

Challenges of Palm Sugar Agroindustry Development in Deli Serdang Regency

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ABSTRACT

The purpose of this study is to collect a literature review on challenges of palm sugar agroindustry development in Deli Serdang Regency. The method used in this literature review uses the systematic literature review method on articles from previous research in the last ten years from now. From the results of the study, it was found that the role of agroindustry in rural areas that have biological natural resources is very much needed for the development and improvement of the people's economy based on agroindustry technology that is environmentally friendly and easy to adopt by rural communities. Found that several problems and obstacles were found in the development of palm sugar agroindustry in Deli Serdang Regency which were generally faced by palm sugar craftsmen.

Keywords: Palm Sugar, Agroindustry, Development

INTRODUCTION

Indonesia is known as an agricultural country, because it has a large area of agricultural land and agroclimatic potential to be developed as an agricultural sector business. In the world market, Indonesia is also known as a producer of various agricultural products. There are many Indonesian agricultural products which are the mainstay commodities in the world trade market (Marsudi, 2013).

The resilience of the agribusiness sector is indicated by its ability to grow positively by 0.22 percent during the 1998 crisis, while the national economy in

aggregate experienced a very strong contraction, which was 13.7 percent. The consequence of the economic contraction is a decrease in national employment by 2.13 percent, or 6,429,500 people. All economic sectors (except electricity) experienced a decrease in labor absorption, while the agribusiness sector was actually able to increase the capacity to absorb labor as many as 432,350 people (Saktyanu and Khairina, 2000).

So it is not wrong if the agricultural sector is called a strategic sector in the implementation of national development, because it is supported by the availability of very good and diverse natural resource potential. However, the availability of a large number of biological resources does not guarantee that the community's economic conditions will be better, except when these advantages can be managed professionally, sustainably and reliably, so that comparative advantages can be transformed into competitive advantages that generate greater added value.

In the framework of agricultural development, agroindustry is the main driver of the development of the agricultural sector, especially in the future the position of agriculture is the mainstay sector in national development, so as to be able to realize a strong, advanced and efficient agricultural sector and become a leading sector in national development (Supriyati, 2006). Agroindustry has a strategic role in efforts to fulfill basic needs, expand employment and business opportunities,

empower domestic production, earn foreign exchange, develop other economic sectors, and improve the economy of rural communities. This is due to the characteristics of this industry which has a comparative advantage in the form of the use of raw materials derived from natural resources available in the country.

Agroindustrial activities can expand the market for primary agricultural products, add value by vertically integrating primary production and food processing systems and minimize post-harvest losses. Austin (1981) mostly agricultural products, including subsistence products and must be processed to some extent. Therefore, a country cannot fully use its agronomic resources without agroindustry.

In addition, such activities will reduce the seasonal consumption of agricultural products. It can process various foods into processed products, increasing the viability, profitability, and sustainability of the production system and its impact on increasing agricultural income, rural employment and foreign exchange earnings, while reducing marketing risk (Lambert, 2001).

Agricultural development programs currently focus on the development of superior commodity agribusiness areas based on comparative advantages that are integrated with rural development, the development of location-specific agribusiness technological innovations to increase the comparative and competitive advantages of agricultural commodities, and the development of food security based on the diversity of local resources. One of the agricultural commodities that exist in Indonesia and has a high economic value is sugar palm (Hidayatullah, 2018).

For the sake of agroindustry development, sugar palm commodities are currently very potential to be developed because sugar palms can produce around 60 types of products with economic value and some have export potential. One of the mainstay products of the palm plant is palm sugar, either in the form of printed sugar

(brown sugar), ant sugar or crystal sugar. Sugar palm also acts as a supplier of energy and a component of environmental conservation.

Opportunities to develop this plant in addition to the availability of existing technology, sugar palm plants are easy to adapt to various types of soil throughout Indonesia including critical land, alang-alang and play an active role in reforestation and forest conservation. Meanwhile, the challenges that need to be overcome to develop this crop include: minimal technological input, improved production management, improved processing, traditional marketing, dissemination is still limited to a small number of farmers, and difficulties in providing superior seeds.

Deli Serdang Regency is one of the potential areas for palm sugar processing business in North Sumatra Province, precisely in Sibolangit District in Buluh Awar Village, Sibolangit District, Deli Serdang Regency because it is one of the centers of palm sugar production in North Sumatra (Wenny, 2013; Farida, 2019). Sibolangit District itself produces the most sugar palm compared to other sub-districts in Deli Serdang Regency.

