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Income of women whose jobs were to sort eucalyptus leaves after the COVID-19 pandemic

Pardamean Daulay^{1,*}, Muhamad Chairul Basrun Umanailo², Sri Pujiati¹

- ¹ Fakultas Hukum Ilmu Sosial dan Ilmu Politik, Universitas Terbuka, Tangerang Selatan 15437, Indonesia
- ² Fakultas Pertanian dan Kehutanan, Universitas Iqra Buru, Maluku 97511, Indonesia
- * Corresponding author: Pardamean Daulay, pardameandaulay@ecampus.ut.ac.id

CITATION

Daulay P, Umanailo MCB, Pujiati S. (2024). Income of women whose jobs were to sort eucalyptus leaves after the COVID-19 pandemic. Journal of Infrastructure, Policy and Development. 8(11): 6432. https://doi.org/10.24294/jipd.v8i11.6432

ARTICLE INFO

Received: 15 May 2024 Accepted: 18 June 2024

Available online: 22 October 2024

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Abstract: Buru Regency is the primary hub for producing eucalyptus oil, a highly valued commodity in the region. The oil extracted from the eucalyptus epidemic plant possesses antiseptic, antibacterial, and antifungal characteristics. Amidst the Covid-19 pandemic, numerous industries require it as a fundamental component of pharmaceuticals. An essential factor in the eucalyptus oil production process is the presence of eucalyptus leaves. Therefore, leaf-sorting workers, including women, are required to ensure this availability. However, in reality, the daily lives of eucalyptus leaf massagers are characterized by challenging economic conditions and a socio-economic environment that lags behind workers in other sectors. This study aims to examine and investigate the roles and work patterns of employed women and the strategies they employ to ensure the consistent flow of household income. The research employed a qualitative methodology with a phenomenological approach. A total of 24 informants were purposefully selected based on their involvement in achieving the research objectives. The results indicate that the COVID-19 pandemic has altered the circumstances of women who collect leaves and rely heavily on eucalyptus trees as a natural resource. Physical adaptation strategies are the preferred methods used to fulfill household requirements. Implementing physical adaptations does not deter women leaf-sorters from continuing their work. Their commitment to meeting their basic needs significantly motivates them to persist in their role as leaf sorters. The income of women engaged in sorting eucalyptus leaves in their households during the COVID-19 pandemic.

Keywords: sequencer; leaf; female; adaptation; physical

1. Introduction

While the COVID-19 pandemic is ongoing, more and more people are looking for eucalyptus oil as a medicinal ingredient because it is believed to be able to prevent the virus from spreading. However, in tandem with this increase, eucalyptus oil has become more difficult to acquire, and its price has even increased by a factor of two (Sudradjat, 2020). The landowners then take advantage of this condition to increase production and income. The Indonesian Central Statistics Agency reported a significant increase in eucalyptus oil production in 2021.

As the number of people consuming eucalyptus oil continues to rise, regional needs are now driving the oil demand instead of local ones. Before the pandemic (Aryani, 2020), daily production of eucalyptus reached 328 liters, classified into two categories: Landowners keep seventy-four percent, sell twenty-four percent in traditional markets, and directly consume two percent, resulting in a surplus of seventy percent. Even though production figures increased to 742 liters per day during the pandemic, the local market experienced a shortage of eucalyptus oil stocks that were

readily available for purchase (Waemesse, et al., 2020), Landowners sell the entire production directly to purchasers who travel to eucalyptus oil production centres. Landowners are pushing to increase production due to growing demand. This demand has an effect on the working time patterns of farmers on production land. Farmers, under constant pressure, resort to physical strategies to meet production needs with a clear focus on profit.

Even though they are the lowest level of workers in the eucalyptus oil industry, leaf crushers are the most important part of the distillation process. The primary suppliers of raw materials for the processing of eucalyptus oil products are those who sort leaves. Nearly eighty percent of the people who sort leaves are women. A woman who massages eucalyptus leaves is a woman who is involved in processing eucalyptus leaves, especially in massaging or squeezing the leaves to extract eucalyptus oil, usually women, who have special skills in massaging or massaging using oil extracted from eucalyptus leaves. They collaborate with other workers to refine eucalyptus leaves to produce oil. The fact that their work yields an income of only one thousand rupiah per kilogram, at most, demonstrates the low value of their existence. It is very interesting to learn about this phenomenon when you consider the state of their income, which is considered to be very low but is still being done to this day. Which factors contribute to women's continued existence, and what methods do they employ to meet the requirements of their households? With this inquiry, the author aims to illuminate the sociological situation in which women who sort of leave persist in their work, despite facing limited conditions.

