

Enhancing Well-being and Sustainable Agricultural Development in Sawahan Turen Village: A Comprehensive Analysis of Rural Population's Welfare and Agricultural Economics

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Abstract

Unforeseeable and fluctuating seasons can result in diminished agricultural yields, irregular rainfall patterns that adversely affect crop growth, and subpar harvests. The presence of pests and diseases can have a substantial impact on crop health and productivity, leading to decreased yields and lower-quality crops. Additionally, the rising costs of fertilizers and other agricultural inputs can impede farmers' ability to acquire essential resources, thereby hampering their productivity and overall profitability. The aim of this study is to assess the well-being of the rural population in Sawahan Turen Village, specifically focusing on the agricultural sector. The study aims to identify the challenges faced by the community in carrying out agricultural activities and to explore the strategies that can be implemented in agricultural economics to improve the well-being of the community in Sawahan Turen Village. By examining these aspects, the study aims to provide valuable insights and recommendations for promoting sustainable agricultural development and enhancing the overall welfare of the community. This study employs a qualitative approach, utilizing both primary and secondary data to support the research objectives. The research is conducted in Sawahan Turen Village, with primary data collected through direct interviews with key subjects and informants, including farmers in Sawahan Turen Village, agricultural extension workers, and relevant stakeholders. Through this qualitative approach, the study aims to provide valuable insights and recommendations for sustainable agricultural development and improving the overall welfare of the community. The research findings highlight the significant role of the agricultural sector in Sawahan Turen Village in contributing to the well-being of its community. It was observed that the involvement of the youth in this sector is notable, as a considerable number of young individuals in Sawahan Turen Village engage in farming activities. The primary reasons for their participation in agriculture are the profitability of farming in the village and the inheritance of agricultural land from their parents, which has equipped them with the necessary farming skills passed down through generations. Interestingly, despite having higher levels of education, many young individuals in Sawahan Turen Village choose to pursue farming. This has contributed to the continuity and preservation of the agricultural

sector in the village, which has been practiced and sustained for generations. The study's originality is derived from its specific focus on Sawahan Turen Village, examining the agricultural sector's impact on community well-being. While previous research exists on rural development, this study offers a unique perspective by investigating youth involvement in farming and the preservation of traditional practices. By uncovering the motivations behind youth engagement, including profitability and inherited land, the study sheds light on the sustainability and dynamics of agriculture in Sawahan Turen Village. This contributes to a broader understanding of the relationship between agriculture, youth participation, and rural community well-being. While this study offers valuable insights, it is important to acknowledge its limitations. These include the specific focus on Sawahan Turen Village, potential biases in qualitative research methods, the limited timeframe, and the singular perspective of the youth. Future research should address these limitations for a broader understanding.

Keywords: *Rural Population, Agricultural Communities, Rural Development.*

Introduction

Indonesia, as a country, possesses immense potential in the agricultural sector (agrarian), which is supported by the climatic conditions, fertile land, and abundant water resources in the region. This is why the majority of the Indonesian population is engaged in farming. The agricultural sector plays a crucial role in the country's economic development, considering Indonesia's favorable geographic location and the availability of vast land that can be cultivated and developed as a leading sector. Consequently, plans were made to make it one of the main sectors, evident from the employment opportunities it provides, as a significant portion of the Indonesian population depends on the agricultural sector for their livelihoods.

Initially, the Indonesian economy relied heavily on the agricultural sector, but over time, there has been a shift towards the industrial sector due to its growth and strength, while the agricultural sector has become less promising. (Mehraban & Ickowitz, 2021) However, the government still places special emphasis on the agricultural sector. Indonesia's natural resources are fundamental indicators of the people's well-being in economic activities, as the country's natural resources hold potential that can be explored by its citizens. (Machmud & Sidharta, 2023). With innovation (Montes de Oca Munguia, Pannell & Llewellyn, 2021), effective management (Ricci, Jeong, De Girolamo & Gentile, 2020), and development strategies (Velasco-Muñoz, Mendoza, Aznar-Sánchez & Gallego-Schmid, 2021), it is hoped that the agricultural sector can thrive and contribute to the advancement of the country's economy, particularly in Indonesia.

