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Determinants of Income and Welfare of Rice Farming Families in Jatiluwih Village, Tabanan Regency, Bali Province

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ABSTRACT: This study aims to analyze the phenomenon of moral hazard among agricultural workers in Indonesia within the context of employment relationships, incentive systems, and social protection policies. Moral hazard is understood as behavior that arises when individuals or groups do not fully bear the risks of their actions due to certain guarantees or protections, thus encouraging suboptimal or irresponsible behavior. This study uses a qualitative descriptive approach with data collection techniques through literature studies, in-depth interviews, and field observations in several agricultural areas. The results show that moral hazard occurs in various forms, such as the misuse of fertilizer subsidies, work inefficiencies due to unfair profitsharing systems, and dependence on government assistance without efforts to increase productivity. Factors such as low financial literacy, weak institutional oversight, and unequal relations between sharecroppers and landowners also increase the potential for moral hazard. This study recommends the importance of improving incentive systems, providing moral education and work ethics, and strengthening local institutions as efforts to mitigate moral hazard in the agricultural sector.

KEYWORDS: moral hazard, agricultural workers, incentive systems, work ethics, agricultural policy, Indonesia

I. INTRODUCTION

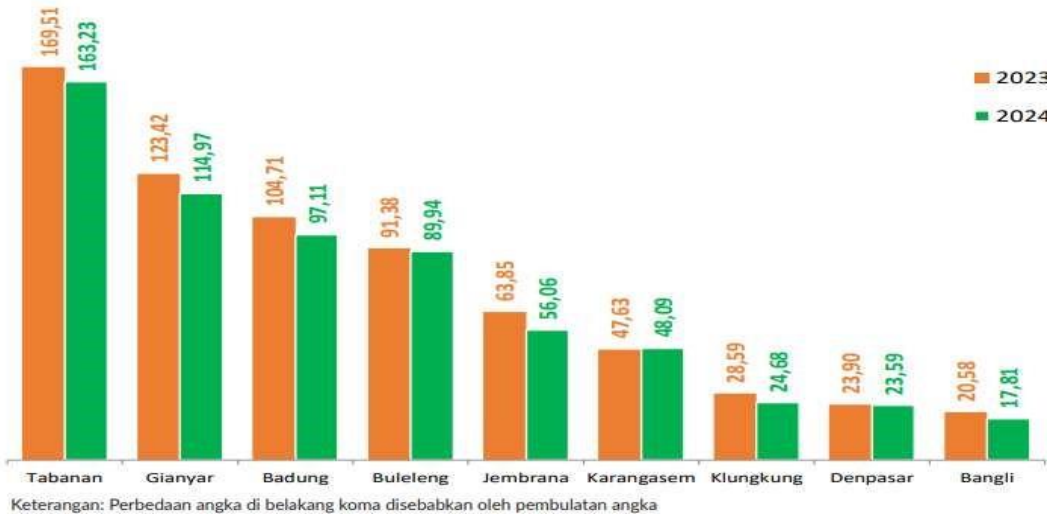
Indonesia is an agrarian country, meaning the agricultural sector plays a crucial role in supporting the national economy. This is reflected in the large proportion of the population employed in the agricultural sector, particularly in rural areas. According to data from the Central Statistics Agency (BPS), the agricultural sector will absorb approximately 29 percent of Indonesia's total workforce in 2023, making it a key sector in the national employment structure. This is further reinforced by Indonesia's abundant natural resources, including soil fertility, diverse agricultural commodities, and the availability of water to support cultivation activities. Indonesia's geographical location in the tropics provides a comparative advantage due to high rainfall and consistent year-round exposure to sunlight. According to Mariano & Herawati (2023), Indonesia's strategic geographic location and favorable tropical climate offer significant potential for the development of various food crops, horticulture, and plantations. This potential should be maximized to enhance food security, increase farmer incomes, and sustainably promote the well-being of agrarian communities.

