Relationship quality as the predictor of long term relationship in the Malaysian dairy industry

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RELATIONSHIP QUALITY AS THE PREDICTOR OF LONG TERM RELATIONSHIP IN THE MALAYSIAN DAIRY INDUSTRY

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ABSTRACT

Dairy market in Malaysia has been increasing due to high income and population growth in the region. In response to the increasing demand, milk processors need to obtain constant milk supplies from the dairy farmers. One way of doing this is when the buyers and the sellers build and maintain quality relationships in order to enhance long term sustainability of the milk supply. This paper examines the determinants of relationship quality and its role in enhancing long term relationship between the Malaysian milk processors and dairy farmers. The study revealed that where as mutuality and price satisfaction influence the perceived relationship quality of the farmers positively; dependency and price flexibility do not. Furthermore, the perceived relationship quality of the farmers has a positive influence on long term orientation of the relationship.

Key Word: Long term relationships, Relationship Quality, Dairy Industry, Malaysia

INTRODUCTION

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 (Dong 2006). In order to cope with the increasing milk demand, dairy supply chain management needs to be more efficient and coordinated in a more timely fashion. Furthermore, fresh milk, stored under controlled temperatures, is marketable within less than 10 days period (Siqueira *et al.* 2008) and therefore needs to be handled properly and marketed promptly. This therefore calls both processors and farmers to be highly coordinated, and maintain high level of relationship quality as a means to ensure long term and sustainable supply of milk. Apart from receiving high quality milk, targeting and managing long term relationships with suppliers may also reduce supply-related risks such as lack of milk supply and delivery of spoiled or adulterated milk (Abdulai and Birachi 2008).

For the same reasons, this paper aims is to explore the determinants of relationship quality and its mediating role in enhancing Long Term Relationships (LTR) between the Malaysian dairy farmers and their buyers. We show that relationship quality mediates between LTR and relationship management activities.

The remaining sections of the paper is organised as follows: In the next section, we provide an overview of the Malaysian dairy market follow by a discussion of the elements of the conceptual framework of our study and the hypotheses, the research design, and a review of the findings from a sample of dairy producers. Elaboration on the conclusions and discussion follow in the penultimate section and the articles concludes with managerial implications of the study.

THE MALAYSIAN DAIRY MARKET

Dairy industry development in Malaysia has been supported by the Malaysian Government and through the Department of Veterinary Services, it introduced the "Dairy Project Scheme" in the late 1980s with the main objective of the scheme is to help small-scale dairy producers market their milk and stimulate rural development. Since that time, the dairy industry has been expanding.

In this scheme, producers receive training and guidance from the Government through Department of Veterinary Services. Veterinary services and milking cows are generally provided by the Government and in most cases, the government maintains ownership of the animals; however, some states sell the milking cow at subsidized prices to the farmers.

Generally, the government purchases fresh milk from farmers based on graded milk prices. It then markets the milk to either state-owned enterprises or private processors through the Milk Collection Centres (MCC). However, this contractual arrangement does not restrict producers from selling their milk to other buyers. As a result, there are multiple markets for the producers. Some farmers sell their milk through milk agents and to restaurants (mostly Indian restaurants). Others sell directly to milk processing firms such as Dutch Lady Milk Industries Berhad, Susu Lembu Asli and Sabah International Dairies. Notwithstanding this, the Government, through its MCC, represents the largest market source for the farmers (constituting about 70% market share).

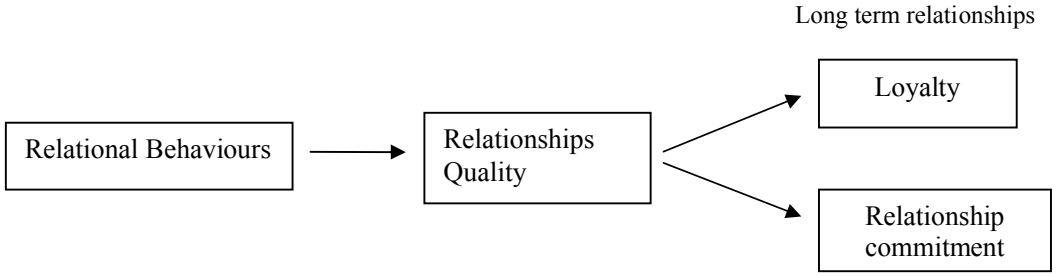
The prices received by farmers differ substantially depending on whom they market their milk to. For instance, whereas the farm gate price that the farmers receive from the MCC and factories range from RM1.80 to RM2.50 per litre, the price range for individual, agents and restaurants lies between RM2.20 to RM 4.00 (Author's survey, June/July, 2009).