From the research results Listyati (1994) shows that the management of sugar palm in agribusiness will provide a large profit value and can bring in foreign exchange for the country, because some sugar palm products are exported to foreign countries such as palm fiber. In 1991 Sukabumi was asked to supply 200,000 tons of palm fiber to Germany.

The purpose of this study is to collect a literature review on challenges of palm sugar agroindustry development in Deli Serdang Regency.

RESEARCH METHOD

The method used in this literature review uses the systematic literature review method on articles from previous research in the last ten years from now. Articles were obtained through the search media google scholar, ScienceDirect, ResearchGate, and

Academia. The keywords used are agroindustry, agroindustry problems, development of agroindustry, agroindustry policy, agricultural development, and sustainability with 100 articles that are considered still relevant to this literature review.

Then, the writer examines it further by identifying, selecting, assessing, summarizing the findings of the theory on agroindustry development, and the problems that are still relevant to be used in this paper.

Then a synthesis of the results that are relevant to the research topic is carried out, so that the facts that will be presented qualitatively become more comprehensive and balanced. This article will contain the theoretical concept of the role of palm sugar agroindustry development and its role in national and regional development, especially in Deli Serdang Regency, North Sumatra Province.

RESULT

The Role of Agroindustry in National Development

From the results of the study, it was found that the role of agroindustry in rural areas that have biological natural resources is very much needed for the development and improvement of the people's economy based on agroindustry technology that is environmentally friendly and easy to adopt by rural communities.

In the history of economic development in various countries, it is recognized that the agricultural sector played an important role in its early days. Due to the development of the use of technology in the sector, the role of the agricultural sector in the national economy has been gradually replaced by the agroindustry sector (Soekartawi, 2007).

In order to act as a prime mover, agroindustry must be a pillar of rural industrialization and must meet the

following requirements, namely: located in rural areas, vertically integrated downwards, have large input-output links with other industries, owned by villagers, labor intensive, Labor comes from the village, raw materials are village production, and the products produced are mainly consumed by villagers.

Simatupang and Purwoto (1990) analysis results based on data from Large and Medium Industry Statistics show that the share of agroindustry in creating added value in the industrial sector decreased from 48.5 percent in 1974 to 20.7 percent in 1985, while the share of the manufacturing industry increased from 20.6 percent to 22.5 percent. The decline in the share of agroindustry in gross domestic product in the period 1974-1985 was followed by a decline in employment, which decreased from 40.7 percent in 1974 to 30.8 percent in 1985. Likewise in the manufacturing industry sector, an increase in the share of domestic product gross was followed by an increase in employment, from 33.1 percent to 36.8 percent.

It is undeniable that the role of agroindustry makes a very real contribution to the development and improvement of agricultural development in rural areas which in aggregate affects the development of national economic development. So that agroindustry can be used as an approach instrument for sustainable agricultural development and national development (Soekartawi, 2007).

Palm Production in Deli Serdang Regency

Sugar palm (*Arenga pinnata* Merr.) is a prima donna plant for the community around the village because most of them get a source of income from the processing of this plant, it's just that most of them do it on existing plants, in other words take advantage of available resources from nature.

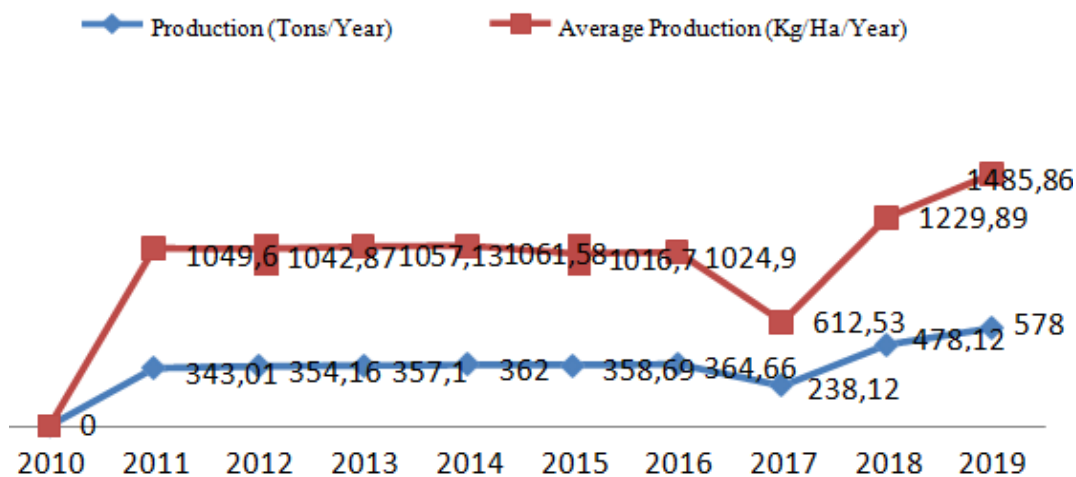


Figure 1. Average Production of Palm Sugar (Kg/Ha/Year) Deli Serdang Regency in 2010-2019

The main product of palm/enu trees is palm sugar which has very good economic prospects because until now the demand for sugar in Indonesia has not been met with national production. According to data on domestic sugar production, which is dominated by cane sugar, the average sugar production in Indonesia is 2.1 million tons per year, while consumption levels reach 2.7 million tons.