The agricultural sector in Indonesia remains the mainstay of the rural economy, and within the agricultural sector, rice farmers comprise the largest number of farmers compared to other types of farmers. This reflects that rice is not only a primary commodity in the national food system but also plays a central role in the socio-economic life of rural communities. Rice production activities are generally carried out collectively by the surrounding community, so that harvesting is not only an economic activity but also an integral part of communal life closely linked to local culture. Farmers, in this context, are individuals who manage agricultural land by utilizing available natural and social resources. According to Harahap et al. (2021), agricultural activities carried out by farmers include essential elements such as land, capital, labor, and organized management systems, both traditional and modern. Rice farmers in rural areas are highly dependent on the availability of natural resources, such as water, fertile soil, and a favorable climate. These geographical conditions and resources facilitate farmers' agricultural activities, but still require additional labor from planting to harvest, both in the short and long term. The reliance on community cooperation and solidarity in this process demonstrates the importance of social capital in maintaining the sustainability of the rice production system.

Bali Island is one of Indonesia's premier tourist destinations and has earned international recognition. Numerous prestigious awards, such as "The Best Destination in the World" and "The Best Spa Destination of the World," awarded by various international tourism magazines and institutions, are clear evidence of the admiration of international tourists for the natural beauty, cultural

richness, and hospitality of the Balinese people. This recognition makes Bali not only a national tourism icon but also a global asset with high competitiveness in the global tourism sector. Behind the glittering tourism industry, Bali also has unique societal characteristics, where the majority of the population, especially in rural areas, still relies on the agricultural sector for their livelihood. Rero & Prayogi (2023) stated that despite the rapid development of the tourism sector, the Balinese people still maintain their local wisdom in agriculture, particularly through the Subak system, which has been recognized as a world cultural heritage by UNESCO. This system not only functions as a traditional irrigation system but also manifests the cultural and spiritual values of the Balinese people, which prioritize harmony between humans, nature, and God. Bali is a unique example where modernity and tradition go hand in hand, keeping the agricultural sector relevant and vibrant amidst the currents of globalization and the massive tourism industry.

Farmers, particularly rice farmers, play a crucial role in supporting the national economy, particularly in meeting the community's food needs. As the primary producers of rice, the staple food for the majority of Indonesia's population, rice farmers form the backbone of the national food security system. This role becomes even more vital as the population continues to grow, which directly increases food consumption. Based on projections from the Central Statistics Agency (BPS), Indonesia's population growth will continue to rise, meaning demand for rice and other food commodities will also increase significantly. In this context, rice farmers have the opportunity to increase productivity and scale their businesses, which can ultimately have a positive impact on their income and well-being. Furthermore, the success of the agricultural sector, particularly rice farming, also has a multiplier effect on other sectors, such as distribution, logistics, and the agricultural processing industry. Therefore, strengthening the position of rice farmers through policy support, access to technology, education, and strengthening social capital is a strategic step towards creating sustainable food security and a resilient rural economy.



Source: www.bali.bps.go.id (2025)

Figure 1.1 Rice Production in Bali Province by Regency/City in 2023 and 2024

The decline in rice production in Bali Province in 2024 is a critical issue in the agricultural sector that requires serious attention. In terms of production volume, the three regions with the highest total rice production in 2024 were Tabanan, Gianyar, and Badung Regencies. These three regions have consistently been the main centers of rice production in Bali due to their relatively extensive rice fields, good irrigation systems, and strong agricultural traditions, particularly through the Subak system. Conversely, the three regions with the lowest rice production were Bangli Regency, Denpasar City, and Klungkung

Regency. Furthermore, entering 2025, the three regencies with the highest production potential were still dominated by Tabanan, Gianyar, and Badung. This indicates that these three regions remain the mainstays in maintaining Bali's food security. Meanwhile, the lowest production potential at the beginning of 2025 was again held by Denpasar City, Bangli Regency, and Klungkung Regency, consistently indicating limited production capacity. This condition illustrates the existence of spatial disparities in agricultural productivity between regions in Bali, which requires regional-based policy interventions and optimization of local resources.

