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RESEARCH ARTICLE

Income Perspectives In The Coconut Sugar Industry A Comparative Study Of Landowner Farmers And Tenant Farmers In Labuhan Ratu

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Abstract

The plantation sub-sector is an important part of national development. One of the plantation commodities widely managed by small industries is coconut sugar, with raw materials derived from coconut trees. In Labuhan Ratu District, many small household industries are engaged in the production and processing of coconut sugar. This processing is done using coconut plants that have not been intensively cultivated. It is known that the average cost incurred by tenant farmers and landowner farmers is IDR 96,000 per week, with a production output of 1 quintal of brown sugar and a rental cost of IDR 70,000 per tree per year. This study aims to determine the income differences between landowner farmers and tenant farmers in the coconut sugar business in Labuhan Ratu District, East Lampung. The data collection techniques used include observation, documentation, and interviews. The study population consists of 100 coconut sugar entrepreneurs in Labuhan Ratu District, with the same sample size using the saturated sampling technique. Data analysis results show that at a 5% error level with 98 degrees of freedom, the t-table value is 1.66055, while the calculated t-value is 2.770. Because the calculated t-value (2.770) > t-table value (1.66055), the alternative hypothesis (Ha) is accepted, meaning there is a difference in income between landowner farmers and tenant farmers in the coconut sugar business in Labuhan Ratu District, East Lampung. Landowner farmers have higher incomes than tenant farmers because the income of tenant farmers must be shared among group members or partnerships, whereas the income of landowner farmers is entirely owned by one individual.

Keyword: landowner farmers, tenant farmers, income

Introduction

As an agrarian country, Indonesia has an agricultural sector that plays a vital role in the national economy. This is reflected in the large number of people who rely on this sector for their livelihood and the contribution of agricultural products to the economy (Sari et al., 2021). Along with the growth of the global population, increasing income, and changing consumer preferences, the demand for agricultural products continues to rise (Susilowati, 2022). Therefore, the agricultural sector has a strategic role both in the current and future economic context. The plantation sub-sector, particularly coconut sugar production, is an important part of the agricultural sector that supports national development. Coconut sugar, made from coconut sap, is a food-processed product that transforms agricultural outputs into consumer goods with a distinctive sweet taste (Kurniawati, 2021). In recent years, small-scale coconut sugar processing industries have grown rapidly in Labuhan Ratu District, where this business is mostly conducted with simple equipment (Hadi et al., 2023). Despite the development of the coconut sugar industry, there are still significant challenges such as lack of capital, non-modern technology, and a locally limited market (Wahyudi, 2022). These factors affect the quality, quantity, and continuity of coconut sugar production, which in turn impacts farmers' income (Adinugroho, 2020). Therefore, understanding the income differences between landowner farmers and tenant farmers is important for business development strategies in this sector. Based on the background described, the problem identified is the difference in market coverage between landowner farmers and tenant farmers, which potentially affects the income levels of these two farmer groups (Rizki & Nugroho, 2021). This study aims to identify the income differences between landowner farmers and tenant farmers in the coconut sugar industry in Labuhan Ratu District, East Lampung.

The following table shows the number of coconut sap tappers and the operational costs incurred by landowner farmers and tenant farmers in Labuhan Ratu District.

Table 1. Number of Coconut Sap Tappers in Labuhan Ratu District

No	Hamlet	Total (People)	Landowners (People)	Tenants (People)
1	Desa Labuhan Ratu VI	20	10	10
2	Desa Labuhan Ratu VIII	50	25	25
3	Desa Rajabasa	20	10	10
4	Desa Labuhan Ratu III	10	5	5
Total		100	50	50

Source: Data on Coconut Sap Tappers in Labuhan Ratu District

From the table, it is evident that Desa Labuhan Ratu VIII has the highest number of coconut sap tappers, while Desa Labuhan

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Ratu III has the fewest. This indicates variations in the distribution of farmers in Labuhan Ratu District (Hadi et al., 2023).

