



Managing Supply to Meet the Global Demand for Coconut-based Products at ABC (Private) Limited

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ABSTRACT

The purpose of the research paper is to identify the prominent factors relevant to supply shortage and provide recommendations to ABC (Pvt) Ltd in order to overcome the shortage in the supply of coconuts and it will facilitate the company to cater the international market for coconut-based products. Researchers have developed what are the reasons for inadequate supply? and how the supply shortage can be reduced? as research questions in order to address the problem of supply shortage in coconuts compared to the international demand. Moreover, qualitative research followed by a phenomenological research strategy was conducted to solve the research problem and in-depth interviews with the internal and external parties of ABC (Pvt) Ltd were held for the data collection. Correspondently, thematic analysis was used to analyse the data. Finally, the research has identified prominent reasons for the lack of supply of coconuts and provided recommendations along with the incorporation of the partnership model. The applicability and the preferences of deploying partnership model as Supplier relationship Management (SRM) theory as and with the aim of reducing the supply shortage in coconuts in which it will assist ABC (Pvt) Ltd to satisfy the international demand for coconut-based products were discussed under the study.

Keywords: Supply, Demand, Supplier Relationship Management, Partnership model

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1. Introduction

Coconut is also known as *Cocos nucifera* which grows in tropical regions and a variety of foods, and beverages can be made from its (Yong, Yan Fei Ng and Tan, 2009). Coconut kernel and tender coconut water have various medicinal features such as antibacterial, antifungal, antiviral, antiparasitic, anti-dermatophyte, antioxidant, hypoglycemic, hepatoprotective, and immunostimulant which is important for human healthiness (DebMandal and Mandal, 2011).

In the global market, coconuts are mostly available in the form of coconut-based products not as raw coconuts. There is a growing demand for coconut-based products in the world. In 2018 global coconut

products market size was at \$11.5 billion in 2018 and is expected to be around \$31.1 billion by 2026 (Globenewswire, 2020).

Many countries supply coconut-based products to the world to satisfy this growing demand. Out of which major suppliers are Indonesia, Thailand, Vietnam, and Malaysia (Businesswire, 2019). Sri Lanka is also one of the major suppliers and it has been ranked the fourth position in the international market for coconut kernel products and is very popular for desiccated coconut (Sri Lanka Export Development Board, no date). Although Sri Lankan coconuts have a good demand, only 40% of the local coconut production is used for the export industry (Parliament, 2016). Because the amount of domestic consumption is increasing with increasing population growth (Pathiraja *et al.*, 2015).

In the Sri Lankan coconut export industry, there are large number of small and large-scale companies and out of which ABC (Pvt)Ltd, operating for more than 100 years and their product portfolio include coconut kernel-based product such as desiccated coconut, virgin coconut oil, coconut flour, coconut milk and cream, copra etc. (ABC (Pvt)Ltd, no date). Over the companies, ABC (Pvt) Ltd has a good demand for coconut and coconut-based products in the international market and this company is one of the largest exporters of coconut-based products (Sri Lanka Export Development Board, no date). Since the demand for their products is increasing gradually, their fresh coconut requirement needs to be increased with respect to the demand. Therefore, managing the coconut supply able to fulfill the demand created by the global market.

Throughout the study some main concepts linked with the lack in supply of coconuts such as demand, supply, and supplier relationship management. Subsequently partnership model also utilized to manage the coconut supply shortage.

Research Problem

As per Table 1, there is a significant gap between the demand side and supply side. Demand means the number of coconuts required to fulfill the order and supply means the number of coconuts purchased.

