

Evaluating the Impact of Rice Field Well Assistance Programs on Rural Economic Development: An Islamic Economic Perspective

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Abstract: This study aims to analyze the effectiveness of the rice field well assistance program in improving the economic conditions of the rural community of Kepoh Village from an Islamic economic perspective. This study uses a qualitative descriptive approach to capture the experiences, perceptions, and socio-economic changes felt by the community after the program's implementation. Data were collected through in-depth interviews with the village head, beneficiary farmers, and non-farmer community members, supplemented by direct observation. The theoretical framework used in this study includes agricultural development theory, the concept of food security, and the principles of Islamic economics, particularly the profit-sharing mechanism through the muzara'ah contract. The results of the study show that the rice field well assistance program has contributed positively to increased agricultural productivity, stable farmer incomes, and water availability for irrigation. This program enables farmers to increase planting intensity and reduce dependence on seasonal rainfall, which in turn supports local economic resilience. From an Islamic economic perspective, this program is in line with the principles of justice ('adl), mutual cooperation (ta'awun), and public interest (maslahah). The application of profit-sharing mechanisms through muzara'ah practices further strengthens fair economic relations between landowners and farmers. Therefore, the rice field well assistance program not only provides technical benefits but also supports inclusive and sustainable rural economic development based on Islamic values.

Keywords: Rice Field Well Assistance, Rural Economy, Islamic Economy, Muzara'ah, Food Security

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1. INTRODUCTION

The rural economy plays a vital role in supporting national development, particularly in Indonesia, which is known as an agrarian nation. According to data from the Central Statistics Agency (BPS 2025, n.d.), the national rice harvest area in July 2025 reached 0.94 million hectares, a 33.20% increase compared to July 2024. Rice production in the form of milled dry paddy (GKG) also rose to 4.81 million tons, an increase of 35.11% from the previous year. When converted to rice, total rice production reached 2.77 million tons, marking a 35.01% increase compared to July 2024. Cumulatively, total national rice production from January to October 2025 stood at 53.87 million tons of GKG, up 12.17% (BPS 2025, n.d.). The majority of Indonesia's population relies on the agricultural sector for their livelihood, making it the backbone of the national economy, followed by the plantation, fisheries, and forestry sectors, which also play a crucial role in absorbing rural labor and maintaining national food security. This indicates that the development of the agricultural sector still plays a strategic role in supporting inclusive and sustainable economic growth.

One of the main goals of Indonesia's national development strategy is agricultural growth. Increasing the productivity and welfare of farmers is the main goal of development policies in this agrarian country, as the majority of the population depends on the agricultural sector (Hasibuan et al., 2024). Programs to support agricultural infrastructure, especially rice wells, have emerged as one of the government's main initiatives to increase local food security and agricultural production capacity. The sustainable availability of water for rice field irrigation is one of the main challenges faced by farmers in various regions, and the existence of irrigation

infrastructure such as rice wells seeks to address this problem to maintain economic stability. Based on research (Hibatullah & Kusuma, 2024), an adequate irrigation system has an important role in maintaining the sustainability of agricultural production. It was found that damage to irrigation infrastructure and inefficient water use can significantly hinder rice production in various regions. This research is also in line with the results of the study (Hernawati et al., 2023), which show that irrigation development is able to increase the technical and economic efficiency of rice farmers in West Nusa Tenggara.

Several studies also support the importance of agricultural infrastructure, especially irrigation, which plays a major role in increasing farmers' productivity and welfare. (Novizal, 2022) shows that irrigation development in Langsa significantly increases rice yields and income farmers, which in turn reduces unemployment in rural areas. Similarly, (Fitriyah, 2021) evaluated the effectiveness of agricultural infrastructure programs in Lamongan and found that although these programs can increase farmers' production and income, sustainability remains a challenge due to uneven community participation and infrastructure maintenance issues. Climate change has become a major challenge for agricultural sustainability, particularly in developing countries where livelihoods are highly dependent on natural resources. Variability in temperature, rainfall, and extreme weather events significantly affects agricultural productivity, food security, and rural income stability (Hoque et al., 2019).

