



Socio Economic of People's Sugarcane in North Polongbangkeng District (The Operational Area of PT Perkebunan Nusantara XIV Takalar Sugar Factory)

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Abstract. This research aims to identify the management patterns of the People's Sugarcane and analyze the contribution of the People's Sugarcane socio-economic conditions of the people's sugarcane farmers in the North Polongbangkeng District, Takalar Regency. The data analysis used is the qualitative descriptive method with the following steps: (1) data collection (2) data reduction (3) data presentation (4) drawing conclusions. The application of management patterns in the socio-economic conditions of independent sugarcane farmers that most affects income is farming experience and land area, while the application of management patterns in the socio economic conditions of sugarcane farmers in farmer groups (gapoktan) that most affects income is farming experience and education level. The largest contribution of people's sugarcane is in the downstream sector, namely independent people's sugarcane. In terms of Social Contribution, the people's sugarcane creates patterns of cooperation among farmers, enhances social interaction, and helps strengthen their social status in the community. This collaboration creates closer bonds among farmers through sugarcane cultivation and marketing activities. Meanwhile, the Economic Contribution of Independent Sugarcane Farmers: The average monthly income reaches IDR 5,178,571, which is higher compared to farmers in farmer groups / Gapoktan farmers whose average income is around IDR 3,681,818 per month. In terms of labor absorption, independent sugarcane farming absorbs between 20-250 workers per day. Farmers in farmer groups (gapoktan) can absorb 10-50 workers per day, depending on the work requirements in the field.

Keywords: Social; Economic; People's Sugarcane

1 Introduction

The ability of the agricultural sector to directly contribute to economic growth and the welfare of farming households depends on the level of farm income and the surplus generated by the sector itself. Thus, the level of farm income not only serves as the main determinant of the welfare of farming households but also emerges as one of the important factors conditioning economic growth [1].

Sugarcane production can influence national economic development. The more sugarcane produced, the greater the contribution of the plantation sub sector to national economic development will be. The province of South Sulawesi experienced

an increase in production of 64,155 tons from 2013-2014 and a decrease in 2015 of 34,805 tons, a decrease in production in 2016 of 27,796 tons, and in the following year 2017, an increase of 34,786 tons [2].

The potential for developing sugarcane plantation commodities in South Sulawesi Province generally lies in directing their development to areas with a significant number of dry months, one of which is Takalar Regency. This condition results in Takalar having the potential for sugarcane development and one of the largest plantation crops, covering an area of 1,008 hectares [2].

The Polombangkeng Utara District is an area with the largest sugarcane plantation area in Takalar Regency, covering 647.50 Ha [2], leading the community to cultivate sugarcane. This is supported by the presence of a state-owned sugar factory, making sugarcane one of the sources of income for farmers/households in this district. The income for independent sugarcane farmers is higher compared to farmers in farmer groups (gapoktan) because independent farmers use their own land, while gapoktan farmers use HGU land or land owned by PTPN XIV.

In the context of basic theory, this research can be linked to the theory of rural economic development, which emphasizes the importance of the agricultural sector in improving community welfare. This theory explains that the agricultural sector can significantly contribute to economic growth, especially in rural areas, through increased productivity and farmers' income. Additionally, the theory of strategic partnerships is also relevant to this research, highlighting the importance of collaboration between large companies and small farmers to achieve mutually beneficial goals, both economically and socially.

The hypothesis that can be proposed is that the partnership between the people's sugarcane farmers in Polongbangkeng Utara District and PTPN XVI has a positive effect on increasing the income of the people's sugarcane farmers. The upstream and downstream management of sugarcane by PTPN XVI has a direct impact on the improvement of the social and economic welfare of the people's sugarcane farmers' households.

Like other studies, this research has several limitations. One of them is the scope that is limited only to the area of Polongbangkeng Utara District and does not cover other areas in South Sulawesi that also have the potential to have different sugarcane plantation characteristics. Additionally, this study uses data available over a specific period, so the results may not be generalizable in the long term.

