# SUPPLY CHAIN ANALYSIS OF COPRA IN PAKUURE VILLAGE TENGA OF SOUTH MINAHASA

ANALISIS RANTAI PASOK KOPRA DI DESA PAKUURE TENGA MINAHASA SELATAN

By: Karenia Keintjem<sup>1</sup> Joy E. Tulung<sup>2</sup> Fitty V. Arie<sup>3</sup>

<sup>123</sup>Management Department Faculty of Economics and Business University of Sam Ratulangi Manado

#### E-mail:

<sup>1</sup>kareniatabitha@gmail.com <sup>2</sup>joy.tulung@unsrat.ac.id <sup>3</sup>fittyvaldi@gmail.com

Abstract: North Sulawesi is known as one of the places that produce Copra the most in Indonesia. In North Sulawesi, the agriculture sector is considered as one of the superior commodities for the economy. The people of North Sulawesi have been cultivating coconut to be processed into copra as one of their main sources of income. The plantationin Pakuure Village, Tenga sub-district, South Minahasa Regency is an area that is overgrown with coconut plants. This village it is one of the producers of coconut plants inNorth Sulawesi. Based on the interview conducted with all of the ten informants whichare the copra buyers, and then the result shows all of them are the copra buyers, and most informants almost have the same answers about being a copra buyer as the main commodity. It is also discovered that each of the ten informants have their own different experiences and opinions as a copra buyer and how the supply chain can affect their income. The quality of copra determines the price of copra, thus affects their income. According to them the quality of copra determines the price of the copra laways gets the best price, while the bad quality ones tend to have the worst price, that of course affects their income as a copra buyer that the supply chain of copra definitely affects the income of the copra buyers, as most of them being a copra buyer as their main source of income. From the results of the interview with all informants, researcher found that the supply chain of copra definitely affects the income of the copra buyers, as most of them being a copra buyer as their main source of income. Especially whenit comes to quality control, if the copra farmers came up with a huge amount bad quality copra, it can heavily affect the final outcome of the copra buyers.

**Keywords:** supply chain

Abstrak: Sulawesi Utara dikenal sebagai salah satu tempat penghasil Kopra terbanyak di Indonesia. Di Sulawesi Utara, sektor pertanian dianggap sebagai salah satu komoditas unggulan perekonomian. Masyarakat Sulawesi Utara telah membudidayakan kelapa untuk diolah menjadi kopra sebagai salah satu sumber pendapatan utama mereka. Perkebunan di Desa Pakuure, Kecamatan Tenga, Kabupaten Minahasa Selatan merupakan kawasan yang banyak ditumbuhi tanaman kelapa. Desa ini merupakan salah satu penghasil tanaman kelapa di Sulawesi Utara. Berdasarkan wawancara yang dilakukan dengan kesepuluh informan yang merupakan pembeli kopra, maka didapatkan hasil bahwa mereka semua adalah pembeli kopra, dan sebagian besar informan memiliki jawaban yang hampir sama tentang menjadi pembeli kopra sebagai komoditas utama. Ditemukan juga bahwa masing-masing dari sepuluh informan memiliki pengalaman dan pendapat yang berbeda sebagai pembeli kopra dan bagaimana rantai pasokan dapat mempengaruhi pendapatan mereka. Kualitas kopra menentukan harga kopra, sehingga mempengaruhi pendapatan mereka. Menurut mereka kualitas kopra menentukan harga kopra. Kopra yang berkualitas baik selalu mendapatkan harga yang terbaik, sedangkan yang berkualitas buruk cenderung mendapatkan harga yang paling buruk, yang tentunya mempengaruhi pendapatan mereka sebagai pembeli kopra. bahwa rantai pasok kopra sangat mempengaruhi pendapatan para pembeli kopra, karena sebagian besar dari mereka adalah pembeli kopra sebagai sumber pendapatan utama mereka. Dari hasil wawancara dengan semua informan, peneliti menemukan bahwa rantai pasok kopra jelas mempengaruhi pendapatan pembeli kopra, karena sebagian besar dari mereka menjadi pembeli kopra sebagai sumber pendapatan utama mereka. Terutama dalam hal pengendalian kualitas, jika petani kopra menghasilkan kopra berkualitas buruk dalam jumlah besar, dapat sangat mempengaruhi hasil akhir pembeli kopra.

