

Developing Long Term Relationship In The Malaysian Fresh Milk Supply Chain

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INTRODUCTION

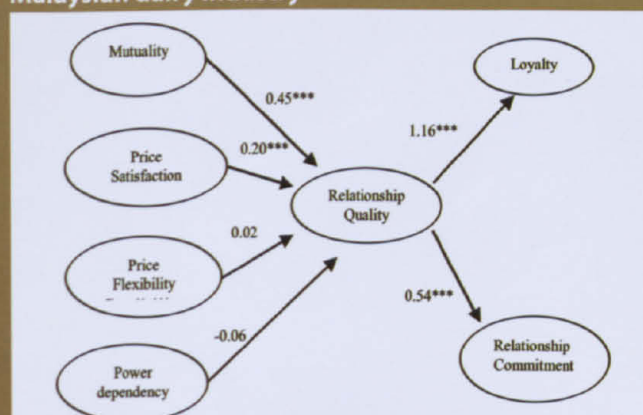
Supply chain management has become increasingly important as a way to enhance competitive strength. That also applies to dairy supply chain management in Malaysia. The dairy industry in Malaysia is projected to expand rapidly due to increasing milk demand resulting from high income and population growth in many countries in Asia Pacific region such as Malaysia which consequently stimulates high milk consumption. Coping with the increasing milk demand, dairy supply chain management needs to be more efficient and coordinated in a more timely fashion.

Fresh milk, stored under controlled temperatures, is marketable within less than 10 days period. It therefore needs to be handled properly and marketed promptly; necessitating the need for both manufacturers and producers to be highly coordinated. Apart from receiving high quality milk, targeting and managing long term relationships with the suppliers reduces supply-related risks such as lack of milk supply, spoiled or adulterated milk. Therefore, building and maintenance of long term relationships (LTR) with the producers will be of enormous benefit to both the dairy farmers and the buyers.

Maintaining closer relationship with the suppliers may stimulate benefits such as improved partner commitment, encourage information sharing and enhance collaborative innovation. These benefits will not only lead to reductions in transaction costs (Williamson, 1979) and market uncertainties but also improve business performance.

In light of the above, this paper explores the nature of Long term Relationships (LTR) between the Malaysian dairy farmers and the buyers of their produce (Figure 1). Our aim was to identify the main relational variables which might induce the dairy farmers to maintain relationships with the buyers.

Figure 1: Long term relationships model in the Malaysian dairy industry



*** significant at 0.01
Model indices: /df =1.708, p=0.00, CFI=0.808, TLI=0.793, PGFI=0.635, RMSEA = 0.073

METHODOLOGY

Information was collected through a survey in June and July, 2009. A total of 133 farmers out of a population of 550 participated. Based on the data base, four states namely Selangor, Johor, Melaka and Sabah were selected for the study. The selected states provided a representative overview of dairy farm operations throughout Malaysia as they represented the various forms of marketing channels and contracts/memorandum of understanding between farmers and the buyers.

DISCUSSIONS

The purpose of this study was to explore the mediating role of relationship quality between the relational variables and the long term relationship variables within the Malaysian dairy farmers. The conceptual model used in this study showed that certain relational variable could enhance or impede the ability of the farmers to stay in LTR with the buyers. The effects of relational norms on long term relationships and the mediating role of the concept of relationship quality were investigated. The findings added to the evidence supporting relationship quality as an important variable in supply chain management which has the capacity to influence building and maintenance of LTR between supply chain actors.

Price flexibility dimension could be defined as the perceptions of achieving better and flexible price from their buyers. Considering that most of the producers sold their milk to the government agency, price flexibility might not influence their perceptions on relationship quality as milk prices in the scheme were fixed (RM1.80 to RM2.00 per liter) according to milk quality, while milk prices in the open market was more or less the same and ranged from RM2.20 to 4.00 per liter.

However, the producers were sensitive with the milk price satisfaction which measured the overall price perception and the milk price quality ratio. The outcome showed that producers will be satisfied if the milk grading system is transparent and fair. In addition, producers are more likely to be attracted by buyers who offer reasonable milk price. These indicate that producers' satisfaction with the price that is received has the capacity to influence their perception of the quality of their relationship as well as their willingness to remain loyal to the buyers.

Since price satisfaction measures as used in this studies is a composite measure made up of aspects of price fairness, and price quality ratio, implies that producers will be satisfied if the milk grading system is transparent and fair. In addition, producers are more likely to be attracted by buyers who offer reasonable milk prices. This finding is in consonance with the study by Gyau & Spiller (2010) who observed a positive relationship between price satisfaction and the relationship quality in the German dairy industry.

Mutuality dimension captures most of the relational behaviours such as cooperation, similar goal, share information and communication. It also implies that mutuality influences farmers' perception of relationship quality.

This supports many other studies which indicate that the relational behaviours initially improve relationship quality (Gyau and Spiller 2010; Kwon and Suh 2004; Batt 2003). Gyau and Spiller (2010) further emphasized that good communication influence the farmer perception of relationship quality and is likely to succeed compared to the economic factors such as the actual milk price. Basically, milk buyers in Malaysia should practice effective and proper communication that lead to reliable and timely information.

Consistent with other research, we found that relationship quality, measured by trust and satisfaction mediate long term relationships. Positive relationships between relationship quality on the one hand and each of commitment and loyalty on the other indicate that farmers are more likely to stay in relationships with their buyers if they perceive them to be trustworthy and as providing favourable business opportunities. This is particularly true since high levels of perceived trust and satisfaction are likely to reduce the transaction costs of farmers in terms of search cost, monitoring and switching costs. This seems likely to lead to a reduction in the overall cost to farmers and consequently, improve performance. Since the dairy farmers are also profit oriented, they are more likely to remain with a buyer who can help to improve their performance.

Variables		Coefficient (Beta)	Significant
Mutuality	----> Relationship Quality	0.448	***
Price satisfaction	----> Relationship Quality	0.202	***
Price Flexibility	----> Relationship Quality	-0.058	0.506
Power Dependency	----> Relationship Quality	0.022	0.621
Relationship Quality Commitment	----> Relationship	0.539	***
Relationship Quality	----> Loyalty	1.164	***

CONCLUSION, IMPLICATIONS AND LIMITATIONS

The results have implications for dairy supply chain actors and, in particular, the milk processors and other buyers. Primarily, it is recommended that processors need to show the ability to work together, exhibit frequent communication, develop mutual goals and an understanding of their producers in the dairy business. These relational norms, when implemented by buyers are likely to result in better evaluation in terms of relationship quality with farmers, which will progressively enable farmers to become committed and loyal to them. As a consequence, there will be a reduced incentive for the suppliers to switch to alternative buyers.

This new stability may subsequently provide the opportunity for buyers to plan their input supply and reduce the costs associated with searching for alternative suppliers.

Secondly, producers have been found to be price sensitive and will react to both a reasonable milk price and milk grading standards. Producers will engage in LTR if they are satisfied with the price. Against this background, buyers need to understand the pricing point that generates producer satisfaction. This process will involve making the milk grading system more transparent to farmers (at present, only a superficial testing is done by the MCC, when the farmers deliver the milk). Detailed analysis of milk quality is done infrequently in a laboratory where suppliers may not be present. A change in the present system will increase the level of confidence in the grades that are assigned to the milk and its corresponding prices.

Like many other researches, this research has a number of limitations. First, a cross-sectional study is limited in its ability to study concepts such as long term relationships involving multiple actors over time. Essentially, the attitudes of producers toward relationships change with time (Jarratt and O'Neill, 2002). Therefore, capturing time series data would provide a better insight into this aspect of relationship building.

