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### **Research Article**

## Resilience of Rubber Farmers' Households Due to Aslide Disaster in the Danau Village, Nalo District, Tantan Merangin Jambi Province

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#### ABSTRACT

The focus of this study is to analyze the resilience of rubber farmer households due to landslides in the lake village, Nalo Tantan subdistrict, Merangin Regency, Jambi Province. This study used a qualitative approach with descriptive type, and the informants of this study were carried out by purposive sampling. The informants of this research are rubber farmer households experiencing pressure from landslides. Data collection methods started from in-depth interviews, observation and document data collection. The unit of analysis in this study is at the household level, namely the rubber farmer household. Data analysis was carried out in several stages, namely data collection, data reduction, data study and drawing conclusions, which were referred to in the Miles and Hubermen model. The results of this study indicate that the household life of rubber farmers is included in the lower middle economy. Rubber farmer households continue to survive driven by the lack of capital to find adequate housing to keep living. The problem found by researchers is that there are no other jobs or other skills owned by rubber farmers. The income of rubber farmers can be seen from the amount or nominal amount of money generated from the sale of rubber. The high and low prices of rubber greatly affect production which ultimately affects the income received by farmers.

Keywords: Household resilience, Landslide disaster, Rubber farmers

#### Introduction

The household is the smallest unit in the family environment. The household consists of grandfather, grandmother, father, mother, and children who have their respective roles and social status within the family environment. The family is the primary part that produces economic needs, where each of them works according to their duties. Fathers have a role to foster and make a living for their families. So the role of a father can be carried out well and is supported by a good job to provide for his family, but each family member also has roles and obligations that must be carried out according to the rules within the household itself, in order to achieve common goals. In essence, every human life is always plagued with problems, both intentional and unintentional problems and also problems that can arise from human factors, from external threats, or the environment in which humans live (Nasution, 2019).

Livelihood is a human activity to obtain a decent standard of living, in order to be able to meet needs, both secondary and primary needs. Livelihoods are also divided into two parts, namely main livelihoods and side livelihoods, what is meant by primary livelihoods are jobs that are mainly carried out, while side jobs are jobs outside the main job itself. Each region has a different livelihood background. There are those who work in the agricultural sector, in the maritime sector, in the agricultural sector, in the trade sector and in other sectors. Likewise in this lake village, which focuses on livelihoods in the agricultural sector, namely rubber farming (Brigita & Sihaloho, 2018).

The majority of the people in rural areas are agriculture, plantations, livestock and others. Low income from the agricultural sector encourages farmers to look for other alternative ways to increase and meet the economic needs of the family. The livelihood structure of the population is one of the population structures that generally provides a pattern of socioeconomic levels. The classification of the livelihoods of the population in rural areas consists of various groups starting with those who work, are looking for work and those who have

worked for the purpose of earning income in an effort to meet the needs of life (Rofifah, 2020).

Rubber farmers are a group of people who have different levels of life from other communities (Utami, 2021) . Rubber farmers have a job in which rubber plants are processed which the sap is taken and processed to be sold to buyers. Likewise with the life of the Rubber Farmer community in Danau Village, Nalo Tantan District, Merangin Regency, Jambi Province. Rubber plantations are a village community business that has long been able to support the family economy (IRAWAN, nd) , besides that the income from the sale of rubber production is very helpful for the movement of village family welfare. community, which results in disruption of the community's income.

Landslides that occur affect people's income where income instability occurs within 1 month. Therefore, the people of the lake village cannot work as usual. In addition, rubber prices and erratic weather and weather support the disruption of the household economy for small farmers. Natural disasters can occur due to natural activities and also in combination with human activities. As quoted from IBRA (2006), there are disasters caused by natural events (Natural disasters) and some are caused by human activities (mad-man disasters). This study aims to analyze the resilience of rubber farmer households due to landslides in Danau Village, Nalo Tantan District, Merangin Regency, Jambi Province.

## Literature Review

#### 1. Household Resilience

The resilience of rubber farmer households can be seen from food expenditure and the level of adequacy of each household (Irwan et al., 2020). Food is a very basic need for human resources, according to Law No. 18 of 2012 is the most important basic human need and its fulfillment is part of human rights. Food is the most basic need for human resources in a nation and to achieve food security it is necessary to have food availability in sufficient quantity and quality. Household food security is a condition of sufficient household food which can be seen from the availability of sufficient food, both in terms of quantity and quality or quality.

which is interesting to study further in order to find out whether it is in accordance with household food security standards in Indonesia (Purwaningsih et al., 2015).

