WIWITAN TRADITION AS PART OF THE LOCAL WISDOM OF VILLAGE COMMUNITIES IN JAVA AND ITS IMPACT ON RICE PRODUCTION

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Abstract: The *wiwitan* tradition is a form of local wisdom that has survived and become a generational legacy. The purpose of this study was to determine how the *wiwitan* tradition affected farmer-owned rice output. A descriptive-analytic methodology was used in the study. This study draws on primary data from in-depth interviews with 32 farmers in Banyumas Regency (Central Java Province) and Sleman Regency (Yogyakarta Province's Special Region). This study's data analysis included production analysis as well as Cobb-Douglas Production Function Analysis with the Regression Model. According to the research findings, most farmers still practice the *wiwitan* tradition as a local wisdom tradition. According to the study's findings, farmers that follow the *wiwitan* tradition do rather well. The study's findings also revealed that seeds, fertilizers, pesticides, labor within and outside the family, agricultural expertise, and *wiwitan*'s simulated local wisdom all had an impact on rice productivity. The scope of this study is limited to the location of farmers who still practice the *wiwitan* custom. This study contributes to the understanding that indigenous wisdom in Indonesia must be preserved and passed down from generation to generation, as long as it does not contradict existing ideology. This study contributes to a variety of sectors, including agricultural and cultural sciences. The inclusion of the *wiwitan* tradition variable as a dummy variable in the regression model is a novel aspect of this study.

Keywords: local wisdom, rice farmer, rice production, tradition, *wiwitan*

INTRODUCTION

Most people in Indonesia work as farmers, so it is not surprising that this country is called an agricultural country. The opportunities for developing Indonesian agricultural products are enormous, considering that the tropical climate in this country strongly supports the cultivation of food crops (Ginting & Andari, 2021). One example of a plant commodity farmers in Indonesia widely cultivate is rice because it is a seasonal food crop with a relatively short harvest life. The agricultural sector has a very strategic role for the Indonesian economy, so it is not surprising that many government programs exist as a form of support for agricultural development (Ginting et al., 2019).

Rice consumption is one of the basic human needs (Clapp, 2017). Therefore, the provision and production of rice must be consistent in an effort to meet consumer needs and demands (Timmer, 2013). Rice is main staple, notably in Indonesia. This is also true in several Asian countries where rice remains the people's primary dietary source. Asian farmers account for 90% of global rice output (Clarete et al., 2013). Increasing food security can also be achieved by providing rice as a key development priority. From time

to time, an increase in population occurs so that agricultural output must also be demanded to meet the food needs of all regions considering the position of food security is the central key in describing the quality of life of people in a country.

The knowledge of farmers, who are mostly in rural areas, cannot be separated from traditional practices that have been developed from one generation to the next. This knowledge is embodied in a tradition carried out as a result of learning which is then disseminated in society. This process is called diffusion, the spread of cultural elements from one individual to another. This process also contains enculturation which means learning that is adjusted to the thoughts and attitudes of individuals toward the existing culture. The tradition among rural farmers in Indonesia that still exists today is *wiwitan*. This tradition is still carried out to preserve the culture and beliefs of the local community. *Wiwitan* is a symbol of respect for Dewi Sri, who has looked after the farmers' rice until it can be harvested later (Saputro et al., 2020).

Local wisdom is an aspect that grows in traditional agricultural systems, especially in rural communities (Dharmawibawa, 2019). Local wisdom is also considered knowledge containing various knowledge to answer problems (Bismark et al., 2025). This tradition is carried out mostly by farmers who come from the island of Java, Indonesia. The village community observes this tradition as a ceremony that local farmers believe will benefit them and help them avoid negative things. The majority of farmers in the small community are rice farmers. Rice farming plays a significant role in meeting the food needs of farmer households. The *wiwitan* tradition is a ritual performed by Javanese people, especially farmers, before starting the rice harvest. This tradition is rooted in the word "wiwit," which means "to start," and serves as an expression of gratitude to Dewi Sri, the goddess of fertility and rice, for an abundant harvest. The *wiwitan* tradition has its own purpose and meaning. The *wiwitan* tradition is not just a ritual, but also has deep social and spiritual meaning. Its main purpose is as an expression of gratitude and a form of thanks to the creator of nature who has provided good agricultural results in this case the community gathers to make offerings to Dewi Sri. The *wiwitan* tradition is also a way of strengthening the community. This activity strengthens social ties between residents, creates solidarity, and eliminates social class boundaries in society. The stages of the *wiwitan* tradition consist of several stages starting from determining the day, mojoki, preparing ubo rampe, praying together and distributing food. There are several variations in the implementation of the *Wiwitan* tradition depending on the region and the commodities cultivated by farmers. Although the *wiwitan* tradition has been abandoned by some people due to modernization, there are still groups of farmers who try to preserve it as part of their local culture and identity. Several farmer groups in the DI Yogyakarta area still routinely carry out this tradition as part of an effort to maintain local wisdom. Overall, the *wiwitan* tradition reflects the richness of Javanese culture that is closely connected to agriculture and spirituality. Knowledge of traditions like this that emerged from indigenous or local communities is important to be developed and transmitted from generation to generation (Sucipto et al., 2020).