The welfare of rice farming families in Jatiluwih Village, Tabanan Regency, Bali Province, is an interesting issue but has not been comprehensively researched, particularly in the context of the integration of culture, agriculture, and tourism. Although Jatiluwih Village is known as a Subak area designated by UNESCO as a world cultural heritage and a leading tourist destination, this does not automatically improve the economic welfare of farmers equally. Most farmers still face challenges such as fluctuating grain prices, limited market access, and limitations in household financial management (Suamba, 2016). This phenomenon raises

significant questions about how the contributions of the agriculture and tourism sectors are truly felt by farming families in terms of increasing income, children's education, and overall quality of life.

The welfare of rice farming families in Jatiluwih Village, Tabanan Regency, can be measured, among other things, by the level of income earned from agricultural activities. Farmer income is an important economic indicator in assessing the extent to which farmers are able to meet basic needs such as food, education, health, and housing. The higher the income earned from farming, the greater the opportunity for farming families to achieve a more decent and independent standard of living. According to Sari & Rachmawati (2022), farmer income has a significant positive correlation with the welfare of farming families, particularly in terms of the ability to send children to school, improve housing, and access to health services. In Jatiluwih Village, although the majority of the community still relies on the traditional Subak-based agricultural sector for its livelihood, the economic added value of agricultural activities is still influenced by various factors such as the selling price of unhusked rice, production costs, and access to markets.

Observations show that the welfare of rice farming families in Jatiluwih Village is significantly influenced by two main indicators: rice selling prices and agricultural land ownership. In the local agrarian economy, fluctuating rice prices often disproportionate to farmers' production costs, resulting in low profit margins. Research by Sudarmika & Yasa (2021) shows that farmers with small plots of land (less than 0.25 hectares) tend to experience greater economic pressure than farmers with larger plots, as their small production scale limits their income potential. Meanwhile, rice prices at the farm level are often influenced by dependence on middlemen and a lack of direct access to consumer markets. Land ownership, on the other hand, is a crucial asset that not only determines production capacity but is also closely linked to the social status and economic security of farming families. In Jatiluwih, although the Subak system reflects collective effort in irrigation management and cultivation, inequality in land ownership remains a challenge to achieving equitable prosperity.

Rice production is a crucial factor that directly impacts the income and well-being of farming families. The higher the harvest volume, the greater the potential income farmers can achieve. However, the reality on the ground shows that high production does not always translate directly to improved farmer welfare. Nugraha (2022) emphasized that increased rice production must be accompanied by good post-harvest management, adequate market access, and efficient use of production inputs. Without these, farmers will enjoy little benefit from a bountiful harvest due to low selling prices or high distribution costs. In Jatiluwih, although the Subak system provides a foundation for sustainable agriculture in harmony with nature, farmers still face real challenges in the form of limited mechanization, lack of access to modern technology, and the dominance of middlemen in the crop distribution chain. This maintains farmers' bargaining power and makes them vulnerable to market price fluctuations.

Education is a crucial factor influencing the income and well-being of farmers, including rice farming families in villages. Higher education enables farmers to acquire better knowledge and skills to manage their farms effectively and efficiently. Educated farmers tend to be quicker to adopt modern agricultural technologies, understand market dynamics, and manage land, water, and labor resources more optimally. This can have a direct impact on increasing their productivity and income. As Suryana (2021) notes, education plays a crucial role in improving farmers' managerial skills, including making rational farming decisions oriented toward long-term profitability. Furthermore, farmers with higher education are also more open to training and government programs aimed at improving human resource capacity. In areas like Jatiluwih, which are based on traditional agricultural systems, education serves as a bridge to harmonize local wisdom with modern agricultural innovations, without diminishing the cultural values passed down through the Subak (Subak).

Social capital plays a crucial role in increasing farmers' income and well-being, particularly in agrarian communities like Jatiluwih Village. Social capital, in this context, encompasses elements such as trust, shared norms, networks, and solidarity among farmers, which are concretely manifested in the traditional Subak system. The Subak system is not only a means of irrigation management but also reflects deep social values and community collaboration. According to Putnam (2000), social capital can increase community efficiency by facilitating coordinated action and strengthening collective work. Meanwhile, Fukuyama (1995) emphasized that the presence of social capital in farming communities fosters mutual trust, strengthens social cohesion, and accelerates the adoption of new agricultural technologies and strategies. Social capital not only acts as a social glue but also serves as a strategic resource that supports farmers' productivity and adaptability in facing economic challenges and agricultural climate change.