Table 1 consists of six quarters which are related to 2019 and 2020. Quarter 1 and 2 of 2019 had a shortage of 286,509 units and 245,016 units respectively. This implies that there's an inadequate supply compared to international demand. But in quarter 3 of 2019, the shortage has become smaller which is only 29,490 units. According to the manager, it is because of the seasonal effect and the yield of that quarter was higher compared to other quarters. Subsequently in quarter 4 of 2019 demand has been drastically moved up because of the panic buying situation that occurred in the international market and to adjust to that company have increased its capacity levels. Panic buying means a sudden increase in purchasing goods due to a sign of disaster and it creates an imbalance between demand and supply (Corporate finance institute, no date). Even though the capacity had been increased there's still a shortage on the supply side. Increment in demand side implies that this company is having a good customer base in the international market. A shortage of 562,396 units can be seen in quarter 4 of 2019 and in quarter 1 of 2020 is has shortage of 786,675 units which is the largest shortage. Moreover, in quarter 2 of 2020, the inadequate supply is 332,090 units.

How the ABC (Pvt)Ltd manage the shortage in supply of coconuts compared to the requirements for production, in order to meet the international demand for coconut-based products?

In order to reach out to the research problem, the below research questions were developed.

- What are the reasons for the inadequate supply of coconut?
- How the supply shortage of coconut can be reduced/minimized?

Research Objectives

- To identify the most prominent reasons, which causes for inadequate supply.
- To provide recommendations to manage the supply of coconut to meet the international demand for the coconut-based product.

2.Literature Review

Coconut Industry

The coconut industry is one of the major industries in Sri Lanka because coconut is an essential food in Sri Lankan cuisine (De silva,1979). Approximately two third of the nut production which is 1.5 billion nuts per annum is used for local market consumption and one-third is used for export purposes (Weralugolla, 2019). About 140,000 number of employees are engaged in this industry (Weralugolla, 2019). According to Sri Lanka Export Development Board (no date) during the year 2020, Sri Lanka has earned around 665 million USD by coconut sector exports and in 2019 have earned around 614 million USD thereby there's an increment in earnings from coconut exports. These statistics demonstrate that Sri Lanka is having a good demand base for coconut sector exports in the world.

Coconut-based products are mainly categorized into coconut kernel products, coconut shell products, and coconut fiber products (Weralugolla, 2019). The study by Parliament (2018) mentioned that Sri Lanka is heavily exporting coconut kernel products rather than the other two categories and have ranked as the third largest exporter of desiccated coconut and coconut oil in the world in 2017. Similarly in 2018 Sri Lanka earned a higher amount of dollars from the exportation of coconut kernel products rather than from both coconut fiber and coconut shell products (Weralugolla, 2019).

Demand

According to Samarajeewa (2002), demand describes the behavioral relationship of the quantities of goods that consumers buy at different prices under pre-determined conditions in the market. Demand for coconut and coconut-based products, economic factors such as product prices and per capita income, and demographic factors such as changes in the population has an impact on the demand for products (Samarajeewa, 2002).

With the time with increase in domestic coconut consumption, the industry has converted to a domestic industry structure from the export-oriented structure. Sri Lankan population has increased from 10 million to 21.8 million in the period of 1950-2021(World Bank,2021) and hence, coconut consumption has increased for the purpose of preparing foods. Generally, from the total coconut production in the country, 65% of the coconuts (Fresh nuts) are domestically used for dietary purpose and rest 35% is used in the processing industry. With this higher domestic consumption, the processing industry is likely to face difficulties due to insufficient nuts for their production (Pathiraja *et al*, 2017).

According to the report by Grand view Research (2019), they have estimated that the global coconut product market to expand up to \$ 95.40 billion by the time of 2025 with a growth rate of 17.5% by annually over the period. This booming demand for natural and chemical-free product can be identified as a strength to the coconut industry sector (Weralugolla, 2019). Moreover, findings from the report (Grand view Research, 2019) have identified, China, US and Netherlands are the main importers of coconut-based products in the global market. When concerning the international market for Sri Lankan Coconut products, the USA, Germany, Netherland, China and the United Kingdom are the top five importers of Sri Lankan coconut-based products (Sri Lanka Export Development Board, no date).

