Internasional Journal of Economic, Agribisnis and Development Studies
Vol, 1,No.1 Januari 2024
ISSN: 3046-6482

ANALYSIS OF ROBUSTA COFFEE FARMING AND ITS CONTRIBUTION TO HOUSEHOLD INCOME OF ROBUSTA COFFEE FARMERS IN SILIMA PUNGGAPUNGGA SUB-DISTRICT, DAIRI DISTRICT

[1]Arry Wihardi Pratama, [2]Bambang Hermanto

[1,2]Program Studi Agribisnis, Universitas Islam Sumatera Utara

e-mail: arrywihardipratama@gmail.com

Correspondent author: trimartial@gmail.com

ABSTRACT

Silima Pungga Pungga Subdistrict is the center of robusta coffee production in Dairi Regency, but the existence of robusta coffee production centers is threatened because farmers choose to convert robusta coffee farms into horticultural crops, the thing that causes conversion of agricultural land comes from the low production of robusta coffee farming and cannot meet Robusta coffee farmer household expenditure. The study was conducted in the District of Silima Pungga Pungga with 30 samples of robusta coffee farmers, the research was conducted using descriptive analysis and multiple linear regression. The results of the study found that robusta coffee farming contributed only 25% of the total household expenditure of farmers which ultimately made Robusta coffee farmers convert their coffee land to be used as horticultural agricultural land. productive age and low maintenance such as fertilizer application and others..

Keywords*: Farming, robusta coffee, contribution, household expenditure.*

1. PENDAHULUAN

Dairi Regency is one of the regencies in North Sumatra which is a highland area and is a regency that is the center of coffee production in North Sumatra. (Utara, 2016) . Robusta coffee is one of the types of coffee cultivated in Dairi Regency, the following is data on the area of robusta coffee plants / sub-district in Dairi Regency.

No.	District	Plant area			
		T.B.M	T.M	T.T.M	Total
1.	Sidikalang	-	-	-	-
2.	Sitinjo	-	-	-	-
3.	Berampu	-	51,10	34,07	85,17
4.	Parbuluan	-	-	-	-
5.	Sumbul	-	221,00	34,07	255,07
6.	Silihasibungan	-	-	-	-
7.	Silimapunggapungga	-	740,00	790,00	1.539,00
8.	Laeparira	-	468,00	553,61	1.021,61
9.	Siempatnempu	-	681,00	630,26	1.311,26
10.	Siempatnempuhulu	-	554,00	638,78	1.192,78
11.	Siempatnempuhilir	-	291,00	278,50	569,50
12.	Tigalingga	-	292,00	279,06	571,06
13.	Gunungstember	-	639,00	400,00	1.039,00
14.	Pegaganhilir	-	656,00	195,89	851,89
15.	Tanah pinem	-	-	-	-
	Total	0	4.593,10	3.834,22	8.427,32

Source: (Utara, 2016)

From the data above it can be concluded that Dairi Regency has a total area of 8,427.32 hectares of robusta coffee and has 4,593.10 hectares of producing plants, Silima Punggapungga District is one of the sub-districts that has the largest total area of robusta coffee plants with a total rubusta coffee plant area of 1,530.00 hectares and a producing plant area of 740 hectares from this data Silima Punggapungga sub-district is a rubusta coffee center in Dairi Regency. (Provinsi Sumatera Utara, 2022).

Robusta Coffee farming in Silima Punggapungga Sub-district is inseparable from existing problems. These problems are factors that limit and factors that hinder Robusta Coffee farming. 6 Limiting factors consist of several physical factors that are not in accordance with the growing requirements of Robusta Coffee plants. (Wijaya, 2017). Physical factors include topography, climate, and soil conditions. Limiting factors will affect the growth and development of Robusta Coffee plants. The inhibiting factors consist of several non-physical barriers in the management of Robusta Coffee farming.(SOCIAL, 2014) Non-physical factors include capital, labor, transportation and communication, agricultural extension, technology, and agricultural land area. These limiting factors and inhibiting factors will affect the productivity of Robusta Coffee in the sub-district. (Hariyati, 2014).