In the context of efforts to improve the welfare of rice farmers in Jatiluwih Village, it is important to understand that production, the application of Tri Hita Karana (THK) values, education, and social capital do not always have a direct impact on welfare, but rather often through the mechanism of income as a mediating variable. Income is a key element that bridges the influence of these factors on welfare, because increased production and the harmonious application of THK values will increase yields and productivity, which in turn increases farmer income (Todaro & Smith, 2015). Similarly, education and social capital can expand access to knowledge, technology, and market networks, which ultimately impact income and welfare (Putnam, 2000;

Schultz, 1961). An empirical study by Mardiana et al. (2020) shows that income plays a significant mediating role in the relationship between education and the welfare of farming households in Karawang Regency. Meanwhile, research by Windia & Ratna (2007) demonstrated that consistent application of Tri Hita Karana values not only maintains ecological and social balance but also increases agricultural productivity, which in turn increases farmers' incomes. The subjective well-being approach emphasizes that individual perceptions of happiness and life satisfaction are strongly influenced by economic conditions, such as sufficient and stable income (Diener et al., 1999).

The urgency of research on farmer welfare in Jatiluwih Village, Bali, is crucial given their vital role in maintaining the sustainability of local wisdom-based agriculture amidst the pressures of modernization and tourism. This study uses a subjective well-being approach to more holistically capture how farmers assess their quality of life, not only from an economic perspective but also from their perceptions of life satisfaction, sense of belonging, and fulfillment of cultural values. In the context of Jatiluwih, a UNESCO World Heritage site with its Subak system, this approach is relevant for understanding the extent to which farmers' perceived well-being aligns with cultural and environmental sustainability. Therefore, this research is urgently needed to provide an empirical basis for formulating agricultural policies that are not only productive but also oriented toward improving farmers' overall well-being.

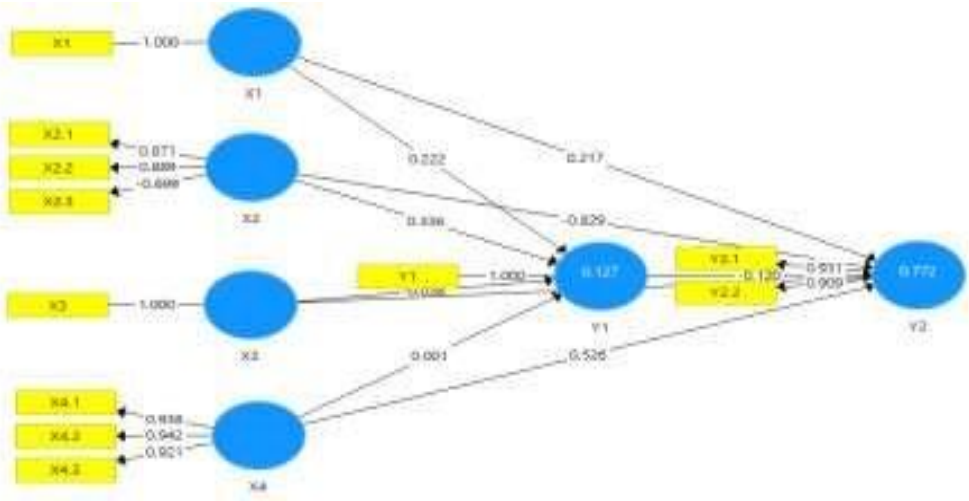
II. RESEARCH METHODOLOGY

This study used a quantitative approach. Data collection was conducted through observation and structured interviews. The population used in this study was 400 farmers, and using Slovin's calculation, the sample size used was 97 rice farmers in Jati Luwih Village. The sampling technique used was stratified based on the area of cultivated land and farmers were interviewed using accidental sampling. The data analysis technique used was Structural Equation Modeling with the Partial Least Squares approach.

III. RESULT AND DISCUSSION

A. Results of the evaluation of the measurement model (Outer Model)

The outer model measurement model was evaluated using convergent and discriminant validity of its indicators and composite reliability for all indicators. Figure 5.2 below shows the results of the evaluation of the measurement model used in this study.