#### 2. Rubber Farmer

Rubber is a plantation that is widely developed in Indonesia until now. Rubber plantations are one of Indonesia's biggest commodities. The rubber farmers who usually work to cut the rubber themselves are in the range of 20 to 50 years in the productive age category. Some children who have graduated from high school and beyond have helped their parents in cutting rubber. In general, the community does not work with one person, or works cutting rubber with more than one hectare of gardens cut. People generally work with the help of their children or their families so that work is completed quickly and on time (Zaini et al., 2017).

#### 3. Natural disasters

Natural disaster is a disaster that occurs naturally without human intervention, which causes damage to village settlements as well as loss of life, property and disrupt the order of people's lives. (Irwan & Pudji Muljono, 2020); (Tamura, 2016) . Landslide is a geological natural disaster that results in the movement of rock or soil masses. The impact of this disaster is very detrimental both from an environmental and socio-economic perspective. or outside the slope due to the gravity factor. When a boulder falls from top to bottom it is caused by gravity pulling it downwards.

Natural disasters such as landslides also occurred in the Lake village area, Nalo Tantan District. Merangin Regency, Jambi Province in almost one year. This landslide occurred due to a fairly high intensity of rainfall caused by heavy rains from noon to late at night for approximately two weeks. , dengue fever (DHF), and various other diseases, and the decline in the income of rubber farmers, because they are unable to carry out rubber tapping activities due to the disconnection of road access to rubber plantations. (Irwan et al., 2020); (Lepa, 2021).

#### Methods

This research is in a qualitative approach with a descriptive type (Kasim & Antwi, 2015) . The location of this research was conducted in the rural area of Danau Village, Nalo Tantan District, Merangin Regency, Jambi Province. The informants of this study were rubber farmer households who experienced the pressure of landslides. Withdrawal of informants is done by purposive sampling. Data collection methods started from in-depth interviews, observations and document data collection. The unit of analysis in this study is at the household level, namely the rubber farmer household. Data analysis was carried out in several stages, namely data collection, data reduction, data presentation and drawing conclusions referred to in the Miles and Hubermen model Miles et al., (2018);Baltacı, (2017)

## Results and Discussion Rubber Farmer's Household Life

The lives of the rubber farmers who usually work to cut the rubber themselves are in the age range of 20 years to 50 years in the productive age category. Some children who have graduated from high school and beyond have helped their parents in cutting rubber. In general, the community does not work with one person, or works cutting rubber with more than one hectare of gardens cut. People generally work with the help of their children or their families so that work can be completed quickly on time (Tumbage et al., 2017).

The rubber plantation developed by the people of the lake village, Nalo Tantan District, Merangin Regency, Jambi Province, which is the main source of livelihood to support their daily needs, because it includes the main livelihood and 65% of the people work as rubber farm laborers. In some cases, rubber farmers carry out their activities from morning to noon. Rubber farmers cut rubber, the results of which are harvested once a week. If the price of rubber is high and normal, then the rubber farmer will get an income that is in accordance with what he expects. On the other hand, if the price of rubber falls, the total income of rubber farmers will decrease or be low (Hammond et al., 2017).

One of the problems in the lives of rubber farmers is natural disasters such as landslides that occur in the Lake village area, Nalo Tantan District. Merangin Regency, Jambi Province in almost one year. This landslide occurred due to a fairly high intensity of rainfall caused by heavy rains from noon to late at night for approximately two weeks. The impacts that occurred from this landslide disaster included a lack of clean water supply, which resulted in the emergence of various diseases such as diarrhea, dengue fever (DHF), and various other diseases, and a decrease in the income of rubber farmers, because they could not carry out

rubber tapping activities. due to cut off road access to rubber plantations.

As a result of this disaster, farmers must be able to adapt to environmental changes and even be ready to face, prevent, and eliminate the adverse impacts of the disasters they experience. Natural disasters in the village of Danu occur quite often, especially landslides, the results of interviews from local people stated that, "landslides in this village are fairly frequent, especially if it has entered the rainy season, not even landslides, floods are also fairly common here, and evacuation from a very long search and rescue team" (SAFITRI, 2017).

