

## Problem Mapping Of Organic Coconut Sugar Directly Export: Problem Tree Analysis Method

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### ABSTRACT

The purpose of this study was to analyze the problems faced by organic coconut sugar entrepreneurs to conduct direct exports. This study was a survey study with organic coconut sugar entrepreneurs and academics. Data were collected using questionnaires, in-depth interviews, observations, and Focus Group Discussion (FGD). Based on the results of the analysis using problem tree analysis, three main problems faced by organic coconut sugar manufacturers to conduct direct exports, namely the problem of inability to meet the required quantities quota, low knowledge of export order, and quality issues. The problem of not being able to meet the required quantity quota is caused by the lesser number of penderes (coconut sugar maker) and the decrease in the number of coconut crops due to the low regeneration of coconut crops and the decrease of coconut soil for settlements, while the lack of knowledge regarding the export regulations is caused by lack of training and assistance, as well as problems with the quality of organic coconut sugar are due to the low knowledge of the quality standards of organic coconut sugar exports and the low awareness of maintaining quality and limited production infrastructure to produce quality organic coconut sugar.

**Keywords:** Entrepreneurship Training, Startup, Effectiveness, Business Sustainability

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### 1. Introduction

Indonesia is a developing country that is trying to develop its industry. To develop its economy, Indonesia relied on industrial sectors including agro-industry. One of the emerging industries is expected to be some of the results can be used as export material. The most influential product export result is the food industry. Based on data from the Ministry of Industry of the Republic of Indonesia in 2016, one of the factors affecting export development in Indonesia is the agricultural and processing industry sector which has a percentage value of 75.99% and 2.38% in developing exports in Indonesia.

Coconut sugar has an important role in the food industry and is quite high in demand as it becomes one of the basic human needs (Efendi *et al.*, 2017). Coconut sugar has the potential to grow and develop both in the domestic and international markets (Suliyanto *et al.*, 2015) as the fast-growing food and beverage industry has increased demand for sugar.

Suliyanto *et al.*, (2015) stated that there are eight problems that can hinder the performance of UKM in coconut sugar, namely 1) instability in raw material quality, 2) in the manufacturing process, many penderes (coconut sugar maker)s still use chemicals in the form of sodium bisulfite, 3) sugar printing tools are still limited to meet export demand, 4) lack of concern about cleanliness, 5) low quality of human resources, 6) financial management problems, 7) limited working capital resources problems, 8) waste problems generated from production processes.

