

The Existence of Migrants as Farm Workers in The Shift in The Post-Covid-19 Industrial Landscape in Berastagi Sub-District, Karo Regency

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Abstract: - In Karo District, migrants who work as agricultural laborers have more excellent job opportunities and business opportunities; however, judging from their income conditions, housing conditions, and ability to send their children to school, they are still classified as poor. The existence of Migrants who work as agricultural laborers face problems and challenges in changing the industrial landscape after COVID-19. The marginalization of Farm Workers in Berastagi City is due to the narrower working area. Many landowners sell them to agro-investors or develop them in a renewable way using technology that replaces labor. Hard work in it. This article uses qualitative research, a research process, and an understanding based on a methodology investigating social phenomena and human problems. Research on the study of migrant workers is necessary to gain a comprehensive understanding of their economic, social, and cultural contributions, as well as the challenges they face. This knowledge can inform evidence-based policies, promote social justice, improve healthcare access, and foster inclusive societies that benefit both migrant workers and their host countries. This article comprehensively reveals the facts in the Berastagi City, Karo Regency field, which is dominated by agricultural landscapes of vegetables, fruits, and plantations. Three things cause the marginalization of migrant farm workers in the Berastagi District, namely lack of skills, lack of education, and age which are classified as elderly. However, the thing that is most affected is the lack of land to be creative or adapt to changes in the agricultural and industrial landscape.

Key-Words: - Migrant, Farmworker, Shifts Industrial Landscape

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1 Introduction

According to the International Organization for Migration (IOM), migrants reflect the general understanding of people who move from their place of residence into a country or across international borders, temporarily or permanently, and for various reasons, [1]. The term "migrant" can have different meanings depending on the context. Migrant workers have an analysis of the relationship between the meaning of work and the context of socialization of labor organizations for the evaluation of migrant workers, [2]. Meanwhile, according to the Indonesian Central Bureau of Statistics, migrants are defined as residents who have moved their residence across the village/village boundary within the five years prior to the survey, which is divided into five types, namely local urban migrants and out-of-town migrants, Risen Migrant, Lifetime Migrant, and

Migrant Total, [3]. The following is an explanation of the types of Migrants in several senses, which are presented in Table 1.

Table 1. Types and Definitions of the Migrant Concept

Type	Concept Definition
City Local Migrants	<ol style="list-style-type: none"> 1. Risen migrant population whose residence five years prior to the survey was still in urban areas, [3]. 2. Transfers that occur within one country, for example between provinces, between districts/cities. Rural migration to urban areas and/or other administrative units that are lower than the district/city level such as districts, sub-districts, and so on, [4]. 3. The time in which a person is considered a migrant if he or she spends more than a certain amount of time far from their respective homes, the threshold range is one month, [5], [6]. People who have been away from home for at least half a year, [7].
Out-of-town migrants	<ol style="list-style-type: none"> 1. Risen migrant population whose residence five years prior to the survey was still in the city area, [3]. <ol style="list-style-type: none"> (a). from urban areas if the village/kelurahan where they lived 5 years ago was classified as an urban area; (b). from a rural area if the village/kelurahan where they lived 5 years ago was classified as a rural area. <p>Migration from outside the area can have social, economic, and cultural impacts on the origin of migrants and their families.</p>
Migrant Risen	<ol style="list-style-type: none"> 1. Those who have moved within the last 5 years (starting from 5 years before enumeration). This information was obtained from questions about where you lived last year and where you live now. If the two places are different then they are categorized as risen migrants who are also part of the total migration, but the time is within the last 5 years, [3].
Lifetime Migrant	<ol style="list-style-type: none"> 1. Lifetime migrants are those who move from their place of birth to their current place of residence regardless of when they moved. In this theory, migration is obtained from information on place of birth and current place of residence, if these two statements are different then it includes migration during life, [3]. 2. Lifelong migration refers to the movement of individuals from their place of birth to a different administrative unit where they currently live, where their area of residence at the time of enumeration or data collection is different from their place of birth which makes them migrants for life, [8]. 3. "Lifetime" migrations: "Lifetime" migrations are defined by connecting place of birth and place of residence to a date reference. A "lifetime" migrant is any individual living in an administrative entity other than the place of birth, [9].
Total Migrant	<ol style="list-style-type: none"> 1. Those who have moved, so their previous residence is different from their present residence. This information is obtained from the previous residence and current residence. There is a possibility that the previous place of residence is the same as the place of birth and there is also a possibility that it is not the same so that lifetime migration is included as total migration, [3]. 2. A person's migration history by comparing their previous and current place of residence determines whether a person has moved from one place to another during their lifetime, [10].