From the data above it can be concluded that Dairi Regency has a total area of 8,427.32 hectares of robusta coffee and has 4,593.10 hectares of producing plants, Silima Punggapungga Sub-district is one of the sub-districts that has the largest total area of robusta coffee plants with a total rubusta coffee plant area of 1,530.00 hectares and a producing plant area of 740 hectares from this data Silima Punggapungga sub- district is a rubusta coffee center in Dairi Regency.

Farming is a science that studies how to allocate resources owned by farmers to run effectively and efficiently and utilize these resources in order to obtain the highest profit. (Gofar et al., 2022) . Robusta Coffee farming in Silima Punggapungga Sub- district is inseparable from existing problems. These problems are factors that limit and factors that hinder Robusta Coffee farming. 6 Limiting factors consist of several physical factors that are not in accordance with the growing requirements of Robusta Coffee plants. Physical factors include topography, climate, and soil conditions. Limiting factors will affect the growth and development of Robusta Coffee plants. The inhibiting factors consist of several non-physical obstacles in the management of Robusta Coffee farming. Non-physical factors include capital, labor, transportation and communication, agricultural extension, technology, and farm size. These limiting factors and inhibiting factors will affect the productivity of Robusta Coffee in the sub- district.

Robusta coffee farming in SilimaPungga-pungga Subdistrict is experiencing problems with the decreasing area of robusta coffee farming land caused by the conversion of robusta coffee plantations into horticultural crops such as corn and others. This is caused by the low production of robusta coffee caused by the age of coffee plants that have passed their productive age, lack of maintenance, fertilizer application, pesticide application so that production is not optimal. (Septiani & Kawuryan, 2021). Robusta coffee farmers still maintain robusta coffee inherited from parents and use traditional farming systems and the reason farmers still maintain their parents' inherited coffee plantations is because farmers do not have the funds to replant robusta coffee plants with seeds that have high productivity (Septiani & Kawuryan, 2021). Robusta

coffee farmers assume that coffee production cannot meet the farmer's household expenses, which causes farmers to convert their coffee land into horticultural crops. Farmer household income is very important for the survival of farmers ranging from kitchen needs, electricity, water, school fees, daily needs, to traditional events, if the results of robusta coffee farming do not contribute to farmer household income, then robusta coffee farming is threatened with conversion to horticultural crops.

Therefore, researchers are interested in conducting research on "Analysis of Farming Contribution to Household Income of Robusta Coffee Farmers in Silima Pungga Pungga District, Dairi Regency".

2. METODE PENELITIAN

The data collected in this research is primary data. The type of research that will be used in this research is qualitative research, the determination of the research area is determined intentionally (purposive), namely in the District in Silima Punggapungga District, Dairi Regency. On the grounds that it is in accordance with the characteristics of the research, then it is a robusta coffee production setral in Dairi Regency. The sample determination was carried out by means of Sample Random, namely each village selected 10 people randomly to represent the sample population, so that the authors used 30 samples in this study. The data analysis technique used in this research is descriptive analysis technique is to determine the percentage contribution of robusta coffee farming to household income can be calculated using the formula:
P=Pi/Pt X 100%.....

3. HASIL DAN PEMBAHASAN

Robusta Coffee Farmer Revenue

Robusta coffee farmers' income is the income received for 1 year and in 1 year there are different harvest intervals so that to measure crop yields, units of years are used to get accurate results. (Pratama et al., 2015), The length of the coffee selling process is due to additional treatment to be carried out before selling the coffee, the additional treatment is by drying the coffee to remove the water content contained therein. This process takes 4-7 days until the coffee is ready for sale, Robusta coffee farming revenue is obtained from the calculation of the selling price multiplied by the amount of production. (Mirah et al., 2022), The following is the formula for calculating robusta coffee farm receipts:

Description	Robusta coffee farmer
Produktion (Kg)	490.7
Price (Rp)	20.000
Revenue/years	**9.813.333**