Wiwitan is a tradition or ritual performed by farmers, particularly in Java, before the rice harvest. This tradition is closely related to rice production, culturally, psychologically,

and socially. The *wiwitan* procession carried out by the community can increase rice farmers' motivation. *Wiwitan* makes farmers feel more enthusiastic and confident in managing the harvest. This confidence can have a positive impact on production results. The *wiwitan* procession also maintains the regularity of the rice harvest. This research provides a novel insight into the habits of farmers who perform *wiwitan*, which usually marks the right harvest time (when the rice is ripe enough). This helps farmers avoid harvesting too early or too late, which can affect the quality and quantity of the yield. This research contribution is also expected to strengthen social cooperation among farmers. The presence of farmers who still practice the *wiwitan* tradition will strengthen mutual cooperation among farmers. Good cooperation can facilitate the harvest process and distribution of produce. Furthermore, the preservation of local knowledge through *wiwitan* contains local wisdom related to the planting cycle, seasons, and rice conditions. This knowledge indirectly helps maintain production stability. Based on the description provided, the purpose of this study was to assess the impact of the *wiwitan* tradition on farmer-owned rice production.

RESEARCH METHODS

The research method adopted was mix-methods. The research sites were purposefully chosen in Banyumas Regency (Central Java Province) and Sleman Regency (Special Region of Yogyakarta Province). The location was chosen deliberately because many Javanese rice farmers in the area still practice local wisdom traditions, namely *wiwitan* (Salim et al., 2024). The primary data is obtained by directly interviewing farmers using a questionnaire tool. 32 farmers participated in this study. According to Cohen et al. (2017) 30 samples are the minimum number of respondents when conducting statistical research. Secondary data support is also important to strengthen research results that originate from the internet, literature studies, and other relevant sources. Answering the objectives regarding production and the number of farmers who still or have not carried out the *wiwitan* tradition was carried out using a descriptive method. The Cobb-Douglas Production Function Analysis with the Regression Model is used to determine which factors influence rice production. The factors that affect rice productivity at the study site used the Cobb-Douglas production function with a linear regression model that was transformed into natural logarithms (ln) with the following formulation:

$$LnY = lnA+\beta1lnX1+\beta2lnX2+\beta3lnX3+\beta4lnX4+\beta5lnX5+\beta6lnX6+\beta7lnX7+\beta7D1+e \quad (1)$$

Information:
Y = Rice Production (kg/ha)
X1 = Land Area (ha)
X2 = Amount of Seed Use (Kg/Ha)
X3 = Total use of fertilizers (Kg/Ha)
X4 = Total use of pesticides (mL/Ha)
X5 = Total use of labor in the family (HOK)
X6 = Total use of labor outside the family (HOK)

X7 = farming experience (Year)
D1 = *Wiwitan* local wisdom dummy (1 if doing *wiwitan*, 0 if not)
A = Constanta
β1 – β7 = Regression coefficient
e = Error

RESULTS AND DISCUSSIONS

Wiwitan as a symbol of the local wisdom of rice farmers in rural areas

Nature and farmers are a unity and synergy that must always be built. Farmers are very dependent on nature in terms of cultivating their crops. Production or harvest results also depend heavily on nature. This continuous relationship must always be maintained, of course humans must be more adaptable, especially with the phenomenon of extreme natural changes lately. The El Nino phenomenon has an impact of drought for a long time, causing crop failures, while the La Nina effect causes flooding which has an effect on the many OPT attacks that occur. These two phenomena must be mitigated by farmers so that crop production does not decrease. Concerns about the impact of declining production or crop failure for farmers need to be considered because they have a major impact on human life.

