JOURNAL OF SOCIAL SCIENCES AND ECONOMICS

E-ISSN: 3047-5507
Journal of Social Science and Economics (JOSSE)
https://journal.ashapublishing.co.id/index.php/josse/index

Socio-Economic Resilience of Oil Palm Farmers in Facing Fluctuations in Oil Palm Fruit Selling Prices in Mahahe Village

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ABSTRACT

This study aims to analyze: (1) the factors influencing the resilience of oil palm farmers in facing fluctuations in fresh fruit bunch (FFB) prices in Mahahe Village, Central Mamuju Regency, and (2) the forms of resilience demonstrated by oil palm farmers under such conditions. This research employs a qualitative approach with a descriptive method. Ten informants were selected based on specific criteria using a purposive sampling technique. Data were collected through observation, interviews, and documentation, while data validity was ensured through source triangulation. The findings indicate that: (1) the factors influencing the resilience of oil palm farmers against FFB price fluctuations in Mahahe Village include (a) self-esteem, (b) social support, (c) spirituality or religiosity, and (d) positive emotions. (2) The forms of resilience displayed by oil palm farmers in response to price fluctuations are categorized into two types: (a) overcoming the odds (managing challenges and difficulties) through income diversification strategies or seeking alternative employment outside the agricultural sector, and (b) coping (managing anxiety and stress) by engaging in alternative activities such as fishing, livestock raising, praying, exercising, and enjoying the tranquility of working in the plantation

Keywords: Resilience, Price Fluctuations, Palm Oil Farmers

INTRODUCTION

Plantations are one of the subsectors in the agricultural sector with the hope of playing an important role through their contribution to gross domestic product, export earnings, employment generation, and poverty alleviation (Ahmed & Gasparatos, 2020; Fery Purba et al., 2023; Martauli, 2021). The development of the plantation sector aims to accelerate production growth on both large private and state-owned plantations. Plantations can produce food and energy. One of the raw materials for energy production is palm oil. The plantation sector holds significant potential and offers significant potential for export (Ibrahim Fathahillah Hizbul Islam, Widyastuti, Pratama, & Purniawan, 2022; Kumar, Lesmana, & Nahar, 2020; Suhardi & Afrizal, 2021). The palm oil industry plays a significant role in rural areas in Indonesia. Increasing farmers' incomes will enable them to meet their living expenses and improve their families' well-being. The higher a household's income, the smaller its expenditure on food. In other words, a family is considered prosperous if its consumption behavior remains unchanged despite an increase in income (Fan & Cho, 2021; Oswald, Steinberger, Ivanova, & Millward-Hopkins, 2021; Sahara et al., 2023).

Oil palm is a valuable plant because it can produce vegetable oil (Alcock, Salt, Wilson, & Ramsden, 2022; Meijaard et al., 2020; Murphy, Goggin, & Paterson, 2021). Palm oil is marketed by farmers as fresh fruit. The industry then processes it into crude palm oil (CPO) for export. Furthermore, oil palm plantations serve as a vital source of food and nutrition for local consumption, so the scarcity of oil palm plantations in the domestic market has profound consequences for economic development and public welfare (Chrisendo, Siregar, & Qaim, 2022; Essono et al., 2023; Saleem et al., 2022).

Based on the trade balance, Indonesia's realized export value in 2021, generated from CPO production, reached USD 28.61 billion in the form of palm oil (BPS, 2021). Furthermore, according to the Indonesian Palm Oil Producers Association (GAPKI), Indonesian CPO production reached 46.89 million tons in 2021. This makes CPO the largest source of foreign exchange for Indonesia. According to indexmundi data, Indonesia has successfully dominated the CPO market with a percentage of 85 percent. This proves that Indonesia is the largest CPO exporter in the world. Indonesia is the largest producer of crude palm oil globally, with total production reaching 47.1 million tons of CPO annually.

Even though Indonesia is the country with the largest CPO export volume in the world, The phenomenon of price fluctuations continues to occur and impact global market prices. The ongoing global crisis is currently affecting palm oil commodities. The Fresh Fruit Bunches (FFB) price has fluctuated significantly as a result. Naturally, the selling price has a significant impact on farmers' incomes. Those most disadvantaged by the decline in palm oil prices are the palm oil farmers themselves, especially laborers on other people's plantations, who previously enjoyed the sweet price of FFB to meet their daily needs. As one of the pillars of the country's economy, the agricultural sector is expected to increase incomes, especially for rural communities still living below the poverty line (Goel, Yadav, Vishnoi, & Rastogi, 2021; Khalifa et al., 2021; Zhang et al., 2021).