Source: Author Data Processing, 2023

To help examine the study of migrants as farm laborers, we can look at various previous articles that show a comparison of the existence of migrants, especially the shift in the industrial landscape after COVID-19. Research by, [11], shows that the agricultural sector was severely affected by the emergence of the COVID-19 pandemic. However, Craftsmen have not been affected economically by the pandemic but rather by regulations the central government has imposed on social distancing, leading to their inability to transport their products from one city to another, [12]. The COVID-19 pandemic has caused supply chain disruptions, labor shortages, and shifts in consumer demand, affecting the livelihoods of farmers and farm workers worldwide. The pandemic caused a shift in

consumer behavior, with more people seeking locally grown and produced food. This has created opportunities for small-scale farmers and producers, who may be better positioned to meet this demand than large-scale industrial operations. The shift in the post-COVID-19 industrial landscape has significantly impacted the agricultural industry, especially farm laborers, [13].

Abidin's Research on National Economic Recovery During the Covid-19 Pandemic: Analysis of Labor Productivity in the Agricultural Sector This article shows that the Covid-19 pandemic has hurt labor productivity in the agricultural sector, [14]. In the short term, the distribution of social assistance to disadvantaged groups can be prioritized to maintain labor productivity in the

agricultural sector. In the long term, the additional allocation of pre-employment cards supports the productivity of the agricultural workforce through increased knowledge and skills.

The existence of migrants who work as agricultural laborers face problems and challenges in changing the industrial landscape after COVID-19, such as those faced by farmers in Karo District, North Sumatra Province. The development of the agricultural sector in Berastagi, Karo Regency, especially vegetables and fruits, requires labor for production and marketing activities. BPS Karo data for 2018, the agricultural sector's contribution to GRDP is 61 percent. This raises the demand for labor to carry out these agricultural activities for residents and migrants from other areas who are often referred to as migrant farm laborers. Providing skilled labor in the agricultural industry is a challenge in Berastagi District, [15]. The mobility of labor from the agricultural to the non-agricultural sector is followed by high urbanization, as indicated by the high growth of the urban population. Two factors cause migration, namely, push factors and pull factors. The economic factor is the dominant factor causing migration.

The demand for labor is one reason for many migrants to Karo Regency from other areas, such as Pakpak, Toba Samosir, Dairi, Nias, and other areas in North Sumatra, as migrant farm laborers. The types of work they do in the fields are diverse, as are the various types of plants. In Karo District, migrants who work as agricultural laborers have more excellent job and business opportunities; however, judging from their income, housing conditions, and ability to send their children to school, they are still classified as poor. Various adaptation patterns for the survival of migrant farm workers, poor labor farmers have limited economic and social adaptation strategies, and their focus is on fulfilling their daily needs, [16].

When compared with previous research The COVID-19 pandemic has had a significant impact on migrant workers, particularly in countries like India with large populations. The sudden declaration of lockdowns in many countries has taken a toll on the mental health of migrant workers, leading to a significant deterioration of mental health among this population, [17]. Women migrant workers are particularly vulnerable to becoming victims of trafficking and abuse, both while working overseas and when they return to their villages. In Indonesia, the government has made efforts to protect migrant workers, including women, by amending policies and enacting laws to eradicate trafficking in persons, [18]. Problems persist, such as the use of brokers

that are detrimental to women migrant workers and abusive treatment from shelter to placement, [3].