Rural farmers are identical with traditions that have been carried out from generation to generation. Rural farmers are thick with knowledge and experience inherited from their ancestors. There are many traditions that exist equipped with getting closer to the power of God as the creator of nature and its contents. One of the traditions that exist and is still carried out by rural farmers is *wiwitan*. The *wiwitan* tradition is a symbol of local wisdom traditions that exist as a benchmark for agricultural management. *Wiwitan* is the process of starting and expressing gratitude to God for the harvest given. The traditions carried out by these farmers are thick with natural signs that ordinary people are not aware of, but rural farmers can use them as important additional information. Optimizing traditions in maintaining heritage (nguri-nguri Jawi culture) is something that must always be maintained at all times. Traditions that are maintained and used optimally can provide a balance in the use of nature by farmers. The *wiwitan* tradition is a local wisdom that is still often practiced by rural farmers in addition to the implementation of pranoto mongso. *Wiwitan* is generally well known by rural farmers on the island of Java. This tradition emerged as an expression of gratitude to God for giving farmers the opportunity to manage nature (land, rice fields and cultivated plants) and was given blessings for the harvest produced so that they can continue replanting. Rural farmers also believe that *wiwitan* is a symbol or form of prayer to the creator. Time calculations are closely related to rural farmers who implement *wiwitan*. *Wiwitan* itself comes from the Javanese word "wiwit" which is interpreted as the beginning of preparation for planting, especially rice for farmers. Usually this tradition is also followed by the presence of ubo rampe or other components such as tumpeng rice, market snacks, eggs, ingkung, fruit and other components. Usually trusted community leaders will choose a good date for the implementation of the *wiwitan* tradition. Of course, the selection is based on the Javanese calendar which has a special meaning such as Rabu Pahing counted as 16, and 32 rice

bunches in one direction meaning matchmaking. The date of the *wiwitan* implementation that has been determined is accompanied by the preparation of community mutual cooperation in preparing the land for the implementation of the *wiwitan* tradition. Without hesitation, the community usually also sets up tents and stages as well as janur in the rice fields or fields (Saputro, 2021).

The complete *wiwitan* tradition also in the afternoon before the tradition is carried out, rural farmers have prepared offerings and ubo rampe. The community also begins to work together to prepare dishes for guests with takir or pincuk depending on the region. Usually, typical Javanese drinks such as secang are also served at the *wiwitan* tradition. This tradition usually begins in August to September when the rainy season is about to start and is held once a year. Along with the development of the era and technology, the *wiwitan* tradition is carried out simply like holding a kenduri. This effort is made so that the tradition does not disappear and is preserved from generation to generation. Usually, rural farmers feel that there is still something wrong in their hearts if they do not hold this tradition. Farmers remain principled that in addition to running a rice cultivation business as well as possible, it must also be accompanied by prayer through the *wiwitan* tradition that is carried out. Nature, farmers and traditions, all three have a continuous relationship. It is only fitting that the three have very close synergy and influence. Nature is a resource given by the creator to the people on earth and can be utilized by farmers, one of which is farmers. The use of nature by farmers in cultivating plants has an impact on food sufficiency for all human beings. Tradition is present as a form of prayer or gratitude for all that is given by the creator. Tradition has existed from generation to generation and should be maintained and preserved (Utaridah et al., 2019).

The *wiwitan* tradition is one of the unique local pearls of wisdom for rice farmers in rural areas. The *wiwitan* tradition has existed and entered since ancient times before religion was introduced. *Wiwitan* is indeed widely known by most farmers on the island of Java. This tradition exists as a form of human gratitude because God has given blessings by entrusting natural resources so that humans manage them properly. *Wiwitan* is also used as a symbol of prayer to God. The *wiwitan* tradition is closely related to the Javanese tradition with time calculations that must be done as accurately as possible. *Wiwitan* comes from the word "wiwit," which comes from the word start. The word start is synonymous with cutting rice when it is about to harvest and can also be used as a sign of replanting the rice cultivated by farmers. The *wiwitan* tradition must also be followed by preparing components such as tumpeng rice, ingkung, market snacks, eggs, fruit, a complete flower package, and others.