Kata Kunci: rantai pasok

#### INTRODUCTION

#### **Research Background**

Coconuts are diversified based on its shapes and sizes. The most essential thing of coconut fruit is its antiviral capabilities. It comprises of three major sections that are utilized extensively, namely, endosperm (kernel meat), endocarp (shell), and mesocarp (coir) (Varghese and Jacob, 2017). Both the flesh and dried form of kernel meat can be used. The shell is utilized to design handcrafts, and coir is used to create mat rope. According to DebMandala and Mandal (2011), coconut is considered as the most beneficial plant groups known to humans. Among the beneficial palms, three species are commercially valued, the date palm (Phoenix dactylifera), oil palm (Elaeisguineensis), and coconut palm (Cocos nucifera). Palm trees have offered food, water, fuel, and shelter to people in tropical and subtropical climates for generations. As a result, the coconut palm is known as "Kalpavriksha," or "Life Tree" (Chalbhagath and John, 2014).

Oil palm and coconut palm fruits provide valuable oil, which is used in margarine, cooking oil, soap, cosmetics, pharmaceuticals, and fuel. Additionally, the white meat section of the coconut, copra is frequently Coconut tree (Cocos Nucifera) products. Eastern Indonesian countries refer copra as "green gold" (Evita, Mappangara, and Akhmar, 2020). Loomba (2013) has mentioned coconut having the medicinal properties and herbal remedies. Coconut husks are used for coconut matting and provide a considerable source of fuel. Coconut is a tropical fruit produced from the Cocos Nucifera plant, belonging to the Arecaceaeorpalm-Paleman family. Coconut tree grows in the tropics area of the world. Indonesia, Philippines, India and Brazil are among the world's largest coconut producers in the world. Coconuts known have many benefits. Almost all of its parts can be used by humans so it is considered a versatile plant. Especially for the flesh of this old fruit, it can also be processed by taking it and drying it into a trade commodity of economic value, which is called copra.

Copra is the dried flesh of coconut fruit which is one of the coconut fruit derivative products which is very important because it is the raw material for making coconut oil. Copra is rich in essential nutrients including protein, vitamins, and minerals. Copra is one of the processed products of coconut that have such a big potential for international market. Copra can't be consumed directly, but it needs to be processed into final products such as coconut oil. This what makes the value of copra tend to be high.

North Sulawesi is known as one of the places that produce Copra the most in Indonesia. In North Sulawesi, the agriculture sector is considered as one of the superior commodities for the economy. The people of North Sulawesihave been cultivating coconut to be processed into copra as one of their main sources of income. The plantation in Pakuure Village, Tenga sub-district, South Minahasa Regency is an area that is overgrown with coconut plants. This village it is one of the producers of coconut plants in North Sulawesi. Coconut is a plantation commodity that plays an important role for the economy in North Sulawesi. Now this coconut plant is the prima donna and superior in North Sulawesi, so that many business actors such as farmers in Pakuure village, Tenga sub-district, South Minahasa district choose to focus on managing this copra plantation because currently the price of copra is very profitable for copra farmers.

Supply chain management is a management process starting from the flow of information, products, to services throughout the network from customers, suppliers, or companies. Supply chain management represents the supplier's efforts to develop and implement an effective and efficient supply chain as possible. The supply chain includes everything from production to product development to the information systems needed to direct these efforts. The development of supply chain management activities or supply chain management cannot be separated from the development of logistics known as the push era at this time. Supply chain management is a concept in running a business which is a key in business continuity.

This concept emerged at the end of the 1980s when many companies were under pressure due to not implementing an integrated logistics and supply chain system. The management of supply chain management in fact has a very important role in the sustainability of businesses / businesses that are run in this modern era. Judging from the problems that exist at this time because the price of copra is already very high, so many copra buyers compete forthe price they provide to copra farmers, so many copra buyers do not have clear copra suppliers due to price competition that occurs. The increasingly profitable price of copra commodities has resulted in copra buying companies wanting copra that has good quality.