Method

The Research methodology is a scientific approach used to obtain data with specific purposes and uses, and to carry out activities to achieve pre-determined objectives. According to Sugiyono (2023), research methodology is a systematic and scientific way to obtain valid and accountable data. In this study, the researcher uses quantitative research methods with descriptive and comparative approaches to analyze the income differences between landowner farmers and tenant farmers in the coconut sugar industry in Labuhan Ratu District. Variables are essential elements in research that allow researchers to develop and analyze information to answer research questions. According to Sugiyono (2023), a variable is anything that is determined by the researcher to be studied to obtain and analyze information about it. Hatch and Farhady (2021) explain that a variable is an attribute or characteristic that can vary between individuals or objects. In this study, there are two types of variables: independent variables and dependent variables. The independent variable (X) is farming status, which differentiates between landowner farmers and tenant farmers, influencing the management and outcomes of farming activities. Indicators include the type of status (landowner vs. tenant), the degree of freedom in production planning, and the structure of agreements (lease, profit-sharing, or own). The measurement and scale are categorized as landowner (1) and tenant (0) on an ordinal scale. The dependent variable (Y) is farmers' income, defined as the total money received from the sale of coconut sugar production after deducting production costs. Indicators include total income from sales, production costs, and net profit, measured quantitatively in monetary units (IDR). Data collection techniques used in this research include observation, direct observation of coconut sugar business actors in Labuhan Ratu District to obtain information about their business activities (Arikunto, 2022), documentation through existing data on coconut sugar businesses such as financial records and production reports (Hadi, 2021), and interviews with respondents using prepared questionnaires to collect data and information regarding income and production costs of coconut sugar (Moleong, 2018).

The population in this study is coconut sugar entrepreneurs in Labuhan Ratu District, totaling 100 people, with data obtained through interviews, observations, and documentation (Sugiyono, 2023:86). Saturation sampling was used to select the sample, meaning all population members are included, resulting in 100 coconut sugar entrepreneurs as the research sample (Sugiyono, 2023:93). The sampling technique used is saturation sampling, where all population members are used as the sample (Sugiyono, 2023:93). The type of data used is primary data, obtained directly from the research subjects through interviews and observations, including income, production amount, production costs, and capital amount (Hadi, 2021:121). Data sources include observation results from direct observation of the research subjects (Arikunto, 2022:143) and interview results from direct interviews with coconut sugar business owners using a list of questions (Moleong, 2018:138). Data analysis was conducted using the t-test to compare the average income between landowner farmers and tenant farmers, with the formula being:

$$t = \frac{x_1 - x_2}{s_{gab}\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

Where the pooled variance is calculated as:

$$s_{gab} = \frac{(n_1 - 1)s^2{}_1 + (n_2 - 1)s^2{}_2}{n_1 + n_2 - 2}$$

Decision Making:

If t_calculated > t_table, then H_a is accepted, which means there is a significant difference in income between landowner farmers and tenant farmers.

If t_calculated < t_table, then H_a is rejected, which means there is no significant difference in income between landowner farmers and tenant farmers. (Usman & Akbar, 2022:142)

Results And Discussion

Agricultural Enterprise

Agricultural enterprise refers to the activities performed by farmers to manage agricultural resources in order to achieve optimal profits. According to Soekartawi (2020), the science of agricultural enterprise focuses on the allocation of resources effectively and efficiently to achieve profit within a specific period. In this context, agricultural enterprise is considered effective if the outcomes exceed the inputs used, and efficient if the results surpass the costs incurred. Sapoetro (2022) adds that agricultural enterprise involves the production activities on agricultural land aimed at generating crops or livestock products while maintaining the land's ability to produce in the future. Adiwilaga (2021) emphasizes that agricultural enterprise is the human activity of managing land to enhance crop or livestock yields while ensuring land sustainability for future production. Bishop and Toussaint (2022) define agriculture as a business that integrates various resources to produce agricultural products for both personal consumption and sale. Rivai (2022) describes agricultural enterprise as an organization that combines natural resources, labor, and capital to produce agricultural products independently to meet livelihood needs.