CONCEPTUAL FRAMEWORK

This study investigates the role of relationship quality as a mediator for relational variables and long term relationships between the Malaysian dairy farmers and their buyers. The main thesis of our conceptual model (as illustrated in Figure 1) is that the perceived relational norms of farmers will influence the perception of the quality of their relationships with buyers which may subsequently influence their level of commitment and loyalty. Loyalty and commitment in the relationship has been used as an indication of LTR (Rowley 2005; Venetis and Ghauri 2004).

In the subsequent sections, we discuss the main components of Figure 1

FIGURE 1: A model of relational behaviours, relationship quality and Long Term Relationships in the Malaysian dairy industry



THE NATURE OF LONG TERM RELATIONSHIPS

The concept of long term relationships (LTR) refers to relationship marketing. This can be defined as an act of marketing which establishes, maintains and enhances relationships with customers and other partners (Ganesan 1994).

In relationship marketing literature, long term relationships are not only known as a source of competitive advantage (Haar *et al.* 2001; Morgan and Hunt 1994) but also create adequate frameworks for cooperation, information sharing and mutual learning (Cambra-Fierro and Polo-Redondo 2008). In the business to business context, exchange parties rely on relational exchanges to maximize their profits over a series of transactions (Ganesan 1994).

It is argued that LTR can create barriers against competition, reduces price competition and generates more revenue per customer (Vanetis and Ghauri, 2004). Buyer and seller relationships development can be categorized into five stages (Ford 1980). Ford (1980) states that "the development of buyer and seller relationships can be seen as a process in terms of (1) increasing experience of two parties, (2) the reduction in uncertainty and the distance between them, (3) the growth of both actual and perceived commitment, and (4) the formal and informal adaptations to each other and the investments and saving involved" (Ford,1980, p.349). Based on this premise, we will consider existence of relationship commitment and loyalty as a measure of LTR. Since both relationship commitment and loyalty are not built overnight, it can be considered as a good measure that reflects the ongoing process of the relationship (Rowley 2005; Venetis and Ghauri 2004).

Several definitions which reflect the different aspects of commitment have been proposed. For instance Dwyer et al. (1987*)* stress "behavioural dimension" and define it as "an implicit or explicit pledge of relational continuity between exchange partners" (Dwyer et al*,* 1987, p19). Other refers to attitudes such as a desire for stable relationships, willingness to make short term sacrifice for the sake of maintaining the relationship and a belief in relationship stability (Anderson and Weitz, 1992; Morgan and Hunt, 1994). Without commitment, no actor has the ability to ascertain the duration of the relationship and therefore the long term viability of their firm.

Loyalty in research terms can be categorized into three main streams: behavioural loyalty, attitudinal loyalty and composite loyalty (Rauyruen and Miller 2007). Rauyruen and Miller (2007, p23) define behavioural loyalty as "the willingness of average business customers to repurchase the service and the product of the service provider and to maintain a relationship with the service provider/supplier". They also define attitudinal loyalty as "the level of customer psychological attachment and attitudinal advocacy towards the service provider/supplier". Other scholars further argue that customer loyalty cannot be explained by only looking at the customer's behaviour in isolation of the customer's attitudes and vice versa, but rather in order to gain an understanding of loyalty, behavioural and attitudinal loyalty should be considered as composite loyalty. Composite loyalty assumes that loyalty can only be seen when a customer both continuously purchases or uses the same product and actually recommends to others to buy the same products (Baldinger and Rubinson 1996; Rauyruen and Miller 2007).

The presence of loyalty and commitment as discussed above could therefore be linked directly and hence used as a measure of LTR.

