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# THE RELATIONSHIP BETWEEN THE ROLE OF FARMER GROUPS AND THE WELFARE OF THEIR MEMBERS IN BANYU ABANG VILLAGE, TELUK BATANG DISTRICT, KAYONG UTARA REGENCY

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**Abstract.** Farmer groups act as learning classes, collaboration platforms and production units. Welfare is the goal of farming families, where prosperity is the ability to meet the food and non-food needs of farming households and manage expenses. The aim of this research is to determine the level of the role of farmer groups and the welfare of their members, as well as to analyze the relationship between the role of farmer groups and the welfare of farmer group members in Banyu Abang Village, Teluk Batang District, North Kayong Regency. The population in this study was 360 members, with a sample size of 100 farmers. The data collection techniques used were direct observation and interviews with farmers. The data analysis used was Spearman's Rank Correlation analysis using IBM SPSS Statistics 23 software. The results of the study showed that the majority of farmers spent most of their income on food consumption, which reached 55.3% of total income and more than 70% of farmer family expenses were spent on food consumption, especially rice and daily necessities. Based on the results of the Spearman rank statistical test, Poktan's role as a learning class, collaboration vehicle, and production unit has a positive but weak relationship with the level of welfare of members. The correlation value between learning classes (0.307), collaboration platform (0.292), and production units (0.302) shows that although there is a positive relationship, the relationship to member welfare is not very strong. This means that although farmer groups can have a positive impact, their role has not been strong enough to significantly improve welfare.

**Keywords:** farmer groups, role of farmer groups, welfare

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## INTRODUCTION

One of the policies pursued by the government to achieve national development goals is the economic improvement through agricultural development (Saleh, 2018). In Indonesia, farmer groups

have long existed as communication institutions among farmers in carrying out their activities. The development of agriculture in the country has led to sustainable agricultural growth by taking into account environmental, social, and economic aspects (Nesia, 2023). According to Maulana (2019), A farmer group is a grassroots-level institution formed directly to organize farmers in agricultural activities. According to the Regulation of the Minister of Agriculture No. 67 of 2016 concerning the development of farmer institutions, a farmer group is a collective of farmers, livestock breeders, or planters established based on shared interests, similar environmental conditions (social, economic, and resource-related), common commodities, and mutual familiarity, with the aim of enhancing and developing their members' farming business. A farmer group consists of male or female adult farmers and those informally connected within a local area, bound by shared needs and social harmony. The group operates within an influential environment and is led by a group leader (Jaya, 2018).

One of the initiatives undertaken by the government in partnership with farmers to foster agricultural self-reliance is the formation of farmer groups in rural communities (Zogar et al., 2014). Using a group-based approach, farmers are empowered to play a more significant role in the development process. (Asmini et al., 2020) Farmer groups serve as a medium for agricultural extension, aiming to guide more structured changes in farming practices which are reflected in increased agricultural productivity, subsequently leading to higher farmer income and contributing to improved welfare for farmers and their families. The goal is to achieve sustainable agriculture, optimize farming efforts, and enhance the welfare of the farmer households (Eda et al., 2023). The presence of farmer groups also enhances farmers' capacity, which refers to their ability to carry out agricultural activities, respond effectively to challenges, and meet the criteria of being competent and competitive farmers (Suyadi et al., 2018). Members are guided to share a common perspective, have similar interests, and foster relationships based on a sense of kinship (Hasan et al., 2020).

According to Zogar et al., (2014), In the agricultural sector, not all activities can be carried out by individual farmers, so that cooperation among farmer group members is essential in providing production inputs, conducting maintenance, pest control, harvesting, post-harvest handling, and marketing activity. Therefore, farmer groups are established to address issues that cannot be resolved individually and to enhance the capacity of farmers and their families. Through the presence of farmer groups, farmers can collaboratively solve problems such as securing agricultural production inputs, improving production techniques and marketing (Barokah et al., 2023). Nuryanti & Swastika, 2016 stated that the establishment of farmer groups represents a process of manifesting consolidated agriculture, enabling production to be carried out optimally and efficiently. According to Mawarni et al., (2017), when large scale production occurs, it has a positive impact on farmers as it generates higher income, allowing them to save and accumulate capital, which in turn can improve their standard of living by increasing their earnings. Therefore, the development of farmer groups must be carried out more intensively, systematically, and in a well-planned manner to enhance their function and role.

