JOURNAL OF SUSTAINABLE FINANCE AND DEVELOPMENT
Online ISSN: 3125-1293 Volume 1, Number 1, February 2026 Pp. 45 – 51

ANALYSIS OF VALUE ADDED AND BUSINESS SUSTAINABILITY OF TOFU AGROINDUSTRY AT VINA JAYA COMPANY JAKARTA

Tiaravelin Puteri Diana[1], I Wayan Budiasa[2†]
[1]Agribusiness Study Program, Faculty of Agriculture, Udayana University, Indonesia
[2]Master Program in Sustainable Finance and Development, Udayana University, Indonesia
[†]Email: wba.agr@unud.ac.id

(Received: December 16, 2025; Accepted: February 23, 2026; Published: June 5, 2026)
DOI: https://doi.org/10.24843/JSFD.2026.v01.i01.p04

ABSTRACT – The Vina Jaya Company has been operating for 32 years, in that period the company has faced several obstacles. including the fluctuating price of soybeans as the main raw material for making tofu and also the capital which is quite high resulting in low tofu production quantity and has an impact on the profit or income earned by the company is not optimal. Based on this, it is necessary to analyze the value added and the sustainability of the tofu agroindustry at Vina Jaya Company. The data in the study comes from primary and secondary data using the Hayami value-added analysis method. Based on the results of the study, it can be concluded that the value added obtained from the tofu agroindustry at Vina Jaya Company is IDR 21,073.89/Kg with 46.6% value-added ratio and categorized as high added value. The profit obtained by Vina Jaya Company is IDR 17,302.46/Kg and if calculated based on one production process, the profit generated is IDR 10,381,476.9. with the percentage of net profit obtained by the company which is 57.25%. Value-added analysis affects business sustainability, in the value-added analysis conducted at Vina Jaya Company produces business sustainability indicators including value-added ratios, labor shares, and profit which are included in the criteria to continue the business that will determine the sustainability of Vina Jaya Company. The acquisition of high added value also affects company profits which is one of the factors in creating business sustainability.

Keywords: agroindustry; Hayami method; sustainability; tofu; value added

1. INTRODUCTION

Indonesia is known as an agrarian country, which means that the majority of the population is involved in agriculture. Indonesia's agriculture is divided into plantation, livestock, fishery, forestry and food crops (Dewi & Yuliarmi, 2017). Food crops are one of the leading agricultural products. It consists of various types such as rice, corn, tubers, grains and others. Soy is one of the grain-based food crops. Soy is one of the Community's staple foods, rich in vegetable fat and protein (Setyawan & Huda, 2022). Soybeans can be processed into various preparations including tempeh, taoco, oncom, tofu, etc.

The most common form of processed soy that is available on the market is tofu. Tofu is one of the most popular staple foods in Indonesia, consumed by everyone from children to the elderly (Nurfadillah et al., 2020). The general public, especially in Indonesia, use tofu as a source of plant-based protein because it is cheaper and can be used as an alternative to protein from meat and chicken (Rastana et al., 2022).. The popularity of tofu in Indonesia cannot be separated from the tofu agro-industry. According to Udayana (2011), agro-industry is an industrial activity that uses agricultural raw materials, which are processed into semi-finished products for direct consumption. The tofu agro-industry is a place for the production of tofu from soy beans to tofu products that can be consumed.

Vina Jaya Company is an agro-industrial company located in Jakarta processes soybeans into tofu. In the midst of today's modern era and its location in the city centre, it still maintains the traditional processing of tofu, where the processing still uses human assistance and minimal modern technology. Although the processing is still traditional, it is still actively producing tofu and its production can meet the market needs, especially in Jakarta. During 32 years of it's operation, it has faced several obstacles, including fluctuating soybean prices, which are the main raw material for tofu production, and high capital costs, which results in low tofu production, and the company's profit is not maximum. Based on this condition, it is necessary to analyse the added value for the sustainability of the tofu agroindustry. The objectives of this study are (1) To analyze the amount of value added and profit of tofu agribusiness in Vina Jaya Company. (2) To evaluate the great effect of value added on the sustainability of tofu agroindustry business at Vina Jaya Company.

2. MATERIAL AND METHODS

2.1 Research Location

The research site was the Vina Jaya Company, located at Teluk Gong Selatan I, Gang U, No.27, Kelurahan Pejagalan, Kecamatan Penjaringan, North Jakarta. It was purposefully selected based on some reasons: (1) Vina Jaya Company is one of the agro-industries in Jakarta that processes soybeans into tofu; (2) Research has never been conducted by analysing the added value of processing soybeans into tofu at Vina Jaya Company; and (3) Vina Jaya Company's owner and employees are open for this research.

