

Comparative Study of Farming Income from Large Chilies and Curly Chilies In Sheet District, West Lombok Regency

¹Yusmiati, ²Khairil Anwar, ³Baiq Santi Rengganis
^{1,2,3}Al-Azhar Islamic University, Lombok, Indonesia
yusmiati575@gmail.com

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ABSTRACT

One of the agricultural commodities that has high production potential is chili plants, chili is a type of agricultural commodity that has economic value and plays an important role in meeting the needs of the community. In West Lombok Regency, especially in East Mareje Village, Selamat District, the chili plants that are widely cultivated are large chili plants and chili pepper plants (*Capsicum annum* L). The two types of chili plants have price differences and high price fluctuations, due to differences in the use and availability of production of the two types of chili plants in the market. Therefore, research has been conducted which aims to determine the amount of income of large chili and chili farms, whether the income of large chili farms is higher than the income of chili farms, and whether the obstacles faced in the cultivation of large chili and chili peppers.

In this study, the research methods and techniques used are comparative methods and direct interview techniques based on a list of questions that have been provided. The sample of respondent farmers was taken using the proportional random sampling method, where 30 people were taken from the large chili plant farms and 30 people were taken from the curly chili farms so that the number of respondents was 60 people.

The results showed that the average income of large chili farms was IDR 5,309,000/LG or IDR 97,135,044/Ha, while the average income of curly chili farms was IDR 3,566,000/LG or IDR 70,542,331/Ha. The t-test results show that the equal variances are assumed obtained sign value. 0.00 is smaller than the significance value of the hypothesis test (0.05). This shows that H_0 is rejected or H_1 is accepted, which means that the average income of large chili farms is higher than curly chili.

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Corresponding Author:

Yusmiati
Al-Azhar Islamic University, Lombok, Indonesia
E-mail: yusmiati575@gmail.com

INTRODUCTION

Indonesia, as an agricultural country, has abundant natural resources, so that for a long time, many people have used farming or cultivation as a livelihood to meet their needs. Agriculture is an important pillar in the country's economy, especially in regions or areas that have high potential for agricultural production (Abidin, 2021).

The agricultural sector includes several sub-sectors, including the fisheries sub-sector, food crops sub-sector, livestock sub-sector and forestry sub-sector. One agricultural commodity that has high production potential in Indonesia is the chili plant. Chili plants are a type of commodity that has economic value and plays an important role in meeting the needs of farming families.

In West Nusa Tenggara, chili is a horticultural commodity that has been developed for quite a long time. This is because the NTB community is diverse in consuming food with relatively spicy spices compared to other communities in Indonesia. With the high demand for chilies, especially curly chilies and large chilies, this will encourage the development of farmers in cultivating chilies (NTB Agricultural Service, 2011).

Sheet District is one of the sub-districts in West Lombok Regency which has the potential to develop various types of farming, especially developing chili farming. On the other hand, sheet sub-district also has quite good rainfall so that chili plants can grow optimally and produce large yields.

METHOD

In this research, the method used is the comparative approach method. In the Big Indonesian Dictionary (KBBI), comparative is a comparison, where this method is used to compare or find similarities between two or more the same variables based on a certain framework of thought. This research was conducted in East Mareje Village heet District, West Lombok Regency, March-May 2024. The location for this research was chosen by purposive sampling. Taking into consideration, this village is one of the fairly large Chilean production centers in Sheet District, West Lombok Regency. The number of respondents was determined using proportional random sampling with a population of 258 respondents, so that 60 respondents were taken consisting of 30 large chili respondents and 30 curly chili respondents.

Data collection was carried out in three ways, namely Interviews are a way to collect data by asking questions according to a questionnaire that has been previously prepared for respondents, namely large chili farmers and curly chili farmers. A questionnaire is a data collection technique that is carried out by giving respondents a set of written questions to answer. Documentation is a method used to obtain data and information in the form of books, archives, documents, written numbers and images. Document study is a complement to the use of observation or interview methods.

In a comparative study of large chili farming with curly chili farming, there are several variables that will be measured. The following are the four variables that will be measured and the measurement method, namely Production costs, this variable calculates the costs incurred by farmers in producing and managing farming which consists of fixed costs and variable costs. Production, this variable calculates the production results obtained by farmers from running a farming business, which is calculated by multiplying the amount of production by the land area (Kg). Revenue, this variable calculates the total revenue obtained by multiplying the total production of the farm by the production price. Income, this variable calculates the results of farming income obtained from total income minus production costs.

RESULTS AND DISCUSSION

A. Average production costs for large chili and curly chili farming businesses

The production costs referred to in this research are the total costs incurred by farming businesses during the production process in curly chili farming and large chili farming. Production costs in curly chili and large chili farming are divided into two, namely fixed costs and variable costs. Variable costs consist of production facility costs and labor costs. Meanwhile, fixed costs consist of tool depreciation costs and equipment costs.