From the results of the above calculations, it can be seen that the results of robusta coffee farming income from production, namely the average coffee production of 490.7kg with a selling price of Rp. 20,000 / kg, the revenue obtained is Rp. 9,813,333 / year. Robusta coffee farm receipts are small in a year this is due to the small production of robusta coffee in Silama Pungga Pungga Subdistrict and according to farmers the price given for each kilogram is also fairly low and not

comparable to the expenses they have to incur to carry out robusta coffee farming activities, the farm receipts they receive have not been deducted by spending on fertilizer, pesticide application, and labor (maintenance and harvest). So that farmers reduce farm expenses by reducing the provision of fertilizers, pesticides, and the use of labor. This is why many robusta coffee farmers convert coffee plantations into horticultural crops. (Selfiani & Nurlianti, 2021) (Saenab et al., 2018) to increase farmers' income and help household expenses of robusta coffee farmers.

Farmer Household Income

Household income of robusta coffee farmers in Silima Pungga-pungga District in order to meet daily needs, farmer household income can be measured from farmer household expenses, farmer household expenses are costs incurred by households for daily needs in order to meet daily life, household expenses are usually used to buy kitchen utensils, household expenses such as electricity, water, celebration events, pocket money for school children and others.

Household expenditures affect lifestyle and consumptive patterns, with high expenditures of robusta coffee farmers and fairly low income from farm receipts so that robusta coffee farmers in Silima Pungga-pungga District look for other alternatives to help meet household expenses.

Contribution of Robusta Coffee Farming to Farmer Household Income

Robusta coffee farming in Silima Punggapungga sub-district is still one of the main livelihoods to support the households of coffee farmers, but robusta coffee production is not optimal, many factors affect the non-optimal production of coffee, namely the age of the plant that has passed the productive period and the low maintenance treatment of coffee plants. (Paloma et al., 2020) such as rarely giving fertilizer etc. So that many farmers began to convert their coffee land to be used as horticultural crops such as corn and others, farmers chose to convert their coffee plantations because they wanted to get a higher income to meet the household expenses of coffee farmers. Robusta coffee farming income has a very small contribution to the household expenses of farmers in the Silima Pungga Pungga sub-district..

The average income of robusta coffee farming is Rp. 7,201,883 and the average household income of farmers is Rp. 25,840. 000 means that the income from robusta coffee farming is only 28% of its contribution to household income, this is what causes robusta coffee farmers to convert a lot of agricultural land from coffee plants to horticultural crops to cover farmer household expenses, with the low contribution also causing farmers to be reluctant to take care of their coffee to eventually worsen coffee production, because farmers think that with the results of production that is not able to cover the costs of coffee production, such as doing maintenance, fertilizing, applying pesticides and farmers only occasionally do maintenance if it is really needed. The use of labor for the coffee farming process is also suppressed to minimize the cost of coffee farming.

The small contribution of robusta coffee farming has also made farmers start looking for additional income by becoming laborers and self-employed. (Andari et al., 2018), to meet household expenses. One of the reasons for the low coffee production is that the seeds used are breeding seeds that have been inherited from farmers' parents for generations, even some farmers also still use the same trees as the trees cultivated by their parents in the past, which means that the age of the trees has passed its productive limit, so that robusta coffee production in SilimaPungga-pungga District is very small.

CONCLUSIONS

results and discussion carried out in the field, it can be concluded:

1. Robusta coffee farming in Silima Pungga Pungga District uses urea type fertilizer with an average cost / year of Rp 191,200, gromoxone pesticide with an average cost / year of Rp 142,667, tool depreciation costs with an average cost / year of Rp 95,967, labor with an average cost / year of Rp 2,181,667, of all expenses incurred by farmers during the farming process in an average year of Rp 2,611,501. 2.
2. The average income of robusta coffee farmers during their farming in one year is the average revenue of Rp 9,813,333 minus the production costs of Rp 2,611,501, so that

the average robusta coffee farming income per year is Rp 7,201,833.

3. The average income of robusta coffee farming is Rp. 7,201,833 and the average household expenditure is Rp. 25,840,000, meaning that the income from robusta coffee farming only contributes 28% to household expenditure.

