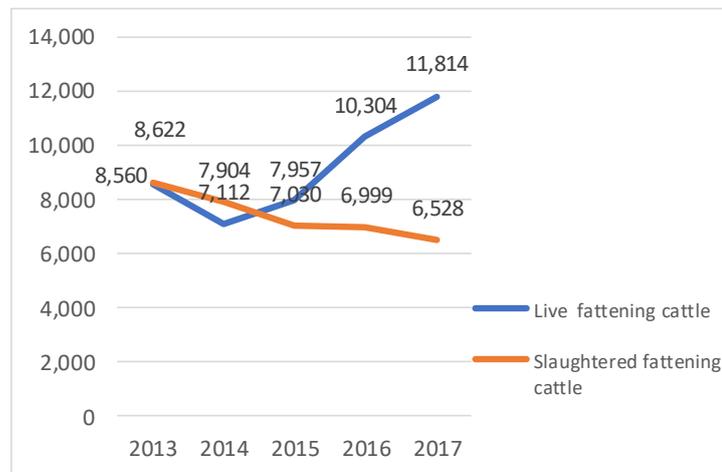


Fig. 1 The number of live and slaughtered fattening cattle at PYK Coop

Source: PYK Coop Annual Report (2018)

METHODOLOGY

Evaluation of Conceptual Framework

Porter's five forces of competitive analysis (1979) was applied to assess the competitive ability and potentiality for the business operation of the cooperative. The model describes five forces that determine the competitive intensity and attractiveness of the markets. The five forces are as follows.

1. *Competitive rivalry*. The rivalry among existing competitors or the industry concentration can be measured by the number of firms and their size. There are three factors used as the measurement: competitive structure or market structure, demand conditions and industry exit barriers.
2. *A threat of new entry*. The risk of new entrants in the industry is the barrier protecting the business from the new competitors. The barrier to entry arises from many sources such as brand loyalty, absolutely cost advantage, economies of scale, switch cost or government regulation.
3. *The threat of substitution*. The risk of substitute products, the substitute products are the competing products that meet the market or consumer needs in term of the quantity, price, and change of consumer attitude and behaviour.
4. *Supplier power*. The bargaining power of suppliers depends on the degree of monopoly or substitution of the inputs, as well as the quantity of purchased raw materials.
5. *Buyer power*. The bargaining power of buyers depends on the number and size of consumers. The customer has high bargaining power when they are a few buyers with significant market share.

Besides Porter's five forces, the present study included another five factors to Porter's five forces. These five factors were the macro environmental factors consisting of macroeconomic, technological, social, political and legal, and demographics. The five macro environmental factors are summarised as follows (Piputsitee, 2009; Jaturongkakul, 2004).

1. The macroeconomic environment is the most important and influential factor to the business operation of the cooperative, including economic growth rate, interest rate, foreign exchange rate, and inflation rate.
2. A technological environment can be an opportunity or a threat. The threat from a new competitor is the most influential factor that directly relates to the technological environment.
3. Social environment can be classified into various aspects such as people's attitude, lifestyle or health issues.

4. Politic and legal environment can be an opportunity or a threat depending on the change in rule or regulation in legal issues.
5. Demographic environment is a change in population size. Changing in population size is also affected by an opportunity or a threat of business operation.

Research Methodology

The present study was qualitative research that used primary and secondary data. The primary data involves in-depth interviews with staff of PYK coop, experts and PYK coop members with a total of 30 stakeholders. The secondary data were collected from available research papers, operation report and the financial statements of the PYK coop. All data were descriptively analysed using the extended Porter's five forces. The criteria used to evaluate the competitive ability and potentiality for business operation consists of five dimensions: the intensity of competitive rivalry, the threats of the new entry, the threats of substitute products, the bargaining power of suppliers and customers.

RESULTS AND DISCUSSION

The competitive ability and potentiality for business operation of PYK Coop were assessed using the extended Porter's five forces model. Two types of data set were the primary and secondary data obtaining from in-depth interviews with 30 PYK Coop stakeholders and the annual PYK Coop performance report, respectively. The results obtained from the extended Porter's five forces model are as follows.

1. The Intensity of Competitive Rivalry

Based on the data reported by the Department of Cooperative (2017), there were in a total of 94 fattening cattle cooperatives in Thailand. Among them, 87 out of 94 (92.5%) were operated solely on selling live fattening cattle. Whereas the other seven cooperatives (7.5%) had fattening cattle as well as a slaughterhouse, so they had more variety of beef products such as retail and wholesale cuts. PYK Coop was one of these seven cooperatives, which was capable of beef production and marketing.

2. The Threat of New entry Competitors

The ability and potentiality of PYK Coop to protect themselves from the threat of new entry were assessed. PYK Coop was registered under the Thai Cooperatives Act 1999, meaning to say that they could raise the funding as much as they could do. The fundraising under the Act could benefit them from the threat of the new entry in case the new entry had limited funding, and so-called an investment limitation.