One of the ways to ensure the successful development of the agricultural sector is through effective management, particularly in the planning phase. Regional development planning is a supportive factor in improving local resources and enhancing various sectors, including the private sector and others, responsibly. Effective and efficient regional economic development planning requires a balanced approach and planning for the utilization of resources by private sector farmers, entrepreneurs, savings and loan cooperatives, and social organizations, all

of which should play a role in this planning process. (Fahmid, et al., 2022) In every country, there exists a division between wealthy and impoverished regions. When the gap between rich and poor regions narrows, it signifies a positive outcome, known as the trickling-down effect. However, when the disparity between wealthy and poor regions widens, it indicates a process of polarization. (Sunan and Senuk, 2015)

According to the "Kabupaten Dalam Angka 2020" data, the total population of Malang Regency in 2020 was 2,654,448, with a productive age percentage of 71.45% (15 to 64 years old). The total workforce was 1,484,452. In the Turen district, the population was 121,400, accounting for 4.57% of the total population of the regency. The harvested land area was 2,374 hectares, with a productivity rate of 73.83 hectares and a total production of 17,528 tons. The total rice field area was 2,248 hectares, while the plantation area covered 1,749 hectares. Sawahan village, located in the Turen district, had a total area of 518.63 hectares, which accounted for approximately 8.15% of the district's total area. The village had a population of 9,290. (Central Bureau of Statistics of Malang City, 2021) In 2020, the Poverty Line in Malang Regency was 338,156, showing a 2.62% increase compared to the previous year's figure of 329,512. The number of poor people in 2020 increased by 18,960 individuals, reaching a total of 265,560, with a poverty rate of 10.15%. In the economic development of Malang Regency, the agricultural sector still plays a significant role. This can be observed in the formation of the Regional Gross Domestic Product (GDP) in 2019, where the agricultural sector contributed around 30%, ranking first. Additionally, the agricultural sector continues to be the primary source of employment in Malang Regency compared to other sectors.

Tahun Year	Garis Kemiskinan (rupiah/kapita/bulan) Poverty Line (rupiah/capita/month)	Jumlah Penduduk Miskin Number of Poor People	Persentase Penduduk Miskin Percentage of Poor People
(ii)	(i)	(ii)	(i)
2012	229.619	274.600	11,01
2013	245.120	287.400	11,44
2014	254.380	290.310	11,07
2015	265.629	292.070	11,53
2016	282.933	293.740	11,49
2017	294.904	283.960	11,04
2018	314.550	268.490	10,37
2019	329.512	346.600	9,47
2020	338.156	265.560	10,15

Sumber/Source: BPS, Survei Sosial Ekonomi Nasional Maret/BPS-Statistik Indonesia, March National Socioeconomic Survey

Figure 1. Poverty Line, number, and percentage of poor population in Malang Regency from 2012 to 2020

Examining the data, it is evident that a significant portion of Malang Regency is dedicated to agricultural land. Approximately 45,851 hectares are rice fields, 100,691 hectares are fields/gardens, and 26,534 hectares are plantation areas. (Central Bureau of Statistics of Malang City, 2021) This indicates that the community heavily relies on the agricultural sector due to the dominance of agricultural land in the region. Therefore, regional development planning becomes a crucial factor in resource improvement and the responsible development of the agricultural sector. Effective and efficient regional economic development planning requires a balanced approach and careful resource management.