RELATIONSHIP QUALITY

Relationship quality can be defined as the producers' perception of how well their relationships fulfil the expectations, predictions, goals and desires of the customer (Gyau and Spiller 2008), and can be consider as an appropriate indicator for successful relationship (Hennig-Thurau and Hansen 2000). Relationship quality is manifested in several distinct but related constructs and as a result, there seems to be no consensus among researchers on the set of constructs or variables which constitute relationship quality, or what its antecedents are (Crosby 1990). Because of this, different researchers have used different variables to measure the relationship quality construct (see Gyau and Crosby et al. 1990,Wray et al. 1994, Kim and Cha 2002, Spiller, 2007, Leuthesser 1997 Naudé and Buttle, 2000).

Many researches indicate that relationship quality may enhance and improve business-to-business relationships. For instance, Crosby *et al* (1990) explained that relationship quality in the selling service industry is essential in fostering sales effectiveness and sustainability. Rauyruen and Miller (2007) added to this and proved that the presence of relationship quality in the courier delivery service industry eventually influence partner loyalty.

DIMENSIONS OF RELATIONAL BEHAVIOUR

There are a number of factors that may influence relationship quality (Crosby 1990; Gyau and Spiller 2008). Various relational behaviour including communication, cultural similarity, joint activities, the degree of dependency, flexibility, goal mutuality, restraint from the use of power and perception of technical expertise are widely used and explored in the literature (Anderson and Narus 1990; Batt 2003; Ganesan 1994; Gyau and Spiller 2007a; Heidi and John 1992; Weaver 2008). Each of the variables plays a significant role in influencing relationship quality measures such as trust (Gyau and Spiller 2007a) and satisfaction (Cambra-Fierro and Polo-Redondo 2008).

Table 1 provides a literature chat for the various relational behaviours which have been identified as a potential candidate to influence relationship quality.

TABLE 1: Aspects of relational behaviour adapted from Ivens, 2004

Norm/Behaviour	Description
Communication	The degree of exchange detailed relevant information and communication among the agents, suppliers and customers (Anderson and Narus 1990; Cambra-Fierro and Polo-Redondo 2008; Mohr and Spekman 1994)
Information exchange	The parties' readiness to proactively provide all information useful to the partner (Heidi and John 1992; Ivens 2004)
Mutuality	The "actors" attitude that realization of one's own success passes through the partners' common success (Dant and Schul 1992; Ivens 2004)
Solidarity	The preservation of the relationship particularly in situations in which one partner is an predicament (Achrol 1997; Ivens 2004)
Power distance	The expectation that legislative power is preserve for the partner interest (Kaufmann and Stern 1992)
Flexibility	The ability to adapt and customize partners requirement and current request (Heidi and John 1992)
Cultural fit	Understanding of partners attitudes and behaviours and appropriate interpretation of actions (Gyau and Spiller 2007b)
Dependency	The degree of dependency between business partners (Ganesan 1994; MacKenzie and Hardy 1996)
Cooperation and joint activities	The coordination tasks which are undertaken jointly and singly to pursue common and/or compatible goals and activities to develop and maintain the relationship(Woo and Ennew 2004; Young and Wilkinson 1997)

In the next section, we present the outcome of an exploratory study using factor analysis and reconfirm the model using structural equation modelling. We endeavour to investigate the relational variables and relationship quality in the Malaysian dairy industry which to our best knowledge is the first of its kind in Malaysia.

RESEARCH HYPOTHESES

Based on the literature, we conceptualize general hypothesis which state that the relational behaviour dimensions of Malaysian dairy producers influence their commitment and loyalty (LTR) with their buyers indirectly via their perception of relationship quality. These hypotheses are stated below:

Hypothesis #1: The relationship quality of the dairy producers is influenced by their relational behaviours.

Hypothesis #2: The producers' long term orientation in their relationships with the buyer is influenced positively by their perception of relationship quality. More specifically:

H2a: The suppliers' perception of relationship quality will have a positive influence on suppliers' level of commitment to the buyers.
H2b: The suppliers' perception of relationship quality will have a positive influence on suppliers' level of loyalty to the buyers.

METHODOLOGY

Survey design

Data was collected from 133 dairy producers through a survey in Malaysia in June and July, 2009. A data base of producers was obtained from the Department of Veterinary, Malaysia.

Based on the data base, four states were selected for the study, namely, Selangor, Johor, Melaka and Sabah. The four selected states provide a representative overview of dairy farm operations throughout Malaysia as they represent the various forms of marketing channels and contracts/memorandum of understanding between farmers and buyers. The various scales of operation in Malaysia were also best represented in the selected states. These considerations indicate that our sample is representative.