Regulation of the Minister of Agriculture No. 67 of 2016 in Purnami (2016) states that continuous development efforts are undertaken to assist farmer groups in improving their functions, which are: (1) as a learning class, farmer groups are expected to equip their members with the necessary knowledge, skills, and attitudes to grow into strong and independent farming enterprises, ultimately enhancing their income, productivity, and quality of life; (2) as a cooperation platform, farmer groups facilitate collaboration among farmers as well as with external parties, aiming to increase efficiency and farming capacity; (3) as a production unit, farmer groups are expected to engage in partnerships with other stakeholders to support sustainable productivity and the preservation of natural resources.

Banyu Abang Village plays an integral role in the development of Teluk Batang District. Agriculture in Banyu Abang continues to hold a highly strategic position, both in stimulating economic growth and ensuring equitable development. It is also responsible for providing staple food and generating income for many farmers. A significant proportion of the poor population resides in rural

areas, where the majority of residents work as farmers. Income is the most crucial component of household welfare, as many aspects of well-being are dependent on income levels. In some cases, household income may limit the ability to meet essential needs (Muhklis et al., 2020). Therefore, attention to the welfare of rice farmers is essential, as it is closely linked to the future sustainability of rice farming.

Almost the entire population of Banyu Abang Village relies on agriculture. When the agricultural system functions well, the welfare of the community tends to improve, whic is reflected in sufficient income, higher levels of education, and better access to healthcare services. However, in reality, many farmers in the village have yet to achieve a prosperous standard of living. This is due to several challenges they face, such as rising fertilizer prices, declining rice yields, market prices that depend heavily on grain quality, and frequent pest infestations. These factors significantly affect farmers' livelihoods, often resulting in incomes that are insufficient to meet their basic needs.

An improvement in farm productivity reflects an enhancement in farming activities, which ultimately leads to increased farmer income and welfare (Kementan RI, 2009). The success of farmer groups can be determined by the extent to which they are able to carry out their role in improving the welfare of their members. Through group activities, farmers are able to exchange ideas, experiences, knowledge, and skills, fostering innovation to enhance the agricultural system. This interaction is expected to enable farmers to manage rice farming more effectively. Therefore, the existence of farmer groups is expected to encourage active participation among farmers in running the group, improving agricultural outcomes, and enhancing their own capabilities and self-reliance.

It is important to understand the role of farmer groups in improving the welfare of their members to determine whether these groups can contribute to the advancement of farmers. Based on this background, the main objective of this study is to examine the level of welfare among farmer group members and assess the extent to which the groups fulfill their functions in accordance with the regulations of the Ministry of Agriculture. Additionally, the study aims to investigate the relationship between the role of farmer groups and the welfare of their members in Banyu Abang Village.

contains the research background concisely, concisely, and clearly; problem formulation, research objectives; as well as data related to the substance of the study. Does not contain many references, except those of a regulatory nature, laws, regulations, and the like. Writing narratively, does not need to be given special sub-titles. Included in writing operational definitions, if deemed necessary, are also written narratively.

## METHOD

The research was conducted in Banyu Abang Village, Teluk Batang District, North Kayong Regency, one of the regions where the majority of the population is engaged in agriculture. It was conducted from July to September 2024. The population of the study includes all members of farmer groups in Banyu Abang Village, comprising 14 farmer groups with a total of 360 members. A census method was employed to collect data from all active farmer groups. Subsequently, Sarwono (2011) uggested that the sample should consist of at least 100 respondents with a margin of error of 10%, or be five to ten times the number of indicators used, in order to obtain statistically significant and more accurate results. This study employed 20 indicators and therefore used a sample of 100 respondents from the total population of rice farmers in Banyu Abang Village. The sampling technique used was proportional random sampling. The researcher selected respondents who were active farmers and members of farmer groups whose main farming activity is rice farming in paddy field. From the 14 farmer groups, samples ranging from 4 to 12 members were taken from each group.