Source: processed primary data, 2025

Figure 2 Measurement Model

Convergent validity testing was also conducted by examining the average variance extracted (AVE) value for each latent variable. If the average variance extracted (AVE) for a latent variable is greater than 0.5, it is considered to have good convergent validity. In this study, the recommended AVE value should be greater than 0.50. Based on Table 1, it can be seen that all variable variance extracted (AVE) values are greater than 0.50. Thus, it can be concluded that the data in this study has good convergent validity.

Table 1. Convergent Validity Test Results using Average Variance Extracted

	Average Variance Extracted (AVE)
X1	1,000
X2	0,679
X3	1,000
X4	0,872
Y1	1,000
Y2	0,847

Source: processed primary data, 2025

In this study, reliability testing used Cronbach's alpha and composite reliability parameters. The results of the Cronbach's alpha and composite reliability tests indicate that the values of all constructs are greater than the minimum limits for Cronbach's alpha (greater than 0.70) and composite reliability (greater than or equal to 0.7). Based on Table 2, the reliability test using Cronbach's alpha and composite reliability, the parameter values for all constructs are above 0.7. Thus, from the reliability test using Cronbach alpha and composite reliability of all constructs, it has good internal consistency for use in testing this model.

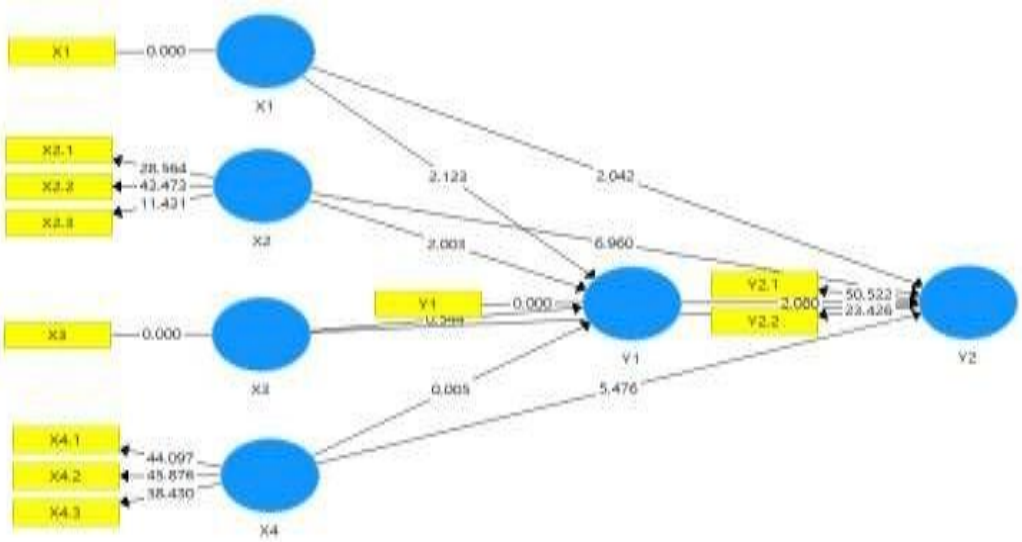
Table 2. Construct Reliability Test Results

	Cronbach's Alpha	Composite Reliability
X1	1,000	1,000
X2	0,712	0,740
X3	1,000	1,000
X4	0,926	0,953
Y1	1,000	1,000
Y2	0,820	0,917

Source: processed primary data, 2025

B. Structural model evaluation results (Inner Model)

Inner model testing is performed by examining the R-square value, which is a goodness-of-fit test. The R-square value of a PLS model is evaluated by examining the predictive relevance of the model variables. R-square measures how well the model's observed values and parameter estimates compare. Figure 3 shows a path diagram of the structural model (inner model).



Source: processed primary data, 2025

Figure 3 Structural Model

The R-square value for the income variable is 0.680, which means that this research model is moderate or 68.0 percent of the variation in rice farmers' income in Jati Luwih Village is influenced by production, the application of the Tri Hita Karana concept, education and social capital and the remaining 32.0 percent is influenced by other factors not included in the model. The R-square value for the welfare variable is 0.772, which means that this research model is a strong model or 77.2 percent of the variation in rice farmers' welfare in Jati Luwih Village is influenced by production, the application of the Tri Hita Karana concept, education, social capital and income and the remaining 22.8 percent is influenced by other factors not included in the model.

