



Resilience of rural coconut farmers in Tanjung Raja Village, Kateman District, Indragiri Hilir Regency South Sumatra, Indonesia

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ABSTRACT

This study aims to analyze the livelihoods of coconut farmers in Tanjung Raja Village and describe the factors that affect farmers' livelihoods in Tanjung Raja Village, Indragiri Hilir Regency, South Sumatra. Sampling was carried out descriptively with data collection methods using interviews, document data collection, and observation collection methods, and data analysis using the Miles and Huberman model. The results showed that most of the population in Tanjung Raja Village are coconut farmers, and some of them are coconut farmers who do not own their own land. Thus, the factor that most influences the existence of coconut farm workers in Tanjung Raja Village is the limited expertise of the population who have only graduated from elementary school, as many as about 30 people, or around 68.1% of them, making it difficult for them to work in other fields. First, the livelihood on the small island of Tanjung Raja Village only comes from coconut plantations. Second, farm laborers do not have skills and abilities in other fields, and third, they have a low level of education.

KEYWORDS: *Resilience, Livelihood, Coconut Farmer Labor*

1 INTRODUCTION

In the English-Indonesian dictionary (VanBreda A.D., 2001), resilience comes from an English word or term, namely from the word "resilience," which means spring power, springy power, or happiness. According to Sills and Steins (2007), resilience is a positive adaptation for dealing with stress and trauma. Resilience is a mindset that allows individuals to seek new experiences and to see life as a work that is progressing. According to Tajiq et al. (ictionary (VanBreda A.D., 2001), resilience comes from an English word or term, namely from the

word "resilience," which means spring power, springy power. There are three main indicators in understanding the concept of resilience, namely buffer capacity, self-organization ability, and capacity for learning. Livelihood resilience depends on how livelihoods function in capacities and agents, as well as social, institutional, and natural conditions. In addition, Speranza (2014) also argues that the concept of resilience can help to understand the factors that allow people to protect their livelihoods from the adverse consequences of change (climate change and climate variability) (Indraddin dan Irwan, 2016).

Vulnerability and resilience coexist in the system. Although resilience is seen as the inverse of vulnerability in the domestic life approach, it can be viewed as a separate but connected scale. Vulnerability from low to high and low to high resilience means that increasing resilience will reduce vulnerability while decreasing resilience can increase vulnerability. More than one million farming households' livelihoods are jeopardized because an estimated 33 million coconut trees on 295,191 hectares of land have been damaged, affecting the coconut sector. But frequent and powerful typhoons are hurting small-scale coconut producers' meager sources of income. Because of more frequent and powerful typhoons, farmers will always experience a lot of revenue shocks (Serio et al., 2021). Due to the prevalence of catastrophic weather events and shifting climatic circumstances, coconut growers face unheard-of difficulties while seeking to boost productivity. In order to successfully adjust to extreme weather events and uncertain climate circumstances, farmers require information on suitable climate-wise agricultural methods. This makes the use of climate smart agriculture (CSA) practices in the region relevant. The CSA procedures have the potential to significantly increase productivity and aid in climate change adaptation and mitigation (Eadie et al., 2020).

Communities on the small island of Tanjung Raja

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Village make a living from the agricultural sector. The dominant farming business is coconut plantation farming. The form of business carried out by the community on the small island is coconut plantations. Coconut plantations are the main source of supporting family food in Tanjung Raja Village, Kateman District, Indragiri Hilir Regency, Riau Province. This situation agrees with Pattiselanno et al. (2018) that crops in plantations greatly contribute to the fulfillment of needs.

The area of coconut plantations on a small island is 800 M², with a number of farmers as many as 25 people, and the highest production is 10,000 coconuts in one harvest, and the lowest is 1,000 coconuts, with a general price of 2,000 per kilo. If the price goes up, 3,000 per kilo, if the price goes down, 1,500 per kilo. Besides that, as a coconut farmer, his income is uncertain, and the price of coconut has fluctuated up and down. The average monthly income of farm laborers is \$2,400,000, while the expenditure is estimated at \$3,200,000. This is not balanced between the income and expenditure of coconut farmers on small islands. The presence of coconut plantations in Parit Gergaji is high in Tanjung Raja village and in Indragiri Hilir is included in the rank of 4 coconut producers with a total production of 361 348.00 tons of coconut plantations (BPS Provinsi Riau, 2019).