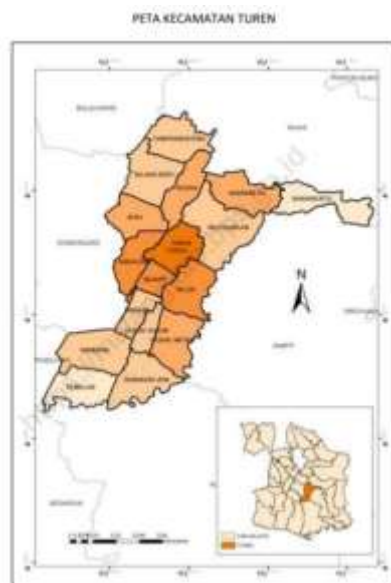


Figure 2. Map of Turen District

Sawahan Village in Turen District is located in the southern part of Malang Regency, and the majority of its residents work as farmers. Farming is the primary profession of the people in Sawahan Village, Turen District. In addition to farming, to achieve sustainable economic development that prioritizes natural resources, both the resources from the environment and human resources, as well as planned regional development activities in accordance with the framework and allocation of resources that can readily be implemented by economic actors and local stakeholders, green economy is one of the ways to balance economic prosperity for the people and social justice while reducing environmental risks. A village is an area inhabited by a group of people as a community, including a legal community with the lowest level of government administration directly under the sub-district head and has the right to govern its own affairs.

The aforementioned empirical phenomena that have prompted this research to be conducted in Sawahan Village, Turen, are considered strategic and promising due to its vast agricultural land and fields or gardens in Turen District, as well as the visible environmental potential and a strong economic growth rate supported by a thriving agricultural sector.

The research problem addressed in this study is to understand the level of well-being among the agricultural population in Sawahan Turen Village, the challenges faced by the community in carrying out farming activities, and to determine the strategies for implementing agricultural economics to enhance the well-being of the community in Sawahan Turen Village.

Research Method

This study employs a qualitative approach, utilizing both primary and secondary data to support the research objectives. The research is conducted in Sawahan Turen Village, with primary data collected through direct interviews with key subjects and informants, including farmers in Sawahan Turen Village, agricultural extension workers, and relevant stakeholders. Secondary data, on the other hand, is obtained from sources such as the records of the Central Bureau of Statistics of East Java, online platforms, village offices, and relevant government departments.

The data collected is then analyzed using various techniques, including data collection, data reduction, data presentation, and drawing conclusions. By employing these methods, the study aims to gain a comprehensive understanding of the well-being of the agricultural community in Sawahan Turen Village, the challenges they face in farming activities, and the strategies for implementing agricultural economics to enhance their well-being. Through this qualitative approach, the study aims to provide valuable insights and recommendations for sustainable agricultural development and improving the overall welfare of the community.

Results and Discussion

The agricultural sector in Sawahan Turen Village plays a significant role in the community's well-being. One indicator of this is the high level of employment generated by the agricultural sector in the village. The majority of the population works as farmers, with a total population of 9,290 in Sawahan Turen Village. The involvement of young individuals in

the agricultural sector further strengthens the village's resources and support from the local community. Many young individuals in Sawahan Turen Village choose to be farmers because it is still profitable. In addition to the financial aspect, the youth also inherit agricultural land from their parents, which equips them with farming skills passed down through generations. Despite having higher levels of education, these young individuals opt to cultivate their own farmland. This continuity of farming practices has allowed the agricultural sector in the village to be sustained and preserved over time.

Interviews with key individuals involved in agricultural activities support these statements. Informants state that the youth in Sawahan Turen Village have a genuine concern and love for the development of agriculture in the village. They acquire farming skills from their parents, and they adapt and enhance these skills with modern advancements. The collaboration between traditional knowledge and new developments has resulted in significant progress in the agricultural sector in Sawahan Village. However, farmers in Sawahan Turen Village face challenges in their agricultural activities. Uncertain weather conditions, high fertilizer and pesticide prices, and land conversion limit their ability to maximize profits. Interviews with farmers reveal that some land in Sawahan Turen Village has been converted into factories or other businesses. While this creates new job opportunities, as factory employees are recruited from the surrounding area, it also provides an alternative to relying solely on agriculture. To address these challenges, several strategies can be implemented in Sawahan Turen Village. These include providing guidance and assistance from competent professionals such as agricultural extension workers, researchers, or academics. Additionally, offering affordable capital support through village cooperatives and farmer cooperatives can be beneficial. Strengthening the commitment of the community to maintain a sustainable agricultural system is also essential.

