SriJAB*: Sriwijaya Journal of Agribusiness and Biometrics in Agriculture Research*

Vol. 01 No. 1, 2021.
Page: 51-60

Articel History:
Submitted: April 6rd, 2021
Accepted: Sept, 5rd, 2021

Maya Riantini*, Ktut Murniati, Yunita Munisara
Department of Agribusiness, Faculty of Agriculture, Universitas Lampung, Jl. Prof. Dr. Soemantri Brodjonegoro, No. 1, Bandar Lampung, Lampung, Indonesia, 35145

*) *Correspondence email*: mayaunilah@gmail.com

Corn Farmer Income Analysis in the Penengahan District of South Lampung Regency

ABSTRACT

Corn is one of the crops that, after rice, provides the second most carbs. Corn is utilized for livestock and the processed food sector in addition to food. The purpose of this study is to look at the income of maize producers in Penengahan District, South Lampung Regency's. At the locations of Sukabaru Village and Kelaten Village, Penengahan District, South Lampung Regency, this study used a survey method with a direct interview using questionnaires. A basic random sampling strategy was used in this study, which included 51 corn producers. The average household income of maize farmers in Penengahan District is IDR 40692322,08 per year, according to the findings. Corn farmers' household income in accumulation from corn on farm income was IDR 32634674,96 per year, off farm income was IDR 5872941,24 per year, and non farm income was IDR 2396470,44 per year.

Keywords: *Corn, Income, & Household Income.*

INTRODUCTION

The agricultural sector in Indonesia plays a critical role in the development of economic prosperity and farmer welfare. Farmers' economic progress and well-being are determined by their amount of revenue and profits generated by the agriculture sector. The agriculture sector plays a crucial part in the framework of a country's economic development. When it comes to the welfare of farmers and their contribution to national income, Indonesia's development journey has not yielded

the best results to date. This is because this is a sector that receives little attention from the government in terms of national development. (Soekartawi, 2011)

In September 2017, the number of persons living in poverty in Lampung Province totaled 1083,74 thousand, with 211,82 thousand in urban areas and 871,77 thousand in rural regions. (Badan Pusat Statistik Lampung, 2017) Rural areas have the highest poverty rate of the people when compared to urban areas. The lack of supporting infrastructure, as well as residents' limited access to transformation, health, and education services and infrastructure, contribute to the significant population of poor people in the countryside. (Haryanto, 2012)

Every year, the widespread development of maize harvest in Indonesia increases, which is followed by higher corn production and productivity. According to Indonesia's Ministry of Agriculture (2018), the corn harvest area in 2014 was 3837019 hectares, with a yield of 19008426 tons, which thereafter rose till 2018. Out of Indonesia's five central production areas, Lampung Province is the third greatest corn producer. Corn production in this province totals 2581224 tons, with a productivity rate of 53,08 tons per hectare.

Lampung has the potential to become one of Indonesia's largest corn-growing regions. From the standpoint of productivity, this province's corn producing potential is obvious. Lampung Province, behind Central Java and South Sulawesi, has the third highest corn productivity rate in Indonesia. The amount of productivity level demonstrates the area's ability to produce corn commodities. In Lampung Province, there are three areas where corn is grown: East Lampung Regency, South Lampung Regency, and Central Lampung Regency (Badan Pusat Statistik Lampung, 2018).

Corn is one of the crops that, after rice, provides the second most carbs. Corn is utilized in animal feed and the processed food industry in addition to food. Corn has a high nutritional value, is grown in many parts of Indonesia, is relatively inexpensive, and has readily available technology from cultivation to processing. (Surapto & Marzuki, 2019) Every year, the industry's demand for corn continues to rise dramatically. (Zubachtirodin *et al*., 2017) With the fulfillment of corn demand, corn farmers' and producers' incomes are predicted to rise. Suratiyah (2018) claims

that the amount of revenue is influenced by a number of complicated elements, including both internal and external influences. Internal influences include age, education, and the amount of land owned by farmers. The availability of production facilities and prices are external considerations.

Farmers' farming efforts are anticipated to boost their revenue, allowing them to meet their daily necessities. According to the explanation above, corn farmers' income is determined by their age, degree of education, and the amount of land they own. As evidenced by the money generated from corn farmers in the District of South Lampung Regency, research on corn farmers is required.

RESEARCH METHODS

The research was conducted in the villages of Kelaten and Suka Baru in Penengahan District, South Lampung Regency. South Lampung Regency is the highest corn production in Lampung Province, hence the location of the research was chosen purposively. The sub-district was chosen as the research location with this in mind.

