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Comparative Analysis Of Lowland Rice Farmers' Income Between Users And Non-Users Of The People's Business Credit (KUR) In Pondidaha District, Konawe Regency

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Abstract

This study aims to: (1) determine the income generated from lowland rice farming in Ponidaha District, Konawe Regency, and (2) analyze the differences in income between rice farmers who use People's Business Credit (Kredit Usaha Rakyat/KUR) and those who do not in Ponidaha District, Konawe Regency.The research was conducted in Ponidaha District, Konawe Regency, involving a total sample of 81 respondents, consisting of 21 KUR beneficiary farmers and 60 non-KUR farmers. The data were analyzed using farm income analysis and the Independent Samples t-Test to examine differences in the average income between KUR users and non-users. Farm income was calculated as the difference between total revenue and total production costs. The results indicate a statistically significant difference in income between lowland rice farmers who use KUR and those who do not in Ponidaha District, Konawe Regency. This difference suggests that access to KUR financing enhances farmers' ability to obtain working capital and production inputs, thereby improving farm productivity and increasing both revenue and overall farm income

Keyword: Income comparison, Lowland rice farming, people's business credit

INTRODUCTION

Indonesia is an agrarian country in which the agricultural sector plays an important role in the national economy, including in food provision, employment, and the formation of Gross Domestic Product (GDP). One of the strategic commodities in the agricultural sector is rice (Oryza sativa), which is the main food source for the Indonesian population and a source of

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income for most farming households. Therefore, the sustainability of rice production is related not only to meeting food needs but also to improving farmers' welfare (Sunaringtyas Puspitaningsih et al., 2016).

Lowland rice farming requires sufficient capital because it involves various production inputs, such as seeds, fertilizers, pesticides, labor, land preparation, and transportation costs for harvested products. These capital requirements generally need to be available from the beginning to the end of the production process. Limited capital may cause farmers to reduce the quantity or quality of inputs used, potentially reducing farm productivity and revenue. Thus, capital is one of the important factors determining the sustainability and performance of lowland rice farming. Susriani et al. (2022) showed that limited capital can affect farmers' ability to meet production-input needs and ultimately affect income. Saediman et al. (2019) also emphasized that capital is one of the factors of production that can constrain increased production when it is not adequately available.

Sources of capital in farming can basically come from farmers' own capital or borrowed capital. Own capital comes from farmers' financial capacity, while borrowed capital can be obtained from financial institutions or other sources of financing (Mamoto et al., 2021). For farmers with limited own capital, access to financing is important to ensure that production inputs are available at the right time and in appropriate quantities. One government policy aimed at expanding access to financing for business actors, including the agricultural sector, is the People's Business Credit (KUR). The KUR program was launched by the government in 2007 as financing for productive and feasible businesses that do not yet have the ability to fully meet banking requirements (bankable). KUR financing can be used for working capital and investment needs and is therefore expected to strengthen business capacity and improve the performance of business actors, including farmers (Kemenko Perekonomian, 2020).

In theory, access to KUR can help farmers overcome capital constraints in providing production facilities. However, the use of KUR does not automatically indicate that farmers' income is higher than that of farmers who do not use KUR. Income differences may also be influenced by land area, the amount of inputs used, productivity, selling prices, production costs, and farmers' ability to manage financing. Therefore, an empirical study comparing farmers' income based on KUR usage status is needed to determine whether access to financing is associated with differences in farm income.

Pondidaha District is one of the areas in Konawe Regency with lowland rice farming activities. Based on the research data, there are 431 lowland rice farmers, consisting of 111 KUR-user farmers and 320 non-KUR farmers. The existence of two groups of farmers with different

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financing statuses within the same area provides a relevant setting for comparative analysis. Differences in access to capital sources are therefore of interest, particularly in relation to the income obtained from lowland rice farming activities.

Several previous studies have examined the relationship between KUR and farmers' economic performance. Kelbo et al. (2024) analyzed the utilization of KUR in increasing the income of lowland rice farmers, while Ayal et al. (2024) examined the effect of KUR on the productivity and income of lowland rice farming. Rahmawati et al. (2023) also analyzed farmers' income through the KUR program using a multiple linear regression approach. These studies generally used influence or relationship approaches to explain the association between KUR utilization and farmers' income or productivity. Meanwhile, Tahir et al. (2017) and Astriani et al. (2024) showed that difference testing can be used to compare farm income based on certain characteristics or conditions.

Based on these previous studies, there remains an opportunity to strengthen empirical evidence through a direct comparative approach between KUR-user and non-KUR farmers, particularly in lowland rice farming in Pondidaha District, Konawe Regency. This approach is important because it not only describes the relationship between KUR and income but specifically tests whether there is a statistically significant difference in income between farmers who have access to KUR and farmers who do not use KUR. Thus, this study has a different position from studies that focus on analyzing the effect of KUR through regression models.

