CURRENT CHALLENGES FACED BY LOCAL THAI COFFEE PRODUCER

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ABSTRACT
Purpose: This study explores challenges that are facing by the local producers in the coffee industry in Thailand. Moreover, there is a need to understand the supply chain systems of local producer such as the local chain and factors that are affect their businesses created by the fierce competition around. Also, there has been a paradigm shift in the coffee industry in Thailand because the consumption of the soluble coffee is transforming into the fresh brewing coffee.

Design/methodology/approach: Qualitative approached is used and semi-structured interview is conducted on the established local producer to understand their supply chain and how they sustain their businesses with an increasing competition faced by them.

Findings: This paper shows the importance of the local coffee production in Thailand that affects the local producers to meet its demand for local consumption. There are also increasing interests from the foreign investors to purchase the coffee beans at a higher price that lead to a threat to local producers.

Research limitations/implications: The limitations in data collection as the interviewers were reserved on the information and the coffee industry in Thailand is based on local producers' initiative to expand their business due to there are minimal assistance from the government. This study can provide a better understanding of important factors in the coffee supply chain risk management by the local producers that can be categorised the risks into organisational, technological, and environmental contexts.

Originality/value: This study highlights the potential benefits of this type of research to develop an understanding of the coffee supply chain and the evolution of relationships in a supply chain system as well as how the local producers can sustain their business in these increasing challenges and a fierce competition.

Keywords: Coffee Industry; Supply Chain Risk Management; Coffee Supply Chain

Paper type: Viewpoint

Introduction

The pattern of coffee drinking is not the same as they were before and transformation of consumption patterns has emerged with the fast and growing of specialty, fair trade and organic coffees (Ponte 2002). This transformation led coffee chains to mushrooms dramatically and not only that, coffee chains sell an environment and a social positioning more than just 'good' coffee. About 2.25 billion cups of coffee are consumed in the world daily (Dicum et al., 1999 cited in Daviron and Ponte, 2005). Coffee chain has transformed into a 'latte revolution', where consumers can choose from various kinds of coffee, origin, brewing and grinding methods, flavouring, packaging, 'social content', and

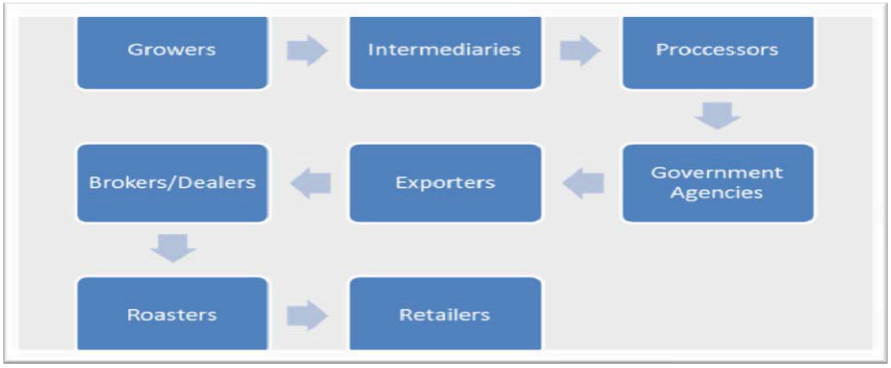
environment (Bacon 2005; Ponte 2002). As retail coffee prices continue to rise in the specialty market, roasters capture increasing profit margins. At the same time, some coffee farmers receive prices below the production cost. The global value chain for coffee is currently characterised by a 'coffee paradox', which categorized as 'coffee boom' in consuming countries and as 'coffee crises' in producing countries (Daviron & Ponte 2005). In the global market at present, industries have to design and manage their supply chain cost effectively and efficiently from upstream until the downstream to create and provide the product to customers. According to Simschi-Levi et al. (2003, p.1), they define that "Supply chain management is regarded a set of approaches utilized to efficiently integrate suppliers, manufacturers, warehouses and stores, so that the merchandise is produced and distributed at the right quantities, to the right locations and at the same time, in order to minimise costs while satisfying service level". Supply chain management is regarded as a network that links the industry and provides needs to the consumers and it will be an important factor that local producers need to understand it (Zhao, Frese & Giardini 2010).