C. The Influence of Production, Implementation of the Tri Hita Karana Concept, Education and Social Capital on the Income of Rice Farmers in Jati Luwih Village

The analysis shows that production and the implementation of the Tri Hita Karana concept have a positive and significant impact on the income of rice farming families in Jatiluwih Village, Tabanan, Bali. Meanwhile, education and social capital have no effect on the income of rice farming families in Jatiluwih Village, Tabanan, Bali. The analysis results show that agricultural production has a positive and significant impact on the income of rice farming families in Jatiluwih Village, meaning that the higher the production yields obtained by farmers, the greater the income received by farming families. This finding is in accordance with the theory of production in agricultural economics which states that production is a function of efficiently managed inputs and is a major factor in creating added value (Soekartawi, 2006). In the context of rice farming, increased production not only reflects technical success in cultivation but also has a direct impact on the economic conditions of farming households.

In Jatiluwih Village, renowned as a culturally diverse agricultural area and a UNESCO World Heritage Site, rice production practices are not only based on technical principles but also infused with local values such as Tri Hita Karana. Productivity in this area has a unique dimension, entwined with spiritual, social, and ecological values. As production increases, farmers not only achieve higher yields but also gain greater access to markets, both local and tourist, ultimately boosting family incomes. Thus, production is not merely a technical variable but also a strategic instrument for creating culturally based prosperity.

The application of Tri Hita Karana (THK) values has a positive and significant impact on the income of rice farming families in Jatiluwih Village. This indicates that the stronger the application of the THK concept, namely harmony with God (Parahyangan), fellow human beings (Pawongan), and nature (Palemahan), the greater the potential for increasing farmers' income. This concept reflects a holistic development approach that integrates spiritual, social, and ecological dimensions (Windia & Ratna, 2007). When linked to income theory, particularly in the microeconomic approach, income is the result of an individual's productive contribution to factors of production, such as land, labor, capital, and entrepreneurship (Mankiw, 2014). In the context of farmers, the application of THK increases the efficiency and sustainability of the use of these factors, for example, wise and sustainable land use (Palemahan), increased cooperation between farmers (Pawongan), and the presence of spiritual motivation in farming (Parahyangan), all of which contribute to increased production. The more consistent the application of THK, the more optimal the management of resources, which has a direct impact on increasing farmers' household income.

The research results show that education has no significant effect on the income of rice farming families in Jatiluwih Village. This finding suggests that farmers' formal education does not directly contribute to increased yields or farm income. This could be due to several factors, including the fact that the majority of farmers in this village received primary or secondary education, which does not specifically equip them with agricultural technical or managerial skills relevant to increasing productivity and crop marketing.

Theoretically, education will increase a person's productivity and income. However, in practice, the effectiveness of education in increasing income depends largely on the relevance of the educational content to the work undertaken. In the case of farmers in Jatiluwih, the formal education system has not been fully geared towards supporting technical competency in agriculture. In other words, the human capital developed through formal education has not translated directly into increased land productivity or agricultural yields. An empirical study by Siregar & Saragih (2019) also found similar results, namely that farmers' formal education in North Sumatra had no significant effect on income, while work experience and access to agricultural information were more influential. Likewise, research conducted by Yuliana (2021) in an agrarian area in West Java concluded that education will only affect income if combined with technical training or the use of modern agricultural technology.

The results of the study indicate that social capital does not significantly influence the income of rice farming families in Jatiluwih Village. Although social capital in the form of trust, norms, and social networks is believed to play a crucial role in strengthening cooperation among farmers, in reality in Jatiluwih, this social capital has not been optimally utilized to support economic aspects, particularly in increasing income. This indicates that the existence of social capital has not been accompanied by the ability to access markets, price information, or production technologies that can directly impact the added value of farming businesses. In theory, social capital, according to Coleman (1988), is an asset embedded in the structure of social relations and can be mobilized to achieve collective goals. However, this theory also emphasizes that social capital will only have a real impact if it is used

strategically in productive activities. In Jatiluwih Village, social networks and norms of mutual cooperation play a greater role in maintaining local social and cultural harmony, rather than in the context of increasing economic efficiency or farming productivity.

