22. Analysis of Organic Brown Sugar in Banyumas Regency

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Analysis of Organic Brown Sugar in Banyumas Regency

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Abstract. Banyumas Regency is one of the most potential organic brown sugar producers in Central Java. Organic brown sugar has a higher selling value than coconut sugar. The comparison of the price of coconut sugar and brown sugar which has a difference of Rp. 6,500.00 / kg with an average farmer production of 8 kg / day. The high price of brown sugar is very beneficial for coconut sugar farmers. This study aims to determine the income of the sugar craftsmen and determine the RC ratio. The research was conducted in two districts, namely Cilongok and Pekuncen districts, with 2 farmer groups, namely the Manggar Jaya farmer group and the Cikal Mas farmer group. The basic method used in this research is descriptive analysis. Data analysis using cost income analysis and RC ratio. The results showed that the craftsmen revenue Rp106,087.00 per day and the value of the RC ratio was 1.40 indicating that the business was feasible to run.

Keywords: business analysis, RC ratio, brown sugar ,agroindustry

1. Introduction

Banyumas Regency is one of the potential producers of brown sugar in Central Java. According to 2017 statistical data obtained from the DisperindagkopBanyumas Regency, the production of brown sugar in Banyumas reaches 35,562 tons per year with 7,863 business units, and as much as 25,819 tons of brown sugar are exported to various countries. In 2015, the average consumption of coconut sugar per capita per week reached 0.136 ounces and consumption per capita per year reached 0.709 kg. Based on data from the Directorate of Small and Medium Trade and Domestic Products, the Ministry of Trade, the market demand for Indonesian brown sugar products reaches 400 tons consisting of domestic and foreign demand. Domestic demand alone reaches 20 tons per month, while national production capacity is only in the range of 5 – 10 tons per month. Thus, although it is still export-oriented because it is considered more profitable, the domestic market is still growing.

There are 2000 brown sugar craftsmen who have obtained organic certification from the organic brown sugar certification agency Control Union Certification (CUC) which includes organic standards from USDA (United States), NOP (Europe) and JAS (Japan). Organic certification shows that Banyumas organic brown sugar products have been able to penetrate foreign markets (exports) [1]. Generally, the main consumers of brown sugar products, especially North America and Northwest Europe, are the centers of consumption. Viewed in more detail, countries with high consumption of coconut sugar are the United States, Germany, the Netherlands, Ireland, Australia, Belgium. England, Austria and Scandinavia.

The development of agro-industry in rural areas is one of the government's programs to support the improvement of the quality of Indonesia's exports, from commodity products to products that have certification and branding. The development of agro-industry in rural areas is primarily aimed at increasing the added value of agricultural commodities, expanding employment opportunities, increasing export volume and encouraging rural economic growth. Utilization of local food raw materials in agro-industry is expected to increase the diversity and availability of food products. The problems faced in the brown sugar agroindustry are:

1. How is the income and efficiency of the brown sugar agroindustry
2. What is the flow pattern and supply chain mechanism of brown sugar agroindustry

From these problems, this research aims to:

1. analyze the income and efficiency of the brown sugar agroindustry
2. analyze the flow pattern and supply chain of brown sugar agroindustry in Banyumas Regency

2. Research Method

The basic method used in this research is descriptive analysis, which is a research method to examine a group of people, an object, a set of conditions, a thought or a class of events in the present or at least a period of time that is still affordable in the respondent's memory. is sequential explanatory which combines research techniques, methods, quantitative and qualitative approaches in one study.

The study lasted for 8 months, namely in March-November 2020. The study was conducted in Banyumas Regency. The location selection was carried out purposively, namely in Pekuncen and Cilongok Districts, Banyumas Regency considering that the location is the largest brown sugaragro-industry center in Banyumas Regency. The method of data collection is done by survey technique. In the survey research method, information is obtained through direct interviews with respondents and observations. Data analysis using Cost and Revenue Analysis and RC ratio.[2]

3. RESULTS AND DISCUSSION

Cost, Revenue, Revenue and Profit Analysis Cost analysis is used to determine and calculate the total costs incurred during the production of brown sugar. The costs analyzed include fixed costs, variable costs, total costs as well as revenues and profits received by the brown sugar business owner in the calculation for one time of production. Cost analysis can make it easier for business owners to find out the amount of costs used in the production process, the amount of revenue and profits received and can find out the business efficiency of the brown sugar agroindustry.

Revenue. Revenue is the result of multiplying the number of products with the selling price per unit of product. The amount of brown sugar produced per day is 5.3 kilograms with a selling price of Rp. 20,000 per kilogram. The average revenue earned by craftsmen is Rp.106,087.00 per day.This revenue is slightly higher than the study [2]on brown sugar in KulonProgo, Yogyakarta, which is Rp. 95,450/day.

Profit. According to[3], income is the difference between total revenue and total costs (variable costs and fixed costs). The average income obtained from the brown sugar agroindustry in Banyumas Regency can be seen in Table 1.