Hence, local producers also have their own coffee supply chain, whereby they source their "Arabica" beans from the hill tribes located at the northern Thailand. With the paradigm shift in the coffee drinking in Thailand, the consumption behaviour leads to many establishments of local coffee chain, kiosks, cafés and restaurants to serve fresh brewing coffee. According to Seranevijaikitkhan (2008), there is an increase in the number of domestic coffee plants to sixty nine [in 2007], which create fierce competition amongst the industry and to survive their businesses, the local producers need to reduce costs and improve efficiency along the supply chain (Seranevijaikitkhan, Parthanadee & Buddhakulsomsiri 2008). According to "The Five Competitive Forces" by Porter (1979), these forces can help local producers mirror out their position in its industry that is minimised vulnerable to risk (Porter 1979). A better understanding of these forces helps local producers increase its information of its own industry and information are, therefore, manage to withstand challenges (Gilbert 2008). This study will look at the current business challenges facing by local producers in the coffee industry in Thailand.

Background of Coffee Supply Chain

The supply chain is the sequence of activities and processes required to bring a product from its raw state to the finished goods sold to consumers. Coffee supply chain is often complex, and varies in different countries, but typically consist of growers, intermediaries, processors, government agencies, exporters, brokers or dealers, roasters and retailers. Each of them has a role to play in the supply chain (Reinhardt 2000). Figure 1 demonstrates the coffee supply chain.

Figure 1: Coffee supply chain.



(Source: Nestle, 1999. Coffee - The Supply Chain)

Growers usually cultivate on a small plot of land of just one or two hectares, and many do some primary processing [drying or hulling] themselves. Intermediaries sometimes involved in many aspects of the supply chain. They could buy a coffee at any stages between coffee cherries and green beans

and do some of the primary processing, or they could act as collectors to gather sufficient quantities of coffee from many individual farmers to transport or sell to a processor, another intermediary, or to a dealer. There could be as many as five intermediary links in the chain.

Processors can be individual farmers who have their own equipment to process coffee or a separate processor that forms a farmers' co-operative that pools resources to buy the equipment to convert 'cherries' into green coffee beans. Government agencies play their role in some countries as the government controls the coffee trade, perhaps by buying the coffee from processors at a fixed price and selling it in auctions for export (Ibrahim & Zailani 2010).

As for exporters, they buy from cooperatives or from auctions and then sell it to dealers. They have expertise and knowledge of the local area and producers generally enables them to guarantee the quality of the shipment. Dealers or brokers supply the coffee beans to the roasters in the right quantities, at the right time, at a price acceptable to the buyer and seller.

Roasters are people whose capability is to turn the green coffee beans into products people enjoy drinking. According to Ponte (2004), the coffee industry is "roaster driven" as also add value to the product through marketing, branding and packaging activities (Ponte 2004). Retailers are sellers of coffee products, which range from supermarkets to food and beverage outlets.

A supply chain is only as strong as when it is effectively linked. Each relationship exists between the supply chain involved in the separate stages of the chain whether it is in the structuring of product distribution, arrangements for payment and arrangements for handling, or in storing the product. At the heart of these relationships is the way in which people treat each other. Long-term business relationships need to be based on honesty and fairness parties to a trading agreement need to feel that they are getting a fair deal. However, the following topic discusses the research methodology used in this research.

Research Methodology

A mix research method is applied to this study. Firstly, a qualitative approach is being use to understand the local producers to understand their supply chain and how they sustain their businesses with an increasing competition faced by them (Miles & Huberman 1994; Silverman 2009). A set of semi-structured question is used in the interview to gain more insight of what kind of challenges or risk they are facing. Followed by the risk identification that is discussed with the local producer during the interview and these identify risk will then use in the future research.

In order to understand the organisational, technology and environment contexts in supply chain risk management (Tornatzky et al. 1983; Tornatzky & Fleischer 1990), a case study was used in this study (Yin 2008). Case study accept and encourage multiple methods of data collection procedures and it also provide a deeper understanding from the local producers (Hartley 2004; Yin 2008).