Supply

Supply means the quantity of products that suppliers are willing and able to supply at a particular price (Whelan and Msefer, 1996). However, when demand exceeds the supply, it is known as a supply shortage (Greenlaw and Shapiro, 2017). This causes to create a disequilibrium in the market. The supply of coconuts has been reduced during the past years due to the factors such as urbanization, the opening of new industrial ventures, fragmentation of holdings, crop diversification, absence of operators on the holdings etc. (Dissanayake, 2005).

Although there are many reasons behind the lack in supply of coconuts, few common reasons are stated in the literature (Chowdappa and Jayasekhar, 2017; Pathiraja et al., 2010; Pathiraja *et al.*, 2015; Weerawardana *et al.*, 2013; Wickramananda *et al.*, 2007). Those are price, availability of labour, coconut land fragmentation, changes in the climate, and pests and diseases.

Price

Price is a factor that affects the supply of coconuts (Chowdappa and Jayasekhar, 2017). As per Chowdappa and Jayasekhar (2017) study, it states that currently coconut growers are highly vulnerable to risks and price fluctuations, and this might lead them to exit from the coconut industry.

According to Dehn et al. (2005, cited in Subervie, 2007) study, it was identified that changes in the world commodity prices affect both demand and supply and it mainly affects the supply of agricultural products. However, a small shock in supply can cause to have a huge impact on the price (Subervie, 2007)

Availability of labour

The study by Kalathiya et al. (2007, cited in Anithakumari, 2013) mentioned that 50% of the cost of cultivation comprise of the cost of manure, fertilizer and labor.

Lower wage rates, higher education levels, and poor social acceptance are the major reasons for the labor mobility from agricultural sectors to others Pathiraja et al. (2010). Therefore, the lack of pickers for cultivation activities are the major issue and for processing activities, machinery and technology can be used instead of manpower (Pathiraja *et al.*, 2010).

Coconut and Fragmentation

Breakage of coconut lands into smaller parts and use those for alternative purposes known as coconut land fragmentation (Pathiraja *et al.*, 2015). Major reason for increment in land fragmentation is the increase in population, therefore, there's an opportunity cost of keeping lands for coconut cultivation thereby people use them for other purposes (Pathiraja *et al.*, 2015). Reasons for coconut land fragmentation are residential purposes, conversion of lands for industrial purposes, lack of labour availability for coconut plantation activities, cost of production, higher wage rates etc. (Fernando *et al.*, 2005, cited in Weerawardana et al., 2013).

Changes in the climate

Climatic changes directly affect the coconut yield because yield is not constant. During some periods yield is high and in some periods yield is low. According to Peiris et al. (1995, cited in Fernando et al., 2007), rainfall and temperature are the important climatic factors influencing coconut yield. Moreover, variations in the climate cause extreme crop shortages, it causes for income losses to the economy (Fernando *et al.*, 2007).

Supplier Relationship Management

Impacts of the supply chain cause the volatilities in the supply of coconuts, thereby the benefit received by the actors who are engaged in the supply chain need to be considered (Pathiraja *et al.*,2017). According to Mor *et al* (2015), they argued that SCM is all activities about managing better partnerships and relationship with suppliers and meeting customer demand.

Supplier Relationship Management is focusing on the processes that are used to maintain the interaction between firms and suppliers that are belongs to the firms' upstream supply chain (Chopra and Mendil,2013). Also, through a better relationship firm as a buyer can constantly get their goods and for the raw material suppliers as seller, they get a loyal buyer and expected value for their products, and this reduced the uncertainty of both parties (Aji,2015).

Partnership model

Fundamentally, the main characteristic of a partnership is deemed to be a collaboration with the partners and the success of a partnership depends on that (Ramanathan and Gunasekaran,2014 cited in Mofokeng and Chinomona,2019). Similarly, In the study of Lambert, Emmelhainz and Gardner (1996) have identified that, it is a bond created between the organizations based on mutual trust, and openness while sharing risk and rewards among them and conducted with the aim of achieving greater business performance.