Table 1: Average Production Costs of Large Chili and Curly Chili Farming in East Mareje Village, sheet District, Year (2024)

| No | Fee Type | Big Chili | | Curly chili | |
|----|--------------------------|-----------|------------|-------------|------------|
| | | Per LG | Per Ha | Per LG | Per Ha |
| 1 | Variable Costs | | | | |
| | a. Production Facilities | 1,702,000 | 16,018,784 | 1,333.4 | 13,395,260 |
| | b. Labor | 704 | 6,949,950 | 750,000 | 7,901,351 |
| | Amount | 2,407,000 | 22,968,734 | 2,083.4 | 21,296,611 |
| 2 | Fixed cost | | | | |

| | | | | | |
|--------|----------------------|-----------|------------|-----------|------------|
| | a. Tool Depreciation | 1,895,000 | 34,791,783 | 1,793,000 | 18,112,848 |
| | b. Equipment Costs | 1,150,000 | 1,150,000 | 1,953,000 | 1,953,000 |
| Amount | | 3,045,000 | 34,792,933 | 3,746,000 | 18,114,801 |
| Total | | 5,452,000 | 57,761,667 | 5,829.4 | 39,411,412 |

Source: Processed Primary Data (2024)

From Table 1 it is shown that the average production costs incurred by large chili farms are IDR 5,454,000/LG or IDR 57,761,667/Ha. Keriting is IDR 5,829.4/LG or IDR 39,411,412/Ha. Meanwhile, curly chili farming is IDR 5,829.4/LG or IDR 39,411,412/Ha.

B. Average Production, Price, Revenue from Large Chili Farming and Curly Chili Farming.

The production referred to in this research is physical production in large chili farms and curly chili farms. The level of production influences the chili farming income obtained. This is in accordance with the opinion of Hadisapoetra, (1973), that farming income is determined by the amount of production value and the amount of production costs of a farm.

Table 2: Average Production, Price, Revenue from Large Chili and Curly Chili Farming in East Mareje Village, sheet District (2024)

| No | Description | Revenue (Rp/LG) | | Revenue (Rp/Ha) | |
|----|-----------------|-----------------|-------------|-----------------|-------------|
| | | Big Chili | Curly chili | Big Chili | Curly chili |
| 1 | Production (Kg) | 148 | 137 | 148 | 137 |
| 2 | Unit Price (Kg) | 65,000 | 55,000 | 65,000 | 55,000 |
| 3 | Revenue (Rp) | 9,620,000 | 7,535,000 | 175,165,608 | 147,149,210 |

Source: Processed Primary Data (2024)

In Table 2 it is presented that the average income for large chili farmers is IDR 9,620,000/LG or IDR 175,165,000/Ha. Meanwhile, the income of curly chili farmers is IDR 7,535,000/LG or IDR 147,149,210/Ha. There is a significant difference in production value caused by the area of land owned cultivated by each respondent.

C. Income from Large Chili Farming and Curly Chili Farming

The chili farming income referred to in this research is the difference between the production value and the production costs incurred by chili farming farmers.

Table 3: Large Chili and Curly Chili Farming Income in East Mareje Village, sheet District in 2024

| No | Description | Income (Rp/LG) | | Income (Rp/Ha) | |
|----|-----------------|----------------|-------------|----------------|-------------|
| | | Chilli Big | Curly chili | Chilli Big | Curly chili |
| 1 | Reception | 9,594,000 | 7,535,000 | 175,165,608 | 147,149,210 |
| 2 | Production cost | 4,285,000 | 3,969,000 | 78,030,564 | 76,606,879 |
| 3 | Income | 5,309,000 | 3,566,000 | 97,135,044 | 70,542,331 |

Source: Processed Primary Data (2024)

From Table 3, it is shown that the average income earned by large chili farmers is IDR 5,309,000/LG or IDR 97,135,044/Ha, while the income from curly chili farming is IDR 3,566,000/LG or IDR 70,542,331/Ha in Mareje Timur Village, sheet District. The differences that occur are due to the large production value produced and the amount of production costs incurred by each respondent.

D. Comparison of Large Chili Farming Income and Curly Chili Farming

There is a difference in the amount of income obtained by each large chili and curly chili farming as explained previously, and after comparative test analysis was carried out using the t-test.

Table 4: T Test Results (t-test)

| Independent Samples Test | | | | | | |
|--------------------------|-----------------------------|---|------|------------------------------|--------|-----------------|
| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | |
| | | F | Sig. | t | df | Sig. (2-tailed) |
| INCOME | Equal variances assumed | ,588 | ,446 | -11,801 | 58 | ,000 |
| | Equal variances not assumed | | | -11,801 | 57,462 | ,000 |

Source: Processed Primary Data, SPSS version 20

Based on the output of the t-test results above, in the Equal variances assumed section, a sign value is obtained. 0.00 is smaller than 0.05 (the significance value of the hypothesis test), then the decision taken is that Ho is rejected and H1 is accepted. This means that the average income from large chili farming is higher than the average income from curly chili farming, where the difference between the average income from large chili farming and curly chili in Mareje Timur Village, sheet District is IDR 2,014,000/LG or IDR 28,016,398/Ha.