Based on the above description, the researcher is interested in understanding the management patterns in the socio-economic conditions of people's sugarcane farmers and identifying the contribution of the sugarcane commodity from upstream to downstream for people sugarcane farmers partnered with PTPN XVI (Takalar Sugar Factory) as well as the management process of sugarcane cultivation from upstream to downstream. Therefore, the researcher conducted a study titled "Socio Economic of People's Sugarcane in North Polongbangkeng District (Operational Area of PT Perkebunan Nusantara XIV Takalar Sugar Factory).

2 Research Methodology

This research was conducted in the Polongbangkeng Utara District, Takalar Regency, South Sulawesi Province, which is the operational area of PT Perkebunan Nusantara XIV Takalar Sugar Factory. This research was conducted from July to September 2019. The selection of this research location was done intentionally using a purposive approach. This location was chosen deliberately based on several considerations that it is a potential site for sugarcane cultivation in collaboration between farmers and the company (people's sugarcane).

The population in this study consists of all independent sugarcane farmers in the North Polongbangkeng District, Takalar Regency, totaling 254 farmers, which includes 143 independent sugarcane farmers. Additionally, there are 111 sugarcane farmers in farmer groups.

The determination of the informant sample is based on 10% of the population, which amounts to 25 farmers consisting of 14 people's sugarcane farmers (Rayon I-III) and 11 farmer groups (Rayon I-III). This is in accordance with Arikunto's opinion, 2002, that if the sample size is less than 100, it is better to take them all; if the number is larger, 10-15% can be taken [3]. The determination of the informant sample of 25 farmers is based on the research informant criteria, namely informants who are professionals as people's sugarcane farmers, consisting of independent people's sugarcane farmers and farmer groups, in accordance with the title and object of the research to be conducted. In addition, the smallholder sugarcane farmers in question possess knowledge related to the research focus and are able to answer research questions based on recommendations from the company.

The research uses a qualitative descriptive method with data collection techniques conducted through interviews, observations, and documentation. The data analysis technique employs data collection methods, data reduction, data presentation, and then drawing conclusions.

3 Result and Discussion

3.1 Overview of Farmers & Profile of People's Sugarcane

People's sugarcane is a sugarcane plantation where the entire cultivation process is carried out by farmers. Tebu rakyat is a partnership program conducted by PT. Perkebunan Nusantara XIV Takalar Sugar Factory with the community/farmers who wish to cultivate sugarcane. This people's sugarcane program consists of 2 types, namely "Independent People's Sugarcane (TRM) and People's Sugarcane Cooperative (Gapoktan)." (TRG).

Independent sugarcane is managed directly by individual farmers without the assistance of farmer groups. Independent farmers have full control over the cultivation process and sugarcane yield. This allows them to earn higher income but with greater risks and production costs compared to farmers in the group.

People's sugarcane in Gapoktan (Farmers' Group Association) involves several farmers who join together in one organization to collectively manage sugarcane cultivation. This system provides benefits in terms of cost efficiency and access to

facilities or assistance from the government or companies. The average income of Gapoktan farmers is usually lower than that of independent farmers, but the risks and workload can be lighter.

This profile shows that the two types of people's sugarcane plantations contribute differently to farmers' welfare, depending on the scale and management methods.

The average sugarcane farmers are still of productive age in managing sugarcane, with most sugarcane farmers being male, while female sugarcane farmers, whether from independent sugarcane farmers or farmer groups, are rarely found at the research location. The majority of informant farmers in the North Polongbangkeng District, for independent sugarcane farmers, have a high level of formal education (>9 years), with 50% having completed education up to a Bachelor's degree. Meanwhile, for cooperative sugarcane farmers, the level of formal education is low (<7 years), with the majority having only completed elementary school, at a rate of 54.54%. The number of dependents among the informant farmers is mostly less than 5 people, with a percentage of 71.42% for independent sugarcane farmers and 63.63% for cooperative sugarcane farmers. Farmers with 5 family dependents account for 14.28% for independent sugarcane farmers and 27.27% for cooperative sugarcane farmers. For family dependents of more than 5 people, the percentage is 14.28% for independent sugarcane farmers and 9.09% for

cooperative sugarcane farmers. Most independent sugarcane farmers generally have more experience in sugarcane farming compared to sugarcane farmers in farmer groups.