Several previous studies have examined ways for depressed groups to survive, including Muhammad Fathan Radityasani's study on adaptation strategies for farmer and non-farmer households affected by tidal floods. This study found that these households used physical strategies as an alternative source of income. Additionally, Syarif Husni discovered the use of physical strategies by fishermen who worked outside the fisheries sector (Husni, 2020). Ayu Ferina's research on the adaptation strategies employed by fishermen in Kenjeran revealed the use of physical strategies alongside a job diversification approach and other forms of fishing gear diversification (Ni Nengah et al., 2021). For this study, the researchers investigated the physical strategies that women who work as eucalyptus leaf sorters employ to satisfy their requirements by making the most of their working time to acquire a significant amount of additional income. This strategy, without a doubt, directly impacts women who work as eucalyptus leaf sorts. However, the profit-driven nature of landowners forces this marginalized group to modify their work schedules and behaviours to refine eucalyptus oil.

In addition to exploring physical strategies, the author discovered that women employed as eucalyptus leaf sorters struggle to cope with the COVID-19 pandemic, resorting to a variety of adaptation strategies to overcome their limited income streams. According to Qowaid's study (Qowaid et al., 2020; Sarip et al, 2020), a decline in purchasing power leads to a tendency for income to decrease due to limited mobility, which in turn impacts the marketing of agricultural products (Adinugroho et al., 2020; Rosiadi et al., 2021). The challenges of meeting household income requirements and the effects of climate change are impacting agricultural production during the COVID-19 pandemic (Maulana and Nubatonis, 2020; Sadiyah, 2021). The author will analyze

the income of women working as eucalyptus leaf sorters to better understand household economic behaviour. All of the previous studies examined the limitations of subsistence from the perspective of household income. However, the author will do this. According to White, the household is the fundamental unit of analysis because it is the unit of production, reproduction, consumption, ceremonial relations, and political interaction. This is the reason why the household is the fundamental unit of analysis (Ellis, 2000). Chayanov asserts that understanding the economic behaviour of farmers begins with viewing the household as both a production and consumption unit (Chayanov, 1991).

2. Materials and methods

The research method was a qualitative model with a phenomenological approach. This is because it considers human behaviour, including what people say and do, to be a result of how individuals interpret the world around them (Collins and Stockton, 2018; Creswell, 2007). Researchers selected the villages of Miskoko, Waplau, Wamlana, and Waewar as research locations due to their interest in the conditions of female workers who perform the activity of sorting eucalyptus leaves. These workers' living conditions are increasingly under pressure as a result of the COVID-19 pandemic; however, they are still able to survive within their current circumstances.

For this study, we collected data through direct observation. Informants typically begin their work at six o'clock in the morning and continue until the afternoon. Therefore, to observe the activities, the researcher strives to align them with the established routines.

3. Results and discussion

3.1. Physical adaptation to work patterns

When the COVID-19 pandemic was ongoing, the economic situation of eucalyptus sequencers in Buru Regency's workforce structure was relatively low. On the other hand, in reality, this line of work is highly resistant to pandemics. This means that even though their income does not increase, they can live in these conditions with greater ease. These farmers are in a situation similar to that of farmers on Lombok Island who work on dry land, as well as salt farmers in Aceh. (Kiram and Zamzami, 2021; Wuryantoro and Ayu, 2020). Although people's standard of living has not improved, there is a growing demand for eucalyptus oil as an alternative medicine. This demand is growing even though there has been no improvement in the standard of living. Women are creatures that were created with various advantages; therefore, when it comes to trying to assist their husbands in working to earn a living so that the family's living needs can be met, they have many limitations. This study shows that adaptation has the potential capacity for social and economic change for women who sew leaves (Sabariman, 2019). Several reasons ultimately lead women to choose to work in the field of leaf sorting. On the other hand, women who sort leaves are real evidence that exists in society regarding the role that women play in helping to improve the family economy. These factors include economic, educational, social, and cultural ones.