D. The Influence of Production, Implementation of the Tri Hita Karana Concept, Education, Social Capital, and Income on the Welfare of Rice Farmers in Jati Luwih Village

The results of the study indicate that rice production has a positive and significant impact on the welfare of farming families in Jatiluwih Village. This means that the higher the production level achieved, the higher the level of welfare perceived by farmers. In this context, production is not only an indicator of economic achievement but also serves as a source of life satisfaction, social stability, and a sense of security for farming families. This finding can be explained using the subjective wellbeing theory approach, which emphasizes that well-being is not measured by an individual's level of satisfaction with their life as a whole (Diener et al., 1999). Furthermore, Diener & Seligman (2004) emphasize that subjective well-being is influenced by economic conditions, social relationships, and personal achievements. In this case, high production provides a sense of accomplishment and satisfaction with farmers' hard work, as well as increasing their ability to meet basic needs and plan for the future. Success in farming also increases farmers' self-esteem and social prestige within the community, contributing to increased happiness and psychological well-being.
The application of Tri Hita Karana (THK) values has a positive and significant impact on the welfare of rice farming families in Jatiluwih Village. Tri Hita Karana, as a Balinese philosophy of life, emphasizes balance and harmony between humans and God (Parahyangan), fellow humans (Pawongan), and nature (Palemahan). In agricultural practices, these values are reflected in the pattern of cooperation between farmers through Subak, environmental conservation, and spiritual rituals that are integrated into daily farming activities. The application of this concept creates a sense of calm, satisfaction, and meaning in the lives of farmers, which is the core of subjective well-being. According to the theory of subjective well-being developed by Diener et al. (1999), a person's well-being is not only determined by economic conditions, but also by the extent to which individuals feel satisfied, have meaning in life, and experience positive emotions in their daily lives.
The research results show that education has a positive and significant impact on the welfare of rice farming families in Jatiluwih Village. Although education does not directly increase income, it plays a significant role in improving farmers' perceptions of well-being. Education plays a role in broadening horizons, shaping rational thinking, and encouraging an open attitude to change and innovation, including in sustainable agricultural practices. Farmers with better education tend to be better able to make strategic decisions in managing their farms, maintaining family health, and establishing healthy and productive social relationships, all of which are determinants of subjective well-being.
The research results show that social capital has a positive and significant impact on the welfare of rice farming families in Jatiluwih Village. Although social capital does not directly impact income, it plays a crucial role in shaping perceptions of wellbeing by improving the quality of social relationships, community support, and a sense of community. Social capital, embodied in the Subak system and the Tri Hita Karana values, encourages farmers to collaborate, share information, and maintain harmony with nature and each other. This solid and trusting social environment creates a sense of security, comfort, and satisfaction in daily life as farmers.
The results of the study indicate that income has a positive and significant impact on the welfare of rice farming families in Jatiluwih Village. The higher the income earned by a farming family, the higher the level of welfare they perceive. Income enables the fulfillment of basic needs such as food, clothing, education, and health, which are the main foundation for improving the quality of life of farmers. In this context, income is a crucial element in supporting feelings of security, comfort, and satisfaction with life, all of which are key indicators in the theory of subjective well-being. According to Diener et al. (1999) in the theory of subjective well-being, a person's well-being is determined not only by objective conditions such as income, but also by their personal assessment of their life as a whole. Although this theory emphasizes that happiness is not always linear with material improvements, the availability of income remains a key variable influencing feelings of security, control over life, and the achievement of life goals, especially in the context of farming families who still depend on sources of income from the agricultural sector.