At least a complete picture of the dynamics of the life of migrant farm workers in the area of Berastagi District, Karo Regency, in the long run, will affect sustainable development in Karo Regency. The limited analysis of data on migrant farm workers has implications for Karo Regency's demographic data and impacts the formulation of poverty alleviation policies and programs. With the availability of information and data regarding migrant farm workers, the district government can obtain several benefits that can assist in mapping, planning, and formulating policies and programs for alleviating poverty for migrant workers. So it is necessary to write articles originating from research related to the existence of migrants as farm workers so that a complete picture is obtained of the dynamics of their lives in the destination area, which, in turn, in the long term, they are integrated into the development of Karo.

2 Literature Review

2.1 Existence of Migrants as Farm Workers

A literature review on the health status of migrant farmworkers was conducted, which highlighted that estimates of the size of the migrant and seasonal farmworker population vary widely, [17]. Studies show that agriculture remains the most hazardous industry, where migrant farmworkers face a greater risk of workplace injuries and illnesses, [18]. The Migrant Experience article discusses the complex set of economic and ecological interacting forces that brought the migrant workers documented in this ethnographic collection to California. Mexican immigrants had long been an integral part of agricultural production in the United States and were not newcomers even in 1940, [19]. A study researched the healthcare disparities among migrant farm workers in NJ following a series of field observations within the local clinics, [20].

A systematic literature review was conducted to identify factors related to the health-related quality of life of domestic migrant workers and to synthesize studies. The review found that research on the QoL of migrant workers was centered in cities such as Seoul and Busan, and agricultural, fishery, and livestock workers were relatively limited, [21]. The studies reviewed in a literature review on migrant agricultural workers highlighted that migrant farmworkers work under deplorable working conditions and face numerous health and safety hazards, including occupational chemical and

ergonomic exposures, various injuries and illnesses, discrimination and social exclusion, poor pay and long working hours, and language and cultural barriers, [18].

2.2 Shifting Industrial Landscape

The literature review on shifts in the industrial landscape and migrants as farm workers reveals several key findings. Migrant dairy workers in Vermont face a wide range of occupational and health hazards, [22]. In California's San Joaquin Valley, farmworkers and young people are playing a growing role in shaping rural politics, [23]. The United Farm Workers union attracted national headlines and gained labor contracts with higher wages and improved working conditions, galvanizing the Chicano movement, [24]. Migrant workers face various psychological health issues, including stress, depression, and coping, [25].

Rural areas are experiencing severe labor shortages due to out-migration, impacting food security and sovereignty, [26]. As automation technologies replace vulnerable forms of low-skilled migrant labor, there is a qualitative shift in farm work, [27]. Overall, the literature highlights the unique occupational and environmental risks faced by migrant farm workers, the role of farmworkers in shaping rural politics, and the need for further research on the psychological health of migrant workers.

3 Method

This article uses qualitative research, a research process, and an understanding based on a methodology investigating social phenomena and human problems. With this approach, it is hoped that as much in-depth information as possible can be obtained from the problems in the field so that this research can comprehensively reveal the facts in the field, which is located in Berastagi City, Karo Regency, which is dominated by agricultural landscapes of vegetables, fruits, and plantations, [28]. The study, [29], argues that qualitative methodology is a research procedure that produces descriptive data in written or spoken words from people and observed behavior. Descriptive and qualitative research describes the social phenomena in the object under study. The approach seeks to reveal the relationship between various social phenomena that explanatory research cannot achieve.

4 Results and Discussion

4.1 Economic and Social Life of Migrants as Farmworkers

Poverty is a fundamental problem in a country whose people depend on the agrarian sector, especially the limited absorption of labor, resulting in unemployment, [30]. Along with the limited absorption capacity of the labor force, there is a fact that there are differences in the development of the agricultural sector between various bloodlines. As a result, labor mobility occurs from one region to another. Facts were found about the emergence of migrant farm laborers from other areas to Karo District as an agricultural area that requires much labor. These farm workers generally live in Berastagi District and work in several nearby agricultural areas.