According to Lambert, Emmelhainz and Gardner (1996), the partnership model has three main elements such as drivers, facilitators, and components. Drivers are the causes for the partners to create the partnership, facilitators mean supportive environmental factors which involve in developing and maintaining a successful partnership and components are the processes and activities which involve in sustaining a long-term partnership (Lambert, Emmelhainz and Gardner,1996).

Recently supply chains have become more complex due to the complexity in the business environment thereby that created the importance for supply chain partnership concept (Goffin *et al.*,2006; Nyaga *et al.*, 2010:Ramanathan and Gunasekaran, 2014 cited in Mofokeng and Chinomona,2019). Correspondingly, this partnership model is necessary when business organizations are faced with scarce resources, severe competition, higher customer expectations, and faster rates of change (Lambert, Emmelhainz and Gardner,1996). In the past literature states that "supply chain partnerships are identified as essentials in sustaining supply chains" (Goffin *et al.*,2006; Nyaga *et al.*,2010 cited in Mofokeng and Chinomona,2019).

The study of Kim, Kumar and Kumar (2010) has identified critical factors need to have for a supply chain partnership are organizational commitment, coordination, leadership, trust, communication, conflict resolution methods, and resources. Similarly, Successful factors for supplier partnerships are sharing of information, searching for continuous improvements, and joint problem-solving efforts (Stuart,1993). Therefore, companies must identify the essential factors required for a supply chain partnership and develop detailed points by considering different contexts (Kim, Kumar and Kumar, 2010).

Partnership collaboration has advantages for the organization such as cost reduction, profit maximization, forecast accuracy, and inventory control (Aviv, 2007; Gavirneni *et al.*, 1999; Lee So and Tang, 2000 cited in Mofokeng and Richard,2019). A well-structured supply chain partnership will offer competitive products to the customers and improve the supply chain effectiveness (Lau *et al.*, 2002 cited in Kim, Kumar and Kumar, 2010, p.187). Also, supply chain partnerships have a positive impact on supply chain performance (Mofokeng and Richard,2019). According to the study of Koza and Lewin (2000 cited in Amudavi,2003, p.52) stated the long-term success of the partnerships depends on the strategic intent similarities of the partnering companies and their ability to mutual adaptation.

3. Research Methodology

According to the study of Dudovskiy (2016) research philosophy can be categorized mainly into pragmatism, positivism, realism and interpretivism. Interpretivism allows the researcher to view the reality or truth through the experiences, perceptions, and interpretations of the participants belonging to the study (Thanh and Thanh, 2015). Thereby in this research also interpretivism research philosophy is more suitable over positivism because throughout the study researchers want to identify the subjective interpretations of participants behind the situation. This study follows a qualitative research approach. Qualitative research means any kind of research which does not follow a statistical procedure or any quantification when arriving at findings (Yilmaz, 2013). Among the two research choices qualitative research is more suitable for this study. Because the research problem of the study is focused on how ABC (Pvt)Ltd manages shortage in supply of coconuts compared to the requirements of production. Thereby the term "how" in the research problem, it states that this study covers a broad area rather than a specific one. A broad area of the study requires qualitative research over quantitative research approach. Similarly, according to Guest, Namey and Mitchell (2013) mentioned that research questions with term "how" and "why" requires more of information, opinions, and experiences of human beings and those cannot be obtained by conducting a quantitative-oriented research and data collection methods. Literature mentions that qualitative study evaluates on how people experience a research issue and gather information about the human side of the issue (Mack et al., 2005). Therefore, study requires subjective opinions of the participants within the research site because participants are the people who face the impacts of the research problem. Research strategy used by this study is phenomenology because in phenomenology strategy it studies about "individual experiences, beliefs and perceptions and text used as human experience" (Guest, Namey and Mitchell, 2013).

Population of this study can be identified as all the 3 members of the supply chain division of the ABC company and 10 key suppliers of the company. Further, out of these 10 suppliers, 7 suppliers are distributors and rest 3 suppliers are farmers who directly supply coconut to the company. Purposive sampling method used to identify the sample from the population because it provides higher efficiency and the flexibility that given to the researcher to choose what data he/ she needs to collect and determine the information-rich respondent based on their willingness to provide data (Etikan, Musa and Alkassim, 2016). In depth interviews were conducted to collect data because researchers wanted to collect rich data for better understanding of the research context (Minikel-Lacocque, 2018).