The data used in this study consist of both primary and secondary data. Primary data were obtained through direct observation at the research site and face-to-face interviews with respondents

using a structured questionnaire prepared in advance. Secondary data were gathered from theoretical literature relevant to the research variables and issues. Sources of secondary data included theses, dissertations, journals, and related institutions (such as the village office and other agencies directly connected to the study) to strengthen the findings. This research employed a Likert Scale to measure the variables of farmer group roles (X) and the welfare level of farmer group members (Y). The role of farmer groups was measured through three sub-variables: learning class (X1), cooperation platform (X2), and production unit (X3).

The data analysis method employed is descriptive analysis, which serves to explain and illustrate the phenomena occurring in the research area, as well as to determine the relationship between the role of farmer groups and the welfare level of their members in Banyu Abang Village. The role of farmer groups is measured using three indicators assessed on a Likert scale. The categorization of the level of farmer group roles is scored from 1 to 3, as presented in Table 1 below:

**Table 1. Farmers' responses to the role of farmer groups**

| No | Answer Choice | Value |
|---|---|---|
| 1 | Strongly Agree | 3 |
| 2 | Uncertain | 2 |
| 3 | Disagree | 1 |

Source : Mantali et al., (2021)

The data processing method employs Microsoft Excel tabulation and an analysis of welfare level based on Gilarso (1992) , which measures welfare through consumption or expenditure: (a) if food expenditure exceeds 75% of the annual household income, the welfare level is considered low; (b) if food expenditure ranges between 40% and 75% of annual household income, the welfare level is categorized as moderate; and (c) if food expenditure is less than 40% of annual household income, the welfare level is classified as high.

Yudaningrum (2011) in Hasrawati et al., (2020) explained the calculation of food expenditure in relation to the total household expenditure of farmers. To determine the proportion of food expenditure to household income, the following formula can be written with equation 1.

$$TP = \frac{Pp}{Tp} \times 100\% \quad (1)$$

Where :
PF : The proportion of food expenditure (%)
Pp : Food expenditure of the household (Rupiah)
Tp : Total expenditure of the household (Rupiah)

Meanwhile, to analyze the relationship between the role of farmer groups and the welfare level of their members, the Rank Spearman correlation analysis is used. The Spearman's rank correlation test can be formulated as equation (2) :

$$r_s = 1\frac{6 \sum di^2}{N\ (n^2-1)} \quad (2)$$

Where :
$r_s$ : Spearman's rank correlation coefficient
$d_i^2$ : The difference between the ranks of each data
n : Total number of the data

## RESULT AND DISCUSSION

### Characteristics of Respondent

The respondent data were obtained from questionnaires distributed to members of farmer groups in Banyu Abang Village, with a total of 100 respondents. The questionnaire consisted of three sections: questions on the farmers' personal information, the role of the farmer group, and the farmers' welfare, which was measured through food and non-food expenditure levels. A description of the respondents' characteristics is presented in Table 2.

**Table 2. Data of respondent**

| Data of the respondent | | Numbers of Respondent | Percentage (%) |
|---|---|---|---|
| Age | 35 – 43 | 17 | 17 |
| | 44 – 52 | 47 | 47 |
| | 53 – 62 | 26 | 26 |
| | 63 – 70 | 10 | 10 |
| Education Level | SD | 19 | 19 |
| | SMP | 31 | 31 |
| | SMA | 50 | 50 |
| Number of Dependent Family Member | 1 – 3 | 55 | 55 |
| | 4 – 6 | 44 | 44 |
| | 7 – 9 | 1 | 1 |
| Farming experience | 7 – 19 | 31 | 31 |
| | 20 – 33 | 51 | 51 |
| | 33 – 47 | 18 | 18 |

Source: Data Processed, 2024

The majority of farmers are within the productive age group (35–62 years), presenting an opportunity for the adoption of agricultural innovations. However, attention must also be given to older farmers (63–70 years) to ensure their continued engagement in the innovation process. Agricultural development strategies should take these demographic characteristics into account to design more effective approaches in promoting agricultural advancement.

The majority of farmers have a low level of educational background, which may hinder their ability to adopt agricultural innovations. To enhance productivity and advance agricultural development, efforts are needed to provide better access to education and training programs for farmers.