Furthermore, climatic factors such as gas rainfall, temperature, and carbon emissions have been empirically proven to influence agricultural output both in the short and long term. For instance, rainfall tends to positively affect crop production, while rising temperature and carbon emissions may reduce productivity and create instability in agricultural systems (Chandio et al., 2022). In this context of rural agriculture, water availability is a critical factor influencing productivity and resilience. Climate variability often disrupts rainfall patterns, leading to droughts and reduced crop yields. Therefore, small-scale irrigation interventions, such as rice field well programs, play a crucial role in enhancing farmers' adaptive capacity and reducing vulnerability to climate shocks (Hoque et al., 2019).

The availability of assistance for the rice well program is important because it provides a new picture of the effectiveness of the agricultural sector's contribution to the local economy. Zaman emphasized that micro-scale infrastructure development, if designed according to local needs, can have a major impact on improving community welfare. In addition, (Fadhillah & Khotimah, 2024) explained that the success of small infrastructure is largely determined by its connection to direct economic impacts. Therefore, it is important to assess the extent to which the rice well program actually results in an economic improvement for rural communities.

In this study, there is also a new perspective to evaluate the success of rural development initiatives on agricultural infrastructure, which in this case is rice fields (Zaman, 2021). This method offers a more comprehensive understanding of the mechanisms of improving well-being through infrastructure interventions by directly linking the economic impact of physical assistance (Fadilla & Ratnawati, 2024). In addition, given that food security and farmer empowerment are the main goals of any agricultural development strategy, this study also places both topics as markers of program effectiveness. A thorough examination of the causal relationship between infrastructure provision and economic shifts can uncover previously unknown factors that may affect the success of the program.

Kepoh Village is one of the villages that received the rice field well assistance program, making it an interesting place to research the impact of the program on the community's economic growth. The availability of water for irrigation is a traditional problem in the agricultural sector that the government in Kepoh Village, Sami District, Boyolali Regency wants to solve through the rice field well assistance program. Limited access to irrigation water, which is an important component of production, is often a significant challenge for farmers who want to maximize their agricultural yields. Based on the results of an interview with the Head of Kepoh Village, Sami District, Boyolali Regency (2025) (*Transkrip Wawancara Kepala Desa Kepoh, 2025*), farmers' erratic income and low land productivity lead to limited planting patterns and a high dependence on the rainy season. Before the existence of rice fields, farmers in Kepoh Village, Sami District, Boyolali Regency were only able to harvest once a year with low productivity. Therefore, the availability of the construction of rice well infrastructure not only has an impact on agricultural productivity, but also affects the economy of the community as a whole. From this study, it will be analyzed whether the rice well assistance program really results in economic improvement for the people of Kepoh Village, Sami District, Boyolali Regency. This is very important because, although it has a huge potential impact on the lives of small farmers, investment in agricultural infrastructure is sometimes has received less attention than large-scale infrastructure initiatives. The success or failure of such programs can provide important lessons for us to make more effective policies in the future.

From the perspective of sharia economics, it is also explained that the development of water infrastructure is closely related to the principles of justice, help (ta'awun), and also benefit (maslahah). Water is seen as a natural resource that must be used fairly, not monopolized, and can provide wide benefits to the community. Research (Nawwaf & Saifulloh, 2023) shows that well waqf in Pamekasan is able to improve community welfare through the availability of water that supports agricultural activities. (Fadhillah & Khotimah, 2024) also proves that the well waqf program in Banten has an impact on the socio-economic development of the community. Both studies strengthen the argument that sustainable water supply is a tangible form of rural economic empowerment.