Farm laborers often work long hours, from morning to evening or night. Farm workers in Berastagi District often work in the productive sector but also do household work. Therefore, migrant farm workers often face economic difficulties and uncertainty about their future and that of their families. Women who work as agricultural laborers play an essential role in supporting the economic needs of their families. This is influenced by several things, from economic needs to patrilineal solid customs. Batak women have had the same opportunities as men in education, employment, and position, although men are often prioritized, [31].

Large landowners often employ migrants as farm laborers in the Berastagi District to earn wages as daily laborers on the landowner's agricultural land. After that, the produce is collected, and the farm workers can cultivate the owner's land for about six months before planting. If they are not employed as laborers, they have no choice but to create small businesses that produce the equivalent of their salary or earn their daily living. The Central Statistics Agency (BPS) stated that the nominal wage for farm workers in October 2019 had increased by 0.12% to Rp—38,278 per day. Suppose a farm worker earns Rp. Thirty-eight thousand two hundred seventy-eight per day and have to support all members of his family, then surely they will be below the poverty line. Farm workers who work 30 days a month will receive a wage of Rp—1,148,340 in one month, [32].

The life of migrant farm workers is complicated because they do not generate much money from their hard work as farm laborers. The income derived from agricultural activities does not affect

the increase in income, let alone the potential threat of crop failure, [33].

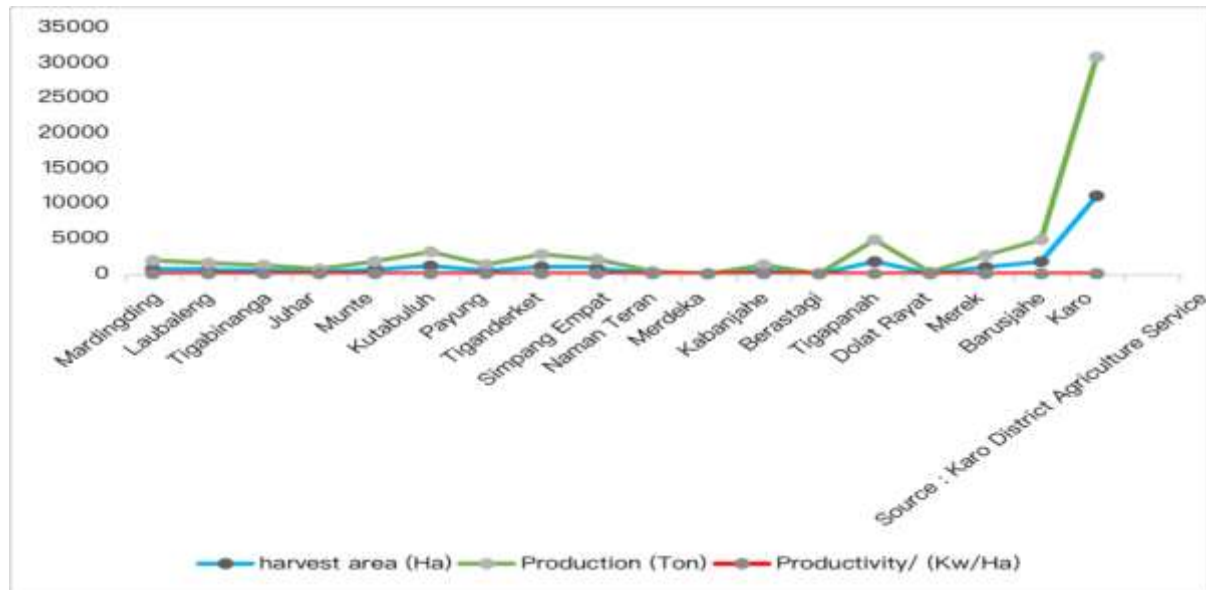


Fig. 1: Harvested Area, Production, and Average Productivity of Field Rice in Karo Regency, 2019
 Source: [34]

Therefore, many migrant farm workers from the agricultural sector in Berastagi District have different and unequal incomes with their jobs to cover their necessities of life. Various necessities of life, such as clothing, food, shelter, and health, must be met for self and family survival. Because the necessities of life are unlimited and must be filled to sustain life, the condition of having to continue working hard to earn money to support his family, whether we like it or not, must continue.