Based on the above description, research on comparing the income of lowland rice farmers according to KUR usage status in Pondidaha District, Konawe Regency, is important. The results are expected to provide empirical information on the income conditions of KUR-user and non-KUR farmers and serve as consideration for local governments and KUR-distributing institutions in evaluating access to financing for farmers. For farmers, the results are also expected to provide information on the relevance of access to capital in supporting lowland rice farming activities. Therefore, this study aims to determine the income level of KUR-user and non-KUR lowland rice farmers and analyze the income differences between the two groups of farmers in Pondidaha District, Konawe Regency.

METHOD

This research was conducted in Pondidaha District, Konawe Regency, Southeast Sulawesi, with the research locations comprising three villages: Momondowu Village, Lalonggotomi Village, and Wonuamonapa Village. The research locations were determined purposively based on the consideration that the three villages are lowland rice farming areas and contain both KUR-

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user and non-KUR farmers. The research was conducted starting in October until completion, while field data collection was carried out for one month.

The study population consisted of 431 lowland rice farmers in Pondidaha District, comprising 111 KUR-user farmers and 320 non-KUR farmers. The sample was determined using the Slovin formula with a 10% margin of error (Sugiyono, 2013), as follows:

$$n = \frac{N}{1 + Ne^2}$$

Based on the calculation, 81 respondents were obtained. The sample was then determined proportionally according to KUR usage status using proportionate stratified random sampling. The calculation resulted in 21 KUR-user farmers and 60 non-KUR farmers. The sample distribution in each village was carried out proportionally according to the number of farmers in the population, while respondents were selected using simple random sampling based on the list of farmers obtained from the Agricultural Extension Center (BPP) of Pondidaha District.

The study used primary and secondary data. Primary data were obtained through direct interviews with respondents using a structured questionnaire covering farmer characteristics, KUR usage, production quantity, selling price, production costs, revenue, and farm income. Secondary data were obtained from the Central Statistics Agency, the Konawe Regency Agriculture Office, the BPP of Pondidaha District, KUR-distributing institutions, and relevant scientific literature. Data were collected through interviews, field observations, and documentation.

Data analysis was conducted quantitatively. Lowland rice farm income was calculated as the difference between total revenue and total production costs (Soekartawi, 2016; Damogalad et al., 2024), using the following formula:

$$Pd = TR - TC$$

Where: = farm income (Rp/MT), = total revenue (Rp/MT), and = total production costs (Rp/MT). Total revenue was calculated by multiplying the quantity of production by the selling price:

$$TR = P \times Q$$

while total production costs were the sum of fixed costs and variable costs:

$$TC = FC + VC$$

Furthermore, the average income of KUR-user farmers was compared with the average income of non-KUR farmers. The difference in income was tested using an independent samples t-test with a separated-variance approach when the variances of the two groups were not assumed to be equal. The test was conducted at a 5% significance level (). The research hypotheses were: : there is no significant difference in income between KUR-user and non-KUR

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farmers; and : there is a significant difference in income between the two groups. The testing decision was based on the Sig. (2-tailed) value: if the significance value was < 0.05, then was rejected, whereas if the significance value was > 0.05, then was accepted.

RESULTS AND DISCUSSION

Production, Costs, Revenue, and Income of Lowland Rice Farming

Lowland rice farm income in this study was analyzed based on production, production costs, and revenue during one planting season. A comparison of farming conditions between KUR-user and non-KUR farmers is presented in Table 1.

Table 1. Production, Production Costs, Revenue, and Income of KUR-User and Non-KUR Lowland Rice Farmers in Pondidaha District in 2026

Description	KUR Users	Non-KUR Users
Production (kg/ha/planting season)	3.995	3.790
Fixed costs (Rp/ha/planting season)	1.296.028	1.195.390
Variable costs (Rp/ha/planting season)	4.569.497	4.383.577
Total production costs (Rp/ha/planting season)	5.865.525	5.578.967
Revenue (Rp/ha/planting season)	24.771.451	23.500.282
Income (Rp/ha/planting season)	18.905.926	17.921.315

Table 1 shows that the average production of KUR-user farmers reached 3,995 kg/ha/planting season, while that of non-KUR farmers was 3,790 kg/ha/planting season. Thus, production in the KUR-user group was higher by 205 kg/ha/planting season, or approximately 5.41%. This difference indicates a tendency for farmers with access to KUR to achieve higher production levels. The availability of capital may provide farmers with greater capacity to meet production-input needs more timely and in appropriate quantities, although the difference in production is not solely determined by KUR use and may also be influenced by land area, input use, technology, land conditions, and farm-management capacity.