The questionnaires were then designed and developed based on an extensive review of the literature on relational behaviours, buyer-seller relationships and relationship marketing (Batt 2003; Gyau and Spiller 2007b; Kwon and Suh 2004; Morgan and Hunt 1994; Ulaga and Eggert 2006; Venetis and Ghauri 2004). We also took note of the opinions of marketing and supply chain experts. We used triangulation to study the concepts and their interrelations. A two-step approach was followed for empirical research. Initially, we conducted a qualitative exploratory study consisting of a literature review, key-informant interviews (Phillips 1981), and interviews with related agencies (public and private institutions) to understand the dynamics of dairy producer- buyers relationships.

In the next stage, the questionnaire was pre-tested with three supply chain and alliance specialists and 10 dairy farmers in Malaysia. Participants were asked to provide feedback on the length, content, format, comprehensibility and accuracy of the survey instrument. After each stage, the questionnaire was modified by incorporating the feedbacks received.

The interviews were questionnaire-structured, conducted face-to-face at the respondents' premises, and lasted between 45 minutes to 1 hour. Through a random sampling approach, 133 successful interviews were conducted by 5 trained enumerators. In order to ensure consistency, farmers were asked to evaluate the relationship with their main buyer which, in this case, was defined as the buyer who buys largest quantity of their fresh milk.

Respondent description

The majority of respondents were men, with an average age of 45 years and 13 years of experience in the dairy farming business. The herd size averaged 85 cows, with the largest herd having 2455 cows. The average milk yield (per day) is 10 kilo per cow while the highest milk yield is 28 kilo. The lowest milk yields range from 2 kilo to 15 kilo per cow per day. Breeds of cows used are diverse: ranging from pure breeds such as Holstein- Friesian and Jersey to mixed breeds such as Sahiwal-Friesian crosses.

The firm size and producers' level of education are summarized in table 2.

TABLE 2: Number of producers according to firm size and level of education

Firm Size	*Number of producers*	*Percentage*
Smale-scale (0-30 cows)	57	42.9%
Semi-commercial (30-50 cows)	25	18.8%
Commercial (50 -100 cows)	31	23.3%
Large-Scale (100 and above cows)	20	15.0%
Level of Education	*Number of producers*	*Percentage*
Primary and secondary education	105	78.9%
Diploma and certificate education	23	17.3%
Tertiary education	5	3.8%

Measurements scales

The measurement for the relational behaviours dimensions were developed from communication, information sharing, power exploitation, dependency, goal attainment, cultural similarity, flexibility and price satisfaction variables as shown in Table 1. The relationship quality was constructed with statements reflecting trust and satisfaction which were adapted from Gyau and Spiller (2007), Ganesan (1994) and Batt (2003). While the long term relationships variables were constructed from relationship commitment (Morgan and Hunt 1994) and loyalty (Rauyruen and Miller 2007). Relationship commitment statement relate to the affective commitment of the producers in this business while the loyalty measurement represent general statement of producers' loyalty (see Table 3).

In all cases, a five point likert-scale type questions ranging from: 1=strongly disagree, 2= disagree, 3= partly/disagree, 4=agree and 5 =strongly agree, were used to measure the various latent constructs of the relational variables, relationship quality, commitment and loyalty

STATISTICAL ANALYSES AND RESULTS

Principal component analysis and reliability tests

The statistical analyses were done in two stages, first we conducted a factor analysis as a data reduction strategy and to determine the main component in the relational behaviours dimensions. In the first stage, we examined the variables that were loaded on each factor and assigned a suitable name. The Principal Component Analyses with varimax rotation was used and all factors with eigen values above 1 were extracted. In addition, all factors with factor loadings above 0.5 were retained. To test for the appropriateness of the factor analysis for the scale, the Kaiser-Meyer-Olkin Measure of Sampling adequacy (KMO-MSA) was conducted and all fell within the accepted region (KMO is greater than or equal to 0.5). Following, a reliability test using the Cronbach Alpha was conducted in order to purify the measurement scale. The alpha coefficients for all components were above the conventional cut off point of 0.60 indicating that the measurement scale used is acceptable (Nunnally 1978).The results of the factor analysis are shown in Table 3.