Agricultural Revenue

Revenue in agricultural enterprises refers to the income obtained from the sale of agricultural products. Boediono (2021) explains that revenue is the income derived from the sale of production outputs. Bishop and Toussaint (2022) further explain that agricultural revenue is calculated by multiplying the quantity of products produced by the market price, where the difference between revenue and production costs determines the profitability of the enterprise. The Indonesian Institute of Accountants (Ikatan Akuntan Indonesia, 2021) defines revenue as the gross inflow of economic benefits that increases equity without additional contributions from the owner. Rosjidi (2022) defines revenue as an increase in assets or a decrease in liabilities resulting from transactions involving the delivery of goods or services over a certain accounting period. Belkaoui (2021) adds that revenue includes the net inflow of assets from the sale of goods and services as well as the results of creating goods or services over a specific period. Simammora (2023) and Niswonger (2022) also describe revenue as the inflow from capital contributions obtained through business activities and the amount billed to customers for goods or services provided.

Agricultural Enterprise Status

The status of an agricultural enterprise describes the relationship between farmers and their land, which can be in the form of ownership, lease, or sharecropping systems. Bishop and Toussaint (2022) explain that sharecropping is a common method used to manage agricultural land due to land limitations and the need for efficiency. Landowners are those who own and manage their own land with full autonomy in planning production activities and receive all the profits from their agricultural ventures (Bishop & Toussaint, 2022). Conversely, tenant farmers manage land owned by others through rental agreements or sharecropping systems, often lacking the motivation for significant investments because their profits depend on the agreed-upon system (Hermanto, 2022). This difference in land ownership status can significantly impact farmers' income (Hermanto, 2022).

Revenue

Revenue is a broad concept in accounting and economic literature. The Indonesian Institute of Accountants (Ikatan Akuntan Indonesia, 2021) defines revenue as the gross inflow of economic benefits from a company's activities that increases equity without additional owner contributions. Rosjidi (2022) states that revenue is an increase in assets or a reduction in liabilities arising from transactions involving the delivery of goods or services during a specific accounting period. Belkaoui (2021) explains that revenue includes the net inflow of assets from the sale of goods and services as well as the results of creating goods or services over a given period. Simammora (2023) defines revenue as the inflow from capital contributions obtained from business activities, while Niswonger (2022) defines revenue as the amount billed to customers for goods or services provided.

Definition of Production

Production is the process of transforming inputs into outputs that add value in the form of goods or services. Sugiarto et al. (2023) explain that production involves the transformation of resources into useful final products. Adiningsih (2023) adds that production is a process of converting inputs into outputs with higher value, while Sukanto (2022) emphasizes that production is a primary activity in a business entity aimed at meeting market demands. Sudarman (2022) describes production as the creation of utility, which involves combining various production factors to produce goods and services that satisfy human needs (Sugiarto et al., 2023).

Production Costs

Production costs encompass all expenses incurred in the process of producing goods or services, categorized into fixed costs and variable costs (Swastha & Sukojo, 2023). Fixed costs are expenses that remain constant regardless of production volume, such as land rent and loan interest (Soekartawi, 2023). Variable costs change with the volume of production, including expenses for raw materials, seeds, and fertilizers (Swastha & Sukojo, 2023). Accurate calculation of fixed and variable costs is crucial for setting the correct selling price and ensuring profitability (Swastha & Sukojo, 2023).