In terms of costs, the average fixed cost of KUR-user farmers was Rp1,296,028/ha/planting season, higher than that of non-KUR farmers at Rp1,195,390/ha/planting season. Likewise, the average variable cost of KUR-user farmers was Rp4,569,497/ha/planting season, while that of non-KUR farmers was Rp4,383,577/ha/planting season. This resulted in an average total production cost of Rp5,865,525/ha/planting season for KUR-user farmers, compared with Rp5,578,967/ha/planting season for non-KUR farmers. Thus,

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KUR-user farmers incurred production costs approximately Rp286,558/ha/planting season higher.

Higher production costs among KUR-user farmers do not necessarily indicate a less favorable condition. Increased costs may reflect greater use of production inputs as a consequence of capital availability. In farming, additional costs can provide economic benefits when they are able to generate greater increases in production and revenue. In this study, the increase in production costs in the KUR-user group was accompanied by higher production and revenue than in the non-KUR group.

The average revenue of KUR-user farmers was Rp24,771,451/ha/planting season, while that of non-KUR farmers was Rp23,500,282/ha/planting season. The difference in revenue between the two groups reached Rp1,271,169/ha/planting season. The higher revenue in the KUR-user group was mainly associated with its higher average production. These results indicate that the additional capital available through KUR has the potential to support production activities, particularly in meeting farming-input needs.

After deducting total production costs, the average income of KUR-user farmers reached Rp18,905,926/ha/planting season, while non-KUR farmers obtained Rp17,921,315/ha/planting season. Thus, there was an average income difference of Rp984,611/ha/planting season, or approximately 5.49%, with the KUR-user group having higher income. Nevertheless, this average difference needs to be statistically tested to determine whether the income difference between the two groups is truly significant.

Comparison of Income between KUR-User and Non-KUR Farmers

To determine the significance of the income difference between KUR-user and non-KUR farmers, an independent samples t-test was conducted. Before determining the difference-test results, variance homogeneity was tested using Levene's Test. The test results are presented in Table 2.

Table 2. Results of the Income Difference Test for KUR-User and Non-KUR Lowland Rice Farmers in Pondidaha District in 2026

Test	Value
Levene's Test (F)	15,242
Levene's Test (F)	0,000
Levene's Test Sig.	3,833
t-value	75,841

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Sig. (2-tailed)	0,000
Mean Difference	Rp1.271.168,50
95% CI	Rp610.648,22 – Rp1.931.688,78

Levene's Test results show a significance value of 0.000 < 0.05. This indicates that the income variances of the two groups are not homogeneous. Therefore, interpretation of the independent samples t-test refers to the Equal variances not assumed row. The test results show a t-value of 3.833 with 75.841 degrees of freedom and a Sig. (2-tailed) value of 0.000. Because the significance value is less than 0.05, is rejected and is accepted. Thus, there is a statistically significant difference in income between KUR-user and non-KUR lowland rice farmers in Pondidaha District, Konawe Regency

The mean difference of Rp1,271,168.50 indicates that the average income of the KUR-user group is higher than that of the non-KUR group. This finding shows that KUR usage status is associated with differences in the economic performance of farming, particularly in terms of income. Access to financing enables farmers to obtain additional capital to finance production needs, thereby reducing working-capital constraints.

These findings are consistent with Kelbo et al. (2024), who showed that KUR utilization is associated with increased income among lowland rice farmers. The findings are also consistent with Ayal et al. (2024), who found an association between KUR and the productivity and income of lowland rice farming. Rahmawati et al. (2023) also demonstrated the importance of the KUR program in supporting farmers' income. The consistency of these findings strengthens the argument that access to formal financing can be one supporting instrument for improving the economic capacity of farming.

Nevertheless, the results of this study cannot be interpreted as meaning that KUR is the only factor causing differences in income. Farm income is also influenced by productivity, land area, selling price, use of production facilities, labor costs, environmental conditions, and farmers' ability to manage their farms. In this study, the KUR-user group showed higher production and revenue, although its production costs were also higher. This condition indicates that the additional costs incurred were still accompanied by a greater increase in revenue, resulting in higher income.

Thus, the existence of KUR in Pondidaha District can be viewed as one financing alternative with the potential to support the sustainability of lowland rice farming. However, the effectiveness of financing is determined not only by access to credit but also by the appropriate use of funds for productive activities. Therefore, increased access to KUR needs to be

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accompanied by assistance and capacity building for farmers so that the financing obtained can be used effectively to increase farm productivity and income.

CONCLUSION

Based on the results of the study on the comparison of income between KUR-user and non-KUR lowland rice farmers in Pondidaha District, Konawe Regency, it can be concluded that the average income of KUR-user farmers was Rp18,905,926/ha/planting season, while that of non-KUR farmers was Rp17,921,315/ha/planting season. Thus, the average income of KUR-user farmers was higher than that of non-KUR farmers.