In this study, it not only covers the technical sharing of profits that obtain profits, but also considers the principles of justice, blessings (barokah), and common welfare (falah), which are the cornerstones of the Islamic economic system (Kartiko, 2019). Principles such as 'adl (justice), ta'awun (cooperation), and maslahah (common welfare) are used in the context of the rice field well assistance program as criteria to determine whether the financial benefits obtained have been allocated fairly and in accordance with sharia law. This is relevant, considering that profit sharing is a common practice in rural Indonesia, especially in Keboh Village, Sambu District, Boyolali Regency for the management of rice fields and agricultural land.

More deeply, the principle of muzara'ah in sharia economics is relevant to the practice of profit sharing in Kepoh Village, Sambu District, Boyolali Regency. In the context of Islamic economics, (Nugraha, 2016) emphasizes that muzara'ah traditional Islamic agricultural profit-sharing contracts are very suitable for agricultural communities in Indonesia. The study proposes two muzara'ah-based financing models, both involving government participation, both as policy guarantors and as direct agricultural partners. This reinforces the argument that Islamic contracts are not only doctrinally sound but also contextually appropriate to address financing gaps in rural Indonesia. Further support for the application of Islamic economics in rural contexts can be seen in research by (Zulaeha et al., 2019), which proposed a sharia-based business design for Village-Owned Enterprises (BUMDes) in Pegayaman. Their study shows how Islamic contract principles such as wadi'ah, musharakah, and buying and selling can be applied in real sector operations such as savings and loans, waste management, and clean water services. The application of Islamic ethics and mutualist cooperation is in line with the communal nature of rural communities, especially those with a Muslim majority. This highlights the wider application of Islamic economic principles beyond finance and into productive village enterprises.

In addition, food security is also the focus of this research, which is one of the areas that is expected to be improved by the program rice field well assistance. The Food and Agriculture Organization (FAO) states that food security is achieved when everyone, anywhere, has physical and financial access to healthy food sufficient to meet their food needs and preferences and lead an active and healthy life (FAO, 2006). Therefore, it is hoped that the well-making support program for the rice fields of the community of Kepoh Village, Sami District, Boyolali Regency will increase food security for all communities and farmer households. This program also has the potential to develop a more sustainable and self-reliant local food system through increasing crop diversification and land productivity.

Despite the growing body of literature on agricultural developments and infrastructure programs, several important gaps remain. Although numerous studies have examined the impact of climate change on agricultural productivity and vulnerability, most of them rely on quantitative approaches and macro-level analysis. Limited research explores micro-scale agricultural interventions, particularly irrigation-based programs, using a qualitative approach integrated with Islamic economic perspectives. Moreover, previous studies primarily focus on biophysical and economic variables, while the role of social values, cooperation, and community-based development remains underexplored. Therefore, this study aims to fill this gap by analyzing the effectiveness of the rice field well assistance program at the village level while incorporating Islamic economic principles.

This research is expected to advance agricultural development policies theoretically and practically, especially related to micro-scale infrastructure. In practice, policymakers can use the findings of this research to help create more efficient and locally relevant agricultural infrastructure assistance programs. In addition, this research can also provide a new perspective on how development initiatives can be created to improve the social welfare and religious values of rural communities in addition to production and income. With this in mind, this research can provide results on a truly integrated and sustainable development model that can be created when economic growth coexists with social progress in the community of Kepoh Village, Sambu District, Boyolali Regency.

2. LITERATURE REVIEW

1. Agricultural Development and Village Economy

Village economic development cannot be separated from strengthening the agricultural sector as the main foundation of rural livelihoods. One of the important elements in agricultural development is agricultural infrastructure, especially irrigation, which plays a strategic role in increasing productivity, farming efficiency, and the sustainability of the local food system. In this context, the rice field well assistance program can be seen as a form of real implementation that has a direct impact on improving the welfare of village communities (Novizal, 2022).

The competitiveness of the agricultural sector is determined by the interaction between small factors, such as the efficiency and management of farmers at the field level, and then by the presence of large factors such as government policies and institutional support. An effective agricultural development strategy is one that is able to connect micro and macro interests in a balanced manner (Saptana, 2016). In this case, the construction of rice field wells is a form of small strategy to support farmers in managing water resources more efficiently, so that the productivity and competitiveness of village agriculture can increase. The increase in farmers' ability to plant throughout the year due to the availability of water is an indication that this small development is able to provide a comparative advantage into a competitive advantage (Saptana & Saliem, 2016).