Since the onset of price fluctuations, oil palm farmers have been compelled to develop a certain degree of resilience to sustain their livelihoods and avoid being overwhelmed by adverse conditions. Price fluctuations refer to the variability in commodity prices over a specific period of time, which in the context of palm oil farming often manifests as a decline in selling prices. This phenomenon presents a critical challenge to farmers, requiring them to adapt not only economically but also socially and psychologically. In this context, resilience is defined as the ability to endure, adapt to, and recuperate from challenging situations, including both individual and communal aspects. It is not a static attribute but rather a dynamic process that evolves and extends across different phases—before, during, and after crises or disasters (Almutairi, Mourshed, & Ameen, 2020; Tariq, Pathirage, & Fernando, 2021; Terblanche, de Sousa, & van Niekerk, 2022).

Resilience refers to the capacity of a system to absorb disturbances and reorganize while undergoing change, maintaining its essential function and structure. In the context of rural livelihoods, ivelihood adaptation involves strategies through which households adjust to shocks or stresses—economic, environmental, or social—to sustain well-being. These theoretical perspectives are crucial to understanding how oil palm farmers in Mahahe Village develop adaptive capacities and maintain socio-economic stability despite market price fluctuations.

Along with Pasangkayu Regency, Central Mamuju Regency is one of the main areas in West Sulawesi Province that produces palm oil. A total of 72,052 tons of palm oil were produced in 2023 from plants spanning about 36,159 hectares in the region. Mahahe Village is one of the main centers for agricultural development in this region, especially in the production of palm oil. Plantations that produce palm oil have grown significantly in this region. The planted area was only 290 hectares when PT. SRL II first launched the plantation, but it has now grown to 649 hectares. Despite this expansion, managing their farms remains a constant issue for palm oil producers. The most significant of these issues is price volatility, which has a detrimental effect on both plantation owners and farmworkers. The declining trend in selling prices strongly impacts farmers' income, lowers workers' daily pay, and increases socioeconomic vulnerability.

The study's title, "Socio-Economic Resilience of Oil Palm Farmers in Facing Fluctuations in Oil Palm Fruit Selling Prices in Mahahe Village, Central Mamuju Regency," reflects these difficulties. The study makes use of a framework for social resilience that highlights three essential abilities: transformative, adaptive, and coping. Coping capacities

are short-term tactics used to endure sudden shocks, such cutting back on spending or diversifying sources of income. To protect against market volatility, adaptive capacities entail medium-term changes such as enhancing farming methods, gaining access to institutional support, and creating social networks. Contrarily, transformative capacities stand for long-term structural shifts including implementing new technologies, rearranging livelihood plans, and organizing as a group to affect market dynamics or legislative actions. The study aims to supply a thorough grasp of how oil palm farmers in Mahahe Village manage the socioeconomic risks associated with price changes and work toward achieving sustainable lifestyles by looking at these three aspects.

METHODS

This research employs a qualitative approach and falls into the descriptive research category. Moleong (2017) defines qualitative research as a flexible and simpler method because it is more adaptable when faced with various realities and evaluates the reciprocal impacts resulting from existing value patterns. Qualitative methods exist to enable direct observation of the relationship between researchers and informants.

Measurable achievement indicators in this research include: 1) Identification of problems summarized from observations in the preliminary study, 2) Development of instruments that meet the requirements as measurement tools for application, 3) Compilation of valid data on factors influencing resilience and the forms of resilience of oil palm farmers, 4) Compilation of scientific articles that can be submitted to national and international seminars and published in accredited international and national scientific journals.

In this study, the following data collection techniques were used: observation, observation techniques are useful for observing the behavior and activities of participants at the research location. During this observation process, researchers record various things that are directly observed. Recording activities can be conducted in either a structured or unstructured manner; Interviews are a method for obtaining data through direct conversations between researchers and participants. Interviews aim to gather information that cannot be obtained through observation alone. The interviews in this study were conducted face-to-face with informants, namely residents of Mahahe Village who work as oil palm farmers, based on interview guidelines. This was done to determine the factors that influence their resilience and how they demonstrate resilience when facing fluctuations in oil palm prices. Documentation is a method for collecting information by seeking appropriate evidence in accordance with the research focus. Documentation refers to written materials. The types of documents referred to can include various things, such as policy documents, biographies, decrees, instructional letters, magazines, books, and papers.