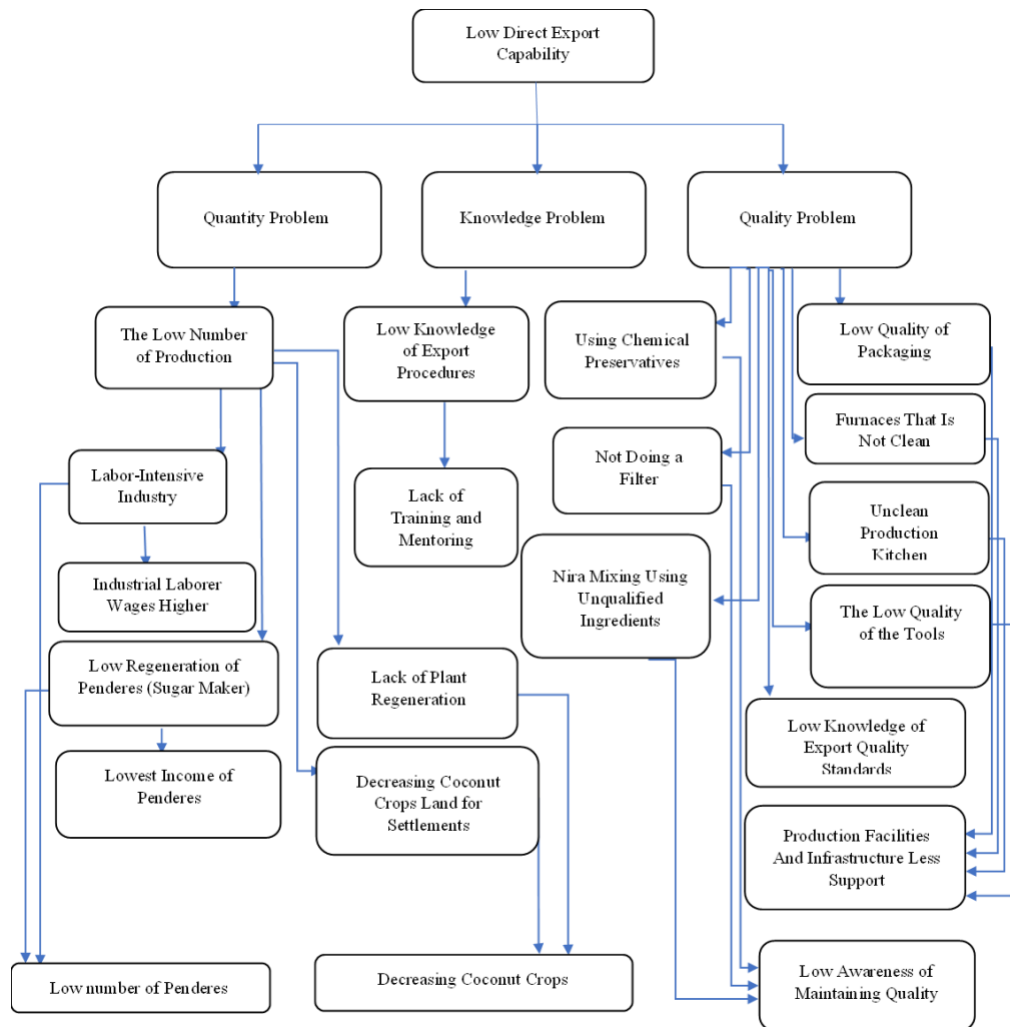
One of the efforts to improve the well-being of organic coconut sugar entrepreneurs is to market their products to the export market, because the export market is still very large and provides a higher profit margin than the domestic market. Although some organic coconut sugar entrepreneurs have done export marketing but are still limited and do not export directly, but through export intermediaries. The marketing of organic coconut sugar exports through intermediaries will lead to dependence on export intermediaries and reduce profit margins. Based on these problems, it is necessary to analyze the problems faced by organic coconut sugar businessmen to conduct direct exports and to formulate strategies to be able to conduct direct exports.

## **2. Research Methodology**

This study uses qualitative descriptive methods. Data collection was conducted using observation methods, in-depth interviews, and Focus Group Discussion (FGD) with coconut sugar industry stakeholders in Purbalingga. Focus Group Discussion (FGD) was carried out to find out the cause of the low quality and quantity of coconut sugar. The results of obtaining data using observation methods, in-depth interviews, and Focus Group Discussion (FGD) were then analyzed using problem tree analysis. Based on Silverman's research in Lestari *et al.*, (2014), tree diagrams are designed to analyze problems by sequencing causal relationships between problems. Using a problem tree analysis can be an alternative to obtaining the root of the problem and a solution to solve it.

## **4. Results and Discussion**

Based on observation results, in-depth interviews, and Focus Group Discussion (FGD), with organic coconut sugar stakeholders, it is possible to formulate a tree problem of low direct export capability of organic coconut sugar as presented in Figure 1:



Based on Figure 1 above, the problem of low direct export capability can be explained as follows:

- The problem of the quantity of organic coconut sugar  
The increasing demand for organic coconut sugar has not been met due to the low production of organic coconut sugar caused by the fewer number of penderes (coconut sugar maker) and the decrease in the number of coconut crops. The lower the regeneration of penderes (coconut sugar maker) is due to the lower income earned as penderes (coconut sugar maker). Not a few penderes (coconut sugar maker) chose to be factory workers in the industrial sector because they saw that this job as a sugar farmer was less promising than it was to meet the daily necessities of life, so they preferred to find other sources of income that would be more rewarding to ensure their well-being. Apart from low income, jobs as penderes have a very high risk, so many farmers have decided not to continue their work as penderes because they are seen as impractical and dangerous, especially for those who are physically unable to climb coconut trees. Another factor that causes a limited amount of coconut sugar production is the low regeneration of coconut crops and the decrease of coconut crops land for settlement, resulting in a decrease in the number of coconut crops to produce organic coconut sugar.
- The problem of low knowledge of export methods