Before starting the *wiwitan* tradition, a date for implementation is determined, usually by the head of the farmer group or a community leader who is used to selecting the date. Of course, it is matched with a good Javanese day. For example, Wednesday Pahing counts 16, and rice clusters 32 in the same direction, meaning matchmaking. After the date is set, the tumpeng is prepared, and a day or two before the event is carried out. Usually, the farmers or residents work together to prepare the land for Wiwiti, building tents and stages and designing invitations for guests, and making coconut leaves and even

flags as a sign that there will be an event in the rice fields or land even better if there is something like a carnival and dancers accompanied by gamelan players.

The day before the start of the afternoon program, the community prepares to do a rampe for offerings. In addition, the community also needs to prepare dishes for guests, such as Gudangan and Nasi Uduk, which have been seasoned with shredded ingkung chicken, eggs, and others, then served using takir or pincuk depending on the customs of the area. The drinks served are usually Javanese drinks such as wedang secang. Usually, this *wiwitan* tradition is carried out once a year, usually when the rainy season starts from August to September. Of course, it must also be adjusted to the harvest season of farmers in that area. With the development of the times and after the Covid-19 pandemic, this *wiwitan* tradition began to adapt and is simpler in its implementation, only by holding a feast (praying followed by eating together). Based on the research results from 32 interviewed respondents, 16 farmers or 50%, still carried out the *wiwitan* tradition. Therefore it can be said that most farmers still carry out existing local wisdom traditions. According to them, carrying out the *wiwitan* tradition has become a culture that must be preserved for generations, and there are fears that if they don't do it, there will still be lumps in the farmers' hearts. Farmers still have the principle that apart from doing the best possible rice cultivation business, it must also be supplemented with prayers through the *wiwitan* tradition that is carried out.

This is also represented Purwandaru et al. (2016) in the importance of respect, as some farmers on the island of Java express ancestral traditions as a fundamental component of contact with the gods by cultivating rice for ritual offerings. *Wiwitan* is also utilized as a prayer symbol, associated with rice and the goal of meeting fundamental requirements such as protection and charity. In addition to functioning as emblems of the supplicant's wishes, post-harvest rice plant artifacts are used by the Javanese to represent the gods and to remind them of the virtues of life.

Wiwitan is more than just a harvest ceremony; it is a system of local values and knowledge that drives farmer conduct from planting to harvest. It has an indirect, but important, impact on production. Farmers use *wiwitan* to establish cultivation patterns and time. This timing is usually determined by natural indicators (grain color, plant age, and weather conditions). Farmers' *wiwitan* practices teach farmers to follow regular planting patterns and natural cycles, lowering the danger of crop failure and increasing yields. Farmers' *wiwitan* practices promote more cautious plant management during the cultivation stage. These traditions gradually acclimate farmers to more effective rice cultivation. *Wiwitan* also trains farmers about ethical and orderly farming practices, such as avoiding premature harvesting and preserving natural equilibrium. These ethics promote more sustainable farming, which is critical for long-term output (Nisa et al., 2022).

Farmers' Rice Production in Rural Areas

Farmers want to be productive. Farmers cultivate food crops such as rice with the purpose of producing high yields. High rice production yields are determined by farmers'

input levels and the quality of their rice cultivation. High rice output will boost farmers' incomes and improve their welfare. The following is rice production by rural farmers.

Table 1. Rural farmers' rice production and Dependent t Test Result

No	Description	Farmers with *Wiwitan* (Kg/Ha)	Farmers without *Wiwitan* (Kg/Ha)
1	Highest	7,397	7,360
2	Average	6,569	6,155
3	Lowest	5,085	4,571
Dependent t Test Production			
	Sig-t		0,003***

Source: primary data is processed (2025)

Table 1 shows the average rice yield per hectare. Farmers who use *wiwitan* to sow rice have higher productivity than farmers who do not practice local wisdom traditions. The output rate differs by 37 kg per hectare. Farmers' lowest rice production per hectare is 4,5 tons, while farmers who do *wiwitan* produce more than 5 tons per hectare. The average yield between farmers who use *wiwitan* and those who do not is still more than 6 tons per hectare. The difference between the two is 414 kg per hectare. The difference in these numbers is not significant, thus *wiwitan* is not required, even though cultural preservation is crucial. The results of the dependent t-test show that Ho is rejected (sig-t < 0.05) meaning that the rice crop production of farmers using *wiwitan* is greater than the rice crop production with an error rate of 5%.