E. The Role of Income in Mediating the Influence of Production, Implementation of the Tri Hita Karana Concept, Education and Social Capital on the Welfare of Rice Farmers in Jati Luwih Village

The analysis shows that income significantly mediates the influence of production, the application of the Tri Hita Karana concept, education, and social capital on the welfare of rice farming families in Jatiluwih Village, Tabanan, Bali. The results of the study indicate that income significantly mediates the influence of production on the welfare of rice farming families in Jatiluwih Village. This means that higher agricultural production achieved by farmers increases income, which in turn positively impacts family welfare. High production generates a surplus that can be sold or stored, providing economic stability for farming families.
In this case, income serves as a connecting link explaining how agricultural production flows into improved quality of life.

The results of the study indicate that income significantly mediates the effect of the implementation of the Tri Hita Karana (THK) concept on the welfare of rice farming families. This means that the higher the level of application of THK values in the lives and agricultural practices of farmers, the greater their chances of obtaining better incomes, which ultimately improves family welfare. The THK concept, which encompasses harmony with God (Parahyangan), fellow humans (Pawongan), and nature (Palemahan), encourages farmers to manage land wisely, maintain social relations, and carry out farming activities with high spiritual values. These practices not only result in sustainable agriculture but also create a harmonious and productive work climate, which has a direct impact on income.

The results of the study indicate that income does not mediate the effect of education on the welfare of rice farming families in Jatiluwih Village. This finding indicates that increasing farmers' education levels does not necessarily impact family welfare through increased income. This means that even if farmers' education increases, it may not significantly increase income, or the resulting increase in income may not be strong enough to substantially impact family welfare. In the context of subjective wellbeing theory, well-being is not solely determined by economic aspects such as income, but is also influenced by individuals' perceptions of their overall quality of life, including life satisfaction, happiness, social relationships, and personal achievement (Diener et al., 1999).

The results of this study indicate that income does not mediate the influence of social capital on the welfare of rice farming families in Jatiluwih Village. This means that although farmers' social capital levels are quite high, as evidenced by strong social networks, trust among farmers, and norms of mutual cooperation, this does not significantly increase income, which in turn impacts welfare. In other words, harmonious social relationships do not necessarily generate sufficient economic growth to improve welfare through income. From the perspective of the subjective well-being theory developed by Diener et al. (1999), well-being does not stem solely from economic aspects, but rather from how individuals assess their lives holistically, including emotional, social, and cultural aspects. Social capital, in this context, contributes more to the quality of social relationships and psychological life satisfaction, rather than directly to increased material income. Therefore, even if farmers possess high levels of social capital, if it is not balanced with access to markets, technology, and other economic resources, its contribution to income will be limited.

IV. CONCLUSIONS

Based on the results of the analysis, it shows that production and the application of the Tri Hita Karana concept have a positive and significant effect on the income of rice farming families in Jatiluwih Village, Tabanan, Bali. While education and social capital do not affect the income of rice farming families in Jatiluwih Village, Tabanan, Bali. Production, the application of the Tri Hita Karana concept, and education, social capital and income have a positive effect on the welfare of rice farming families in Jatiluwih Village, Tabanan, Bali. Income significantly mediates the effect of production and the application of the Tri Hita Karana concept on the welfare of rice farming families in Jatiluwih Village, Tabanan, Bali. While income does not mediate the effect of education and social capital on the welfare of rice farming families in Jatiluwih Village, Tabanan, Bali.

The Tabanan Regency Government is expected to continue supporting rice production as a leading sector proven to increase farmers' income and welfare, through the provision of environmentally friendly agricultural technology, training, and incentives for sustainable farmer groups. The Tri Hita Karana values should be the basis for culture-based agricultural development policies and integrated into agricultural, education, and tourism programs. Furthermore, although education and social capital do not directly impact income, both contribute to well-being. Therefore, the government needs to strengthen non-formal education tailored to farmers' needs and strengthen agricultural community forums, such as Subak and integrated farmer groups, to expand social networks and farmer participation in village development. Farmers in Jatiluwih Village are expected to continue maintaining and developing efficient and sustainable agricultural production by adhering to the Tri Hita Karana values, which have been proven to increase income and welfare. Farmers also need to actively participate in training to make their education more productive in farming practices. Although social capital does not directly impact income, strengthening solidarity and cooperation within the farming community remains crucial for expanding access to information, marketing, and joint business opportunities.

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