LITERATURE

Andari, I., Suriadi, A., & Harahap, R. H. (2018). Analisis Perubahan Orientasi Mata Pencaharian dan Nilai Sosial Masyarakat Pasca Alih Fungsi Lahan Persawahan Menjadi Lahan Industri. *Anthropos: Jurnal Antropologi Sosial Dan Budaya (Journal of Social and Cultural Anthropology)*, *4*(1), 1. https://doi.org/10.24114/antro.v4i1.9968

Gofar, Y. Al, Pratiwi, B. A., & Darmi, T. (2022). Peningkatan Kualitas Sumber Daya Manusia Untuk Pemanfaatan Sumber Daya Alam Desa Kota Baru Santan. *Jurnal Ilmiah Mahasiswa Kuliah Kerja Nyata (JIMAKUKERTA)*, *2*(2), 292–297. https://doi.org/10.36085/jimakukerta.v2i2.3075

Hariyati, Y. (2014). PENGEMBANGAN PRODUK OLAHAN KOPI DI DESA SIDOMULYO KECAMATAN SILO KABUPATEN JEMBER. *Agriekonomika*, *3*(1), 81–91.

Mirah, V., Maweikere, A., & Benu, O. (2022). Analisis Keuntungan Usaha Industri Rumah Tangga Kopi Robusta Bubuk Biji Merah di Desa Liberia Timur, Kecamatan Modayag, Kabupaten Bolaang Mongondow Timur. *Agrigud*, *3*(4), 459–468.

Paloma, C., Yusmarni, Y., Utami, A. S., & Hasnah, H. (2020). Pengaruh Aksesibilitas Pembiayaan Terhadap Pendapatan Petani Kopi Di Lembah Gumanti, Kabupaten Solok. *Jurnal AGRISEP: Kajian Masalah Sosial Ekonomi Pertanian Dan Agribisnis*, *19*(2), 301–314. https://doi.org/10.31186/jagrisep.19.2.301-314

Pratama, Y. Y., Ismono, R. H., & Prasmatiwi, F. E. (2015). Manfat Ekonomi dan Risiko Tunda Jual Kopi Di Desa Tanjung Rejo Kecamatan Pulau Panggungan Kabupaten Tanggamus. *Jurnal Ilmu-Ilmu Agribisnis*, *3*(3), 268–276.

Provinsi Sumatera Utara, B. (2022). *Luas Tanaman dan Produksi Kopi Arabica Tanaman Perkebunan Rakyat menurut Kabupaten/Kota*.

Saenab, S., Nurliani, N., & Rosada, I. (2018). Analisis Finansial Konversi Tanaman Tahunan Menjadi Tanaman Hortikultura. *Wiratani: Jurnal Ilmiah Agribisnis*, *1*(2), 12–23. https://doi.org/10.33096/wiratani.v1i2.17

Selfiani, S., & Nurlianti. (2021). Dampak Perekonomian terhadap Alih Fungsi Lahan Tanaman Kopi ke Tanaman Tomat dalam Peningkatan Kesejahteraan Masyarakat di Desa Potokullin. *Ad-Dariyah: Jurnal Dialektika, Sosial Dan Budaya*, *2*(1), 11–24. https://doi.org/10.55623/ad.v2i1.55

Septiani, B. A., & Kawuryan, I. S. S. (2021). Analisa Penyebab Turunnya Produksi Kopi Robusta Kabupaten Temanggung. *EKUITAS (Jurnal Ekonomi Dan Keuangan)*, *5*(3). https://doi.org/10.24034/j25485024.y2021.v5.i3.4612

SOCIAL, M. D. S. Y. P. (2014). PEMETAAN POTENSI DAN PERMASALAHAN PENGEMBANGAN KOPI ARABIKA TORAJA. In *Applied Microbiology and Biotechnology*.

Utara, B. P. S. P. S. (2016). *Sumatera Utara dalam Angka*.

Wijaya, M. I. (2017). Usahatani Kopi robusta di Kecamatan Candiroto Kabupaten Temanggung (studi kasus Desa Gunungpayung dan Desa Sidoharjo). *Angewandte Chemie International Edition, 6(11), 951–952.*, *Mi*, 5–24.