Table 1 Percentage of Respondents Based on Household Income Level

Household income level (Rp)	Percentage (%)
Low (< 1,500,000)	62
Medium (1,500,000 - 2,500,000)	26
Height (2,500,000-3,500,000)	7
Extremely High (< 3,500,000)	5
Quantity 100	

Source: Primary Data (processed) 20 21

Table 1 shows the percentage of respondents based on the level of household income of rubber farmers in Danu Village, Nalo Tantan District . Merangin Regency, Jambi Province. This information was obtained from an interview process with one of the people in the village and au named Mr. Ambrizal 46 (years old), which from the above results stated that income is very closely related to the economy of this lake village, which can be seen a very significant difference.

The percentage of income in this lake village also affects the results of rubber production, because when income is low the production is not good or unstable, and vice versa, if the income is high then the rubber production this time is very good and has high quality, so the market price much improved than before.

#### Rubber Farmer Household Resilience

Household resilience of rubber farmers is a pattern of survival of rubber farmers who are able to survive in any situation and condition (Mahendra, I., Rasyad, A., Nurhidayah, 2019) . The resilience of rubber farmer households in this lake village needs more attention because

the remote location of the village also makes this village rarely highlighted and visited by many people, because it is a remote village in Merangin Regency, Jambi Province, the process to this lake village takes approximately 15 hours to arrive. Not only that, researchers also find out what steps must be taken by rubber farmers to maintain life during the landslide that hit this lake village, in which the village recovery process to carry out normal activities again, which is a one to two month process evacuation (Jin et al., 2021).

The people in this lake village still maintain their homes even though they are in a state of disaster, for the reasons: (1) there is no capital to find adequate housing to continue living and carrying out life activities. So it is very difficult to get a more decent place to live, the income from rubber farming is not able to meet the needs of the farmer's household. However, to meet household needs, some family members of farmers or tapping laborers are forced to seek additional income by working as helpers in rubber fields that are not affected by land-slides. Rubber farming communities are also very dependent on the results of rubber

plantations because it is the main livelihood of the community in general, but if the rubber farming community moves it will make it difficult for rubber farmers to work and harvest their rubber products. (2) the problem found by the researcher is that there are no other jobs or other skills owned by rubber farmers. This makes it difficult for farmers to find jobs that require the required skills and basics. This is because in general the people in this Lake village have a low education, many of them only graduated from junior high school (SMP), and some even do not graduate from elementary school (SD), because there is no encouragement from their families. to continue their education. This makes the people in the village of Lake maintain their profession as rubber farm laborers. The expertise gained is obtained from generation to generation through fathers, uncles, fathers, and the same profession. (3) the low economic level of the rubber farming community. Where the people who live in this lake village consist of middle to lower economic groups with uncertain incomes. The livelihoods of the people in this lake village only depend on rubber plants. Income is a very important thing in determining the profit or loss of a job done. Income can be used as a benchmark in assessing the success of a business or work carried out by rubber farmers (RAMADAINI et al., 2019).

The income of rubber farmers can be seen from the amount or nominal amount of money generated from the sale of rubber. The high and low prices of rubber greatly affect production which ultimately affects the income received by farmers. The production level can be seen by the rubber farmers as seen from the productivity of the rubber area per hectare of each rubber farmer (Sankalpa et al., 2020).

## **Conclusion**

The lives of the rubber farmers who usually work to cut the rubber themselves are in the age range of 20 years to 50 years in the productive age category. Some children who have graduated from high school and beyond have helped their parents in cutting rubber. In general, the community does not work with one person, or works cutting rubber with more

than one hectare of gardens cut. People generally work with the help of their children or their families so that the work can be completed quickly and on time. The people in this lake village still maintain their homes even though they are in a state of disaster, for the reasons: (1) there is no adequate place to live to survive and carry out life activities so that it is very difficult to get a more decent place to live. The survival of the rubber farming community is very dependent on rubber plantations, if the rubber farming community changes their residence it will make it difficult for rubber farmers to work and harvest their rubber products. (2) the problem found by the researcher is that there are no other jobs or other skills owned by rubber farmers. This makes it difficult for farmers to find jobs that require the required skills and basics. This is because in general the people in this Lake village have a low education, many of them only graduated from junior high school (SMP), and some even do not graduate from elementary school (SD), because there is no encouragement from their families. to continue their education. This makes the people in the village of Lake maintain their profession as rubber farm laborers. The expertise gained is obtained from generation to generation through fathers, uncles, fathers, and the same profession. (3) the low level of the economy of the rubber farming community where the people who live in this Lake village consist of the middle to lower economic class with uncertain incomes.

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