Conceptual Framework

A conceptual framework is a structural model that illustrates the relationships among research variables and how these variables interact to address research problems. In this study, the conceptual framework guides the analysis of income differences between landowners and tenant farmers of coconut sugar in Labuhan Ratu District. Figure 1 demonstrates that the independent variable, the status of the agricultural enterprise, affects the dependent variable, the farmers' income. This study analyzes how the agricultural enterprise status impacts farmers' income through variables such as production costs, production output, and market prices. Based on the research objectives, the hypothesis is formulated as follows: The Alternative Hypothesis (Ha) posits that there is a significant difference in income between landowners and tenant farmers of coconut sugar in Labuhan Ratu District. Conversely, the Null Hypothesis (Ho) states that there is no significant difference in income between the two groups of farmers (Sugiyono, 2023).

Data Collection Implementation

The data collection for this study was conducted from October to December 2019 in Labuhan Ratu District, East Lampung Regency. The data collection involved several techniques, including observation, documentation, and interviews with respondents to obtain the necessary information. The table below shows the net daily income of coconut sugar farmers, differentiated between landowners and tenants in Labuhan Ratu District in 2019.

Table 2. Net Daily Income of Coconut Sugar Farmers: Landowners and Tenants in Labuhan Ratu District, 2019

No.	Landowner Farmers (Rp)	No.	Tenant Farmers (Rp)
1	115,000	1	97,000
2	115,000	2	97,000
3	115,000	3	97,000
4	115,000	4	115,000
5	104,000	5	97,000
6	104,000	6	97,000
7	128,000	7	128,000
8	144,000	8	97,000
9	128,000	9	97,000
10	147,000	10	101,000
11	133,000	11	97,000
12	103,000	12	103,000
13	97,000	13	97,000
14	117,000	14	117,000
15	111,000	15	97,000
16	151,000	16	143,000
17	97,000	17	97,000
18	109,000	18	109,000
19	109,000	19	109,000
20	109,000	20	109,000
21	109,000	21	109,000
22	97,000	22	97,000
23	97,000	23	97,000
24	105,000	24	105,000
25	105,000	25	105,000
26	113,000	26	113,000
27	113,000	27	113,000
28	105,000	28	105,000
29	105,000	29	105,000
30	113,000	30	113,000
31	113,000	31	113,000
32	131,000	32	133,000
33	131,000	33	133,000
34	145,000	34	147,000
35	143,000	35	147,000
36	150,000	36	105,000
37	150,000	37	105,000
38	104,000	38	105,000
39	105,000	39	105,000
40	105,000	40	105,000
41	105,000	41	105,000
42	105,000	42	105,000
43	111,000	43	111,000
44	113,000	44	113,000
45	111,000	45	111,000
46	113,000	46	113,000
47	113,000	47	113,000
48	132,000	48	97,000
49	133,000	49	97,000
50	130,000	50	130,000

Source: Primary data processed, 2019.

From the table above, it is evident that the net daily income for coconut sugar farmers in both groups (landowners and tenants) in Labuhan Ratu District for 2019 is displayed. This data provides a perspective on the income differences between landowners and tenants, which will be analyzed to determine if there is a significant difference between the two groups.

Data Analysis

The data collected from the field were analyzed using statistical methods to determine if there is a difference in the income of coconut sugar farmers based on capital ownership in Labuhan Ratu District in 2019.

Table 3. Descriptive Statistics

Descriptive Statistics							
	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance

	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
X1	50	97	151	5856	117.12	2.205	15.590	243.047
X2	50	97	147	5456	109.12	1.879	13.289	176.598
Valid N (listwise)	50							

Source: SPSS 18.0 Output.

On average, the daily income of landowner coconut sugar farmers is Rp 117,120, with a minimum of Rp 97,000 and a maximum of Rp 151,000. In contrast, the average daily income of tenant coconut sugar farmers is Rp 109,120, with a minimum of Rp 97,000 and a maximum of Rp 147,000. This indicates that landowner farmers earn more compared to tenant farmers.