Small-scale development in villages has a real impact on the economic, social, and environmental aspects of the community (Fadilla & Ratnawati, 2024). They explained that infrastructure such as agricultural irrigation not only supports production sustainability, but also opens up access for the community to new economic opportunities, encourage farmer regeneration, and increase farmer family income. The construction of rice field wells, in this context, not only provides water for agriculture, but also strengthens the local economic foundation, increases food security, and reduces people's dependence on the rainy season.

These two theories strengthen the framework of thinking in this study, that the existence of rice wells as a village agricultural development is an effective strategy in encouraging community economic growth. Through this framework, it can be understood that the success of agricultural development programs does not only lie in the agricultural products produced, but also in the long-term socio-economic impact on the village. Therefore, the existence of this rice field well assistance not only has an impact on agricultural productivity, but can also create economic independence for village communities. The theory of Rural Agricultural Development in the context of local resources focuses on four main guarantees provided by local food:

1. Availability Guarantee: Local food grows widely and is quite abundant throughout Indonesia, which can naturally guarantee its availability.
2. Affordability: The local food system tends to have easier affordability because the distribution system used is relatively short.
3. Quality Assurance: Local food ingredients are proven to have nutritional content that is not inferior to rice or wheat. For example, sago has a high carbohydrate content, while cassava is rich in nutrients such as carbohydrates, protein, and fiber.
4. Sustainability: Local food grows in harmony with local agroecological conditions, thus further ensuring the sustainability of agricultural resources.

The government encourages the diversification of food consumption based on local resources through Presidential Decree No. 22 of 2009, focusing on non-rice and non-wheat carbohydrate sources. Commodities such as sago, corn, and cassava were identified as having great potential to be developed.

2. Profit Sharing in Islamic Economics

In supporting capital and reducing risk at the farmer level, the Islamic financial system offers a profit-sharing mechanism based on the concept of risk-sharing (Beni et al., 2021). This mechanism is in line with sharia values that emphasize justice and transparency, in contrast to the conventional interest system which is considered *riba* (Fathin Nur Muhammad et al., 2024). The profit-sharing system is the main foundation of Islamic financial institutions as an effort to avoid the interest system because bank interest is considered usury. In the context of agriculture, there is a relevant cooperation agreement, namely *Muzara'ah*, which is a form of profit sharing between land owners and cultivators. This contract is considered valid according to Islamic economics because it fulfills the principles and conditions of *muzara'ah*, and is implemented through agreement and proportional sharing of profits (Untoro et al., 2017).

A. Definition and Basis of *Muzara'ah* Law

Muzara'ah is a form of agricultural management cooperation between land owners (shahibul 'ardhi) and cultivators (amil). In this contract, the land owner gives his agricultural land to cultivators to be planted and maintained. In return, cultivators will get a certain share of the harvest obtained, according to a previously made deal. Etymologically, Muzara'ah is taken from the root word zara'ah which means to grow. This contract is a solution offered by Islam for people who have expertise in agriculture but do not own land, or for people who have land but do not have the expertise or time to cultivate it. The legal basis of Muzara'ah in Islam is strengthened by several verses of the Qur'an (e.g. QS. Al-Muzammil: 20 and QS. Az-Zukhruf: 32) which leads people to trace the bounty of Allah on earth. In addition, there is a hadith of the Rasulullah SAW which explains that the Rasulullah SAW once made a Muzara'ah contract with the people of Khaibar, where the proceeds were shared between the Prophet and the workers. This principle encourages mutual help and mutual need between the two parties.