# **Research Objective**

The purpose of this research is to analyze the supply chain of copra in Pakuure Village Tenga, South Minahasa.

#### THEORETICAL FRAMEWORK

### Management

Stoner and Freeman (1992) defined management is the process of planning, organizing, leadership, and controlling the efforts of organizational members and the process of using all organizational resources to achieve predetermined organizational goals. Koontz and Weihrich (1988) stated that management is an art of getting things done through and with the people in formally organized groups.

# **Supply Chain**

According to Beamon (1999), supply chain is an integrated process which involves the processing of raw materials into finished goods and making them available to the end user. Chan et al. (2003) described supply chain as the partnership and/or alliance involving suppliers, downstream customers and a host of logistics service providers to exploit their capabilities in order to create value for the end consumer.

# **Supply Chain Management**

According to Christopher (2011:4), Supply chain management is a reciprocal relationship between providers and customers to deliver highly optimal values to customersat a fairly low cost but provide overall supply chain benefits. According to Lockamy and McCormack (2004), Supply chain management has been emerging as one of the main areas in businesses that can offer sources of competitive advantage. Chen and Paulraj (2004) stated that, the supply chain management construct begins by developing a collaborative advantage, as opposed toPorter's competitive advantage.

#### **Previous Research**

Kambey, Kawet, and Sumarauw (2016) determined the cabbage supply chain system in Rurukan Village from farmers to consumers. This research method is qualitative. The results of this study indicate that: (1) the supply chain system in Rurukan Village is very good in terms of information, as well as the benefits that farmers get; (2) Products or crops sold by farmers are in the form of fresh cabbage; (3) The relationship between farmers, collectors, retailers, consumers looks very good from the information and involvement of all parties in the cabbage supply chain.

Jansen and Sumarauw (2016) aimed to find out how the supply chain for fish catches is in Manado City and Bitung City and to see whether there are differences between the supply chains for fish catches in Manado City and Bitung City. This research method uses descriptive qualitative research with primary data from interviews and field observations. The results showed that there were differences between the supply chains of fish catches in Manado City and Bitung City. Fishing groups in Manado City focus more on selling fish directly at the market, auctioning or selling fish caught at the fishermen's group. Whereas in fishermen groups in Bitung City, the role of fish collectors greatly influences the supply chain of fish catches.

Spina et al. (2014 identified which supply chain management (SCM) practices should be adopted by managers in order to achieve superior performance for their companies. Approximately 800 worldwide firms were analyzed, spread across13 different industries, to understand the impact of 31 practices in five enterprise operational performance indicators.

#### RESEARCH METHOD

## Research Approach

This research is qualitative method. Qualitative research approach refers to all non-numeric data or data that have not been quantified and can be a product of all research strategies (Saunders, Lewis, and Thornhill, 2009). Creswell (2003) defined the qualitative research as an effective model for the research to be more detail in obtaining data by deeply involved in the natural experiences.

## **Population and Sample**

The population used in this study are the Copra Business which includes Copra farmers, Copra buyers and their employees in Pakuure Village, South Minahasa Regency. Purposive sampling used as the sampling method in this research. According to Sugiyono (2007), purposive sampling is a technique to collect sample of

data source with some considerations like people who are considered understand the matter, can be trusted or people who has authority that will make it easier to the researcher to explore the certain object or social situation. The sampling size of this research are the 10 informants.

#### **Data Collection Method**

Data for this research are gathered from primary data and secondary data, which relevant with the research itself. Primary Data are the result of conducting some type of the data needed for this research, the data gathered through interview and observation in the social situation. The secondary data involved gathering data from company data, books, journal, and literatures.

# Operational Definition of Research Variable Table 1. Operational Definition and Indicator of Research Variable

Variable	Definition	Indicator
Supply Chain Management	Supply chain management is a reciprocal relationship between providers and customers to deliver highly optimal values to customers at a fairly low cost but provide overall supply chain benefits.	Operations, Distribution, Inventory, Production.