Farmers in Banyu Abang Village typically have between one and three dependent family members, allowing them to concentrate more effectively on their farming activities. However, those with four to six dependents may face greater challenges in managing their finances and resources. Therefore, agricultural development strategies should take into account the burden of family dependents to support farmers in making better decisions and to enhance their welfare.

The majority of farmers have considerable farming experience, with more than half of the respondents having between 20 to 32 years of experience. This indicates strong potential for adopting innovative agricultural practices. However, those with very long standing experience may require tailored approaches to encourage greater openness to change. Agricultural development strategies should take farming experience levels into account to better support the adoption of more effective farming practices.

**The Welfare of Farmer Group Members**

In evaluating the quality of life and economic conditions of a community, the welfare of its members is a crucial aspect, especially among farmers or groups who rely on the agricultural sector. According to Gilarso (1992), the approach used to measure the welfare level of farming households is the proportion of food expenditure to total household income. Total household income includes all income sources, both from the agricultural sector and from other sources (such as non-agricultural income). Table 3 is the presentation of the total income of rice paddy farmers.

**Table 3. Total income of farmer household**

| Total Income (Rp/year) | Respondent (number of people) | Percentage (%) |
|---|---|---|
| 18,000,000 – 32,000,000 | 55 | 55 |
| 32,000,001 - 46,000,000 | 37 | 37 |
| 46,000,001 – 60,000,000 | 8 | 8 |
| Total | 100 | 100 |

Source: Data Processed, 2024

It can be seen that 55% of farming households have an annual income ranging from Rp 18,000,000 to Rp 32,000,000, indicating that the majority of farmers earn relatively low incomes. This income may come from their agricultural activities, side jobs, or non-agricultural enterprises they operate. The average total annual food expenditure is Rp 18,504,200 per household, while the average annual household income is Rp 33,456,000. Thus, the proportion of food expenditure can be written with equation 3.

$$\text{Proportion of Food Expenditure} = \frac{18{,}504{,}200}{33{,}456{,}000} \times 100\% = 55.33\% \quad (3)$$

The calculation shows that 55.3% of the household income of farmers is allocated to meet food needs, reflecting a high dependency on food expenditure. When a household allocates more than 50% of its income to food, it often indicates a lower level of welfare, as the household may struggle to meet non-food needs. In contrast, households that allocate a smaller proportion to food expenses are more likely to enjoy higher welfare levels, as they are more capable of meeting non-food requirements. The welfare level of farmer group members, specifically rice paddy farmers, is assessed by comparing the proportion of food expenditure to total household income. Table 4 presents the classification of farmer welfare levels.

**Table 4. Analysis of farmers' welfare based on food expenditure**

| Welfare level | Food expenditure | Respondent (people) | Percentage (%) |
|---|---|---|---|
| Low | > 75 % | 15 | 15 |
| Moderate | 40 – 75 | 61 | 61 |
| High | < 40 | 24 | 24 |
| | | 100 | 100% |

Source: Data Processed, 2024

The majority of farmers fall into the medium welfare category, indicating that they are able to manage their household expenditures. Improved farmer welfare not only enhances their quality of life but also contributes to broader social and economic stability within the agricultural community. The needs of farming households in Banyu Abang Village include expenditures for both food and non-food necessities. Food needs are measured by expenditures on items such as rice and daily groceries (including protein sources, vegetables, cooking oil, sugar, coffee and tea, and kitchen spices). Meanwhile, non-food expenditures cover education, healthcare, transportation, and other miscellaneous costs. The Table 5 presents data analysis on the amount of food and non-food consumption by farming households.

**Table 5. Analysis of food and non-food consumption by farmers' household**

| No | Expenditure type | Average (Rp/year) | Percentage (%) |
|---|---|---|---|
| 1 | Food | 18,504,200 | 70.35 |
| 2 | Non-Food | 7,797,372 | 29.65 |
| | Jumlah | 26,301,572 | 100% |

Source: Data Processed, 2024

The high proportion of food expenditures compared to non-food ones indicates a challenge in achieving better welfare. Expenditure on rice is relatively high, as rice is the staple food for every household, which in turn affects the dietary pattern of families to ensure their primary rice needs are met. On average, a household consumes 360 kg of rice annually, with a monthly average consumption of approximately 26.29 kg below in Table 6.