For the most part, women are responsible for sorting leaves as part of the work process involved in the production of eucalyptus oil, which also includes care and sorting. During a single production period, these labour activities take place in forests and near eucalyptus plantations. The duration of the work period ranges from fourteen to thirty days (Doran et al., 2021). Workgroups, responsible for sorting and delivering leaf sorting results, perform a total of eight hours of work each day (Ernawati et al., 2022). The reality in the field changed during the COVID-19 pandemic. The production period lasted for eight days, and the working hours reached twelve hours per day. The duration of the working time reached eight days. Daily, they begin their work at 5:00 and continue until 18:00. They maximize the available working time in a single day as a method to speed up the refining process. This reduces the production time from 14–30 days to 8–10 days.

Women who work as eucalyptus leaf sorters employ these physical strategies to optimise their working time. These actions are a way for them to earn a better living to fulfil their daily lives. Without a doubt, this strategy directly affects the women who work as eucalyptus leaf sorters; however, their primary concern for meeting their subsistence needs makes them an increasingly marginalised group.

As a further point of interest, understanding the women who work as leaf sorters shows us how they can maximize their economic resources despite unfavourable economic conditions by employing strategies commonly referred to as adaptation. In this strategy, female massage therapists demonstrate how they can make use of all the resources at their disposal. Adaptation is the process by which an individual modifies his behaviour in response to his environment. Adjustment is the process of changing one's behaviour in response to changes in one's existing environment. One additional interpretation of the term is the act of altering one's surroundings in order to conform to one's own preferences. Adaptation fundamentally involves fulfilling the survival requirements (Ariyani, 2013; Azizah et al., 2018; Nurhayati et al., 2020).

There are some physical adjustments that may be necessary for the job of sorting leaves, particularly for women who perform this task. Choosing or making the decision to survive is something that the woman who crushed the leaves did in order to improve her life. To maintain their lives, leaf-crushing women typically employ physical adaptation strategies. In addition, they employ livelihood patterns and combine these two strategies into a single livelihood strategy in order to ensure their continued existence.

Regarding Scoones, the following is an explanation of the livelihood strategy: One way to make good use of the agricultural sector is to bring in outside help like technology and workers (intensification). Another way is to increase the amount of land that can be used for farming (extensification). These are both examples of agricultural land intensification and extensification strategies. Multiple livelihood patterns, or diversification, is a strategy for achieving a higher standard of living by implementing a variety of livelihood patterns and searching for other employment opportunities outside of the agricultural sector in order to bring in more money. Geographic engineering, also known as migration, is a method of generating income that involves moving away from one's village area (mobility) and settling in another location, either permanently or in a circular fashion (Budiyanti and Dharmawan, 2018).

Women who sort leaves are employed in positions that indicate they use an

intensification income strategy that is directly related to physical adaptation. Their work patterns and positions demonstrate this. There are two variables that mutually support physical adaptation strategies and intensified livelihood strategies. These variables involve utilizing and extending working time. Muscular and physical strength are the basis for women leaf-sorting to gain accumulated profits from the production they work on. The duration of working time indicates that intensification is not only about expanding the cultivated land, but more than that, not extending the working time is a livelihood strategy that for women leaf-sorting is an effective way to increase accumulated income.

The decision to implement a physical adaptation strategy will undoubtedly result in a number of consequences for each and every person who chooses to do so. These consequences include overtraining, muscle imbalance, increased stress on the body, decreased flexibility, and decreased sleep quality, all of which have an effect on mental stress. The consequences of implementing adaptation strategies are not a barrier to earning an income for a leaf crusher; rather, the accumulation of income to meet the needs of the household becomes the primary goal when they are working.

3.2. Dependence of livelihood on nature

By sorting leaves as part of their subsistence activities, women have the sense that they are living in harmony with the land. Verbal descriptions passed down from one generation to the next, have been the sole method of transmission of knowledge regarding the management of nature. When it comes to the management of resources and interactions with other living creatures, living obedience to nature forms a view of the universe as an inspiration that gives birth to a holistic concept as well as the concept of totality (Pečarič, 2022). Specifically, it refers to a comprehensive idea that encompasses challenging and even inseparable aspects of life. On the other hand, women who crush leaves are believed to be able to protect the environment in a way that does not affect the location where they earn their livelihood.