4. Findings and Results Discussion

External Environmental Conditions

External environmental conditions enclosed all the factors and conditions that are prevailing outside of the company and beyond the control of the ABC company. Mostly, the company has less influence on these conditions while these conditions have a higher impact on the company.

As per the external environmental conditions, the first prominent issue that was able to identify is Severe competition in the industry. Sri Lankan Coconut-based product industry is a very competitive industry. A high number of new businesses has emerged compared to during the past period as a result of the increased popularity of coconut white oil and it has identified that, when considering the market number of coconuts suppliers is far more less than the number of buyers. That creates a coconut shortage in the market.

The second condition that was identified is Higher domestic consumption of coconut. Approximately two third of the annual coconut production in the country is consumed at the level of household and only the rest comes to the industry (Pathiraja *et al*, 2017; Weralugolla, 2019).

Price volatility is another condition that researchers could identify as a reason for inadequate supply. Price is determined through the market mechanism and hence this volatility occurs mainly due to the excess demand for coconuts compared to the coconut supply. According to the study conducted by Chowdappa and Jayasekhar (2017), also identified the changes in the price also have a considerable impact on the supply of coconut. Normally, suppliers make decisions based on price prediction. This means, they accept orders for a predicted price and once they tried to purchase coconuts to fulfill their accepted orders, they have to face issues. At the same time, this affects their margin and sometimes they had to face losses. Since everyone is working to earn profits, both suppliers and companies are price conscious. This affects to the company's ability on sourcing nuts and in other words, inadequate supply compared to company requirements of nuts. Another prominent reason that was identified is climatic changes and yielding patterns. When the rainfalls happen properly, it positively impacts the yield (Peiris *et al.*, 1995) and prolonged drought seasons cause to reduce in the yield (Liyanage, 1987). Moreover, normally from January to March the coconut yield is low and from July to September the yield is high (Peiris *et al.*, 2007). It can be obtained the yielding pattern has an impact on the coconut supply.

Most of the fertile lands have been utilized for other purposes such as the construction of industrial ventures (Dissanayake., 2005) and most of the coconut lands have been fragmented into small parts for residential purposes (Pathiraja *et al.*, 2015). Improper land management is also another reason for a coconut supply shortage

Another reason is pests and animal attacks. Annually, the coconut yield is reduced by 10%-15% due to the mite attack (Wickramananda *et al.*, 2007).

Further, suppliers tend to create an artificial shortage of coconut by keeping stocks. According to the Hindustan Times, (as cited in Levi *et al.*, 2019) onion suppliers keep the onion and create an artificial shortage to sell them later for a higher price. Similar incidents can be obtained in the Sri Lankan coconut market as well. Suppliers are highly price conscious and suppliers are interconnected. Since suppliers are interconnected it is somewhat difficult for the companies to deal with suppliers. Because suppliers do not show much loyalty towards the company rather, they work together for their own well-being as a supplier community and they do not care about to whom they supply, as there are large number of companies in the industry.

According to the study conducted by Naik and Suresh (2018), authors have identified there is a direct impact of government policy changes on the Agri product supply chain. In this context, the Sri Lankan government has informed to use only organic fertilizers for the cultivation. When moving from chemical fertilizer to organic fertilizer affects the yield as farmers used chemical fertilizers for a longer period and trees are used for it. Hence, it can be expected further reduction in the yield. Moreover, the government has decided to restrict the importation of Palm oil, and currently palm oil is highly used in bakeries and other industries. Therefore, due to that decision of the government demand for coconut oil will increase, and ultimately that reduces the number of coconuts that comes to the industry.