Further analysis showed that PYK Coop has been operated from 1980 and they have gain knowledge and know-how on farming technology and fattening feed. These know-how technologies appeared to be rather simple. So, other competitors could be easily implemented similar technology and could produce similar marbled beef quality.

Interestingly, it was observed that PYK Coop had an advantage on the investment limitation, but the cooperative could not wholly exclude the threat of new entry competitors. It can be explained that PYK Coop used simple farming technology and simple feeding formulae for fattening cattle that are easy to mimic. Hence, there is no significant difference in meat quality of PYK when compared with new competitors.

3. The Threats of Substitute Products

Overall, PYK Coop only had a moderate capability to prevent the threat of product substitution. Because of similarity in feed formulae used for fattening cattle, there were not much different in the consequent marbled beef qualities as compared with other cooperatives. The major marbled beef produced by PYK were normally in grade 3.0-3.5, which were above the average quality but not yet in the high-quality marbled beef. Looking at the medium-high quality beef market in Thailand, there was other marbled beef with a softer texture and lower fat content that could substitute the PYK marbled beef products. These substituted marbled kinds of beef were obtained from cattle fed in a pasture and natural grassland and were cured to soften the beef after slaughtering. Furthermore, these substituted products could meet consumers' demands and requirements on healthy food, which is the trend of the current market (Mekhora and Theingtham, 2012; Kittikarnkul et al., 2016). However, PYK marbled beef products were still considered superior as compared with other marbled beef in the northeast region.

4. The Bargaining Power of Suppliers

The bargaining power of suppliers can be considered in two levels, which are 1) at the cooperative and farmer level and 2) at the cooperative and input supplier level. At the cooperative and farmer level, the cooperative set the price of the live fattening cattle, which was 125 Thai Baht/kg. Furthermore, the farmers had to buy the feed, molasses and animal medicine as well as receiving the animal medicinal services from the cooperative. All the prices were set by the cooperative. In this case, the bargaining power was in the hand of the cooperative. At the cooperative and input supplier level, the cooperative signed a contract with the feed mill industry with an agreement to produce the cooperative with the feed formulae for fattening cattle that meet the agreeing feed standards and the required amounts and price. In other word, the cooperative ordered a big amount of feed, so the bargaining power, in this case, was in the hand of the cooperative.

5. The Bargaining Power of Buyers

It has been suggested that consumers paid more attention to quality and sensory properties of beef (Boleman et al.,1997). The beef tenderness was the most influential property on the consumers' decision to buy the product and the consumers were willing to pay more for the improved tenderness. It is possible, therefore, that PYK marbled beef products could fit in the middle-income market. The middle-income market was a big market sector in Thailand amounting 42% of the total market sectors (Mekhora and Theingtham, 2012; Kittikarnkul et al., 2016). It is therefore likely that there was a high demand for premium beef products, so the PYK Coop had more bargaining power than the buyer. Regarding the PYK's annual report, 55.24% of their products were sold in wholesale cuts, the rest 44.76% were the retail cuts. When there was a big order, which the amount and price was deal in advance. There are, however, other possible explanations, the bargaining power was more on the buyers (customers) side. Overall, PYK Coop had moderate bargaining power with the buyers.

6. The Impact of An Environmental Factor

Based on the situation of marbled beef market in Thailand during 2013-2017, there was an increasing trend in imported live cattle and retail cuts from aboard. In 2017, the number of imported live cattle and retail cuts increased by 19.34%. At the same time, the number of exported live cattle and retail cuts decreased by 72.67%. The declined in the exports was due to the neighbourhood countries imported more beef products from Australia. As a consequence, the number of beef products in Thailand were higher than the domestic's demands. These mays impact the market share of PYK Coop marbled beef products in the future.

From the study of Sub-committee on Agricultural Productivity Examination, The Commission for Agriculture and Cooperatives, National Legislative Assembly (Thailand) (2017), the results suggested that the Thai fattening cattle business should improve their productivity, product quality

and food safety, value-added products, marketing research, as well as improving the potentiality of all personnel or organizations along the whole food chain. As a consequence, three national strategic plans were launched including maintaining the domestic markets, increasing cattle population and feeding management. These strategies support the operation of the cooperative for a successful business.

The key production technology for fattening cattle is the feeding technology because the concentrate feed is a significant production cost for fattening cattle. It was found that the farmer had to shoulder the concentrate feed cost about 10,347.22 Baht/cattle/year. Hence, each fattening cattle cooperative or community enterprise had developed their own feeding formulae to reduce the feeding cost, increasing competitive opportunity on feeding price with PYK Coop.

Overall, the important external environmental factors are the legal environment and the macroeconomic factor from the Thai-Australian Free Trade Agreement (reducing cattle and products tax to 0% as of 2020). All of the environmental factors have a direct impact on stakeholders in the Thai beef industry. Especially at the cooperative producer level, they need effective management on production, processing and distribution to improve their competitive ability and potentiality for business operation.