When socioeconomic conditions undergo unstable fluctuations, it automatically affects their household's income. As a result of the fact that it is difficult to earn a living other than by sorting leaves, women who sort leaves are forced to devote their energy to work that is extremely taxing. A state of shock and stress brought on by the changes in circumstances brought about by the COVID-19 pandemic, which in turn leads to a reduction in income, which in turn leads to responses and efforts to adapt to the crisis (El Kassas et al., 2020).

According to Devereux, households will respond to a crisis in income and food for consumption in two different ways. The first step is to ensure that they continue to have enough food for consumption. It is possible to accomplish this by purchasing food and accepting food from other parties without making a payment. Second, modify the food that is consumed, specifically by reducing the quantity and quality of food, diversifying the sources of food, and decreasing the number of people living in the household in order to reduce the amount of consumption that needs to be provided (Devereux et al., 2020). Women who sort leaves do not carry out these two actions; instead, they make physical adaptations to overcome the challenging conditions they face.

The inability or delay in meeting their living expenses during the COVID-19 pandemic as a result of the production of agricultural products makes it increasingly difficult for them to continue to survive, despite the fact that being a leaf crusher is the only skill they possess that allows them to provide for their household. On the one hand, women with their income can utilize and develop their potential, and on the other hand, they can earn their own income, which not only satisfies their personal needs but also contributes to their families' financial needs: Some of the more recent studies focus on how women engage in livelihood activities, leveraging economic, educational, social, and cultural factors as motivators for their work: During the COVID-19 pandemic, Dilawati conducted research on women and family resilience. She discovered that female workers were looking for alternative ways to meet the financial needs of their families. In general, they make a living by selling with a limited capital base, and some of them only hope for assistance from the government while exchanging roles with their husbands (Dilawati et al., 2021). According to Setiyono, who conducted a study on the meaning and changes in gender relations for women who worked as casual workers during the COVID-19 pandemic, there are economic and non-economic meanings associated with the situation in which women became casual workers. In the context of changing gender relations, more parallel gender relations emerge, and these parallel gender relations become more pronounced with higher education levels. The converse is also true: the lower the level of education, the greater the degree to which men dominate women in terms of gender relations (Setiyono and Imelda, 2021).

Research on women's activities appears to distinguish the phenomenon of women relying on leaf-sorting work as their primary source of income. The decision to work as a leaf sorter is part of a livelihood strategy that confronts reality. The decision to work as a leaf sorter is part of a livelihood strategy that confronts the reality of household economic difficulties and the availability of natural resources. They hold a robust understanding of the concept of mountains and water, fostering a systematic perspective on life that persists across successive generations. However, the COVID-19 pandemic has presented different circumstances, leading to the adoption of a new physical strategy in women's culture, which involves crushing leaves to make ends meet.

4. Conclusion

Because they relied on their means of subsistence, women who sought leave were required to adjust their working hours to increase their income-oriented productivity to ensure their continued existence. As a result of the fact that the division of labour that is carried out is not entirely conducted based on gender, women are required to participate in the process of fulfilling the requirements of household life. Working as a leaf-sorter to increase income is a practice that is commonly carried out by women. This is because the fundamental factor of dependency is the fulfilment of household subsistence needs, which cannot be fully carried out by men as heads of households.

Author contributions: Conceptualization, PD, SP and MCBU; methodology, MCBU; validation, PD and SP; investigation, PD and MCBU; writing—preparation of original

draft, MCBU; writing—review and editing, PD. All authors have read and approved the published version of the manuscript.

Funding: This research was funded by the Collaborative Research Grant from the Universitas Terbuka, Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, grant number B/175/UN31.LPPM/PT.01.03/2024.

Acknowledgments: The author would like to thank the Institute for Research and Community Empowerment of Universitas Terbuka for its support for Collaborative Research, Applied Research in 2024, as well as all parties who have helped so that the research and publication process can be completed.

Conflict of interest: The authors declare no conflict of interest.

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