Rice production is influenced by various factors which may come from outside the use of inputs. This is shown by the research of Li et al. (2020) that climate change is possible, which will damage plant development so that production decreases. External variables employing inputs that may affect rice production are expected to have a greater impact by up to 40%. Flooding and pest infestations are also caused by heavy rainfall. Pest management applications must be adopted to reduce agricultural production losses. However, it is crucial to note that each location has its own distinct traits, such as farmers on the island of Java who keep traditional local knowledge. Many farmers believe that the *wiwitan* ceremony is a crucial part of the agricultural process (Rizki Kurniawan, 2019).

Factors Affecting Rice Production

The Cobb-Douglas function can help to determine what factors influence rice farmers' rice yield in rural locations. Of course, conventional assumptions must be made prior to analyzing the normalcy test. The normality test and traditional assumptions used are the heteroscedasticity test and the multicollinearity test. The three tests were completed and passed all existing assumptions, allowing them to continue evaluating production-related aspects, as shown in the table below.

Table 2. Multiple linear regression results factors affecting rural farmers' rice production

Variable	Coefficient	t-stat	Sig.
constanta	0,207	0,209	0,836
Ln X1	1,023***	12,888	0,000
Ln X2	0,004	0,057	0,954
Ln X3	0,078 **	2,426	0,023
Ln X4	0,038	0,845	0,406
Ln X5	0,068*	1,768	0,087
Ln X6	-0,040	-1,396	0,175
Ln X7	0,010	0,244	0,808
D1	0,664**	1,944	0,019
Adjusted R^2			0,795
F			0,000

Source: primary data is processed (2025)

Information:
*** = significance at the level of confidence 99% (α = 0,001)
** = significance at the level of confidence 95% (α = 0,05)
* = significance at the level of confidence 90% (α = 0,1)

Based on Table 2, the Adjusted R^2 value is 0,795. The interpretation of these statistics is that the variation in rice output can be described by the independent variables, which are land area, seeds, fertilizers, pesticides, work in the family, labor outside the family, farmer experience, and a dummy variable (79,5%). At the same time, the remaining 20,5% describes variables not included in this model. The higher the Adjusted R^2 score, the better the regression model.

The F test was also used in this study to show in the regression model whether simultaneously the independent variables influence the dependent variable. Based on Table 2, it can be seen that the probability of the F value is 0,000 or less than the value of 5%. This figure indicates that simultaneously the variable area of land, seeds, fertilizers, pesticides, labor in the family, labor outside the family, farmer experience, and the *wiwitan* dummy have a real and significant effect on the corn production of farmers in rural areas. A partial test or t-test is also used in this study to test the effect of independent variables one by one on the dependent variable. This testing method can be done by looking at how much the significance value of each variable is. Based on Table 2, it can be seen that four variables affect rice production, namely land area, fertilizer, family labor, and the *wiwitan* dummy.

Based on Table 2, it can be seen that land area affects rice production. This variable has a significant effect if seen from the significance value of 0,000 or less than 1%. From the value of the regression coefficient, it can be stated that an increase in land area of 1% will increase rice farmers' production by 1,023%, likewise with the fertilizer variable, which has a significant value of 0,023 or less than 5% so that it can be stated that the fertilizer variable has a real and significant effect. Looked at the regression coefficient

value, it can be said that every 1% increase in fertilizer use will increase rice production by 0,078%. The variable use of labor in the family also influences rice production with a significance value of less than 10%, namely 0,08. When viewed from the value of the regression coefficient, a % increase in the use of labor in the family by 1% will increase rice production by 0,01%.

The three variables mentioned align with the research of Chung et al. (2015), which states that land area and other factors such as fertilizer and labor, significantly affect rice production. Increasing the land area will certainly increase the opportunities for farmers to get more rice production. Increasing the use of fertilizers must also be adjusted to the recommendations so that production can be optimal. The use of labor in the family is also important for rural farmers because many family members help cultivate the family's land. According to research by Chau & Ahamed (2022), farmers can maximize profits by managing the use of labor so that the selection of labor also affects the technical efficiency of the cultivated rice. Intensive labor investment will encourage increased rice production, which is getting better.