**Table 6. Analysis of food expenditure by farmers' household**

| No | Food Expenditure Type | Rata-rata (Rp/thn) | Jumlah Presentase (%) |
|---|---|---|---|
| 1 | Rice | 4,932,200 | 26.65 |
| 2 | Daily groceries | 13,572,000 | 73.35 |
| | Total | 18,504,200 | 100% |

Source: Data Processed, 2024

Daily household expenses represent the largest share of total expenditure, indicating that farmers' families allocate a significant portion of their income to meet everyday needs. In contrast, higher non-food expenditures can reflect a better level of welfare, as it implies that family members are able to fulfill basic needs beyond food, including education, transportation, healthcare, and other miscellaneous costs. Table 7 is an analysis of the amount of non-food expenditure by farmers' households.

**Table 7. Analysis of non-food expenditure by farmers' households**

| No | Expenditure Type | Average (Rp/year) | Percentage (%) |
|---|---|---|---|
| 1 | Education | 1,246,154 | 15.98 |
| 2 | Healthcare (BPJS) | 0 | 0 |
| 3 | Transportation | 4,465,618 | 57.27 |
| 4. | Miscellaneous | 2,085,600 | 26.75 |
| | Total | 7,797,372 | 100% |

Source: Data Processed, 2024

The proportion of transportation expenses represents the largest share of total non-food expenditures. This highlights the importance of accessibility and mobility for farmers in carrying out their daily activities, which is directly linked to economic development and improved welfare. Meanwhile, healthcare expenses are lower compared to other non-food expenditures, as most farming households typically use public health insurance services such as BPJS (Social Security Agency).

**The Relationship Between the Role of Farmer Groups and the Welfare Level of Their Members**

The relationship between the roles played by farmer groups and the welfare levels of their members needs to be examined. By using Spearman's rank correlation analysis, this relationship is tested to determine whether higher involvement and functionality of farmer groups are associated with better welfare outcomes. The Spearman Rank correlation calculation was performed using the SPSS23 software, as shown in Table 8.

**Table 8. Relationship between farmer groups' role and the welfare of their members**

| Variable | Indicator | Correlation Coeffisien | Annotation | Sig* |
|---|---|---|---|---|
| Farmer group's role | Learning class | 0.307 | Low | 0.001 |
| | Cooperation platform | 0.292 | Low | 0.003 |
| | Production unit | 0.302 | Low | 0.002 |

Source: Data Processed, 2024

The Spearman rank test results in Table 8 show that the correlation between the learning class and the welfare level of the member is 0.307, indicating a weak (not strong) but positive relationship. The alternative hypothesis (Ha) is accepted with a significance level of 0.001 for the learning class variable (X1), indicating a statistically significant relationship between the role of farmer groups and member welfare. One plausible reason for the relatively weak correlation is that not all farmer group members actively participate in the learning class activities. Furthermore, irregular meeting schedules and inconsistent learning sessions may also hinder the effectiveness of the program. Nevertheless, with proper support and management, farmer groups have the potential to serve as effective platforms for improving members' knowledge and farming skills. Improving the quality of learning classes can have a positive impact on the welfare of farmer group members, although this impact may not be immediately significant.

The test results indicate that the cooperation platform has a correlation of 0.292 with members' welfare. This correlation reflects a weak positive relationship between farmer group cooperation platforms and members' welfare. With a significance value of 0.003 for the cooperation platform variable (X2), the alternative hypothesis (Ha) is accepted. These findings suggest that when a cooperation platform is utilized within a farmer group, its relationship with members' welfare is positive and significant. One reason for the relatively weak correlation is that not all farmer groups engage in partnerships with external parties such as agricultural institutions, input suppliers, or other relevant

stakeholders. This lack of external collaboration may reduce the potential positive impact of the cooperation platform on the welfare of group members.