This study used a basic random sampling strategy for sampling. The total number of corn growers in both locations is 1035. There are 577 farmers from Kelaten Village and 458 farmers from Sukabaru Village, according to the information. Table 8 provides information on the number of farmers each village in the Penengahan District of South Lampung Regency. The quantity of samples is proportionally determined by the formula Issac & Michael (2013) based on the number of corn farmers in the population. The number of samples of 51 respondents corn farmers were obtained using the Isaac and Michael equations, with a breakdown of the number of respondents determined from each region and proposed allocation, resulting in the number of samples obtained in each of the 28 respondents in Kelaten village and 23 respondents in Sukabaru village.

The household income analysis is obtained by adding the family income from farming (on farm), non-farm (off farm), and non-farm income, using the formula below. (Soekartawi, 2015).

P_{rt} = P on-farm$_{\text{corn farming}}$ + P off-farm + P non-farm ..... (3)

The Soekartawi formula is used to calculate the difference between the revenue collected from the farm and the production costs expended in one year:

π = Y. Py - ∑Xi. Pxi – BTT ..... (4)

The use of ratios or comparisons between revenue and cost ratios can be used to determine if farming is profitable or not. It can be expressed mathematically as follows:

R/C = PT / BT ..... (5)

The following are the conditions for making a decision:

a. If R/C > 1, the farm is profitable because the revenue exceeds the cost.
b. If R/C < 1, the farm will lose money since the revenue will be less than the costs of
c. If R/C = 1, the farm is profitable because the revenue exceeds the cost.

RESULTS AND DISCUSSION

Sukabaru and Kelaten Villages' Situations in General

Sukabaru Village and Klaten Village are two villages in Penengahan District, South Lampung Regency that have been designated as research sample villages. Sukabaru Village has a population of 2739 individuals (7,27 percent), with males accounting for 1441 (52,61 percent) and females accounting for 1298 (47,39 percent). Sukabaru Village has 913 houses, with the majority of residents working as farmers. Sukabaru village has 600 km2 in size. Sukabaru Village is 5,5 kilometers from the seat of Penengahan District, and 17,5 kilometers from the capital of South Lampung Regency.

Kelaten Village has a population of 2891 individuals (7,67 percent), with males accounting for 1477 (51,01 percent) and females accounting for 1414 (48,91 percent). Sukabaru Village has 900 houses, with the majority of residents working as farmers. The settlement of Klaten covers an area of 7,50 hectares. Kelaten Village is 0,5 km from the capital of Penengahan District, and 12,5 km from the capital of South Lampung Regency.

In this study, 51 corn growers were recruited from two villages: Sukabaru and Kelaten. According to the study's findings, corn farmers' average age ranges from 15 to 64 years, implying that corn farmers in the study area are of economically productive age. A person who is of productive age will have the desire, enthusiasm, and hard work to expand his business. He will also have a positive outlook on life and foresight (Mantra, 2014). Based on a study of corn farming income, which was calculated by dividing total revenue by total cost of corn growing. The cost of farming is the amount of expenditure employed in corn farming, whereas the receipt of corn farming is the result of multiplying the amount of corn produced by the selling price of corn stated in rupiah.

Corn farmers' average revenue from corn farming in the first and second growing seasons with an average land area of 1,26 ha is IDR 13607085,75 and IDR 12947281,82, respectively, or IDR 10799274,41 and IDR 10275620,49 if made in the form of 1 ha. If one ha of land is determined based on the number of corn farmers and the area of land used, the average land area is 1,26 ha, while one ha of analysis findings can be computed to get a little quantity of analysis results per hectare. Corn cultivation is profitable and worthwhile in the Penengahan District. R/C, both the R/C value of currency and the R/C costs for the entire cost, show this. In the first growing season, the R/C value of cash costs was 3,23, which implies that every IDR 1000000,00 cost incurred by farmers in running corn farming will generate IDR 3230000,00 in income, resulting in a profit of IDR 2230000,00 from cash costs. IDR 1000000,00 for the full cost incurred by farmers in corn cultivation produced IDR 2490000,00.