There are factors affecting the internationalization of coconut sugar to overseas markets, some of which are the quality and quantity of coconut sugar products and related knowledge of export methods. Export arrangements in each country are not the same, so it is necessary to note which country will be the destination for export, any requirements, etc. Some examples of requirements include: coconut sugar products must be certified as organic sugar, products must be clean and do not use chemicals in their manufacture. In fact, to obtain an organic certification, coconut sugar entrepreneurs must understand the steps and requirements to obtain organic coconut sugar certification and expensive costs.

- Coconut sugar quality problem

Low sugar farmers' awareness of coconut sugar quality results in organic coconut sugar being obtained not according to market or export quality standards. Processing technology is one of the keys that determine the quality of organic coconut sugar to be produced. However, due to low quality awareness, in the process of making sugar, penderes still use less supportive tools and ingredients such as:

- The tools used are low quality and unhygienic.
- The kitchen where to produce coconut sugar and furnaces are used is not hygienic.
- There are still many penderes (coconut sugar maker) who do not filter out nira, or have already filtered but have not used a filter that meets the standard, causing a high content of excrement in sugar.
- Not a few penderes are still mixing good quality niras with bad quality niras to obtain a greater quantity of coconut sugar.
- Use of hazardous chemicals such as Natrium Bisulfit in place of Iaru, this is more practical, but can harm consumer health. This is one of the things that makes coconut sugar unacceptable to the export market.
- Coconut sugar packaging is not good enough, so at the time the product storage becomes damaged and not attractive to market.

This is in line with the research of Suliyanto *et al.*, (2013) state that there are 12 factors that can affect the quality and quantity of niras, namely 1) weather, climate, and season 2) plant insect/hama disturbances (rats, ants, beetles, squirrels/mice 3) wind 4) quality and measurement of laru 5) cleanliness of the coconut tree 6) cleanliness of tools for making coconut sugar 7) fertilizer used for coconut tree 8) age of coconut tree 9) long of tapping nira 10) drying technique used 11) soil state 12) plant state.

## **5. Conclusion**

The low export capability is due to the problem of inability to meet the required quantity, low export method knowledge, and quality problems. The problem of not being able to meet the required quantity is due to the low number of penderes (coconut sugar maker) caused by the low regeneration of penderes due to low income, so the penderes prefer the income as factory workers to produce more and the decrease in the number of coconut crops due to low regeneration of coconut crops and the decrease in coconut crops land for settlement, while the lack of knowledge regarding export procedures are due to lack of training and assistance, and the quality problems of coconut sugar are due to the low knowledge of export quality standards and low awareness of maintaining quality. However, there are still many penderes that are still spilling nira, not filtering, and using chemicals, as well as limited production facilities to produce quality organic coconut sugar using unhygienic processing technology.

To improve the quantity and quality of products in order to penetrate the export market, there are several things that need to be done:

- Grow the interest of the younger generation to become a distress by creating certain programs run by the party who makes policies
- Rejuvenating coconut plants to replace old and unproductive coconut trees
- Taking care of coconut plants so that they can produce organic coconut sugar even better
- Conduct training and assistance to support development in producing organic coconut sugar
- Conduct training and assistance to improve the knowledge of coconut sugar craftsmen in managing and producing better coconut sugar
- Conduct training and assistance related to export procedures, such as: how to start exports, export procedures, export product quality, pricing, packaging, negotiation, and export contracts
- To assist technology to improve product quality by building filter technology to improve product cleanliness
- Provide supportive equipment to support coconut sugar business activities so that it can produce clean and hygienic organic coconut sugar products
- Provide tools that can help coconut sugar craftsmen climb trees to minimize the risk of accidents
- Providing training assistance and cost assistance in certifying the quality of organic coconut sugar as one of the requirements for entering the export market

By paying attention to the above, it is expected to increase production by offsetting the improvement in the production quality of organic coconut sugar in accordance with export quality standards.

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