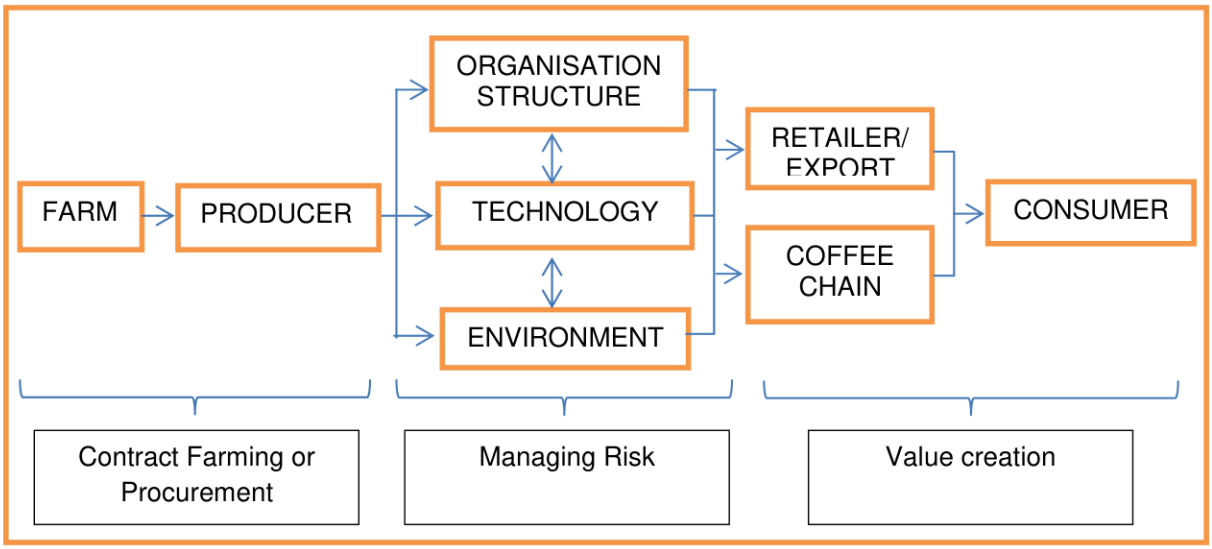
Case Study of Local Producer Coffee Supply Chain

Local Producer A is a family business, and they have been in the industry for 8 years. Their business established in 2005 at Mae Sai located in the northern region of Thailand. During the first 3 years of establishment, the business relied on the suppliers to supply the coffee beans and they had expanded the business by having their own roasting facility. They sourced the raw green beans directly from the hill tribes as their business and roasting location was located near by the source. Currently they have their own outlet to supply and also supply the coffee beans to some restaurants as well as kiosks around Chiang Rai province.

Due to price volatility in coffee, the price has led to increase of coffee price by their supplier they invested new technology by having their own roasting facility. With this technology adoption, they are more in control of their supply chain for the beans although they do not have the contract farming in place. This shows that they are proactive in managing the risk of sourcing for coffee beans and

roasting as it is the core and one of the critical success factors for a coffee supply chain. Besides, managing risks along the supply chain, they reduced costs, increase efficiency, and open up another business opportunity. They have transformed into a small medium enterprise (SMEs) by roasting the beans and supply to other outlets such as kiosk, café, restaurants and also their own outlet. Figure 2 below summarised the coffee supply chain framework by the local producers.

Figure 2: Supply Chain of Local Producer.



Source: Framework through information gathered in Interview process

Major Risk in the Coffee Supply Chain Faced by Local Producer

Local coffee supply chains in faces multiple risks. Three main categories of risks are identified through the preliminary interview, which are production risks, market risks, and other risks as shown in table 1 below. The preliminary identification is then analyse to which party that is most likely to suffer losses along the supply chain. Due to the limitation of data on coffee production and others therefore preliminary identification of risks and associated losses is a problematic so the majority of this exercise has been of qualitative, rather than quantitative nature. Table 1 summarised the risks that are identified.