In other words, the struggle to meet these needs is nothing more than a work activity fulfilling the need for survival. The low income of migrant farm workers is not the only reason that causes problems. Not having skills in life governance management is considered very important in financial management to deal with difficult situations that can occur at any time, [12]. The following shows the production of crops in Berastagi District compared to cities in Karo Regency which are presented in Figure 1. The data presented shows that the harvested area in the Berastagi District is only around 4 hectares with a production of 11.11 tons; this is the second smallest crop producer in Berastagi Regency. Therefore, Migrant Farm Workers in the District of Berastagi do not prioritize the work of farm laborers as the main subject of work, considering the condition of the District of Berastagi as an agro-tourism location. Migrants' Social Life as Farmworkers is at the lowest level of society. Their position cannot fall any lower, and no position can be held and no

position that can be lost. Such a position has a significant impact on group values and norms.

Migrants as farm workers live to make ends meet because there are no materials or people to guarantee their lives in the future. This statement has important implications for agriculture-oriented development plans. These farm workers need to have the educational background or intelligence that is qualified to improve their social status and have experience in governing agriculture. They are used to working continuously as agricultural laborers, a staple of their life, so they only know about working roughly on agricultural lands, such as weeding, planting, and harvesting. Many of them come from other places (migrants), and these farm workers hope to find opportunities for success or get higher-paying and less competitive jobs when their time is up with contract work with landowners.

In the distribution of results, migrant farm laborers in Berastagi District who do not own land have an agreement between the farm laborers as cultivators and the owners of the fields or land regarding the system for sharing the crops. Farm laborers bear all production and planting costs, while the land owner provides land for rice cultivation. When the harvest season comes, the income is divided between the landowners and the farm laborers. The wage distribution system for agricultural activities is an agreement between the landowner and the farmhand regarding the field or paddy field where the farmer works in a specific

area of the natural agricultural process. However, the farmhand has the right to harvest rice and agricultural produce to participate in the harvest obtained according to the contract. However, other risks are owned by farm workers, namely when there is crop failure / puso. They risk not getting their crops and being paid even though they have worked from the start.

The amount of cultivated land cultivated by some of the Berastagi District farm workers is more than just rice fields to get an abundant harvest. The number of fields cultivated influences income from the harvest season. The more rice fields cultivated by agricultural laborers, the higher the yield; conversely, if fewer, the income will be lower. Compiled from data processing in the field, it shows that several factors cause the low income of farm workers in Berastagi District, namely, needing land to manage the lack of income. The low income from agricultural products is relatively small to meet the many needs of forced farm labor families.

Most migrant farm workers in Berastagi District have a shallow level of education. The last level of education is Elementary School (SD); agricultural farm workers find it challenging to get more part-time jobs. With a part-time job, more is needed; even the income is sometimes very insufficient. Migrant farmworkers with less education have implications for low income. Lack of work skills also supports more income than work that can be done. However, migrant farm workers in Berastagi District only have farming skills in the fields or rice fields, and even then, they are not their own, so they do not have side activities in the fields or rice fields to achieve maximum income. Individual skills affect the productivity of farm laborers. The capacity for skills and stability can boost the productivity of farm workers so that their income can automatically be maximized.