Table 1. Average Income of Brown sugar Agroindustry in Banyumas Regency per day

Description	Average (Rp/day)
Revenue	106.086,95
Variable Cost	14.961,00
Fixed Cost	60.566,14

Total Cost Total	75.527,14
Profit	**30.559,81**

Source: Primary data processed, 2020

Table 1. shows that the brown sugar agroindustry in Banyumas Regency earns anprofit of Rp. 30,559.81 per day. This profit is obtained from the total revenue of Rp.106,086.95 per day minus the total cost of Rp.75,527.14 per day.

Business Efficiency Analysis Efficiency is defined as the effort to use the smallest input to get the maximum production. Efficiency can be known by calculating the Revenue of Cost Ratio (R/C). R/C is the ratio between total revenue and total cost 2003)[4].
Mathematically :

$$RC\ ratio = \frac{Total\ Revenue}{Total\ Cost}$$

If R/C > 1 then the business is efficient (profitable) to be cultivated, meaning that the input used is appropriate.
If R/C < 1 then the business is not efficient (not profitable) to be cultivated, to achieve efficiency, the input needs to be added.
If R/C = 1 then the business is break-even, i.e. the business provides the same amount of revenue as the amount spent.

R/C analysis is used to determine the value of the comparison between revenues and costs, so that it can be seen the amount of revenue obtained from each unit of rupiah costs incurred. The amount of R/C value in the brown sugar agroindustry in Banyumas Regency per day shows more than one, namely 1.40 or it can be said that the revenue obtained by the brown sugar agroindustry in Banyumas Regency is greater than the total costs incurred in the production of brown sugar, then the agro-industry business brown sugar is efficient (profitable) to cultivate, meaning that the input used is appropriate. The R/C value of 1.40 means that the brown sugaragro-industry in Banyumas Regency will receive an income of Rp. 1.40 from every Rp. 1.00 of the costs incurred. [5] stated that the greater the R/C value, the greater the profit from the business.
Based on previous research conducted by [6]with the title Comparative Analysis of Coconut Farmers' Income from Brown sugar Business with Printed Sugar in Hargobojo Village, Bagelen District, Purworejo Regency, it is efficient and able to generate profits because the brown sugar business in Hargobojo Village has a higher R/C value. from 1 which is 1.25. This shows that the brown sugar business in Hargobojo Village is more efficient than the brown sugaragro-industry in Banyumas Regency because it has a higher R/C value. The costs incurred in the brown sugar business in Hargobojo Village are lower than the brown sugar agroindustry in Banyumas Regency, and different selling prices will affect the R/C value obtained.
However, these results are slightly lower than the research of[2] with RC rati0 1.42 and[7]inCiamis Regency with RC ratio 1.43

The Supply Chain of Brown Sugar Agroindustry Supply chain of brown sugar agroindustry. There are several supply chain patterns for gulasemut in Banyumas Regency as follows:

1. Supply chain pattern 1

In this pattern, producers (penderes) sell palm sugar products directly to supplier traders to exporters (suppliers).

Craftsmen -----→ Suppliers -----→Exporters

2. Supply chain pattern 2

This pattern is a marketing activity that is quite a lot carried out by producers, namely producers sell to collectors traders around their homes, then collectors sell directly to supplier traders to exporters (suppliers).

Craftsmen ----------→Collectors------→ Suppliers --------→Exporters

3. Supply chain pattern 3

This supply chain pattern is the pattern most used by producers, namely producers sell to collectors, then collectors sell back to wholesalers, then wholesalers sell to supplier traders, and finally supplier traders sell back to exporters.

Craftsman -----→ Collector-----→Wholesaler ----→Supplier ----→Exporter

4. Supply chain pattern 4

In this supply chain pattern, craftsmen sell directly to wholesalers, then sell them again to supplier traders and finally to exporters.

Craftsman ----→Wholesaler ----→ Supplier ----→ Exporter

5. Supply chain pattern 5

In this pattern, consumers buy directly from producers (penderes), this consumer segment wants to get brown sugar products that are cheap, even though the water content is still quite high, which is around (8-10) percent. Consumers in this segment need to dry the brown sugar they buy for about 2-3 hours in the hot sun so that the water content reaches (3-4) percent, with the aim that brown sugar products can last for at least 6 months when packaged and stored in free air conditions and dry place.

4. Conclssion and Suggestion

A. Conclusion

1. Household-scale agro-industry revenue in Banyumas Regency is IDR 106,087.00 per day with a total production of 5.3 kilograms of ant sugar per day. income of IDR 30,559.81 per day. The value of R/C in the brown sugar agroindustry in Banyumas Regency per day shows more than one, namely 1.40.
2. There are 5 patterns of supply chains in Banyumas Regency consist of craftment, collector, wholesaler, supplier and exporter

B. Suggestion

1. To improve the performance of agro-industry and management, it can be done by increasing supply chain activities through partnership strategies and good relationships with customers or consumers
2. Income from craftsmen can be increased with a good marketing management system so that customers will increase
3. Business efficiency can be increased by increasing the number of crushed coconuts, namely by expanding the area of coconut plantations in Banyumas Regency

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