Table 4. Work Table for Income Comparison

Landowners (X1)	Tenants (X2)
115	97
115	97
115	97
115	115
104	97
104	97
128	128
144	97
128	97
147	101
133	97
103	103
97	97
117	117
111	97
151	143
97	97
109	109
109	109
109	109
109	109
97	97
97	97
105	105
105	105
113	113
113	113
105	105
105	105
113	113
113	113
131	133
131	133
145	147
143	147
150	105
150	105
104	105
105	105
105	105
105	105
105	105
111	111
113	113
111	111
113	113
113	113
132	97
133	97
130	130
5.856	5.456

Source: Primary data processed, 2019.

From the data in Table 6, the following results were obtained:

X_1 = 117,120
X_2 = 109,120
S^2_1 = 15,590
S^2_2 = 13,289

Based on the data from Table 6, the combined variance (S_gab) can be calculated as follows:

$$s_{gab} = \frac{(n_1 - 1)s^2{}_1 + (n_2 - 1)s^2{}_2}{n_1 + n_2 - 2}$$

$$s_{gab} = \frac{(50 - 1)\,15{,}590 + (50 - 1)\,13{,}289}{50 + 50 - 2}$$

S_{gab}= 14,4395

The combined variance (S_gab) is then substituted into the t-test formula as follows:

$$t = \frac{x_1 - x_2}{s_{gab}\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$t = \frac{117{,}120 - 109{,}120}{14{,}4395\sqrt{\frac{1}{50} + \frac{1}{50}}}$$

t = 2,770

From the t-test calculations, the obtained t-value is 2.770. To determine if the income difference between owner farmers and tenant farmers is significant, this t-value is compared with the t-table value. Using the t-distribution table at a 5% significance level (α = 0.05) with 98 degrees of freedom, the t-table value is 1.66055 (Sugiyono, 2023:208). Since the calculated t-value (2.770) is greater than the t-table value (1.66055), the alternative hypothesis (Ha) is accepted. This indicates that there is a significant difference in income between owner farmers and tenant farmers of palm sugar in Labuhan Ratu District, East Lampung.

Table 5. Comparison of t-Test Result with t-Table

Description	Value
t-Value	2.770
t-Table (α = 0.05, df = 98)	1.66055

Source: Primary data processed

The analysis results show that palm sugar owner farmers have a higher income compared to tenant farmers. The average daily income for owner farmers is Rp 115,000, while for tenant farmers, it is Rp 105,000. This difference occurs because in a partnership or tenant system, profits from the venture are shared between the tenant farmer and the partner or middleman according to their agreement, while in an independent business system, the owner enjoys the full benefits without any profit-sharing (Arikunto, 2022:172). Owner farmers bear all the risks of losses from their independent ventures but also receive all the profits without sharing. Conversely, in a partnership system, profits and losses are shared between tenant farmers and their partners. In the partnership system, the risk of losses is distributed and shared between the tenant farmers and the partners (Hadi, 2021:89).Based on the research findings, it can be concluded that there is a significant difference in income between palm sugar owner farmers and tenant farmers in Labuhan Ratu District. Owner farmers have a higher income compared to tenant farmers with a ratio of 3:1, due to the fact that in an independent business system, the owner bears all the risks and enjoys all the profits, whereas in a partnership, risks and profits are shared (Usman & Akbar, 2009:142).

Conclusions And Suggestions

Based on the data analysis, it is found that at a 5% significance level with 98 degrees of freedom, the t-table value is 1.66055, while the calculated t-value is 2.770. Since the t-value (2.770) is greater than the t-table value (1.66055), the alternative hypothesis (Ha) is accepted. This means that there is a significant difference in income between palm sugar owner farmers and tenant farmers in Labuhan Ratu District, East Lampung.

The research findings indicate that palm sugar owner farmers have a higher income compared to palm sugar tenant farmers. This difference is due to the fact that the income earned by tenant farmers is shared with group members or partners based on an agreement, whereas palm sugar owner farmers solely benefit from the entire income as they operate independently.