Conditions of Sawahan Village

Sawahan Turen Village, located in the southern part of Malang Regency, is primarily inhabited by farmers. This occupation serves as the primary

source of livelihood for the community in Sawahan Village, Turen District, and holds immense potential for agricultural development. The village's population totals 9,290 individuals, residing in 2,664 households, with an average of three members per family. The agricultural sector in Sawahan Turen Village plays a significant role compared to other sectors within the community. Paddy fields and sugarcane are the prominent agricultural commodities in Sawahan Turen Village, although alternatives such as corn and various vegetables (chili, eggplant, long beans, etc.) are also viable options depending on the farming season. This information was shared by our informants, who highlighted that farming activities in Sawahan Turen Village are heavily influenced by the weather and other factors.

Furthermore, the agricultural sector serves as a crucial pillar of food security and self-sufficiency for the people of Sawahan Turen Village. While the majority of the villagers work as farmers and have not transitioned to other occupations, some engage in small businesses or micro-enterprises. However, these ventures remain relatively limited in scope. The activities related to these businesses demonstrate the farmers' commitment to improving the income and well-being of Sawahan Turen Village. Most farmers in the village possess fertile land and are not considered small-scale farmers. Despite working as farmers, their land size averages around 1 hectare. As a result, they collaborate and support each other during planting and harvesting seasons.

The agricultural sector in Sawahan Turen Village significantly contributes to the welfare of its residents. One indicator of this is the absorption of labor from the agricultural sector, with the majority of the population working as farmers. With a total population of 9,290 in Sawahan Turen Village, the involvement of young individuals in this sector is noteworthy. Many young individuals in the village choose to be farmers due to the perceived profitability, as well as the inheritance of agricultural land from their parents, which equips them with farming skills passed down through generations. It is worth mentioning that despite having higher levels of education, these young individuals willingly engage in

farming. This is what keeps the agricultural sector in the village running in a sustainable and preserved manner.

Another reason why many young individuals in Sawahan Turen Village aspire to work as farmers is their deep love and attachment to the village itself. Their awareness of the importance of preserving agriculture in Sawahan Turen Village, coupled with their affection for the community, serves as a driving force. According to interviews conducted with key individuals, the youth in Sawahan Turen Village genuinely care about the village and some have acquired farming skills from their ancestors. The positive impact they can create by excelling in their endeavors indirectly influences the surrounding environment.

Based on the interviews conducted, it is evident that the youth of Sawahan Turen Village possess a strong sense of responsibility and love for their village. Their agricultural skills, inherited from their parents, play a vital role in shaping their actions. By performing their tasks diligently, they indirectly inspire and have a positive impact on their surroundings.

The theory of roles describes social interactions in terms of actors who play their designated roles according to cultural norms. (Geza, et al., 2021) The role of youth serves as a social agent of change, where they play a crucial role in driving social, economic, political, and other aspects of life. (Trivelli & Morel, 2021) This role is increasingly important as they have the ability to make positive contributions in line with their abilities and professionalism. The role of youth is that of an inspirer, constantly inspiring and being inspired by every change that occurs in Indonesia. Youth are the foundation of development and the future of the nation. As one of the pillars of civil society, youth are at the forefront of nation-building. They are the driving force behind national development, representing the next generation and the future of the nation. The quality of human resources among the youth is of utmost importance and should be the primary focus.

The community of Sawahan Turen Village demonstrates a commendable awareness and commitment to environmental conservation. This is evident in the methods they employ, which take into account the preservation of nature. The residents also engage in collective efforts to

conserve the environment by practicing agriculture within residential areas and along roadsides through tree and plant cultivation. This heightened awareness serves as a driving force for the community to uphold local wisdom, as they firmly believe in the importance of preserving nature. The people of Sawahan Turen Village are well aware that continued exploitation of the land will lead to long-term damage. This is substantiated by the regular activities that take place in the village, such as communal work every Sunday, the organization of "green house" competitions in various neighborhoods of Sawahan Turen Village, inter-village farmer competitions, and hydroponic plant competitions between neighborhoods. These activities aim to promote environmental preservation, enhance knowledge and awareness, and foster knowledge-sharing among the residents of Sawahan Turen Village.