The Independent Samples t-Test results show a Sig. (2-tailed) value of 0.000 < 0.05, indicating a statistically significant difference in income between KUR-user and non-KUR lowland rice farmers. This finding shows that access to KUR financing is associated with differences in lowland rice farm income. The availability of additional capital enables farmers to meet production-input needs more optimally, such as seeds, fertilizers, pesticides, and labor. Nevertheless, income differences are not influenced solely by KUR use but may also be related to other production factors and farm-management practices.

The government and KUR-distributing institutions need to expand access to financing for lowland rice farmers and improve assistance in the use of credit so that the funds received can be directed productively to support farming activities. KUR-user farmers should also use financing effectively and according to production needs so that additional capital can provide optimal economic benefits. For future researchers, the study can be expanded to wider areas and larger numbers of respondents and can consider other factors that may affect income, such as land area, productivity, selling price, input use, farmer characteristics, and patterns of KUR fund utilization.

REFERENCE

Astriani, M., Fausayana, I., & Rosmawaty, R. (2024). Analisis perbandingan biaya dan pendapatan pada usahatani padi sawah yang berasal dari benih label dan benih hasil roguing di Desa Tobimeita Kecamatan Wonggeduku Barat Kabupaten Konawe. *Innovative: Journal of Social Science Research, 4*(3), 12142–12156.

Ayal, R. S. E., Girsang, W., & Siwalette, J. D. (2024). Pengaruh Kredit Usaha Rakyat (KUR) terhadap produktivitas dan pendapatan padi sawah. *Jurnal Penelitian dan Pengabdian Masyarakat, 4*(6), 1910–1924.

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Badan Pusat Statistik (BPS). (2023). *Statistik Pertanian Indonesia 2023*. Jakarta: Badan Pusat Statistik.

Herliani, R., Sujaya, D. H., & Pardani, C. (2017). Analisis usahatani padi sawah (Suatu kasus di Desa Karyamukti Kecamatan Banjarsari Kabupaten Ciamis). *Jurnal Ilmiah Mahasiswa Agroinfo Galuh, 4*(1), 1–7.

Kasmir. (2001). *Bank dan lembaga keuangan lainnya*. Jakarta: PT RajaGrafindo Persada.

Kelbo, R., Timisela, N. R., & Kembauw, E. (2024). Pemanfaatan Kredit Usaha Rakyat (KUR) untuk peningkatan pendapatan petani padi sawah. *Prosiding Seminar Nasional Lahan Suboptimal, 12*(1), 854–864.

Kementerian Koordinator Bidang Perekonomian. (2020). *Perubahan Kebijakan Kredit Usaha Rakyat (KUR) Tahun 2020*. Jakarta: Kementerian Koordinator Bidang Perekonomian.

Mamoto, H. R., Ruauw, E., & Katiandagho, T. M. (2021). Analisis kemampuan pemanfaatan modal usahatani kacang tanah di Desa Tombasian Atas Kabupaten Minahasa menggunakan rasio Net Profit Margin dan Return on Investment. *Journal of Agribusiness Rural Development, 3*(2), 206–219.

Panekenan, D., Rumagit, G. A. J., & Pangemanan, P. A. (2017). Peran kredit perbankan pada sektor pertanian di Provinsi Sulawesi Utara. *Agri-SosioEkonomi, 13*(1A), 183–194.

Puspitaningsih, O. S., Utami, B. W., & Wijianto, A. (2016). Partisipasi kelompok tani dalam mendukung program-program pertanian berkelanjutan di Kecamatan Puring, Kabupaten Kebumen (Studi komparasi kelompok tani kelas lanjut dan pemula). *Caraka Tani: Journal of Sustainable Agriculture, 31*(2), 79–85. https://doi.org/10.20961/carakatani.v31i2.11950

Saediman, H., Indarsyih, Y., & Abadi, M. (2019). Status pembiayaan pertanian pada sistem agribisnis padi sawah di Kabupaten Konawe dan Konawe Selatan Provinsi Sulawesi Tenggara. *Buletin Penelitian Sosial Ekonomi Pertanian Fakultas Pertanian Universitas Halu Oleo, 21*(2), 79–85.

Santoso, S. (2014). *Panduan lengkap SPSS versi 20 edisi revisi*. Jakarta: PT Elex Media Komputindo.

Soekartawi. (2002). *Analisis usahatani*. Jakarta: UI-Press.

Sugiyono. (2013). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Bandung: Alfabeta.

Suratiyah, K. (2015). *Ilmu usahatani*. Jakarta: Penebar Swadaya.

Tahir, M., Murdiyati, S., & Arwati, S. (2017). Dampak keanggotaan kelompok lumbung pangan masyarakat terhadap pendapatan usahatani padi di Kabupaten Takalar. *Agric, 29*(1), 69–76.

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