The analysis results show that the variable *wiwitan* local wisdom (D) affects the productivity of lowland rice, as indicated by a significance value of 0,019. This indicates a difference in the production of rice per hectare owned by farmers who are still practicing the *wiwitan* tradition and those who are not doing it because it is statistically significant. The people who carry out the *wiwitan* tradition believe that the *wiwitan* tradition of giving offerings before planting and harvesting rice is a form of thanksgiving to the Supreme Giver in power in that place (Dewi Sri) and will provide good production for the rice that is cultivated. Carrying out the *wiwitan* tradition by farmers is also a symbol of giving thanks to God the creator.

Several studies have emphasized economic efficiency in agricultural production, especially for developing countries. For example, Chandio et al. (2019) examined the effect of agricultural credit and land size on the Technical Efficiency of rice productivity in Sindh, Pakistan. The study results show that several factors influence productivity, such as land area, fertilizer, credit, and labor used. The study's results also stated that farmers efficiently cultivated their crops. Research regarding factors affecting rice farming production in Polenga Village, District Kolaka Regency states that land area significantly affects the quantity of rice production (Kasmin, 2020).

The basic concept of selecting a model is related to the production function, which is divided into two aspects, namely, the amount of rice production and the variability of the output of each farmer. The use of production factors in the analysis framework illustrates the use of different inputs by each farmer. The experience of cultivation determines farmers' treatment of the plants they cultivate they have carried out from time to time. The treatment between one farmer and another is different, so that it will also produce different production. Infrastructure support, such as good irrigation, needs to be maximized for farmers' production. In addition, government policies and extension services are also two important aspects of support for farmers (Dhamira, 2020).

Graha & Yuliawati (2016) conducted research regarding portraits of local wisdom, climate change, and its effect on paddy's productivity in Salatiga. They state that

some farmers still practice local wisdom, namely by *wiwitan*. The *wiwitan* activity is one of the activities of sending prayers to God and is carried out before planting and harvesting rice. This activity is also widely believed by farmers as a symbol of gratitude to Dewi Sri, who has looked after the cultivated rice plants. As much as 27% percent of farmers still use *wiwitan* and believe this activity should be carried out once a year. The study's results also stated that seeds, fertilizers, pesticides, family labor, outside family labor, farming experience, local wisdom dummy, and climate change dummy significantly affected paddy rice productivity. Based on the description that has been mentioned, this research is supported by evidence that tradition is inseparable from the cultivation practices practiced by farmers, especially rice farmers. Tradition also has no detrimental effects, so it can be continued according to existing principles without neglecting good agricultural practices.

Wiwitan is not a technical aspect, such as fertilizer or irrigation. However, the *wiwitan* tradition influences the utilization and allocation of rice production inputs. *Wiwitan* promotes environmental stewardship, allowing for the moderate use of natural pesticides and fertilizers. *Wiwitan* also maintains the spirit of farmers, particularly by strengthening the mutual cooperation system. Farmers are used to working together from planting to harvest since *wiwitan* is done jointly. Furthermore, *wiwitan* ensures the consistency of adaptable traditional behaviors. The information passed down in the *wiwitan* tradition includes experiences with planting seasons, soil conditions, and rice care procedures, ensuring the continuation of sustainable, culture-based agricultural practices.

CONCLUSIONS AND SUGGESTIONS

Based on the results of the research, it can be seen that there are most of the farmers who still carry out the *wiwitan* tradition. The study's results also stated that farmers who practiced the *wiwitan* tradition had higher rice production than farmers who did not practice the *wiwitan* tradition. Four variables influence the production of rice cultivated by rural farmers, namely land area, fertilizer, family labor, and dummy *wiwitan*. The limitation of this research is that the *wiwitan* tradition is a tradition typical of local wisdom that exists on the island of Java, Indonesia, so that different regions will, of course, have different cultures that are carried out. The results of this study are relevant for farmers in Java. Based on this research, farmers may not have to carry out *wiwitan*, but preserving culture or traditions is important so that *wiwitan* activities continue from one generation to another. Farmers can also increase rice production by providing fertilizer and using family labor as recommended. If farmers can increase the area of land they cultivate, it will be better because the production opportunities will also be higher.

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