B. Rules, Conditions, and Forms of *Muzara'ah*

The number of scholars who allow Muzara'ah to put forward the pillars and conditions that must be met in order for the contract to be considered valid. The pillars of Muzara'ah include:

1. Land Owner.
2. Cultivating Farmers.
3. The object of Muzara'ah (i.e. land benefits and the work of farmers).
4. Ijab (expression of land handover) and Qobul (statement of land receipt for processing). Ijab Qabul can occur through deeds or statements that show pleasure (ridho) between the two parties.

The conditions related to agricultural land that must be met are: the land according to custom can be cultivated and produced, the boundaries of the land must be clear, and the land is handed over to farmers to be processed without the land owner participating in cultivating it. The conditions regarding the harvest are that the distribution of the harvest for each party must be clear, the proceeds really belong to the contracting party without any specialization, and the distribution of the harvest must be determined from the beginning of the contract (e.g. half, quarter, or third). There are several views on the legal and illegitimate forms of *Muzara'ah*, depending on who bears the seeds and agricultural implements. Valid Form (According to Imam Abu Yusuf and Muhammad bin Hasan as-Shaibani), if the land, seeds, fertilizers, and costs come from the landowner, while the work and tools are from the cultivators, then the object of Muzara'ah is the services of the farmer, and the law is valid. Another valid form is when the landowner only provides land, while the cultivator provides seeds, tools, and work, so that the object of Muzara'ah is the benefit of the land.

C. Revenue Sharing and Welfare Impact

The mechanism of profit sharing of *Muzara'ah* can be done by weighing or measuring crops. The division of this result should be clear based on the percentage. Law Number 2 of 1960 concerning agricultural revenue sharing agreements aims to divide land products between the owner and cultivator are carried out on a fair basis. The Muzara'ah contract has been proven to have a positive and significant impact on the welfare of farmers. The welfare of farmers in question is a community that is able to use sources of income to meet daily needs, which is measured from the level of fulfillment of basic needs, both food and non-food. (Fajri & Dharmasari, 2019). Studies show that Muzara'ah is able to positively and significantly affect the welfare of farmers. The positive impacts of Muzara'ah include: increasing agricultural economic income, reducing unemployment, increasing domestic agricultural production, and encouraging the development of real sectors that support economic growth. The muzara'ah formed a cooperation between land owners and cultivating farmers based on a sense of brotherhood and mutual help.

The Islamic economic system is built on the principles of monotheism, justice (*'adl*), welfare (maslahah), and social responsibility. In contrast to the conventional economic system which is based on individual ownership and profit, Islamic economics emphasizes the balance between ownership and the use of wealth for the benefit of society at large. Islamic economics also prohibits usury, advocates mutually beneficial cooperation, and emphasizes the principle of halal in economic transactions (Arief, 2022). One of the distinctive features of the Islamic economic system is the use of profit-sharing mechanisms as an alternative to the financing system or economic cooperation. In the context of agriculture, this practice is known as *muzara'ah*, which is a cooperation contract between land owners (shahibul maal) and cultivators (mudharib) with an agreement on the proportion of crop yields as work compensation. In this contract, the landowner provides the land and the cultivator manages it, and the proceeds are divided according to the

initial agreement. This system avoids the inequality that arises in the conventional fixed-wage or land lease system that burdens one party when crop yields decline (Amanda et al., 2024).

According to Sugeng et al., 2021, the profit-sharing system in the muzara'ah contract creates a pattern of fair cooperation between land owners and cultivators, because both parties bear the risk and obtain profits based on the agreed proportions. This mechanism encourages the growth of mutual trust, solidarity, and healthier economic partnerships. In addition, the muzara'ah system is able to increase agricultural productivity, expand economic opportunities for farmers who do not have capital or land, and eliminate social conflicts because all parties have the same interest in the success of land management. Thus, the implementation of the profit-sharing system in the sumuh sawah program not only strengthens the productivity aspect, but also reflects the values of justice, togetherness (ta'awun), and collective welfare as emphasized in Islamic economics (Sugeng et al., 2021).