With agriculture as the primary sector in Sawahan Turen Village and the presence of generations of farmers and their descendants, there is potential to develop the processing of agricultural products into household industries. However, the assistance and involvement of the government are needed to support the community in Sawahan Turen Village. This can be done through providing guidance and training by competent entities to enhance the skills and capabilities of the villagers, ultimately improving their overall well-being. (Aritenang, 2021)

Challenges in Sawahan Turen Village

Challenges in the agricultural sector generally share commonalities, such as unpredictable or uncertain seasons that tend to change over time, resulting in decreased crop yields. Weather conditions, such as irregular rainfall or prolonged droughts, also contribute to suboptimal harvests. The presence of pests and diseases further hampers maximum productivity, while the high costs of fertilizers and agricultural medicines limit the farmers' ability to maximize their profits. (Dewi, et al., 2022) Based on interviews, it is evident that farmers face constraints related to unpredictable weather, pest infestations, fluctuating fertilizer prices, and the seasonal nature of agriculture.

The conversion of agricultural land into buildings, housing, or factories poses a potential threat as it leads to land scarcity. (Moeis, Dartanto, Moeis & Ikhsan, 2020) This situation can have implications for the community of Sawahan Turen Village, as a reduction in available land may gradually diminish the well-being of farmers. However, land conversion can also result in increased job opportunities for the community if it is transformed into factories or housing developments. Additionally, it can impact changes in land prices, aligning with the concept of bid rent theories, which emphasize the analysis of economic activities based on the ability to pay land rent (bid rent) rather than market land rent. According to (Surya, Ahmad, Sakti & Sahban, 2020), the location of economic activities is determined by the high bid rent value that users of the land can afford to pay. This notion is supported by the findings of Madijah, Sudikin, and Hartanto (2021), who state that the growth rate of the agricultural sector in Jember Regency has been slowing down in the past five years. The decline in the agricultural sector's growth rate in the regional gross domestic product (PDRB) is attributed to a decrease in agricultural commodity production. This decline is influenced by the conversion of agricultural land into housing and industrial areas. Additionally, the unpredictable or uncertain climate also contributes to the decline in agricultural production.

Agricultural Strategies and Policies Needed by Sawahan Village

The village of Sawahan Turen's development program is expected to have a positive impact on the welfare and prosperity of its residents in the short, medium, and long term. Based on interviews with key individuals and informants, several constraints in the agricultural sector in Sawahan Turen have been identified. Firstly, small-scale farmer groups, which lack legal entities, need to undergo a transformation process to establish legal bodies. This would enable them to receive assistance from agricultural agencies in Sawahan Turen. Secondly, Sawahan Turen lacks support and awareness programs from relevant parties. It is crucial for the village to receive guidance and socialization to foster the growth and improvement of the agricultural sector in the future. Another challenge in Sawahan Turen is the majority of the population relying on farming as their primary

profession, leaving little room for alternative income sources. Therefore, it is important to explore the potential of micro, small, and medium-sized enterprises (MSMEs) and skills within the village through training, socialization, and support for farmers, involving competent institutions or stakeholders. The importance of diversifying beyond farming is highlighted by the seasonal nature of agricultural work, necessitating additional sources of income. (Otsuka, 2021) Additionally, strategic village policies, based on a comprehensive and systematic development framework, are needed to enhance the welfare of the community in Sawahan Turen.