For farming planting season 2, the R/C value of cash costs is 3,72, which implies that every IDR 1000000,00 in costs invested by farmers in running corn farming will generate IDR 3720000,00 in revenues, resulting in a profit of IDR 2720000.00 For the R/C value of the whole cost acquired by 2,89 for IDR 1000000,00 is generated for the overall cost suffered by farmers in maize cultivation. Corn farmers obtain farm revenue from a variety of non-maize

commodities, including rice, bananas, cassava, vegetables, and animals, in addition to corn cultivation (on farm).

Table 1. Average income distribution of non-farm corn growers

Business Type	income (Rp)	Persentase (%)
Rice	2.391.176,47	77,04
Banana	85.294,12	2,75
Casava	23.529,41	0,76
Vegetables	359.803,92	11,59
Farm	244.117,65	7,86
Sum	3.103.921,57	100,00

Source : Primary data analysis, 2021

Rice commodities, which are widely cultivated by corn farmers, are the source of income for farmers other than corn, with a percentage of 77,04 percent. The average income of farmers from farming outside corn is IDR 3103921,57, with banana farming accounting for 2,75 percent, cassava for 0,76 percent, vegetables for 11,59 percent, and livestock for 7,86 percent.

The majority of corn farmers' off-farm revenue comes from agricultural labor activities, with an average income of IDR 395294,12 and a percentage of 14,78 percent, and income from tractor tenants, with an average income of IDR 94117,65 and a percentage of 3,52 percent. The average income from motorcycle taxi drivers and construction employees was IDR 317647,06 and IDR 88235,29, respectively, with a percentage of 25,08 percent and 3,30 percent, with a proportion of 11,88 percent, income from employee activities was IDR 352941,18. With a proportion of 23,32 percent, income from trading activities was IDR 670588,24. With a proportion of 13,20 percent, income from civil servant activities was IDR 623529,41. as well as IDR 131764,71 in revenue from transportation business activities, representing a 4,93 percent increase.

Corn farmers earn an average of IDR 40692322,08 per year in their households. With an average revenue of IDR 32634674,96 and a ratio of 80,20 percent, farmers' sources of income from on farm activities contribute the most. Non-farm farming and non-farm revenue was IDR 489411,76 and IDR 2184705,88, respectively, representing 1,23 percent and 5,47 percent of total income. This is due

to the fact that not all farmers earn money from sources other than maize planting and agriculture. According to Sugesti *et al*. (2015), 87,54 percent of Sukabaru rice farmers' total revenue comes from on-farm income, 0,91 percent from off-farm income, and 11,55 percent from income outside the agricultural sector.

Table 2. Corn Farmers' Average Off-Farm and Non-Farm Income

	Activities	income (Rp/month)	percentage (%)
1.	Off-farm income		
	Farm laborers	395.294,12	14,78
	Tractor tenants	94.117,65	3,57
2.	Non-farm income		
	Ojek on motorcycles	317.647,06	25,08
	Building Workers	88.235,29	3,30
	Employee	352.941,18	11,88
	Trader	670.588,24	23,32
	Civil Servants	623.529,41	13,20
	Transportation business	131.764,71	4,93
	Sum	2.674.117,65	100.00

Source : Primary data analysis, 2021

The majority of corn farmers' off-farm revenue comes from agricultural labor activities, with an average income of IDR 395294,12 and a percentage of 14,78 percent, and income from tractor tenants, with an average income of IDR 94117,65 and a percentage of 3,57 percent. Because of the limited employment prospects outside of the farming sector, several farmers are unable to work part-time occupations in addition to their main profession of corn farming.

The little quantity of household income has an impact on family welfare since the higher a household's income is, the more requirements it can meet. Alternatively, the lower a household's income, the fewer requirements it must meet. Summing the three household incomes of corn farmers yields the total household income of farmers. Farm income from maize cultivation activities, agricultural income outside of cultivation activities, and non-agricultural farming income are the main sources of income for farmers' households.

Table 3. Corn farmers' average household income

Household Income Source	Income (Rp/year)	Percentage (%)
Agricultural income derived from farming activities (*On Farm)*	32.634.674,96	80,20
Agricultural income outside of activities Cultivation(Off Farm)	5.872.941,24	14,43
Non-agricultural income (*Non Farm)*	2.396.470,44	5,37
Sum	40.692.322,08	100.00

Source : Primary data analysis, 2021

The average household income of corn farmers was IDR 40692322,08 per year after the three sources of income were calculated. Farmers' revenue from on farm activities contributes the most, with an average income of IDR 32634674,96 and a percentage of 80,20 percent, indicating that corn cultivation activities continue to play a role in maize farmers' survival. Despite the rising migration of labor from the agricultural sector to other industries, farmers continue to rely on the agriculture sector as their primary source of income.