Scarcity of supporting services such as coconut plucking, husking, and transportation causes for inadequate supply of coconut. As per past studies, the scarcity of labour for plantation activities has an impact on the supply of coconut (Fernando *et al.*, 2005, as cited in Weerawardana *et al.*, 2013). Moreover, according to the study conducted by Chowdappa and Jayasekhar (2017), scholars have mentioned that meeting future coconut demand is also challengeable due to labour scarcity.

The involvement of the Intermediary group called supply coordinators in the industry is another reason for the coconut shortage in the market. How this happens is, that these supplier coordinators purchase nuts at market price on a cash basis and they try to create a monopoly situation in the market by collecting nuts from the

suppliers and selling them back to the companies for a higher price. Furthermore, higher demand for coconut by-products in the market such as coconut husks were identified as other external environmental conditions for inadequate supply of coconut.

Internal Environmental Conditions

Similarly, the researchers were able to identify three reasons, as the internal environmental conditions that caused for inadequate supply of coconuts, that prevailed within the control of the ABC company. There are Issues with company management and the nut selection process. It has been identified a delay to accept the nuts and suppliers had to wait for a longer period and suppliers are not willing to spend more time. Further, during the nut selection process a huge number of nuts are rejected. Hence, suppliers had to face many issues and had to bear losses. Therefore, suppliers are reluctant to supply to the company.

Another internal condition is Issues with the company offering prices and payments. It has been identified that the company offering prices are lower than the price suppliers are expecting and a delay in the payments. This price deviation is discouraging suppliers to supply for the company.

Furthermore, there are company issues with the relationship building with the suppliers. The company does not have fixed group of suppliers and they choose suppliers based on the price. This company practice on supplier selection based on the price, can be stated as a reason for the companies' inability to build a proper relationship with its suppliers.

However, due to these internal reasons, researchers could observe that suppliers are reluctant and hesitant to supply to the company.

To provide recommendations to manage supply of coconut to meet the international demand for coconut-based product.

The second question that researchers have developed is how the supply shortage can be minimized? and through the data analysis researchers have identified some alternatives that the company can initiate to solve the mentioned problem.

Keeping extra nuts with husks in a separate land was one of the alternative mechanism supposed by participants. According to Hardgrave et al. (2009) stated that keeping safety stock will eliminate out of stock situations. However, currently, this method is practiced by the company, but researchers found out that there were some inefficiencies in this mechanism, during the discussions with participants. According to Lucky (n.d.) coconuts with husks can keep only for four months after that it will start to get grow or it will get rotten. Thereby inventory management is very important if the company plans to continue this mechanism. The study of Hardgrave et al. (2009), has identified that unnecessary stock will lead to a reduction in profit margins, an increment in holding costs and which can ultimately cause stock situations.

Additionally, the farmer-based system under the company is creating societies by collaborating farmers, and through this company is providing incentives to develop the community of the farmers is an alternative mechanism suggested by an interviewee and currently, company has initiated a part of this mechanism and planning to initiate it fully in the future. Under this farmer-based system According to the case study of west African national cotton companies, these companies have created small associations with the farmers and that had caused them to receive quality agricultural inputs and harvested crops (Bingen *et al.*,2003). Also, these associations were the reason behind the success of cotton companies in West Africa (Bingen *et al.*,2003).

Moreover, the introduction of a loan scheme to the suppliers is another mechanism suggested by a supplier. This loan scheme will facilitate the suppliers to purchase coconuts on cash from the farmers and that causes them to purchase at low prices. Similarly, the study by Tang et al. (2018), it has identified that buyer direct financing scheme allows a loan to the suppliers and in which it will assist in procuring raw materials to the suppliers. Buyer-direct financing means “the manufacturer acts as both the buyer and the lender and directly finances suppliers for production” (Tang *et al.*, 2018). Moreover, this scheme is usually practiced by the developing countries and the manufacturers with specialized set of suppliers (Tang et al.,2018).