7. Competitive Ability and Potentiality for Business Operation of Cooperative

Fig. 2 shows the competitive ability and potentiality for the business operation of PYK Coop analyzed by using Peter’s five forces. The horizontal axis is the potential level of cooperative operation. The high score means high potential. The vertical axis is the ability to defend against various factors, the high score means the high potential to defend the treat from competitive factors. The circle size is the degree of the competitive impact on the PYK Coop operation. This graph can divide to 4-channel diagram, the top-right channel shows that the cooperative had high operation potential and defence potential from competitive factors. In the opposite, the bottom-left channel shows that the cooperative had low operation potential and defence potential from competitive factors.

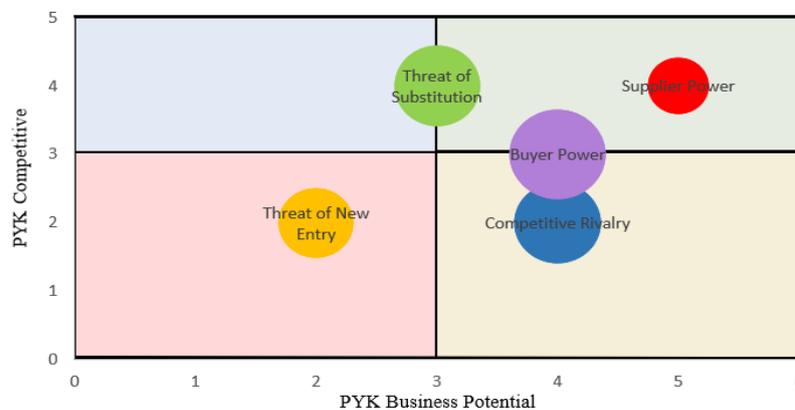


Fig. 2 The competitive ability and potentiality for business operation of Pon Yang Khrum Livestock Cooperative Limited

When assessing the business operation of PYK Coop, the strength of PYK Coop operation was the high degree of bargain power to the suppliers, farmer and feed supplier. Furthermore, PYK Coop had the power to negotiate with the consumer and set the price for the products (price maker). PYK Coop is a big fattening cattle cooperative in an oligopoly market that has a few numbers of competitors and high similarity in products. Meat product quality of PYK Coop was a bit higher than other competitors. However, this advantage might not last long as PYK Coop used necessary technology that is easy to mimic. This finding is consistent with that of Bryant and White (2000) who found that there are external and internal factors involved in the cooperative business. It can be classified into three main aspects: the direct impacts, such as cooperative employment or income

generated (1), the indirect impacts, such as changes in income in the community, society or industry (2), and the induced impacts, such as the local community spending that effect to gross province product and gross domestic product (3).

8. Development Strategies to Increase the Competitive Ability and Potentiality for Business Operation

It may be that PYK Coop benefitted from the immediate and essential business strategy. The co-planning strategy between cooperative and suppliers to produce products that meet the marketing demand should be taken into consideration. It may be the case therefore that this strategy will be able to reduce the production costs and the overstock of input and livestock. Therefore, the farmer will benefit from the active production and marketing plan that prevent unnecessary expenses in feeding. The PYK Coop will have to improve their ability and business potential to protect themselves from an external factor such as 0% import tax from Thai-Australian Free Trade Agreement. Besides the co-planning strategy, other valuable strategies that will help PYK Coop to improve their ability and business potential are consisting of

1. It can thus be suggested that PYK Coop should develop a different product or make the product differentiation that meets customers' demand, so that enables identify target customers who have different product demand.
2. It is possible that PYK Coop should make use of the marketing data including market demanding and supplying for decision making in order to improve the supply chain by implementing information technology. It seems that if PYK Coop could implement these strategies, the farmers could entirely benefit from the mentioned strategies. It is; therefore, likely that the farmers in the community or society in Sakhon Nakhon Province could improve their incomes and it could boost local economic growth.

CONCLUSION

The present research aimed to examine the competitive ability and potentiality for the business operation of PYK Coop by using Porter's five forces of competitive analysis. This study has shown that the competitive capacity and potentiality for the business operation of PYK Coop was quite high. The market structure of PYK Coop was the oligopoly with a few competitors in the market. There was a similarity in PYK Coop product with other competitors, but the PYK Coop product was a bit higher in product quality. PYK Coop used simple feeding technology that it is easier for a new entry competitor to mimic. When considering the bargaining power of suppliers and buyers, PYK Coop had all both control over the suppliers and buyers as PYK was the price maker. However, PYK Coop has faced with the threat from the external factor on free trade agreements, reducing the competitiveness of cooperative. The results of this study indicate that the business development strategy for PYK Coop should be introduced. In so doing, the co-planning between all stakeholders in the supply chain, from input suppliers, farmers, cooperative, wholesaler and retailer may be incorporated with a logistic information system. The current data highlight the importance of the strategy in which it will be able to predict the amount of beef production that meets the market demand. To bring about social and community impact, PYK Coop must define marketing strategies by identifying target customers and creating a product differentiate to meet the customers' requirements. When the cooperative has competent management and has a competitive ability and potentiality for business operation, they will improve the well-being of all members in the community or society.

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