Based on BPS data and research results, it is clear that the people on Pulau Kecil in Tanjung Raja Village, Kateman Subdistrict, utilize coconut plantation activities and a small proportion of those who do not own private land become coconut laborers. In the study of rural sociology, it is called livelihood resilience. According to Walker et al. (2004), livelihood resilience is the ability to face economic problems or difficulties in order to survive in stable conditions. Therefore, this study analyzes the livelihood resilience of rural coconut farmers in Tanjung Raja Village, Kateman District, Indragiri Hilir Regency.

2 MATERIALS AND METHODS

This research uses a qualitative approach with descriptive research design. The use of a qualitative approach as an analysis to see the livelihood resilience of coconut farmers in small islands. The informants of this research are coconut farmers as the main informants. Data collection methods are carried out in several ways, namely observation, in-depth interviews, and document data collection (Irwan, 2018). The unit of analysis in this study is at the individual level, namely coconut farmers. The analysis carried out in this study uses the Miles and Huberman model (Miles B. Matthew, 1992). The opinion is that the activities in analyzing qualitative data are carried out in an interactive way and take place continuously until completed, so that the data is saturated. The level of saturation in the data is marked by not getting new data or information. This analysis starts from data collection, data reduction, data study, and conclusion

drawing, which are analyzed in the main problem of this research.

3 RESULTS AND DISCUSSIONS

Overview of Tanjung Raja Village Small Island

The Small Island, Tanjung Raja Village, Kateman District, is an area located in Indragiri Hilir Regency. The capital of this district is the Guntung River. The boundaries of the Kateman District are in the north by the sea; in the south by the Pelangiran District; in the west by the Belengkong Bay District; and in the east by the Natuna Sea. The natural condition of Pulau Kecil, Tanjung Raja Village is in the lowlands and peatlands, overgrown with mangrove forests and coconut plantations. Small Island, Tanjung Raja Village is located at an altitude of 0–700 cm above sea level, so that water transportation on Small Island, Tanjung Raja Village is influenced by tides. The topography of the small island, Tanjung Raja Village, South Sumatra, consists of land and water, and has a tropical climate, with the highest rainfall in December 2016 of 354 mm, with an average of 17 rainy days. Small Island, Tanjung Raja Village, Kateman District, Indragiri Hilir Regency has a population of 113 people, consisting of 64 men and 49 women.

The main livelihood on this small island is coconut plantations. The area of coconut plantations is 800 m. If the number of farmers is as high as 25 people, and the highest production amount is 10,000 coconuts in one harvest, and the lowest is 1,000 coconuts, with a general price of 2,000 per kilo, if the price goes up, 3,000 per kilo, while if the price goes down, 1,500 per kilo. Besides that, as a coconut farmer, his income is uncertain, and the price of coconut has fluctuated up and down. The average monthly income of farm laborers is \$2,400,000, while the expenditure is estimated at \$3,200,000. This is not balanced between the income and expenditure of coconut farmers on small islands. The presence of coconut plantations in Parit Gergaji is high in Tanjung Raja village and in Indragiri Hilir is included in the rank of 4 coconut producers with a total production of 361 348.00 tons of coconut plantations (BPS Provinsi Riau (2019). The coconut land area in Tanjung Raja Village is shown in the following table:

Table 1 shows that the land area in Pulau Kecil, Tanjung Raja Village is divided into 2 parts. The first is in the sea area with a land area of 300 M or 37.5%, and the second is in the land part with a land area of 5000 M or 62.5%. In general, farm workers who have a higher education will have different mindsets and knowledge than farm workers with a lower education, so that the way of managing coconut plantations will also be different. The education level of coconut farmers in Tanjung Raja Village is shown in the following table:

Table 1. Area Coconut Plantation in Pulau Kecil, Tanjung Raja Village

No	Land area	Amount (M)	Persentase
1.	Sea Part	300	37,5
2.	Land Section	500	62,5
Total		800	100

Table 2. Classification of Farm Workers by Education Level

No	Formal education	Amount	Persentase
1	Primary school	30	68,1
2	Junior high school (SMP)	5	11,3
3	Senior High School (SMA)	8	18,4
4	D3	0	0
5	Bachelor (S1)	1	2,2
Total		44	100

Table 3. Coconut Price for the Last 5 Years

No	Year	Price (Per kilo)
1.	2017	2.000
2.	2018	2.800
3.	2019	2.100
4.	2020	2.000
5.	2021	3.000
Total		11.800

Table 4. Data on the Number of Coconuts in the Last 5 Years

No	Year	Number of Coconuts
1	2017	20.000
2	2018	28.000
3	2019	16.000
4	2020	32.000
5	2021	24.000
Total		120.000