3.2 Pattern of People's Sugarcane Management

The management patterns of people sugarcane by farmers based on their socio-economic conditions are related to the methods/patterns employed by farmers during the management of sugarcane. The patterns adopted by farmers vary based on characteristics such as age, gender, education level, number of family dependents, farming experience, land area, and institutional factors. Research results indicate that the application of management patterns under the socio-economic conditions of independent smallholder sugarcane farmers most significantly affects income, namely farming experience and land area. Meanwhile, the application of management patterns under the socio-economic conditions of smallholder sugarcane farmers in farmer groups (gapoktan) most significantly affects income, namely farming experience and education level.

3.3 Contribution of People's Sugarcane

Based on the interview results, all informants provided very positive responses regarding the reasons for making sugarcane one of their livelihoods. This is because sugarcane is a crop that is very suitable for the research location. Additionally, sugarcane is a perennial crop, making its cultivation and maintenance considered simple and yielding significant profits. Therefore, the continuous development of community sugarcane is expected to provide significant social and economic impacts for farmers and companies.

Implementation of the people's sugarcane program in the Polongbangkeng Utara District, which is both the working area and the result of the partnership with PT. Perkebunan Nusantara XIV Takalar Sugar Factory, contributes to the lives of farmers and the surrounding community. The sugarcane farmers in this study have established a mutually beneficial relationship known as a partnership. The social and economic contributions felt by farmers from the people's sugarcane program from upstream to downstream based on informant interviews and direct observations are.

Upstream. In this aspect, there is a social contribution in the form of cooperation between farmers and suppliers of production means, as well as social guarantees from the company in the form of land measurement with GPS and administrative assistance. From an economic side, assistance is provided by the government, such as capital, fertilizers, and agricultural machinery. The land clearing process creates job opportunities by using local labor

Onfarm (Budidaya di Lahan). This stage involves cultivation activities that focus on skill development through training and extension from companies and the government. From a social perspective, there has been an increase in relationships and synergy among farmers. Economically, the absorption of labor in the planting and maintenance process ranges from 5 to 80 people per day, depending on the needs, with an average labor income of IDR 50,000 -IDR 80,000 per day.

Downstream. In the final stage, the social contribution of people's sugarcane includes the improvement of farmers' social status, especially for independent farmers, which is reflected in the increase in assets and lifestyle. Economically, the labor absorption in the harvesting process reaches 20 to 250 people per day. The average annual income reaches Rp5,178,571 per hectare for independent farmers, and Rp3,681,818 per hectare for Gapoktan farmers, with capital being reinvested for the next planting cycle. Based on the interview results with all informants, the year 2019 provided very good profits compared to the previous year, due to the smooth operation of the factory, which kept the sugarcane raw materials safe until the milling stage.

4 Conclusion

Based on the research results and discussions that have been outlined, the conclusion as follows :

1. The application of management patterns in the socio-economic conditions of independent sugarcane farmers most affecting income is farming experience and land area, while the application of management patterns in the socio-economic conditions of sugarcane farmers in farmer groups most affecting income is farming experience and education level.
2. The largest contribution of people's sugarcane is in the downstream sector, namely independent people's sugarcane. In terms of Social Contribution, the people's sugarcane creates patterns of cooperation among farmers, enhances social interaction, and helps strengthen their social status in the community. This collaboration creates closer bonds among farmers through sugarcane cultivation and marketing activities. Meanwhile, the Economic Contribution of Independent

Sugarcane Farmers: The average monthly income reaches Rp5,178,571, which is higher compared to farmers in farmer groups / Gapoktan farmers whose average income is around Rp3,681,818 per month. In terms of labor absorption, independent people's sugarcane absorbs between 20-250 workers per day. Farmers in farmer groups (gapoktan) can absorb 10-50 workers per day, depending on the work requirements in the field.

3. For future research, it is recommended to expand the scope of the study area and include other variables such as the impact of climate change or government policies on the production of sugarcane by farmers. Longitudinal research is also recommended to observe the long-term trends of this partnership.

5 References

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