In Islamic economics, the profit-sharing system reflects a more equitable and humane form of wealth distribution. Unlike an interest system that guarantees one-sided profits without risk, profit sharing requires the active involvement of both parties in the success of the business. Therefore, in the context of the rice well assistance program in Kepoh Village, Sami District, Boyolali Regency, the principle of profit sharing can be the right approach to strengthen economic justice, reduce inequality between land owners, cultivators and maintaining the sustainability of agricultural cooperation based on Islamic values.

3. Food Security

Food security is a condition for the fulfillment of sufficient, safe, nutritious, and sustainable food for every individual to live a healthy and active life. This concept includes four main dimensions, namely availability, accessibility, utilization, and stability of food supply. This definition is in line with the explanation of the book *Introduction to Agribusiness and Food Security* compiled by Suleman et al., 2025 which emphasizes that food security is not only a physical affair of food availability, but also closely related to social, economic, ecological, and cultural aspects that support a fair and resilient food system (*Pengantar Agribisnis Dan Ketahanan Pangan*, n.d.). In the context of rural development, sustainable agriculture is one of the effective strategic approaches to improve food security. According to (Bahari et al., 2024), sustainable agriculture can increase productivity by up to 40.6%, reduce production costs by 30.7%, and increase farmers' income by 46.4% compared to conventional agricultural systems. This is due to the use of organic fertilizers, verified crops, and environmentally friendly processing techniques that support ecosystems to increase farmers' resilience to climate change and the risk of crop failure.

Development in the agricultural sector, especially at the village level, aims to ensure the fulfillment of food security for every individual and country (Partini & Sari, 2022). Food security is a fundamental condition that reflects the level of welfare and prosperity of a country (Partini & Sari, 2022). According to the definition in Law Number 18 of 2012, food security is a condition for food fulfillment that is reflected in the availability of sufficient, safe, diverse, nutritious, equitable, affordable, and not contrary to community culture (Partini & Sari, 2022). Operationally, food security must meet four main aspects: availability, affordability, quality and safety, and sustainability natural resources and resilience (Partini & Sari, 2022). Sustainable village agricultural development must prioritize local food as a strategic solution. Local food is defined as food consumed by the local community in accordance with local potential and wisdom. The application of local food is a realistic approach to food procurement.

In addition to the technical approach, the cultural dimension also plays an important role in maintaining food security. Prasetyo et al., 2025 highlight that the indigenous community of Kampung Naga has maintained food security through a traditional agricultural system based on local wisdom. By using natural signs and moon phases to determine the planting period, as well as applying crop rotation and organic fertilizers. This practice proves that local knowledge passed down from generation to generation can be a real solution to the food crisis and climate change. In addition, food security cannot be separated from the concept of food independence and sovereignty. Food security from an Islamic perspective also contains elements of *maslahah* (public benefit), justice in distribution, and the prohibition of excessive exploitation of resources. Therefore, the development of agricultural infrastructure such as rice paddies, when combined with local values and ecological approaches, has the potential to create a village food system that is not only resilient but also sustainable and blessed.

Using modern agribusiness approaches, sustainable agriculture, and local cultural values, this study places food security as the main indicator of the success of the intervention of the rice field well assistance program in Kepoh Village, Sami District, Boyolali Regency. This is in line with the goals of the SDGs and the vision of

village-based Indonesian food independence. In addition, the provision of agricultural infrastructure not only provides technical solutions, but can also build an inclusive and participatory food ecosystem. With sustainable water availability, farmers can increase the crop index, diversify commodities, and break dependence on middlemen. This rice field well assistance program can be managed fairly and based on sharia principles such as *maslahah* and *ta'awun*, which have great potential in realizing local food security that is fair, sustainable, and based on local wisdom.

3. METHOD

This study employs a descriptive qualitative approach to analyze the effectiveness of the rice field well assistance program on the economic growth of the community in Kepoh Village, Sambu District, Boyolali Regency. This approach is used to gain an in-depth understanding of how the program is perceived by the community, how it is implemented, and its social and economic impacts. According to Sugiyono (2022), qualitative descriptive research is suitable for exploring perceptions, motivations, and social phenomena holistically.