Age is one of the factors that affect the level of income. Age strength is related to the volume of physical activity in cumbersome work because if you are old, physical activity in the rice fields or plantation fields is also less productive. This can be seen from the average age of farm laborers, around 50 years and over. The existing physical strength is also reduced if the productive period has passed. Decreased labor productivity can lead to decreased income. Almost all farm workers in the District of Berastagi are elderly. They are no longer at their productive age, so their work could be more optimal, and their income could be more optimal, which causes their income to be low.

This is corroborated by several theories of Human Capital Theory: According to this theory,

age can affect income because of the experience and knowledge gained with age. Someone who has worked in a field for many years tends to have higher skills and expertise, which can increase their chances of getting a better job and a higher income.

Life-Cycle Theory: This theory states that income tends to increase with age until it peaks at productive age, and then decreases after retirement. At a young age, a person is usually still in the education or training stage, so his income is relatively low. However, as you get older, the experience and skills you gain increase your chances of getting a better job and higher income. After retirement, income usually decreases due to a lack of income from work.

Age Discrimination: Discrimination based on age can also affect a person's income. Some research suggests that older people may face discrimination in the workforce, which can limit their opportunities for better jobs and higher incomes. Occupational choice can also be influenced by age. Some jobs may be more common among certain age groups, and certain jobs may require higher skills or physical strength which may decrease with age. This can affect a person's income because of the job he chooses.

4.2 Migrant Farmworkers in the Shift in the Post-Covid 19 Industrial Landscape

The COVID-19 pandemic has caused significant changes in the industrial landscape, affecting various agricultural industry sectors. Landscape shifts, especially in land use, have led to the marginalization of farmers, limiting their access to resources because they need more skills to anticipate these changes, [35], [36]. Changing the conventional agricultural sector into agro-tourism narrows the space for migrant farm workers to work according to their expertise. The shift in the industrial landscape after the COVID-19 pandemic gave positive and negative sides to layers of society. Berastagi District is a tourist location area which is undoubtedly an area that implements this landscape shift. In terms of the shift in the industrial landscape, including Hygiene, Low-Touch, Less Crowd, and Low-Mobility products, this impacts the ability of farm workers, [37].

In Indonesia, the work of a migrant farm laborer is dependent on nature and capital from landowners, [38]. Farm workers depend on rice fields and their dependence on natural conditions such as the rainy season and other climates, [39]. Developing farm labor resources is nothing but to secure their livelihoods and cover their needs through agricultural products, [40]. The change in

the landscape of the conventional agricultural industry to switch to agro-tourism, which is closely related to Hygiene, Low-Touch, Less Crowd, and Low-Mobility products, is a natural consequence of the post-Covid 19 pandemic, an increase in human mobilization activities from cities to villages and population numbers and other development processes that always dynamic and adapting. Changes in the landscape of the agricultural industry will become a problem due to the disappearance of the productivity of farm laborers working in the fields or fields.

The marginalization of farm workers in the Berastagi sub-district is due to the narrower working area. Many land owners sell them to renewable agro investors using technology as their business. Livelihoods require farm workers to adopt different strategies to survive and meet their household needs. In the past, agricultural workers who depended on their primary income from cultivating agricultural land were now experiencing concerns from capital owners who would sell their cultivated land. When trying to work off-farm as an alternative to earning household income, they experience rigidity caused by a lack of skills, education, and age. Disruption of the development of various functions of social support and survival skills for migrant farm workers causes them to be marginalized from the search for a source of livelihood.

As is mentioned in the theory of livelihood marginalization is a concept that refers to the ways in which people's livelihoods can be marginalized or excluded from mainstream economic activities, [4]. This can be due to a variety of factors, including land and resource grabbing, the financialization of food and agriculture, vulnerability, and marginalization, [5]. Marginalization can also occur due to conservation-driven displacement, where people are forced to leave their homes and adapt to new livelihoods. In some cases, people may be able to develop adaptive strategies to cope with these changes, but the sustainability of these strategies may be questioned, [6]. The theory of marginalization of livelihoods can be analyzed using a different theoretical framework, such as rational choice theory or Actor-Network Theory (ANT). The absence of norms regarding limited available resources and the absence of institutionalized collective action can place people in danger of exclusion and marginalization.