Source: Data Processed, 2022

## **Data Analysis Method**

Qualitative data analysis is done when the empirical data obtained is qualitative data in the form of a collection of tangible words and not a series of numbers and cannot be arranged in categories - classification / structure classification. Data can be collected in various ways (observation, interview, essence of documents).

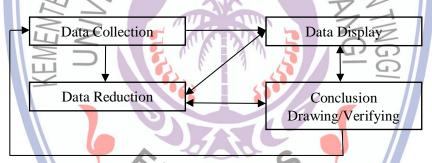


Figure 2. Data Analysis Method Source: Miles and Huberman (1994)

Miles and Huberman (1994) stated that there are activities in data analysis which are: data reduction, data display, and conclusion drawing/verification. In current research, the process of collecting data started using indepth interview firstly the researcher collect the secondary data to choose the informants that about to be interviewed, the secondary data will be source of literatures and journals. In the interview process, the researcher had to ensure that the informant's answer will not widen from the point of the question and supposed to meet the interviewer question's goal. Along with the interview process, the observation towards the informant's expression while answering the questions will also conduct. In collecting data from many informants within a certain time continuously, there will be high possibility of gaining excessive, complicated and complex data. Reducing data has closest meaning with summarize data which means the interviewer should only note the data that meet the point of questions and focusing only to the important answers. Thereby, the data reduction will provide a clearer understanding about what the researcher seeks for. In this stage, the data collected that have been reduced will display using narrative text. The most frequent form of display data for qualitative research data in the past has been narrative text. By displaying the data ease the researcher to understand the real situation and to do some further analysis or caution on that understanding. The last stage in analyzing qualitative data is the conclusion drawing/verification. Thereby, the conclusion in qualitative research will answer the research problem that previously mentioned.

#### RESULT AND DISCUSSION

#### Result

## **Interview Results**

The first informant is a 49 years old male copra buyer. He has been a copra buyer for at least 19 years. In the time span of 1 month, he buys copra from the farmers 6-8 times. When he buys copra from the farmers, the price range is depending on the quality of the copra. Because according to him, the quality of the copra determines the price of the copra. If the copra is still not roasted enough or is overcooked the price could be lower, but if the copra is well-cooked then the price should be high. However, there could be some issues regarding the process of buying and selling the copra, sometimes when it comes to raining season the copra farmers cannot really farm coconut to make copra because it becomes harder to farm copra. Thus, selling copra to the copra factory also might be delayed.

The second informant is a 52 years old male copra buyer. He has been for at least 15 years. In a month, he did at least 10 transactions, because for him buying copra is his only main source of income and there is really nothing he can do to provide for his family. Since being a copra buyer is his only source of income, he tried to always buy copra from the farmers as often as possible and the sell the copra to the copra factory. From there he can make a lot of income to provide for his family without being short on income.

The third informant is a 50 years old male copra buyer. He has been a copra buyer for at least 20 years. In the time span of 1 month, he buys copra for at least 8 times. When buying copra, he always looks for the ones that provide the best copra quality because he didn't want to do much work to sort the copra that he is going to buy, all he wants is the best quality. Since he only takes the best quality, sometimes there are problems when the copra farmers trying to sell him copra that does not really suit his needs and wants when it comes to the quality of the copra. And when the farmers trying to force him to buy the copra that they trying to sell sometimes an argument can happen.

The fourth informant is a 40 years old male copra buyer. He has been a copra buyer for at least 5 years. This buying copra business is a family business that has been going on for 30 years, and he just started to take this business from the last 5 years. And so far, he is still on the process to adjust on this business. In the time span of 1 month, he already buys copra for at least 6 times. Since he still adjusting on this business, sometimes it could be harder for him to buy and sort the best quality of copra that he is going to sell later on. According to him, although sometimes it can be hard, but he is trying his best to keep this family business running.

The fifth informant is a 55 years old male copra buyer that has been a copra buyer for at least 12 years. He buys copra for at least 5 time is the time span of 1 month. According to him, he is not really focusing on buying copra because he still has a job as a private employee as his main source of income, so being a copra buyer is just a side job for him to earn some extra income, and when he retired from his job as a private employee then he will focus as copra buyer, he adds. Since being a copra buyer is not really his main source of income, he does not really have much consideration when it comes to buying copra from the farmers and the quality of copra that the farmers provide.

The sixth informant is a 57 years old male copra buyer. He has been a copra buyer for at least 20 years. When it comes to buying copra, he already has a sole distributor of copra, so they already have a strong relationship that makes it easier for them to do business together. Since, he already has a sole distributer of copra, the process of buying copra becomes much easier and faster. The only thing that can be the issues is when it comes to raining season, farming copra can be hard and slowing the process of buying copra, especially only from 1 distributor, but other than that there's no really any problems for him.

The seventh informant is a 48 years old male copra buyer that has been a copra buyer for at least 18 years. In a month, he made transactions with copra farmers to buy copra for at least 12- 15 times because for him, whenever the farmers bring their copra to him, he always buys them. When it comes to the quality, he also pays the farmers according to how well the copra is, if the copra is no roasted well or overcooked then the price is low, but if the copra is well roasted the he pays them with the normal price or even higher if the farmers provide a huge amount good quality copra. According to him, since he always took all the copra that the farmers brought to him, sometimes the problem occurs when a huge amount of the copra is in bad quality. Therefore, the only thing he can do when the quality of the copra is bad is to adjust the price of the copra accordingly.

The eighth informant is a 55 years old male copra buyer that has been a copra buyer for at least 15 years. In a month, he did at least 10 time's transactions of buying copra. According to him, being a copra buyer is a very profitable business especially in his hometown, because his hometown Pakuure is known for as one of the best copra providers in Indonesia, even on international scale. Being a copra buyer is his only main source of income,

therefore he always keeps his business running steady and always try to overcome any problem that might occur, such as low supply from farmers can be overcome with keeping some copra in stock so when the farmers cannot really sell copra to him as much, he already has some reserved in stock.

The ninth informant is a 45 years old male copra buyer. He has been a copra buyer for at least 3 years, but although he already doing this business for at least 3 years, he does not buy copra that much. In a month, he buys copra for 3-4 times because he still works as a civil servant as his main job and his main source of income. When he buys copra though, he always goes for the best quality so he can earn the best result from this business. According to him, there is no really any issues with this copra buyer business because it is just a side job for him to earn extra income. The only thing that can be a problem is he is having a hard time when it come to the time management that he should make for his main job and his business.

The tenth informant is a 50 years old male copra buyer. He has been a copra buyer for at least 10 years. Other than being a copra buyer he also still works as a private employee. But although he still works as a private employee, he also being serious and focus on being a copra buyer. For him, having a job as a private employee and as a copra buyer does not stop him to focus on both, because he is a workaholic pretty much, he adds. The only issues that sometimes he can encounter is when he being overwhelmed with his job and his business, but so far, he still can manage to overcome any problems with his job and his business. Especially when it comes to payday, the better his works the better his income also, that can drive him to work as hard up until now.

Table 2. Coding Categorization

No.	Informant	Copra as the Main Commodity	Copra Supply Chain			
1.	Informant 1	The price of copra can be determined by the	The weather can affect the supply chain			
		quality	of copra			
2.	Informant 2	Being a copra buyer as the main source of	Accept as much copra supply as possible			
		income	for more income			
3.	Informant 3	Only accept the best quality to fasten the	Copra farmer being forceful			
		buying process				
4.	Informant 4	Copra buyer is a family business	Quality control can be hard sometimes			
5.	Informant 5	Still works as a private employee	Do not have much consideration			
6.	Informant 6	Focusing on buying copralater on	Supply from a sole distributer can be an			
			issue on a bad weather			
7.	Informant 7	Have a sole copra distributor, thus fasten	Quality control can be hard, especially			
		the process of buying copra	from the supplier			
8.	Informant 8	Accept everything from the supplier	Low supply of copra can be a problem			
			that affects the income			
9.	Informant 9	Quality still determine the price	Time management can be a problem			
10.	Informant 10	Took advantage of the hometown as a copra	Can be overwhelmed by the amount of			
		provider to be a copra buyer	work and process			
Source: Data Proceed, 2022						
	THI DAIL					

## **Discussion**

Supply chain performance measure can be defined as an approach to judge the performance of supply chain system. Companies must always be concerned with their competition. Today's marketplace is shifting from individual company performance to supply chain performance which is the entire chain's ability to meet endcustomer needs through product availability and responsive on-time delivery. Supply chain performance crosses both functional lines and company boundaries. Functional groups such as engineering, Research and Design (R&D), manufacturing, and marketing are all the instruments in designing, building, and selling products most efficiently for the supply chain, and traditional company boundaries are changing as companies discover new ways of working together to achieve the ultimate supply chain goal which is the ability to fill customer orders faster and more efficiently than the competitors.

Coconut goods are divided into kernels, inflorescence, shell, water, and handy food items by the Coconut Development Board. Virgin coconut oil, desiccated coconut, coconut milk, coconut skimmed milk, spray dried coconut milk powder, coconut cream, coconut chips, coconut oil, and copra are examples of kernel- based coconut goods. The edible coconut is consumed as dry fruit, while the ground copra is used to extract oil. When compared to other oilseeds, copra has the greatest amount of oil. Eastern Indonesia's economy has been reliant on copra for over eight decades (green gold). The need for cooking oil in European nations increased in the 1880s, prompting

the discovery of copra oil as a new cooking tool. Copra is also a component in the making of butter. The Copra is also utilized in the production of soap (Evita, Mappangara, and Akhmar, 2020).

Based on the interview conducted with all of the ten informants which are the copra buyers, and then the result shows all of them are copra buyers, and most informants almost have the same answers about being a copra buyer as the main commodity. It is also discovered that each of the ten informants have their own different experiences and opinions as a copra buyer and how the supply chaincan affect their income. From the results of the interview with all informants, researcher found that all of the informants are copra buyers and almost all of them copra buyer as their main source of income. Copra as the main commodity in Pakuure village, Tenga subdistrict, South Minahasa definitely affects the thinking pattern of the people in there. Because of how much the supply of copra in there, thus make most of the people in there to make use of this natural source, and one of them is to be a copra buyer.

According to Christopher (2011:4), supply chain management is a reciprocal relationship between providers and customers to deliver highly optimal values to customers at a fairly low cost but provide overall supply chain benefits. This is similar to the results of this study based on the interview conducted from informant 7.

"Whenever the farmers bring their copra to him, he always buys them. When it comes to the quality, he also pays the farmers according to how well the copra is, if the copra is no roasted well or overcooked then theprice is low, but if the copra is well roasted the he pays them with thenormal price or even higher if the farmers provide a huge amount good quality copra."

Stoner and Freeman (1994) defined management is the process of planning, organizing, leadership, and controlling the efforts of organizational members and the process of using all organizational resources to achieve predetermined organizational goals. This is similar to the results of this study based on the interview conducted from informant 10.

"Other than being a copra buyer he also still works as a private employee. But although he still works as a private employee, he also being serious and focus on being a copra buyer. For him, having a job as a private employee and as a copra buyer doesn't stop him tofocus on both, because he's a workaholic pretty much, he adds."

From the result of the interview with the 10 informants, the researcher found that there are similar points from the informants about the how the quality of copra determines the price of copra, thus affects their income. According to them:

"The quality of copra determines the price of the copra. Good quality copra always gets the best price, while the bad quality ones tend to have the worst price that of course affects their income as a copra buyer."

From the results of the interview with all informants, researcher found that the supply chain of copra definitely affects the income of the copra buyers, as most of them being a copra buyer as their main source of income. Especially when it comes to quality control, if the copra farmers came up with a huge amount bad quality copra, it can heavily affect the final outcome of the copra buyers. According to Chopra and Meindl (2013:13), the supply chain consists of all parties involved, directly or indirectly, in meeting customer demands. The supply chain includes not only producers and suppliers, but also transporters, warehouses, retailers and even the customers themselves. This is similar to the results of this study based on the interview conducted from informant 1.

"There could be some issues regarding the process of buying and selling the copra, sometimes when it comes to rainingseason the copra farmers can't really farm coconut to make copra becauseit becomes harder to farm copra. Thus, selling copra to the copra factory also might be delayed."

#### CONCLUSION AND RECOMMENDATION

#### Conclusion

1. Based on the result and discussion from the previous chapter, the supply chain analysis of copra can be concluded. Reviewing the supply chain analysis of copra, it has been observed using interview, it shows that

- all of the informants are copra buyers and almost all of them being a copra buyer as their main source of income. Copra as the main commodity in Pakuure village, Tenga sub-district, South Minahasa definitely affects the thinking pattern of the people in there. Because of how much the supply of copra in there, thus make most of the people in there to make use of this natural source, and one of them is to be a copra buyer.
- 2. The quality of copra determines the price of copra, thus affects their income. According to them the quality of copra determines the price of the copra. Good quality copra always gets the best price, while the bad quality ones tend to have the worst price that of course affects their income as a copra buyer. that the supply chain of copra definitely affects the income of the copra buyers, as most of them being a copra buyer as their main source of income. Especially when it comes to quality control, if the copra farmers came up with a huge amount bad quality copra, it can heavily affect the final outcome of the copra buyers.

#### Recommendation

This research has been conducted in purpose to analyze the supply chain of copra. And from the result, several recommendations for the copra buyers, and for the future researchers, would be as follows:

- 1. For copra buyers, to keep focus on the quality control of the copra that they took from the copra farmers. Because the quality really affects the price of the copra thus also affect their income, especially that most of them being copra buyer as the main source of income.
- 2. For future researchers, hopefully this can give more knowledge and additional information regarding the analysis of supply chain of copra. And also, the researcher hopefully will help in doing their research using the findings regarding with the topic, and even help as guidance inselecting the method of the research.

## REFERENCES

- Beamon, B. M. (1999). Designing the Green Supply Chain. *Logistics Information Management*, Vol. 12, No. 4, 332-342. Available at: <a href="https://www.emerald.com/insight/content/doi/10.1108/09576059910284159/fml/html">https://www.emerald.com/insight/content/doi/10.1108/09576059910284159/fml/html</a>. Retrieved on: October 13, 2022
- Chalbhagath, A., & John, J. P. (2014). Fungicidal Bioassay on Foliar Fungi Associated with Yellowing Disease of Coconut. *Pesticide Research Journal*, 26(1), 90-93. <a href="https://www.researchgate.net/publication/354719824">https://www.researchgate.net/publication/354719824</a> Fungicidal Bioassay on Foliar Fungi Associated with Yellowing Disease of Coconut. Retrieved on: November 1, 2022
- Chan, F. T. S., Qi, H. J., Chan, H. K., & Lau, H. C. W. (2003). A Conceptual Model of Performance Measurement For Supply Chains. *Management Decision*, 41(7), 635-642. <a href="https://www.researchgate.net/publication/241887278">https://www.researchgate.net/publication/241887278</a> A Conceptual Model of Performance Measurem ent For Supply Chains. Retrieved on: August 3, 2022
- Chen, I. J., & Paulraj, A. (2004). Towards A Theory of Supply Chain Management: the Constructs and Measurements. *Journal of Operations Management*, 22, 119–150. <a href="https://www.tlog.lth.se/fileadmin/tlog/Utbildning/Kurser/Logistik i foersoerjningskedjor/Artiklar/JOM-2004-Paulraj.pdf">https://www.tlog.lth.se/fileadmin/tlog/Utbildning/Kurser/Logistik i foersoerjningskedjor/Artiklar/JOM-2004-Paulraj.pdf</a>. Retrieved on: September 16, 2022
- Chopra, S., & Meindl, P. (2013). Supply Chain Management. Essex, England: Pearson Education.
- Christopher, M. (2011). Logistics and Supply Chain Management. 4th Edition. London: Prentice Hall,
- Creswell, J. (2003). Research Design: Qualitative, Quantitative and Mixed Methods Approaches. 2nd Edition. Thousand Oaks, CA: Sage Publications
- DebMandala, M., & Mandal, S. (2011). Coconut (Cocos Nucifera L.: Arecaceae): In Health Promotion and Disease Prevention. *Asian Pacific Journal of Tropical Medicine*, 4(3), 241-247. <a href="https://www.sciencedirect.com/science/article/pii/S1995764511600783">https://www.sciencedirect.com/science/article/pii/S1995764511600783</a>. Retrieved on: October 27, 2022