Before incorporating collected information into a research proposal, data validity checking ensures its factual, accurate, relevant, and reliable nature. In this study, data validity will be tested using source triangulation techniques. According to Suprianto (2024), source triangulation refers to the process of comparing and verifying the reliability of information obtained at different times and using different methods.

The data analysis technique used in this study was descriptive analysis. The data analysis steps applied followed the guidelines provided by Miles and Huberman (1994), namely: data reduction, data display, conclusion drawing. A conclusion is a summary of the research findings that reflects the final results of the study. This is based on the opinions outlined previously, as well as decisions made through both inductive and deductive reasoning. The conclusions drawn must align with the focus, objectives, and previously interpreted research findings. At this stage, researchers verify the data by reviewing each previously compiled finding to ensure its relevance and to support answers to questions about

the resilience of oil palm farmers facing price fluctuations in Mahahe Village, Central Mamuju Regency.

RESULTS AND DISCUSSION

Factors Influencing the Resilience of Oil Palm Farmers During Climate Change

This section directly addresses the first research objective, namely identifying the factors that influence the resilience of oil palm farmers in Mahahe Village in response to price fluctuations. The analysis is framed through the theoretical lenses of social and livelihood resilience.

Findings from the research indicate that the resilience of oil palm farmers in Mahahe Village, Central Mamuju Regency, is shaped by both internal and external factors. Internal factors encompass individual characteristics and capabilities, such as self-esteem, spirituality or religiosity, and positive emotions. Meanwhile, external factors comprise social support from family, peers, the local community, and government institutions, all of which play a crucial role in enabling farmers to endure and adapt to fluctuations in oil palm fruit prices.

1. Self-Esteem

Self-esteem is the desire to possess strength, achieve something, feel self-sufficient, and possess the ability to be independent and free (Koszegi, Loewenstein, & Murooka, 2022; Monteiro, Coelho, Hanel, de Medeiros, & da Silva, 2022) Self-esteem is a basic need that individuals must possess to achieve self-actualization, such as the desire to possess strength, achieve something, feel self-sufficient, and possess the ability to be independent and free. Individuals with high self-esteem are generally better equipped to overcome challenges and can recover quickly and bounce back from failure.

Oil palm farmers in Mahahe Village are faced with the situation of very low oil palm fruit prices due to global market conditions, putting them at a disadvantage. However, despite their downturn, with high self-confidence, they remain confident and stronger in persevering, becoming more patient, not easily discouraged, not easily disappointed, and increasingly diligent in maintaining their oil palm plantations to maximize their income.

2. Social Support (External)

According to Resnick et al. (Putri, 2018), social support is an external factor that originates from outside and influences a person's attitude. Social support refers to the happiness, attention, recognition, or access to assistance an individual receives from others or a particular community. Social support can come in various forms, such as emotional support in the form of encouragement or motivation, instrumental support in the form of financial assistance, and necessary informational support.

Oil palm farmers in Mahahe Village receive assistance from several parties, making this support resilient in the face of fluctuating prices for oil palm fruit. Family, friends, the community, or other social groups can provide emotional, informational, and instrumental support. The social support received by oil palm farmers in Mahahe Village includes support from family, informational support from friends, fertilizer assistance from farmer groups, and government replanting programs that can help oil palm farmers survive.

3. Spirituality or Religiousness

Another factor that influences individual resilience, especially when facing difficulties and challenges, is spirituality or religiosity. Spirituality can provide meaning to life, hope, and

inner strength. Belief in a greater power can help someone face difficulties more calmly and find meaning in their suffering.

Spirituality and religious values are crucial and have significant implications for the resilience of oil palm farmers in Mahahe Village when faced with uncertainty about the selling price of palm oil. They firmly believe that hardship is a test that must be overcome to achieve better results in the future. Therefore, they are confident that these trials can be overcome as long as we remain patient, strive, never give up, and consistently pray and surrender everything to God.