Local development concepts that aim for domestic economic development encompass four key elements. Firstly, productivity, which emphasizes the constant improvement of productivity and full participation of the people in the development process. (Liu, et al., 2020) Secondly, equality, ensuring equal opportunities for all to participate in the development without discrimination. (Huyer & Partey, 2020) Thirdly, sustainability, focusing on development that meets not only present needs but also the needs of future generations. (Benítez, et al., 2020) Lastly, empowerment, where development is not solely for the people but empowers them as well. (Quisumbing, Meinzen-Dick & Malapit, 2022) Several strategies can be applied to improve the welfare of Sawahan Turen village, including counseling and assistance from competent parties such as agricultural extension workers, researchers, or academics. Access to affordable capital through village cooperatives is also necessary. Commitment from the community to maintain sustainable agricultural systems is vital. Research by Rahmawati (2020) suggests that improving farmers' welfare in reducing poverty is not highly effective. Instead, it is more effective when accompanied by income distribution equity. Thus, it is hoped that the government can propose or implement policy strategies to improve the welfare of farmers while considering other socio-economic aspects, leading to more equitable income distribution within the community of Sawahan Turen.

Conclusion

The research findings shed light on the pivotal role of agriculture in Sawahan Turen Village, significantly impacting the well-being of its community. Notably, the study reveals a noteworthy participation of the youth in farming activities. Their engagement stems from the profitability of agriculture in the village and the inheritance of ancestral farmland, which has bestowed them with invaluable farming expertise passed down through generations. Intriguingly, despite possessing higher education levels, many young individuals in Sawahan Turen Village choose to pursue farming, contributing to the enduring legacy and preservation of the agricultural sector in the village. The rural community of Sawahan Turen plays a vital role in improving the well-being of its residents through its agricultural sector, which serves as a key industry. While other sectors can serve as alternatives if the agricultural sector does not thrive economically, there is potential for developing home-based industries that process agricultural products into industrial products. These agricultural products have potential beyond just farming.

There are several challenges that farmers face in their agricultural activities, including unpredictable weather patterns and the high cost of fertilizers and agricultural medicines, which prevent farmers from maximizing their profits. In order to promote sustainable agricultural practices and improve the welfare of the community in Sawahan Turen, several strategies can be implemented. This includes providing guidance and counseling from competent individuals, such as agricultural extension workers, researchers, or academics. Access to affordable capital through village cooperatives is also necessary, as well as a commitment from the community to maintain sustainable agricultural systems.

Based on this research, it is recommended that the government provide assistance and support to the community in Sawahan through counseling and training programs conducted by competent individuals to enhance their human resources and improve their welfare. It is crucial for the government to have a long-term commitment and planning to address

economic issues in Sawahan Turen, such as support from relevant institutions to prevent harmful agricultural practices and ensure adequate economic viability.

The findings of this research highlight the need for further development and research, whether through institutions or universities. This is essential to provide new knowledge and innovations in the agricultural sector in Sawahan Turen, with a focus on increasing productivity and implementing appropriate technologies. The research primarily aims to enhance the agricultural sector and improve the well-being of the agricultural community in Sawahan Turen. This study lies in its focus on the specific context of Sawahan Turen Village and its examination of the role of the agricultural sector in enhancing the well-being of the community. While there may be existing research on agriculture and rural development, this study brings a unique perspective by exploring the involvement of the youth in farming activities and the preservation of traditional farming practices. By delving into the reasons behind the youth's participation in agriculture, including the profitability and inheritance of agricultural land, this study sheds light on the dynamics and sustainability of the agricultural sector in Sawahan Turen Village. This originality contributes to the broader understanding of the interplay between agriculture, youth participation, and community well-being in rural areas.

Limitations of the research was conducted in a specific village, Sawahan Turen, which may limit the generalizability of the findings to other agricultural communities. Each village has its unique characteristics and dynamics that may influence the results differently. The study relied on qualitative research methods, specifically interviews and secondary data analysis. While these methods provide in-depth understanding and rich insights, they are subject to potential biases, such as response bias or limited representativeness of the sample. The research was conducted within a specific period, and the findings may not capture the long-term changes or fluctuations that can occur in the agricultural sector. The study primarily focused on the perspectives of the youth engaged in agriculture. While their insights are valuable, it would be beneficial to also consider the viewpoints

of other stakeholders, such as older farmers, agricultural experts, and local authorities, to gain a more comprehensive understanding of the dynamics and challenges of the agricultural sector in Sawahan Turen Village.

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