Based on information from the Plantation Office of North Sumatra 2017, North Sumatra is a province with a plantation area of 2,141,668.81 hectares. The area of sugar palm plantations in North Sumatra in 2017 reached 6,372 hectares with a total production of 5,268.52 spread over 19 regencies/cities. One of the districts that contributes a lot in cultivating sugar palm is Deli Serdang Regency. The following table shows the area, and average production of sugar palm production in Deli Serdang Regency from 2010-2019.

In Figure 1, it can be seen that the production of palm sugar per tonne in the last 10 years in Deli Serdang Regency has a relatively stable production value and only started to increase from 2011 to 2016, and sugar palm production experienced a very significant decline in 2017 by 238.12 tons, then sugar palm production increased sharply in 2018 (478.12 tons) and 2019 (578 tons).

Meanwhile, its productivity is relatively stable and tends to increase, seen

from 2011 to 2016, and the average production of sugar palm experienced a very low decline in production in 2017 of 612.53 kg/ha/year, but increased again in 2018 (1229, 89 kg/ha/year) and in 2019 (1485.86 kg/ha/year).

So it can be concluded that the production and productivity of palm sugar in Deli Serdang Regency is relatively high and tends to increase every year, this is probably due to changes in people's lifestyles to live healthier by switching to consuming crystal sugar from cane sugar to palm sugar which has a more positive influence on the health of the people human body health.

The Problems of Palm Sugar Agroindustry in Deli Serdang

From the data above, Deli Serdang Regency has a large enough opportunity to absorb labor by developing the agroindustry of palm sap production into palm sugar in the form of molded sugar and palm sugar. As well as being able to bring up small and medium entrepreneurs who can become a forum for palm sugar craftsmen in marketing their processed products. So that in the end sugar palm agribusiness activities from upstream to downstream are able to provide benefits and improve the welfare of sugar palm farmers/craftsmen in Deli Serdang Regency.

Sugar produced from palm sugar processing is very helpful in increasing

people's income. So far, the palm sugar industry is still used as a side business, especially by rural communities. They do not expect too much from the palm sugar industry considering that the income is too little. Because of that they still work in the fields, fields and other jobs to support their family's economic life. Therefore, it is very appropriate if the government in this case the Ministry of Industry and Trade, always provides encouragement and motivation to the community, especially rural communities to improve welfare through the palm sugar industry that they already have (Safari, 1995).

The development of sugar palm agroindustry provides potential benefits for economic development in Deli Serdang Regency. The development of palm sugar agroindustry will also spur economic activities upstream and downstream, namely the development of supply of palm sugar raw materials, auxiliary materials, agroindustry machinery and equipment, as well as the development of food industries (Sukardi, 2010).

The main problem in the development of sugar palm is that in general, sugar palm has not been mass-cultivated. Farmers still rely on sugar palm that grows naturally, the characteristic of sugar palm growing in clusters that have irregular spacing so that land is wasted. This causes the level of land productivity and sugar palm plants to be low, causing farmers' income to decrease (Maliangkay, 2007).

Found that several problems and obstacles were found in the development of palm sugar agroindustry in Deli Serdang Regency which were generally faced by palm sugar craftsmen, including: limited availability of fresh sap water as raw material for palm sugar, small population of palm trees, age of trees. palm sugar that is no longer productive, processing is still simple, reduced availability of firewood as fuel for palm sugar processing, uncertain weather, pest attacks, water that easily stale sap, palm prices tend to be constant, limited

market information, especially about prices palm sugar, farmers sell more fresh sap water to be used as fermented drinks, sales are still to collectors, and the palm sugar processing industry is not the main source of income for palm sugar craftsmen.

CONCLUSION

From the results of the study, it was found that the role of agroindustry in rural areas that have biological natural resources is very much needed for the development and improvement of the people's economy based on agroindustry technology that is environmentally friendly and easy to adopt by rural communities. Found that several problems and obstacles were found in the development of palm sugar agroindustry in Deli Serdang Regency which were generally faced by palm sugar craftsmen.

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