The research was conducted in Kepoh Village, Sambu District, Boyolali Regency, which was selected purposively because it is one of the villages that received the rice field well assistance program. This village represents a rural area that is actively developing agricultural infrastructure to improve community welfare. Informants were selected using purposive sampling based on a key informant and informant-rich cases approach. This technique was used to ensure that the selected participants possess in-depth knowledge and direct experience related to the rice field well assistance program. The study involved three key informants: (1) the village head, who acts as the main informant due to her direct role in initiating and managing the program at the village level; (2) one representative from the farmer group, who is directly involved in agricultural activities and utilizes the rice field well infrastructure; and (3) one non-farmer community member, who provides an external perspective on the indirect socio-economic impact of the program. The selection of these three informants is considered sufficient to represent different perspectives, direct beneficiaries, and the broader community so that a more comprehensive understanding of the program's effectiveness can be obtained.

Data were collected through semi-structured interviews and direct observation. Semi-structured interviews were conducted to allow informants to provide in-depth and flexible responses based on their experiences. Meanwhile, observations were carried out by directly examining agricultural activities, the condition of the rice field wells, and the community's responses to the program.

The data were analyzed using the interactive model proposed by Miles and Huberman (2014), which consists of three stages: data reduction, data display, and conclusion drawing and verification. Data reduction involves selecting relevant information, while data display presents findings in a descriptive narrative form. Finally, conclusions are drawn by identifying patterns and meanings from the data and ensuring their validity. To ensure data validity, this study applied source triangulation by comparing information obtained from different informants. This technique allows the researcher to verify the consistency of information from the village head, farmer representative, and non-farmer community member. According to Sugiyono (2022), source triangulation enhances the credibility and reliability of qualitative research findings.

4. RESULTS AND DISCUSSION

RESULTS

The rice field well assistance program in Kepoh Village, Sambu District, Boyolali Regency is a form of intervention by the village government in supporting the sustainability of the agricultural sector and improving community welfare. This program is intended for farmers who have been experiencing limited access to irrigation, especially in the dry season. Based on the results of the interview with the Head of Kepoh Village, rice field well assistance was given to farmer groups that met certain criteria, such as the area of cultivated land, the level of dependence on rainwater, and the readiness of the community to manage and maintain the facilities that have been built. The existence of rice field wells provides a significant change in the community's planting pattern. Farmers are no longer completely dependent on the rainy season, so they can increase the crop index and expand production opportunities throughout the year. This condition shows that the rice field well assistance program is not only physical, but also affects the agricultural production system at the village level.

Based on the results of interviews with beneficiary farmers and field observations, the rice field well assistance program in Kepoh Village, Sambu, Boyolali was able to increase the availability of irrigation water for community agricultural land and have a positive impact on increasing farmers' household income. Farmers

are no longer completely dependent on rainfall, so planting intensities increase and the risk of crop failure can be reduced. More stable water availability allows farmers to increase crop yields and reduce the risk of crop failure due to drought. Farmers also said that before the existence of rice fields, agricultural products tended to be uncertain, after the assistance of this rice field well, farmers could plant more than once a year. The results of the interviews also show that farmers have experienced an increase in income after the existence of rice fields. More stable production contributes to an increase in crop yields every year. The village head said that before this program, farmers' income was volatile and highly dependent on the season.

The people of Kepoh Village, both farmers and non-farmers in general, have a positive perception of the existence of the rice field well assistance program. Farmers consider this program as a form of government attention to the basic needs of the agricultural sector, while people who are not farmers feel the impact indirectly through increasing village economic activities. However, another informant said that the need for sustainable maintenance of rice fields is also needed and its management must also be fair so that the benefits can be felt equally. Thus, this study shows that the success of the program is not only determined by physical development, but also by governance and community participation. The rice field well assistance program also contributes to increasing village food security through the availability of more guaranteed local food. Increased agricultural production not only meets the needs of farmers' households, but also supports the food supply for the village community as a whole.