Providing good price to suppliers also enable the company to have a continuous supply and researchers have found out this suggestion from most of the suppliers. Suppliers are ready to provide coconuts if they receive a good competitive price because it motivates them to supply more. As per the study of Chowdappa and Jayasekhar (2017) it has identified that currently coconut growers are highly faced with economic changes and uncertainties, which create price fluctuations in the market. Therefore, suppliers are expecting to receive a good price to survive in the market. If they survived company would be able to get a continuous supply.

As per Krause and Scannell (2002), It has identified that supplier incentives will improve the supplier performance and it's consider as a supplier development practice. Moreover, supplier incentives can be used by the product-based companies for the purpose of improving supply (Krause and Scannell,2002). Similarly, providing incentives and other facilities was an alternative mechanism suggested by the participants. And they assume that by implementing that mechanism company would be able to have a continuous supply. Similarly, incentives provided by the organization cause to motivate the suppliers (Modi and Mabert,2007).

Another recommendation suggested by the interviewees was efficient management of the coconut sorting process. Unthe der current procedure of the company, is selecting high-quality coconuts and rejecting the others and this process takes more time. But according to the participant's view this procedure needs to be more supplier friendly. It means that the company should concern on supplier's side. If company would develop coconut sorting procedure more efficient then the suppliers willing to do continuous supply to the company.

Maintaining network of supplier, which means a small group of fixed suppliers which have set of farmers for not to suffer from supplier shortages in another alternative mechanism. because if one supplier fails there are other connections to source coconuts. According to the study of Cormican and Cunningham (2007), has identified that a group of best performing suppliers will contribute to the supply chain performance of the organization.

Offering a fixed price for suppliers for a specified time period, which is similar to a forward contract is another recommendation developed by the management of the ABC company and currently, this practice is followed by the competitive companies. As per the past literature s, in a supply chain contract price, time, quality, and quantities are specified and through that kind of contract organization would be able to manage risks in a supply chain (Arshinder and Deshmukh, 2008, as cited in Handayati *et al.*, 2015).

The partnership is a model which was identified from the past literature and researchers have applied this model to ABC company to solve the research problem. Because partnership with suppliers enables the company to improve supply chain effectiveness (Lau *et al.*, 2002, as cited in Kim *et al.*, 2010). Moreover, the partnership model is important when the organizations are heavily impacted by scarce resources, severe competition, higher customer expectations and faster rates of change (Lambert *et al.*,1996). Moreover, according to Mor et al. (2015), it has stated that supply chain management is all activities involved in managing better partnerships and relationships with suppliers. Thereby supplier relationship management took an important place in developing partnerships. Similarly, the mission statement of U.K. manufacturer

stated that “establishing long term relationships with supply partners that meet company standards are committed to the manufacturer and strive to improve in all areas” (Handfield *et al.*, 2000).

In correspondence to the discussions with the participants, researchers have identified that most of the relevant partnership facilitators are possessed by both parties. It means that these facilitators assist in growing and strengthening the partnership between parties (Lambert *et al.*,1996). Also, the success or the failure of a partnership is depending on the nature of the facilitators (Lambert *et al.*,1996).

5.Conclusion

This study has been conducted with two objectives of identifying the most prominent reasons which causes inadequate supply and providing recommendations to manage the supply of coconut to meet the international demand for coconut-based product. Researchers have followed a qualitative approach with a phenomenology strategy and data has been gathered through six in-depth interviews. With the use of thematic analysis, researchers were able to develop several themes which support the research questions. As the most prominent reasons behind lack of coconut supply it has been identified both external and internal environmental factors. Under this study, it has been examined the applicability and preference of applying partnership model to this context as a recommendation to overcome their issue and were able to identify positive response from participants. Further, in this study it has presented some other alternative mechanisms such as keeping extra coconuts in a separate land, developing a farmer-based system, efficient management of coconut sorting procedure etc.

Future studies can be tested how partnership model can be implemented and the success of the partnership model can apply a quantitative approach in order to address the same research problem as current study is conducted using qualitative approach. Moreover, future studies can test the applicability of other theories of supplier relationship management.

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