Sari *et al.* (2014) explain that the agricultural sector plays a major role in the absorption of labor as well as its contribution as a contributor to income, which is supported by the substantial contribution of the agricultural sector to total household income. Non-farm farming income was IDR 489411,76 and non-farm income was IDR 2184705,88 respectively, with percentages of 14,43 percent and 5,37 percent. This is due to the fact that not all farmers earn money from sources other than maize planting and agriculture. The findings of this study agree with those of Utami *et al.* (2016), who said that the average household income of corn farmers in Ketapang subdistrict is IDR 25095304,00 in on-farm activities, IDR 25023968,00 in off-farm activities, and IDR 19765726,00 in non-farm activities.

In comparison to other types of income, income from on-farm operations contributes the most. Due to the fact that it can demonstrate that, notwithstanding the migration of labor from the agricultural sector to other industries, farmers still rely on agriculture as their primary source of income. This demonstrates that the agricultural sector continues to play a key role in the rural economy, both in terms of labor implementation and income generation.

CONCLUSION

As a result of the investigation, the following conclusions have been reached: Corn growers in The Middle District earn an average of IDR 40692322,08 per year in their households. Corn farmers' household income accumulated from corn farming revenue (on farm) was IDR 32634674,96 per year (80,20 percent).

Due to the fact that it can demonstrate that, notwithstanding the migration of labor from the agricultural sector to other industries, farmers still rely on agriculture as their primary source of income. This demonstrates that the agricultural sector continues to play a key role in the rural economy, both in terms of labor implementation and income generation.

REFERENCES

Badan Pusat Statistik Lampung. (2018). *Provinsi Lampung Dalam Angka 2018*. (Lampung: Pemerintah Provinsi Lampung)

Badan Pusat Statistik Lampung. (2017). *Provinsi Lampung Dalam Angka 2017.* (Lampung: Pemerintah Provinsi Lampung)

Departemen Pertanian. (2018). *Program Peningkatan Produksi, Produktivitas dan Mutu Tanaman Pangan Untuk mencapai Sawsembada dan Sawsembada Berkelanjutan.* (Jakarta: Departemen Pertanian)

Haryanto, R. (2012). *Pengentasan Kemiskinan Melalui Pendekatan Wakaf Tunai*. Jurnal Al-Ilkam, 7(1): 178-200

Issac, S., & Michael, W. B. (2013). *Handbook in Research and Evaluation*. (San Diego, USA: Edits)

Mantra, I. M. (2014). *Filsafat Penelitian Dan Metode Penelitian Sosial.* (Yogyakarta: Pustaka Belajar)

Sari, D. K., Haryono, D., & Kasymir, E. (2014). Analisis Pendapatan dan Tingkat Kesejahteraan Rumah Tangga Petani Jagung di Kecamatan Natar, Kabupaten Lampung Selatan. *Jurnal Ilmu-Ilmu Agribisnis*, 2(3): 562-586.

Soekartawi. (2011). *Pengantar Agroindustri*. (Jakarta: Raja Grafindo Persada)

Soekartawi. (2015). *Analisis Usahatani*. (Jakarta: UI Press)

Sugesti, M. T., Abidin, Z. & Kalsum, U. (2015). Analisis Pendapatan dan Pengeluaran Rumah Tangga Petani Padi Desa Sukajawa Kecamatan Bumiratu Nuban Kabupaten Lampung Tengah. *Jurnal Ilmu-Ilmu Agribisnis*, 3(3): 251-259.

Suprapto, H. S., & Marzuki, R. (2019). *Bertanam Jagung*. (Jakarta: Penebar Swadaya)

Suratiyah, K. (2018). *Ilmu Usahatani*. (Jakarta: Penebar Swadaya)

Utami, P. P., Saputro, S. G., & Nikmatullah, D. (2016). Pendapatan dan Kesejahteraan Petani Jagung di Kecamatan Ketapang Kabupaten Lampung Selatan. *Prosiding Seminar Nasional* Pengembangan Sumber Daya Lokal untuk Mewujudkan Kemandirian Pangan. Purwokerto, 12 Maret 2016.

Zubachtirodin, M., Pabbage, S., & Subandi. (2017). *Wilayah Produksi dan Potensi Pengembangan Jagung. dalam Jagung:Teknik Produksi dan Pengembangan.* (Bogor: Pusat Penelitian dan Pengembangan Tanaman Pangan)