2.2 Data and Data Collection Methods

Qualitative data include an overview of the tofu agroindustry and the processing of soybeans into tofu and quantitative data include output, raw material input, labour input, output price, labour wages, raw material prices, production capacity, equipment for the production, and other input contributions. The primary data used in this study was obtained by interviewing the owners and employees. The three key informants that have been included in this research. One person was the owner of the company named Mr. Liong Kwet Liong and the other two were Mr. Toiman as an employee in the production sector and Mr. Erik as an employee in

charge of administration. Secondary data was obtained from other existing printed and online sources that closely related to the research.

2.3 Data Analysis

The value added analysis used the Hayami's value added analysis structure. Based on the analysis method, the conversion factor, the labor coefficient, the output value, the value added and its percentage, the income and the labor share, the profit and the profit level, and the profit margin could be calculated.

3. RESULTS AND DISCUSSION

3.1 Value-Added Analysis

The company uses 600 kg of soybean in one production process and can produce 1809 kg of output with a conversion factor of 3.015. Tofu (output) is sold at a price of IDR15,000 per kg. The production of tofu requires 13,125 man-days of labor with a wage of IDR171,428.57 per man-day and produces a labor coefficient of 0.022 man-day/kg (Table 2). The soybeans used as raw materials are 600 kg and are purchased at a price of IDR15,000 per kg (Table 2). Besides soybeans, there are other inputs in tofu production such as 5 kg salt, tofu stone, electricity, 12 kg LPG, transportation, and depreciation of tools and machinery, so the price of other inputs is obtained at IDR9,151.11 per kg (Table 1). The output value of the product (tofu) was obtained at IDR45,225 per kg. The labor income is obtained at IDR3,771.43 per kg, which is obtained from the labor coefficient and direct labor wages. Then the result of labor share is obtained at 17.9% of the amount of value added (Table 2).

Table 1. Calculation of other input costs in one production process

No.	Other Inputs	Amount	Unit Price (IDR)	Cost per day (IDR)	Cost per kg (IDR)
1	Electricity	-	-	400,000.00	666.67
2	LPG Gas 12 Kg	10 cylinder	200,000.00	2,000,000.00	3,333.33
3	Water	-	-	150,000.00	250.00
4	Transportation	-	-	150,000.00	250.00
5	Salt	5 Kg	10,000.00	50,000.00	83.33
6	Tofu stone	-	-	5,000.00	8.33
7	Packaging	5400	500.00	2,700,000.00	4,500.00
8	Depreciation	-	-	35,666.67	59.44
				5,490,666.67	9,151.11

Ragarding to Hubeis (1997, *in* Nurrafika, 2016), the added value is low categorized if it's ratio less than 15%; medium categorized if it's ratio of 15-40%; and high categized if it's ratio more than 40%. The value added by processing soya bean to tofu is IDR21,073.89/kg with a value added ratio of 46.6%. The value added ratio of tofu agro-industry in this case was high categorized.

The profit margin is IDR30,225 per kg, which is the difference between the output value of the product (tofu) and the price of the raw materials (soybeans). The results of the profit margin were then divided into several factors, that is, labor income 12.48%, other inputs 30.28%, and company profit 57.25% (Table 2). The result of the distribution of the profit factor of the company is the largest compared to the results of the distribution of the other factors.

3.2 Company Profits in One Production Process

One of the objectives of the study is to determine the amount of profit earned by the company in one production process. The profit is the difference between the value added and the labor cost. In Table 2, the profit obtained by Vina Jaya Company in one production process was IDR17,302.46 per kg, then if it was accumulated in one production process with 600 kg of raw material, the profit generated in one production process was IDR10,381,476.90. The percentage result of the company's profit level when calculated based on the results of value added is 82.1%. Then, the net profit of the company when calculated based on the profit margin obtained from the difference between the value of output and raw materials and subtracted to other factors such as labor income and other input contributions, the percentage was 57.25% (Table 2).

Table 2. Value added analysis of tofu agroindustry at Vina Jaya Company

No.	Variable		Value
I. Output, Input, and Price			
1	Output (kg)	(a)	1,809
2	Raw Materials (kg)	(b)	600
3	Labor (man-day)	(c)	13.125
4	Conversion Factor	(d) = (a) / (b)	3.015
5	Labor Coefficient (man-day/kg)	(e) = (c) / (b)	0.022
6	Output Price (IDR/kg)	(f)	15,000
7	Labor Wage (IDR/man-day)	(g)	171,428.57
II. Revenue and Profit			
8	Raw Material Price (IDR/kg)	(h)	15,000
9	Other Input Contribution (IDR/kg)	(i)	9,151.11
10	Output Value (IDR/kg)	(j) = (d) x (f)	45,225
11	a. Value Added (IDR/kg)	(k) = (j) – (h) – (i)	21,073.89
	b. