The Analysis of Coconut Market Value Chain

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ABSTRACT

Purpose – This paper seeks to examine how the coconut market value chain is managed in order to develop agricultural economic performance in Indragiri Hilir, Riau Province.
Methodology/approach – The method used in this paper is descriptive qualitative research and literature review. The data is collected from secondary sources that is credible related to the topic. The focus of this research is to find various legal theories, propositions, principles, or ideas that are used to analyse and solve the formulated research questions.
Findings – From the data collected, it is found that the coconut market value chain in Indragiri Hilir run quite well. Although there are some problems faced by the coconut farmers, both coconut farmers and Local Government have tried their best to develop coconut exporting activity and to minimize the constraints in coconut market in Indragiri Hilir.

Keywords: Coconut, Market Value, Chain, Analysis, Agricultural, Economic, Indragiri Hilir

INTRODUCTION

Indragiri Hilir is one of the regency in Riau Province, which is the main economic development is in agricultural sectors. This regency is known as a coconut producer with the number of coconut production reaches 310 million tons per year (Apriyanto & Rujiah, 2019). Some other sub-district in Indragiri Hilir are also known as coconut producers as, such as Tanah Merah, Kuala Indragiri, Enok, Batang Tuaka, Gaung, Keritang, Reteh, Mandah, Kateman, and Plangiran. Besides coconut production, the other production activities such as corn farming and rice cultivation are another agricultural economic activity in Indragiri Hilir regency. This regency is also recorded as the highest economic activity in agricultural sectors especially in coconut production. This is quite great for Indragiri region since the climatic issues that occur in the district.

Coconut, which is known as Cocos Nucifera L. in Latin, is one of a tropical plants that spreads in more than 80 countries around the world. Coconut can be processed in many different ways, such as coconut oil, coconut milk, coconut flour, coconut juice, and dried coconut. It is because almost every part of the coconut plant can be used to something beneficial for our lives. That is why coconut is also known as “Tree of Heaven”. From dried coconut, it can also be processed to remodel ice cream, pastries, biscuits, and many other foods and beverages (Akrong, Mbogoh, & Irungu, 2020; Wage &
Molek, 2021; Apriyanto, 2019).

These days, the demand for coconut oil is getting higher. For example, in 2014, the needs of coconut oil around the world reaches 2.18 millions of tons per year with the market value is at 3.11 billions of US dollars (UN comtrade, 2016). Indonesia’s geographical position as a tropical country supports the growth and development of coconut plants. Consequently, this is an advantage for the development of coconut oil commodities. However, Indonesia is not the only country which plays a role as a producers of coconut oil. There are many other countries that contributes in this occurrence which is explained in the chart below.

**Figure 1. The Percentage of Exporting Coconut Oil of Exporting Countries in 2014**

From the data above, we can see that the highest percentage of exporting coconut oil is from Philippines with 41.55%, followed by Indonesia with 35.31%. The last three countries are under 10%, 8.58% for Netherland, 8.59% for Malaysia, and 4.53% from other countries. The lowest percentage of exporting coconut oil is from USA, which is at 1.44%. However, the high demand of coconut supply from Indonesia does not followed by the level of coconut farmer itself. There is still a gap in terms of profit between coconut farmers.

Basically, the concept of agricultural value chain itself includes the full range of activities, including participants, in moving agricultural products from input suppliers to farmers’ field and finally, to consumers (Miller & Jones, 2010).

**Figure 2. Production and Consumption Flow**
In this activity, each stakeholder in the chain above has the link to the next chain, in order to form a viable chain. From the chain above, it is understandable to determine how the marketing and value activities take place and who shares how much benefits from such activities.

It has been argued that the linking of farmers to the markets through efficient value chains would strengthen the value-addition activities which is supported by a better use of technology and data inputs, upgraded infrastructure in order to improve exports process (Pabuayon, Cabahug, Castillo, & Mendoza, 2009). This process enables to raise the income of farmers and will hopefully provide incentive to improve farmers’ management practices towards higher farm productivity. Through increasing production, value addition, and better marketing option, the income of the farmers can gradually be enhanced.

Therefore, the objective of this study is to analyze how the coconut market value chain is managed in order to develop agricultural economic performance in Indragiri Hilir, Riau Province. The scope of the study is limited to value chain analysis. From the objective of the study, there are two research questions:

1. How the coconut market value chain is run in Indragiri Hilir?
2. How to manage the value chain in order to minimize the gap in terms of profit?

LITERATURE REVIEW

Market value chain, especially for coconut commodity, has been discussed in many literatures in order to get the benefit from the research and to maximize the economic activities in certain area. In this section, the researcher would like to provide some studies that is related to coconut market value chain.

A research which is conducted by Nur Rahmi Suud, et al. (2021), is written to analyse how the condition and performance of the coconut supply chain is managed at CV Cakrawala which is located in Bunta District, Banggai Regency, Central Sulawesi Province. Specifically, this study analyse the use of coconut as copra. Copra is a semi-finished coconut products that can be utilized and further processed into various advanced products that is useful for household needs like coconut oil. The method used is case study and the data is analysed using descriptive analysis with Food Supply Chain Networking (FSCN) by Lambert and Cooper, and Supply Chain Operation Reference (SCOR) in order to know performance of coconut chain supply management in CV Cakrawala. The result shows that the coconut chain supply with White Copra products is quite good. The condition of the coconut supply chain with white copra products is quite good. This is shown from the existing supply chain targets, which is companies in Surabaya, a fairly complete supply chain structure whose members start from farmers as coconut producers, companies as processors, customers, as well as transportation and packaging service providers. Supply chain management includes an organizational structure that already exists, but there is no cooperation contract between farmers and the company, only a contract agreement between CV Cakrawala and PT Elvatara which is in Surabaya. Supply chain resources including physical, technological, capital and human resources are sufficient. The supply chain business process includes partnerships between chain members that are well-established partnerships. The received market information is known openly both regarding price and quantity. The flow pattern of the coconut supply chain, especially white copra in Bunta District, Banggai Regency, has two patterns, namely: 1) Farmers - CV. Horizon – PT. Elvatara Indojoya, and 2) Farmers - Collectors - PT. Saraswati – Retailer – Consumer. Overall, the company's performance is classified as superior or in the best position. It can be seen in every attribute and performance measurement indicator is in a superior position. This means that the company must maintain the performance that has been running well (Suud, Indriani, & Bakari, 2021).

The next research is a journal article which is conducted by Kalidas, et al. (2020). This study focuses on constraints faced by farmers in coconut value chain, specifically in production and marketing of coconut activity itself. Accordingly, a clear understanding on problems from production to marketing activity is needed to help the policy makers for a better decision making in the future.
This needs various stakeholders who is involved, such as farmers, harvest contractors, commission agents, exporters, processors, wholesalers, retailers, and so on and so forth. In this research, constraints is analysed in order to find out the significance of the problems to be prioritized using responses priority index. The result shows that in terms of coconut production, the first rank of the problems is the decrease that is due to pest and disease occurrence. From that, interventions are required from the state department of agriculture and agricultural university of pests and diseases management. In terms of coconut marketing, high fluctuation in coconut price is the prior problems because it is the highest rank based on the data collected. This is due to the unstable market condition. Therefore, it is required to set up an institutional body which would be able to predict the price movement and be able to control the availability of coconut itself in order to bridges the gap between supply and demand activity. This institution can hopefully develop an innovative models for upgrading the technology and market information (Kalidas, Mahendran, & Akila, 2020).

METHOD

This method used in this research is a qualitative descriptive research. According to Cresswell (2010), qualitative and descriptive research is a way of investigating and understanding the implications of social or humanitarian problems for many individuals or groups. This study uses a literature review method or literature review (Cresswell, 2010). According to Noviardila (2021) and Bawono (2017), research that uses the literature review method is research conducted by finding sources of information about theories related to the problems found. In this study, the authors used the types of data collected through library research and analysed the data obtained using descriptive analysis methods. Descriptive analysis is a method of data analysis that can be done by presenting explanations related to the facts found from the previous strong and credible literature and analysing these data (Puspasari, 2021 & Halwiah, 2021). The focus of this research is to find various legal theories, propositions, principles, or ideas that are used to analyse and solve the formulated research questions. The data used in this study is secondary data which is obtained not from direct observation.

RESULT AND DISCUSSION

In this section, the researcher tries to provide a collection of literature related to the coconut market value chain in Indragiri Hilir district. The first article is from Anggraini, (2021). This article discusses about Local Government’s effort to improve coconut farmers’ prosperity in Indragiri Hilir District. This research is conducted in order to find out about how the Local Government is improving coconut farmers’ welfare through the production value chain coconut including the role of the Local Government as a regulator to establish regulations relating to the problems of the input-output structure that causes a decrease between coconut farmers themselves. The research results are explained in the table below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Local Government’s role to improve coconut farmers’ welfare in Indragiri Hilir District</th>
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<tbody>
<tr>
<td>1.</td>
<td>As a regulator which determines Local Regulation (Peraturan Daerah) No.3, 2018, about Coconut Trading Regulation and Local Regulation No.4, 2018, about Implementation of Warehouse Receipt System.</td>
</tr>
<tr>
<td>2.</td>
<td>As an upgrading facilitator along with the construction of embankments and normalization of ditches for smallholder coconut plantations, rejuvenation of smallholder coconut plantations, the process of coconut production to increase the commercial capacity of coconut farmers.</td>
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<tr>
<td>3.</td>
<td>As a facilitator through BUMDes (Badan Usaha Milik Desa) institution which replace the role of Tauke (The Collector) because Tauke used to monopolize the price of coconut</td>
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</table>
which creates loss between the farmers. The present of BUMDes can reduce the role of Tauke because the farmers can sell the coconut in BUMDes directly. Thus, the price of coconut can be controlled.

4. As a dynamist stakeholder in conducting socialization to related parties in order to improve the welfare of coconut farmers.

Figure 3. The Local Government’s Role to Enhance Coconut Farmers’ Welfare (Anggraini, 2021).

Nevertheless, there are some factors that hinder Local Government’s role in order to improve coconut farmers’ welfare. The things are the lack of budget from the Government, the lack of human resources especially coconut farmers, and the limited of facilities and infrastructure that hinder the Local Government’s effort to improve coconut farmers’ welfare in Indragiri Hilir.

Another literature related to coconut farmers’ in Indragiri Hilir District is a research conducted by Marlina, et.al. (2022) about the entrepreneurship skills between coconut farmers’ in Indragiri Hilir. This study observe the difference between youth people and elderly people in terms of socio-economic factors and the access to the institutions and supports. The results shows that there is a significant gap between youth people and elderly people in terms of socio-economic factors and the access to the institution which influence the economic activity. The limited access for youth people influence the participation of youth people in coconut market activity. The access such as certification and credit are important to increase the coconut market value and offer an opportunity for youth people (Marlina, Apriyanto, Novitasari, Fikri, & Widyawati, 2022).

The next research is conducted by (Apriyanto, et al., 2022) which has similar topic to the previous research that is discussed in this article. The objective is to compare evaluation of youth people and elderly people in terms of coconut production and marketing. From the result, it founds a significant differences in socio-economic characteristics and accessibility to institutional services. Most of the factors have a substantial impact in terms of engagement of young people in the market to improve high-value coconuts. The certification and the access to coconut market information is an excellent prospect in order to enable young people to increase their income and their livelihood.

CONCLUSION

This research found several facts in terms of coconut market value chain in Indragiri Hilir District. It can be concluded that the economic activity especially in coconut market in Indragiri Hilir is quite good. The Local Government tries to support the coconut exporting activity through BUMDes institution to avoid the increasing number of Tauke which causes price gap between farmers and sellers. Socialization activity is also being worked on to influence young people to improve the market value and to learn how to develop their farmers’ skills. The certification and the access to coconut market is also being worked on in order to influence the spirit of young people to improve their livelihood. However, there are some problems that hinder people in there to maximize the benefits from coconut market. The problems are lack of support from the Government, lack of human resources, and limited facilities and infrastructures to support the coconut market activity.
REFERENCES