TABLE 3: Principal Component Analysis Results

Factors and Item **KMO = .732, Explained variance= 75.211**	**Factor Loadings**
Mutuality : Cronbach's alpha = .828	
We share information regularly with one another	.823
My buyer and I share similar goal	.739
My buyer keep me informed regularly with one another	.697

My buyer and I work closely together to achieve our mutual objective	.677
My buyer and I always discuss and review our business objective	.645
Price Satisfaction : Cronbach's alpha = .821	
The buyer offer me fair and reasonable milk price	.861
I get a reasonable price-quality ratio	.849
I agree with the grading system	.819
Price Flexibility : Cronbach's alpha = .709	
My buyer milk price is flexible and changeable	.834
I can always argue my buyer price and get a good reasonable milk price	.750
My buyer can adjust the contract condition to fit my present requirement	.717
Power Dependency: Cronbach's alpha = .731	
I have no alternative buyer	.771
My buyer controls all the production information	.763
I cannot find other buyer to buy my milk yield	.725
Relationship Quality **KMO = .826, Cronbach's alpha = .818**	**Factor Loadings**
My buyer often meets my expectations	.795
My buyer promises are reliable	.780
I feel satisfied doing business with my buyer	.725
My buyer treat me fairly and equitably	.722
I can trust my buyer	.691
My buyer is quick to handle my complaints	.643
Relationships Commitment **KMO = .814, Cronbach's alpha = .793**	**Factor Loadings**
Our relationship is something that we are very committed to	.774
I feel committed to my buyer	.760
I want to maintain definitely our relationship	.750
I want to improve my relationship in long term	.730
I have maximum effort to maintain our relationship	.684
Loyalty **KMO = .807, Cronbach's alpha = .675**	**Factor Loadings**
If I have other alternative buyers, I will remain with this buyer	.774
I will ask other dairy producer to seek assistance from my buyer	.799
I will continue to do more business with my current buyer in the next few years	.753
My buyer is much more convenience than other buyers	.656
My buyer has given me the best technical support and assistance	.648

The result of the PCA shows that there are four main relational variables in the Malaysian dairy industry. These are: mutuality, price satisfaction, price flexibility and power-dependency.

The measurement model refinement

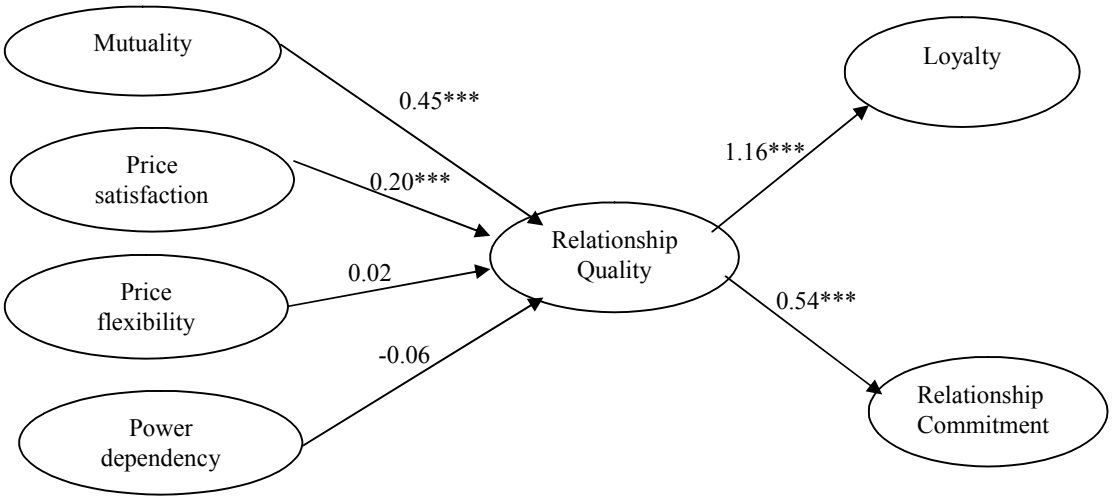
Following the PCA, we employed the structural equation modelling (SEM) using AMOS 17 software to test our conceptual model. SEM makes it possible to test a set of regression equations simultaneously, providing both parameter statistics for each equation and also indices which indicate the 'fit' of the model to the original data.