Table 1.5 Describing the Income Sources of Farmers in Small Islands

No	Source of Income	Salary per Month
1.	Slashing Grass	320.000
2.	Transporting coconut	960.000
3.	Riding coconuts to the harbor	680.000
4.	Hook coconut	1.500.000
5.	Rejecting/ Peeling Coconut	2.000.000
6.	Plowing the garden	3.000.000
Total		8.460.000

Table 2 shows that the highest education for farmers is at the elementary school (SD) level. while the lowest education is at the undergraduate level. Most of the income of farm laborers is less than 2.4 million, with a percentage of 65.3%. This can be seen by the estimated total expenditure of Rp. 3,200,000 in one month. This shows that the salary receipts of farm workers are not able to meet their daily needs. The price of coconut for the last 5 years is shown in the following table.

Table 3 shows that in the last 5 years, the price of coconut in Pulau Kecil has fluctuated, with the lowest prices being in 2017 and 2020, while the highest prices are in 2021. The number of coconuts in the last 5 years is shown in the following table.

Table 4 shows that in the last 5 years, the number of coconuts in Small Island has fluctuated, with the lowest numbers being in 2017 and 2019, while the highest

number was in 2020.

Livelihood Resilience of Coconut Farmer Labor in Tanjung Raja Village

The source of livelihood for farm laborers on the small island of Tanjung Raja Village is coconut plantations. By utilizing natural resources so that people are very dependent on natural resources. The use of coconut plantations has become a community culture because it has been passed down from generation to generation from their previous parents.

On the small island of Tanjung Raja Village, farm laborers have several sources of income, such as cutting grass, tying coconuts, carrying coconuts, bringing coconuts to the port, peeling coconuts, and plowing the garden. Sources of income for farm laborers are shown in

table 5. The sources of income for coconut farm workers are shown in Table 5.

Based on Table 5, it shows that the jobs of farm laborers who earn higher incomes are in jobs such as plowing the garden, ripping and peeling coconuts, and hooking coconuts, while the lowest income is in jobs like cutting grass. Plowing the garden has a higher income because farm laborers work most of the land owned by farmers, and then the harvest is divided by 3 between farm workers who plow the garden, garden owners, and other farm workers.

Receipts from salaries of farm workers are not able to meet their daily needs because income is not balanced with expenditure. For example, a farm laborer who works as a grass cutter with a salary of 320,000 per month cannot fulfill his daily needs. The price of basic commodities is quite expensive due to the long distance between the small island of Tanjung Raja Village and the market. Transportation from Tanjung Raja Village to Small Island is difficult, taking 1 hour by motorbike and 10 minutes by boat. Even with this condition, they still become farm laborers. This is due to several factors, namely:

1. Livelihood in Pulau Kecil and Tanjung Raja Village only comes from coconut plantations. Because geographically, the small island of Tanjung Raja Village has peat soil, which does not allow for other agriculture.

2. Farm workers do not have expertise and abilities in other fields. This is due to the low level of education that makes agricultural workers unable to have expertise in other fields. And because of the encouragement from parents who do not require their children to continue their education to a higher level, they are more familiar with their children from childhood to work.

3. Low level of education. Due to environmental factors, in Pulau Kecil Village and Tanjung Raja Village, children not attending school is common, and not a problem for their parents. As well as transportation, it is difficult to go to school.

4 CONCLUSION

Based on the results of the research and discussion that have been described, it can be concluded that Pulau Kecil, Tanjung Raja Village, Kateman District, Indragiri Hilir Regency, has a population of 113 people, consisting of 64 men and 49 women. The main livelihood on this small island is coconut plantations. coconut plantation area of 800 M. With the number of farmers, as many as 25 people. Based on BPS data and research results, it is clear that the people on Pulau Kecil in Tanjung Raja Village, Kateman Subdistrict, utilize coconut plantation activities and a small proportion of those who do not own private land become coconut laborers. In the study of rural sociology, it is called livelihood resilience The source of

livelihood for farm laborers in Pulau Kecil and Tanjung Raja Village is only from the coconut plantation sector. There are two factors that affect the existence of coconut farm workers on the small island of Tanjung Raja Village, namely: farm workers who do not have skills and abilities in other fields and their low level of education, as evidenced by the large number of farm workers who only graduated from elementary school, as many as 30 people, or 68.1%, making it difficult for them to work in other fields.

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