The analysis of the relationship between the production unit and members' welfare yielded a correlation value of 0.302. This value indicates a weak positive correlation between the production unit and members' welfare. With a significance level of 0.002 for the production unit variable (X2), the alternative hypothesis (Ha) is accepted. However, the weak correlation suggests that functions related to marketing, provision of production tools, and processing have not been fully optimized. This may be due to various factors, including insufficient external support, inadequate infrastructure and facilities, or a lack of coordination among members in managing the production unit. With effective management and appropriate support, farmer groups have the potential to become more productive production units, thereby improving their members' welfare. These findings also show that the success of production units within farmer groups requires strong member collaboration, the application of appropriate technologies, and optimal resource management.

## CONCLUSION

The majority of rice paddy farmers in Banyu Abang Village fall into the moderate welfare category, with food expenditures constituting the biggest portion of total expenditures. The analysis shows that the majority of farmers spend a significant portion of their income on food consumption, accounting for 55.3% of total income, or over 70% of total expenditures.

Farmers in Banyu Abang Village perceive the role of farmer groups as significant in enhancing members' welfare and as playing an important role in agricultural development within the village. These groups contribute to improving members' knowledge and skills, as well as fostering collaboration among farmers, agricultural extension agents, government institutions, and relevant agencies. Farmer groups also function as production units aimed at increasing economic scale.

The research findings indicate that the role of farmer groups as learning classes, cooperation platforms, and production units shows a positive but weak correlation with members' welfare. This suggests that while farmer groups may have a positive impact, their role is not yet strong enough to significantly enhance welfare. A more optimal role of farmer groups in improving skills, fostering collaboration among members and relevant institutions, and increasing production efficiency has the potential to improve farmers' welfare.

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## REFERENCES

Andi Ratu Maulana. (2019). Peran kelompok tani dalam meningkatkan kesejahteraan petani di Desa Temmabarang Kecamatan Penrang Kabupaten Wajo. *Duke Law Journal*, *1*(1). https://digilibadmin.unismuh.ac.id/upload/8904-Full_Text.pdf

Asmini, A., Haryadi, W., & Jamta, M. (2020). peran kelompok tani dalam meningkatkan pendapatan usaha tani padi sawah di Desa Baru Tahan Kecamatan Moyo Utara. *Jurnal Ekonomi Dan Bisnis*, *17*(1), 38–46. http://jurnalfem.universitas-samawa.ac.id/index.php/JEP/article/view/153

Barokah, S., Setiawan, I., & Sudradjat, S. (2023). peran kelompok tani dalam meningkatkan pendapatan petani padi sawah di Desa Sidomulyo Kecamatan Pangandaran Kabupaten Pangandaran. *Jurnal Ilmiah Mahasiswa AGROINFO GALUH*, *10*(3), 1768. https://doi.org/10.25157/jimag.v10i3.10234

Eda, K., Kusrini, N., & Oktoriana, S. (2023). Peran kelompok tani terhadap peningkatan produktivitas usahatani sawi di Pontianak Utara. *Jurnal Sosial Ekonomi Pertanian*, *16*(2), 149. https://doi.org/10.19184/jsep.v16i2.40133

Gilarso, T. (1992). *Tingkat Kesejahteraan Pengeluaran Pangan Pokok Rumah Tangga*. Kanisius. https://books.google.co.id/books?id=Gly6AAAACAAJ

Hasan, Usman, Sadapotto, A., & Elihami. (2020). Peran kelompok tani dalam meningkatkan produktivitas usahatani padi sawah analisis hasil survei pendapatan rumah tangga usaha pertanian sensus pertanian 2013. *EduPsyCouns Journal*, *3*(1), 1–5. https://ummaspul.e-journal.id/pengabdian/article/view/1118

Hasrawati, Nuraeni, N., & Ilsan, M. (2020). Analisis proporsi pengeluaran dan konsumsi pangan terhadap ketahanan pangan rumahtangga petani padi (Studi Kasus Desa Tallung Ura, Kecamatan Curio, Kabupaten Enrekang). *Wiratani: Jurnal Ilmiah Agribisnis*, *3*(2), 129. https://doi.org/10.33096/wiratani.v3i2.61