5 Conclusion

The Existence of Migrants as Farm Workers in the Post-COVID-19 Industrial Landscape in Berastagi

City, Karo Regency, is fraught with difficulties. Large-scale technology-based agribusiness and agro-tourism that can produce food more efficiently and inexpensively with limited access to resources such as land and water, not to mention low salaries and terrible labor conditions, as well as exposure to harmful chemicals and pesticides, pose a threat. Furthermore, the absence of legal protection and social safety nets implies that the presence of migrant farm workers simply further marginalizes them. Farm laborers' experiences in the post-COVID-19 age of shifting industrial landscapes are varied and multifaceted. The adaptation pattern of migrant agricultural laborers occurs through cultural adaptation, such as doing any work to survive, particularly in the destination area, where they still acquire a laborer's job as long as they do not choose to pick, are dedicated, and are thorough in their work.

Migrant farm laborers who improve their socioeconomic status are hardworking, diligent, thrifty, and able to create solid social contacts with the local community (active and passive strategies). The problems of living in their place of origin motivate migratory farm laborers to leave their place of origin, and job prospects are determined by the effectual working days in a month, which is more prominent in the destination area. Even if not all migrant farm workers' socioeconomic lives have improved, mainly as evaluated by indices of housing, children's education, and health, employment prospects remain a factor that draws migrant agricultural workers to Berastagi. The presence of migratory farm workers who do not settle down has a detrimental influence on the establishment of slum-like rental housing. Dependence on external labor will have a long-term impact on the agricultural process in Berastagi, resulting in a decrease in the socioeconomic indicators on the first point, namely the level of skills, education, and age, which also causes the supply of income to become unequal to obtain necessities of life such as decent housing, clothing, and food, as well as health.

As a result, it is suggested that farm laborers implement an active strategy of adaptation strategies (Coping Strategies), namely by optimizing existing resources by doing additional or side work, in addition to creating their work by renting other people's land to address shifts in the landscape of the agricultural industry following the Covid 19 pandemic. Alternatively, a passive technique of pressing or tightening expenses by decreasing family spending on clothing, food, and shelter might be implemented. The most crucial part of dealing

with difficult times is social network requirements. In times of crisis, social networks are the most adaptable. The most effective use of social networks can compensate for any limitations or difficulties encountered by migrant farm workers. These benefits can (1). Increase access to information: By using social networks, governments can provide migrant workers with more accessible information about their rights, work regulations, and health services. This can help migrant workers understand their rights and gain access to the services they need. (2). Raising awareness: This research can raise awareness about the problems faced by migrant workers and provide information on how to address these problems. This can help the government and society to understand the needs and challenges faced by migrant workers. (3). Improve coordination: Using social networks, the government can facilitate coordination between migrant workers, civil society organizations, and government agencies. This can help strengthen support networks and increase the effectiveness of efforts to address problems faced by migrant workers. (4). Increase participation: This research can increase the participation of migrant workers in decision-making processes and enable them to speak directly with governments and civil society organizations. This can assist in strengthening democracy and increasing the involvement of migrant workers in policy-making processes.

Someone who knows and communicates effectively with landowners receives more trust and opportunities than someone with a tiny social network or who follows. A patron-client relationship in the social network approach controlled by landowners makes the social network even stronger and more profitable. Landowners complement and benefit each other in the patron-client relationship and the personal relationships that have been intertwined therein. It is envisaged that migrant farm laborers who use active, passive, and social networks will be able to adjust well under challenging circumstances.

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Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

- Bengkel Ginting developed the research concept, conceptualization, and framework, as well as implemented and reported the research phenomenon.
- Tuti Atika's grammar has improved in social academia.
- Trimurni Februati organized, put out, and looked for secondary data.

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Conflict of Interest

The authors have no conflict of interest to declare.

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