DISCUSSION

The results of the study show that the rice field well assistance program plays an important role in supporting agriculture-based village economic development. The availability of sustainable irrigation water has been proven to be able to increase land productivity and income stability for farmers. This finding is in line with the theory of agricultural development which emphasizes the importance of supporting production facilities, especially water to increase the productivity and welfare of rural communities (Saptana, 2016). The availability of adequate irrigation water allows farmers to intensify agriculture and reduce dependence on erratic natural factors. Nationally, increasing agricultural production is also an important indicator in supporting economic growth and food security (*BPS 2025*). In the context of Kepoh Village, the rice field well assistance program contributes to increasing local production capacity which has a direct impact on the welfare of the community.

From a sharia economic perspective, the rice field well assistance program reflects the principle of *maslahah* because it provides real benefits to the wider community, especially small farmers. The availability of equitable and accessible irrigation facilities supports the creation of economic justice and the reduction of disparities at the village level. The program not only benefits specific individuals, but also improves the collective well-being of the village. In addition, the practice of agricultural cooperation between land owners and cultivators that develops in the villages of Kepoh, Sambu, Sambu, Boyolali, through a profit-sharing mechanism called the *muzara'ah* contract shows the application of the principles of justice and help-help (*ta'awun*) in Islam. The risks and results of agricultural business are shared fairly between landowners and cultivators, thereby avoiding economic inequality. This is in accordance with the principles of sharia economics which emphasizes justice (*'adl*) and cooperation (*ta'awun*) in economic activities (Beni et al., 2021). In the *muzara'ah* profit-sharing system, it allows for a proportional sharing of risks and profits between land owners and cultivators, so that it is in line with the concept of risk-sharing in the sharia economy (Fajri & Dharma, 2019). The existence of rice field wells strengthens the effectiveness of this system because it increases the certainty of crop yields and reduces the potential for conflicts due to production uncertainty.

In terms of food security, the results of the study reinforce the view that sustainable agricultural development is an important foundation in maintaining village food stability. With increased production and diversification crops, Kepoh, Sambu, Boyolali Villages have become more food independent and are not completely dependent on supplies from outside the region. Sustainable water availability supports increasing local food production and strengthens people's access to sufficient and stable food. This is in line with the concept of food security which emphasizes the availability, access, and stability of food supply (*FAO*). With the increase in agricultural productivity, farmer households have better economic ability to meet basic needs, both food and non-food. Thus, the rice field well assistance program not only has an impact on the economic aspect, but also strengthens food security and the sustainability of the village development and food system in accordance with Islamic economic values. This findings of study are consistent with previous research indicating that agricultural productivity is highly sensitive to both climatic and non-climatic factors. Improvements in water access, land utilization, and resource management significantly contribute to increased agricultural output. Conversely,

environmental pressures such as climate variability may reduce productivity if not supported by adaptive infrastructure (Chandio et al., 2022).

5. CONCLUSION

Based on the results of the research and discussion, the purpose of this study is to analyze the effectiveness of the rice well assistance program on the economy of the people of Kepoh village, sambu district, boyolali regency from the perspective of sharia economics. The results can be concluded that the rice field well assistance program has a positive impact on increasing agricultural productivity and farmers' income through more stable water availability. This program also contributes to strengthening household food security and encouraging more sustainable village economic activities. Viewed from the perspective of sharia economics, the implementation of the rice field well assistance program has also been in line with the principles of *maslahah*, *ta'awun*, and justice (*'adl*), especially in the practice of agricultural cooperation and the profit-sharing system (*muzara'ah*) applied by the community. Therefore, this program not only provides economic benefits, but also reflects sharia values in the development of rural agriculture. Therefore, it is hoped that in the future it is necessary to strengthen assistance and program management so that the benefits produced can be felt equally and sustainably by all village communities.

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