Jaya, A. (2018). Pemberdayaan anggota kelompok tani melalui program penyuluhan dalam usahatani jagung (studi kasus kelompok tani tunas harapan di Desa Bonto Rannu Kecamatan Ulu-Ere Kabupaten Bantaeng). https://digilibadmin.unismuh.ac.id/upload/201-Full_Text.pdf

Mantali, M. A., Rauf, A., & Saleh, Y. (2021). Peran kelompok tani dalam meningkatkan produktivitas usahatani padi sawah (studi kasus kelompok tani di Desa Bongopini). *Jurnal Agristan*, *5*(2), 85. https://doi.org/https://doi.org/10.37046/agr.v5i2.11942

Mawarni, E., Buruwadi, M., & Bempah, I. (2017). Peran kelompok tani dalam peningkatan pendapatan petani padi sawah di desa Iloheluma Kecamatan Tilongkabila Kabupaten Bone Bolango. *Agrinesia*, *2*(1), 65–73. https://doi.org/https://doi.org/10.37046/agr.v2i1.2440

Muhklis, S., Kaspul, K., & Partha, M. N. (2020). Hubungan pendapatan dengan kesejahteraan anggota kelompok tani harapan jaya di Desa Sri Raharja Kecamatan Babulu Kabupaten Penajam Paser Utara. *Jurnal Prospek: Pendidikan Ilmu Sosial Dan Ekonomi*, *2*(1), 48–62. https://doi.org/10.30872/prospek.v2i1.1307

Nesia, K. A. (2023). Peran kelompok tani aramiko dalam meningkatkan kesejahteraan petani kakao di Desa Cinta Damai Kecamatan Bambel Kabupaten Aceh Tenggara. *JASc (Journal of Agribusiness Sciences)*, *7*(1), 36–45. https://doi.org/10.30596/jasc.v7i1.14691

Nuryanti, S., & Swastika, D. K. S. (2016). Peran kelompok tani dalam penerapan teknologi pertanian. *Forum Penelitian Agro Ekonomi*, *29*(2), 115. https://doi.org/10.21082/fae.v29n2.2011.115-128

Pertanian, K. (2009). Pemberdayaan kelompok tani dan gapoktan. *Peraturan Menteri Pertanian*, 1–23.https://jdih.pertanian.go.id/sources/files/422010_Pedoman_Penilain_Gabungan_Kelompok_Tani_%28Gapoktan%29_Pengembangan_Usaha_Agribisn1.pdf1

Purnami, A. A. (2016). Peraturan Menteri Pertanian Nomor 67/PERMENTAN/SM.050/12/2016 Tahun 2016. *Tentang Pembinaan Kelembagaan Petani*, 2016. https://peraturan.bpk.go.id/Details/160873/permentan-no-67permentansm050122016-tahun-201

Saleh, A. (2018). Hubungan peran anggota kelompok tani dengan tingkat pendapatan usahatani tembakau. *Jurnal Ilmiah Agribisnis*, *16*(2), 19–31. https://jsp.fp.unila.ac.id/index.php/jsp/article/view/4

Sarwono, J. (2011). Mengenal path analysis (sarwono). *Jurnal Ilmiah Manajemen Bisnis*, *11*, 285–296. http://www.jonathansarwono.info

Suyadi, N., Sumardjo, N., Uchrowi, Z., Tjitropranoto, P., & Swastika, D. K. S. (2018). Status dan determinan pendapatan petani agroforestri di Lingkungan Taman Nasional Gunung Ciremai. *Jurnal Agro Ekonomi*, *36*(1), 71. https://doi.org/10.21082/jae.v36n1.2018.71-89

Yudaningrum, A. (2011). Analisis hubungan proporsi pengeluaran dan konsumsi pangan ketahanan pangan dengan ketahanan pangan rumah tangga petani di Kabupaten Kulon Progo. *Uns*, 1–79.

Zogar, A. U., Retang, E. K., & Djoh, D. A. (2014). Peran kelompok tani terhadap usaha peningkatan pendapatan anggota melalui program kemitraan usahatani (studi kasus kelompok tani "sri mulyo" Kecamatan Sukun, Kota Malang). *Procedia Manufacturing*, *1*(22 Jan), 1–17. https://repository.ub.ac.id/id/eprint/107440