4. Positive Emotions

According to Resnick et al. (Saputra et al., 2023), positive emotions such as happiness, gratitude, and optimism can help individuals build resilience. Positive emotions enable individuals to gain a better perspective on the situation, help them maintain a positive mindset, and serve as a source of encouragement for finding new, creative solutions when faced with a problem.

Positive emotions are a factor influencing the resilience of oil palm farmers in Mahahe Village. These positive emotions keep them steadfast, grateful, joyful, and satisfied with the results. They believe that prices will eventually return to normal, thus maintaining their enthusiasm and optimism for a brighter future for oil palm. In recent decades, green entrepreneurship has developed and become a popular concept as many people have realized the importance of preserving the earth for future generations. Meanwhile, green entrepreneurship is an effort to produce environmentally friendly goods or services, using natural resources sustainably, and employing energy-efficient techniques. Broadly speaking, green entrepreneurship is an aspect of the economic sector that pursues goals beyond the economic sector, but also considers environmental issues and sustainable development.

Resilience of Oil Palm Farmers in Facing Fluctuating Palm Fruit Prices in Mahahe Village, Central Mamuju Regency

This section elaborates on the second research objective, explaining how these farmers exhibit forms of resilience—both adaptive and coping mechanisms—in maintaining livelihood stability amid economic pressures.

Researchers categorise the resilience of oil palm farmers in Mahahe Village, Central Mamuju Regency, into two groups: those who overcome obstacles and those who cope. This is evidenced by interviews conducted by researchers, who found that farmers there are faced with price fluctuations or instability in palm fruit prices, which undoubtedly puts them at a disadvantage. Constantly declining prices clearly impact their economic situation. They also feel anxious and worried about the fluctuations. This anxiety arises from their fear that prices will continue to decline for a prolonged period. Therefore, farmers in Mahahe Village possess a degree of resilience that allows them to take various measures to survive and recover.

1. Overcoming the Odds

Overcoming the odds is a form of resilience that encompasses a person's ability to achieve success in the face of various challenges and difficult situations. This involves defying expectations and enduring through exceptionally challenging circumstances.

Oil palm farmers in Mahahe Village face various problems and challenges in managing their plantations, such as high fertilizer prices, climate change, pest attacks that damage oil palm trees, difficulties selling their harvests, and fluctuations in palm oil prices that cause a drastic decline in the selling price of palm oil fruit. Therefore, they must be resilient to avoid continuing these unfavorable conditions. Farmers in Mahahe Village, Central Mamuju Regency, have implemented income diversification strategies or sought

alternative employment, such as working as farm laborers, selling food and clothing, working as drivers, raising livestock, maximizing oil palm maintenance through fertilization, and planting other crops such as rice, cocoa, patchouli, and corn as additional sources of income amidst unstable oil palm prices.

2. Coping

According to Hanelwad's Wolfers & Utz (2022), coping is a form of resilience related to an individual's ability to manage anxiety and stress when facing challenges in everyday life. This involves using healthy coping strategies and maintaining emotional balance.

The fluctuations in prices have caused anxiety and worry among oil palm farmers in Mahahe Village. They worry that the income from their harvest will not be enough to cover their daily needs, as a low palm oil price will undoubtedly impact their economic situation. To alleviate this anxiety, oil palm farmers in Mahahe Village, Central Mamuju Regency, engage in other activities such as fishing, raising livestock, praying, exercising, and enjoying the quiet and peaceful atmosphere of their plantations, which can also help them feel more relaxed.

CONCLUSION

Factors influencing the resilience of oil palm farmers when facing price fluctuations in Mahahe Village, Central Mamuju Regency include self-esteem, social support from family, friends, farmer groups, and the government, spirituality or religiosity, and positive emotions such as happiness, gratitude, and optimism. The form of resilience of oil palm farmers in Mahahe Village, Central Mamuju Regency in facing the phenomenon of fluctuations in oil palm fruit selling prices is overcoming the odds (overcoming challenges and difficulties) namely through income diversification strategies or looking for other jobs outside the agricultural industry such as becoming farm laborers, selling food and clothing, becoming drivers, raising livestock, maximizing oil palm care through fertilization, and planting other types of crops such as rice, cocoa, patchouli and corn as additional sources of income, then coping (overcoming anxiety and stress) by diverting to other activities such as fishing, raising livestock, praying, exercising, and enjoying the quiet and calm atmosphere while doing activities in the garden can also make them feel more relaxed.

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