- Evita, A. L., Mappangara, S., & Akhmar, A. M. (2020). Agribusiness and Cultivation of Coconut in the Netherlands at the end of the Colonial Era. *IOP Conference Series: Earth and Environmental Science*, 575, 1-8. <a href="https://iopscience.iop.org/article/10.1088/1755-1315/575/1/012108/pdf">https://iopscience.iop.org/article/10.1088/1755-1315/575/1/012108/pdf</a>. Retrieved on: July 28, 2022
- Jansen, R., & Sumarauw, J. S. B. (2016). Analisis Rantai Pasokan Hasil Tangkapan Ikan di Kota Manado dan Kota Bitung. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, Vol. 4, No. 3. <a href="https://ejournal.unsrat.ac.id/index.php/emba/article/view/14119/0">https://ejournal.unsrat.ac.id/index.php/emba/article/view/14119/0</a>. Retrieved on: November 17, 2022
- Kambey, S. F., Kawet, L., & Sumarauw, J. S. B. (2016). Analisis Rantai Pasokan (Supply Chain) Kubis di Kelurahan Rurukan Kota Tomohon. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, Vol. 4, No. 3. <a href="https://ejournal.unsrat.ac.id/index.php/emba/article/view/14116">https://ejournal.unsrat.ac.id/index.php/emba/article/view/14116</a>. Retrieved on: September 16, 2022
- Koontz, H., & Weihrich, H. (1988). Management. McGraw-Hill
- Lockamy, A., & McCormack, K. (2004). Linking SCOR Planning Practices to Supply Chain Performance, an Explorative Study. *International Journal of Operations & Production Management*, 24(12), 1192–1218.
  - https://www.researchgate.net/publication/233717497 Linking SCOR planning practices to supply chain performance An exploratory study. Retrieved on: October 27, 2022
- Loomba, S. and Jothi, V. (2013). Cocos nucifera: Its properties and contributions to dentistry. *International Journal of Scientific Study*, 1(3),138-140. <a href="https://www.researchgate.net/publication/280682702">https://www.researchgate.net/publication/280682702</a> Cocos Nucifera its Properties and Contributions to Dentistry. Retrieved on: September 16, 2022
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage Publications.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). Research Methods for Business. 5th Edition. Prentice Hall.
- Spina, D., Di Serio, L. C., Brito, L. A. L., & de Castro Moura Duarte, A. L. (2014). The Influence of Supply Chain Management Practices in the Enterprise Performance. Conference: POMS 25th Annual Conference Production and Operations Management Society. <a href="https://www.researchgate.net/publication/267268440">https://www.researchgate.net/publication/267268440</a> The influence of supply chain management practices in the enterprise performance. Retrieved on: October 27, 2022
- Stoner, J. A. F., & Freeman, E. (1994). Management. India: Prentice Hall
- Sugiyono. (2007). Metode Penelitian Bisnis: Pendekatan Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta
- Varghese, A., & Jacob, J. (2014). A Study on the KAU Coconut Husking Tool. Conference: 2014 Annual International Conference on Emerging Research Areas: Magnetics, Machines and Drives (AICERA/iCMMD).
  - https://www.researchgate.net/publication/286651837 A study on the KAU coconut husking tool. Retrieved on: August 3, 2022