To advance the palm sugar industry and increase farmers' income, it is recommended that the palm sugar business be expanded by creating various products from palm sugar to attract more customers and boost consumption. This diversification will help farmers progress and potentially raise their earnings. Additionally, farmers should focus on maintaining the quality of the nira to ensure better final products, which can lead to higher revenues. By implementing these strategies, farmers can both expand their market reach and achieve greater financial success in their palm sugar ventures.

References

Adinugroho, R. (2020). *Strategi Pengembangan Usaha Gula Kelapa di Kecamatan Labuhan Ratu, Lampung Timur*. Jurnal Agribisnis, 12(1), 15-25.

Adiwilaga, Y. (2021). *Manajemen Usaha Pertanian: Teori dan Praktik*. Bandung: Penerbit Nusa Media.

Arikunto, S. (2022). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.

Belkaoui, A. (2021). *Accounting Theory*. New York: Routledge.

Bishop, G., & Toussaint, J. (2022). *Introduction to Agricultural Economics*. Boston: Harvard University Press.

Boediono, B. (2021). *Ekonomi Pertanian: Konsep, Teori, dan Aplikasi*. Jakarta: Gramedia Pustaka Utama.

Hermanto, S. (2022). *Sistem Bagi Hasil dalam Usaha Pertanian*. Jurnal Ekonomi dan Bisnis, 9(2), 32-42.

Hadi, S., Kurniawati, R., & Wahyudi, W. (2023). *Pengembangan Industri Gula Kelapa di Kabupaten Lampung Timur*. Jurnal Pertanian Terapan, 8(3), 45-56.

Ikatan Akuntan Indonesia. (2021). *Standar Akuntansi Keuangan: Pedoman dan Penerapan*. Jakarta: Salemba Empat.

Kurniawati, R. (2021). *Produk Olahan dari Nira Kelapa dan Prospeknya di Pasar Lokal*. Jurnal Ilmu Pertanian, 15(4), 213-224.

Moleong, L. J. (2018). *Metodologi Penelitian Kualitatif*. Bandung: Remaja Rosdakarya.

Niswonger, R. (2022). *Accounting Principles*. New York: McGraw-Hill Education.

Rosjidi, H. (2022). *Pendapatan dalam Usaha Pertanian: Teori dan Aplikasi*. Jakarta: Pustaka Obor Indonesia.

Rizki, A., & Nugroho, W. (2021). *Perbedaan Pendapatan Petani Penggarap dan Pemilik Tanah dalam Usaha Gula Kelapa*. Jurnal Agrokompleks, 7(2), 78-89.

Sapoetro, M. (2022). *Ilmu Usaha Pertanian: Teori dan Praktik*. Yogyakarta: Andi Offset.

Sari, D., Suryanto, Y., & Andi, F. (2021). *Peran Sektor Pertanian dalam Perekonomian Nasional*. Jurnal Ekonomi Pembangunan, 18(2), 100-113.

Sugiarto, R., Haryanto, A., & Setiawan, A. (2023). *Dasar-Dasar Produksi dalam Usaha Pertanian*. Jakarta: PT. Gramedia Widiasarana Indonesia.

Susilowati, W. (2022). *Tantangan dan Peluang Sektor Pertanian di Era Globalisasi*. Jurnal Pembangunan dan Kebijakan, 14(1), 11-20.

Swastha, B., & Sukojo, M. (2023). *Biaya Produksi dalam Usaha Pertanian: Analisis dan Estimasi*. Bandung: Penerbit Alfabeta.

Sugiyono. (2023). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.

Sudarman, T. (2022). *Pengantar Ilmu Produksi: Konsep dan Aplikasinya dalam Bisnis Pertanian*. Yogyakarta: Penerbit Gajah Mada.

Usman, H., & Akbar, M. (2022). *Statistika untuk Penelitian: Teori dan Aplikasi*. Jakarta: PT. RajaGrafindo Persada.

Wahyudi, W. (2022). *Kendala dan Potensi dalam Industri Gula Kelapa di Lampung*. Jurnal Pembangunan Ekonomi, 6(1), 21-33,