E. Obstacles Faced by Curly Chili Farming and Large Chili Farming

Based on the results of interviews with respondents in curly chili farming and large chili farming, several obstacles were found, including capital and fertilizer constraints.

Table 5: Obstacles Faced by Farmers in Curly Chili Farming and Large Chili Farming in East Mareje Village, sheet District in 2024

| No | Obstacles | Big Chili | | Curly chili | |
|----|------------|-----------|----------------|-------------|----------------|
| | | Person | Percentage (%) | Person | Percentage (%) |
| 1 | Capital | 19 | 63.33 | 17 | 56.67 |
| 2 | Fertilizer | 11 | 36.67 | 13 | 43.33 |
| 3 | Amount | 30 | 100 | 30 | 100 |

Source: Processed Primary Data (2024)

Based on Table 5 above, it is known that the main obstacle faced by respondents in curly chili farming and large chili farming is lack of capital. The lack of capital in curly chili farming and large chili farming is caused by the absence of capital assistance, either in the form of direct assistance from the government, namely related to aid funds. fertilizer so that until now we still use our own capital. To overcome this problem, respondents obtained capital by borrowing from neighbors, close relatives (family) and selling family assets such as other valuables, because farming businesses had not been able to make bank and cooperative loans with loan interest rates still being too high, so the lack of capital had a direct impact. regarding aspects of the chili farming business, for example providing production facilities in the form of fertilizer, medicine and other facilities.

CONCLUSION

The income earned by large chili farmers in East Mareje Village, sheet District is IDR 5,309,000/LG or IDR 97,135,044/Ha. Meanwhile, the income of curly chili farmers is IDR 3,566,000/LG or IDR 70,542,331/Ha. Based on the results of the t-test at a real level of sign of 0.05 (5%), the significance value for equal variances was 0.000 (0%). Significance value > hypothesis value 0.05 (5%). Thus, the average income of large chili farmers and curly chili farmers is significantly different, where the income of large chili farmers is higher than the income of large chili farmers with an income difference of IDR 2,014,000/LG or IDR 28,016,398/Ha.

REFERENCES

Andayani, SA (2016). Factors Determining Red Chili Production. *Agribusiness Pulpit*, 1(3), 261-268.

- Alfansyur, A., & Mariyani, M. (2020). The art of managing data: The application of triangulation of techniques, sources and time to social education research. *Historical: Journal of Historical Education Studies, Research and Development*, 5(2), 146-150.
- AJIBUR, R. (2023). Implementation of the Social Network of the Shallot Farming Community in Ngali Village, Belo District, Bima Regency (Doctoral dissertation, Mataram University).
- Dantes, N. (2012). *Research Methods*, Yogyakarta; CV. Andi Offset.
- Istiyanti, E. (2010). Marketing efficiency of curly red chilies in Ngemplak District, Sleman Regency. *Mapeta*, 12(2).
- Jankelova, N., Masar, D., & Moricova, S. (2017). Risk factors in the agricultural sector. *Agricultural Economics (Zemědělská Ekonomika)*, 63(6), 247-258.
- Marr, A., Winkel, A., Van Asseldonk, M., Lensink, R., & Bulte, E. (2016). Adoption and impact of index-insurance and credit for smallholder farmers in developing countries: A systematic review. *Agricultural Finance Review*, 76(1), 94-118.
- Narbuko, C., & Achmadi, A. (2017). *Research Methodology* (Jakarta: Bumi Aksara, 2013), Cet. XIII, p, 70.
- Pangkey, MC (2016). Comparison of Income Levels of Coconut Farmers in South Minahasa Regency (Case Study in Ongkaw I Village and Tiniawangko Village, Sinonsayang District). *Efficiency Scientific Periodical Journal*, 16(2).
- Rengganis, BS (2016). Food Security of Dry Land Communities in West Lombok Regency. *UJMC (Unisda Journal of Mathematics and Computer Science)*, 2(1), 69-78.
- Rengganis, BS, Fitasari, BD, & Rahayu, SM (2023). Spatial Characteristics of Porang Development and Competitive Advantage in the Central Lombok Highlands. *Journal of Science Education Research*, 9(10), 9063-9070.
- Sadarudin, S., Anwar, K., & Rosadi, NA (2023). Prospects for Development of the Tofu Industry Business in Murbaya Village, Pringgarata District, Central Lombok Regency. *Primary Economic Journal*, 2(1), 19-27.
- Mansyur, M., Anwar, K., & Rosadi, NA (2023). Feasibility of Vanilla Farming (Intercrop) in Pringgarata District, Central Lombok Regency. *Journal of Primary Economics*, 2(3), 317-321.
- Suratiyah, K. (2015). *Agricultural Science (revised edition)*. Self-Help Group Spreader