We assessed model fit using five indices: the χ^2 test; the comparative fit index (CFI); the Tucker-Lewis index (TLI); the parsimony goodness-of-fit-index (PGFI) and the root-mean-square error of approximation index (RMSEA) (Byrne 2001; Hu and Bentler 1999). The Chi-square value indicates the absolute fit of the model to the data. In this analysis, measurement model the χ^2/df was 1.708 and p=0.00, which is well within the acceptable range. CFI compares the discrepancy function of the hypothesized model to the one of a baseline model while TLI compares the absolute fit of the specified model to the absolute fit of most restrictive model possible, in which all the relationships between the observed variables are assumed to be zero (Byrne 2001).

PGFI however, takes into account the complexity of the hypothesized model in the assessment of overall model fit. Typically, parsimony-based indices have lower values (0.5 and above) than the threshold level of other perceived "acceptable" for other norms indices of fit (Byrne 2001). The model's fit, as indicated by these estimates, was acceptable (CFI=0.808, TLI=0.793, PGFI=0.635).

The root mean square error of approximation is based on a comparison of the values in the specified model to population means and covariance structures. Arbuckle and Wothke (1999) stated that a value of 0.08 or less would indicate a good fit model. Since the model in Figure 2 has an RMSEA of 0.073, this statistic provides further evidence that the model has a good fit. Even though, both CPI and TLI measurement fell marginally short of the benchmarking 0.9 indicating good model fit, we considered other indices measurement such as Chi-Square, RMSEA and PGFI which is within the acceptable range.

FIGURE 2: A model of relational behaviours, relationship quality and Long Term Relationships in the Malaysian dairy industry



*** significant at 0.01

Variable			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	***

DISCUSSIONS

The purpose of this study is to explore the mediating role of relationship quality between the relational variables and the long term relationship variables within the Malaysian dairy farmers. We tested our conceptual model which shows that certain relational variable can enhance or impede the ability of the farmers to stay in LTR with the buyers. We investigate the effects of relational norms on long term relationships and the mediating role of the concept of relationship quality. Our findings add 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.

In this research, we found four relational variables namely price satisfaction, price flexibility, power dependency and mutuality. Through the structural equation we found that whereas price flexibility and power dependency do not influence the relationship quality mutuality and price satisfaction influence relationship quality.

Price flexibility dimension can be defined as the perceptions of achieving better and flexible price from their buyers. Considering that most of the producers sell their milk yields to government agency, price flexibility may not influence their perceptions on relationship quality as milk prices in the scheme (which ranges from RM1.80 to RM2.00 per litre at time of survey) were fixed according to milk quality while milk prices in the open market was more a less the same ranging around RM2.20 to RM4.00.

However, the producers are sensitive with the milk price satisfaction which measures the overall price perception and the milk price quality ratio. The outcome shows 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 (2008) 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 (Batt 2003; Gyau and Spiller 2007b; Kwon and Suh 2004). Gyau and Spiller (2008) further emphasize 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.

On the contrary, power and dependency constructs do not influence the suppliers' perception of the quality of their relationships with the buyers. This result contrasts other research findings such as (Batt 2003; Heidi and John 1992) which state that the use of power reduces the level of trust. The Malaysian case is quite understandable because most dairy farmers do not see the excessive use of power or their dependency on the buyers as an important variable since they have alternative market sources.

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 maximizers, they are more likely to remain with a buyer who can help to improve their performance.

CONCLUSION, IMPLICATIONS AND LIMITATIONS

The results have implications for dairy supply chain actors and, in particular, the milk processors and other buyers. Primarily, we recommend that processors need to show the ability to work together, exhibit frequent communication, develop mutual goals and 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 supplies 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. This may call for a change in the current milk grading system where 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 that have to be taken into consideration in interpreting the results. First, we used a cross sectional data for the analysis and 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 (Jarrat and O'Neill 2002). Therefore capturing time series data would provide a better insight into this aspect of relationship building.

Finally, our data is also based on single sided interviews with the dairy producers, and therefore, potentially subject to hindsight and other biases. A triangulation study between producers and buyers should be conducted to capture a better insight and research framework.

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