Table 1: Summary of the Identify Risk

Identify Risk	Affected Party
Production Risk	
Climate	Famers
Low Yield	Famers
Market Risks	
Price volatility of coffee	Local producer
Decrease In local Consumption	Local producer
Contract Failure	Local producer
Logistics	Local producer
Cooperatives Failure	Famers & Local producer
Foreign buyers	Local producer
Other Risks	
Politics	Famers & Local producer
Labour	Famers
Land title	Famers& Local producer

Source: Information from preliminary interview.

From the identified risk, the information is then discussion on how it can be managed. Three categories of risks are explained; which are risk prevention, risk transfer, and risk coping. Firstly, the risk prevention refers to actions taken to eliminate or reduce events from occurring. Secondly, the risk transfer refers to actions that reduce exposure to existing risks. Finally, the risk coping, this refers to actions that mitigate losses caused by other factors. Table 2 summarised the risk management measure.

Table 2: Risk Management Measures Framework

Identify Risk	Risk Prevention	Risk Transfer	Risk Coping
Production Risk			
Climate			• Forecasting information • Insurance program
Low Yield	• Biological control for pest attack • Provide training for farmers		• Replanting
Market Risk			
Price volatility of coffee		• Hedging	• Governance
Decrease In local Consumption			• Product innovation • Search Alternative market
Contract Failure	• Proper Negotiation		
Logistics			• Outsourcing
Cooperatives Failure	• Hire the right managers		• JV with private sectors • Restructuring
Other Risk			
Politics			
Labour			• Hire
Land title	• Negotiation with government		

Source: Adapted from various sources

Practical Implications of this Study

The outcomes of this study were identified some implications, where this research can provide a better understanding of important factors in the coffee supply chain risk management by the local producers, categorised the risks into organisational, technological, and environmental contexts.

Firstly, knowing organisational risk and innovation by the type of structure can assist the organisation to understand their business and drive their business competency to increase business performance more efficiently. This research has shown that organisational factors comprise of the size of organisation, culture, organisational structure and management styles, and innovation capability (Mingmalairaks 2011).

Technological risk comprises of the relative advantage, coffee recipe and available technologies, compatibility, reliability, and capacity of machines (Seranevijaikitkhan, Parthanadee & Buddhakulsomsiri 2008).

Then, under environmental risks, which include information and competition (Prasad & Sounderpandian 2003). Managers or owners have to understand their business and their position in the industry and use organisational and technological factors to enhance their business capability, and their business competency to differentiate their products and business, be able to compete with, or be ahead of, their competitors (Cai et al. 2006).

The risk assessment used in this research guides the organisation to understand their business and identify their business competency, enabling them to enhance them to successfully implement the innovation in their organisation, thus resulting in improved business performance (Carter & Rogers 2008). The integration of organisational, technology and environment context and will allow an organization to achieve long-term sustainability as they are prepared for the rapidly changing business surroundings.

Limitation of Study

In this study, there are limitations in data collection as the interviewers were reserved on the information. Besides, coffee industry in Thailand is based on the local producers initiative to expand their business due to there are minimal assistance from the government.

Implications for Future Research

This research contributes to an understanding of the nature of Thai coffee industry, and specifically, managing risk at the level of organisational, technological and environment factors that lead to perceptions of improved business performance in the local industry. By enhancing the understanding of these organisational, technological and environment risks. This research contributes to potential future research in the following areas based on the current research.

Secondly, this study can be used as a basis for further research that explores in relation to other organisational, technological and environmental risks, or other industries, using a mix research method.

Policy makers and coffee association role was not discussed in this research because the interviews were conducted solely with business owners. Future research should focus on policy making perspectives, and how coffee association would come into the picture to understand and support the local producers for their sustainability in the business.

Discussion

The findings of this study could be used by traders, business owners and policy makers in the Thailand coffee industry to improve the quality, production and supply of the coffee locally and international. This should be achieved through identifying the risk and take measure of the risk. The application of this framework could also assist local producer to take a deeper understanding of their positioning and area of growth to their sustainability of business. Moreover, by managing the appropriate risks, businesses can strengthen themselves and enhance value creation from within their organisation and eligible to compete with their competitors in the coffee industry.

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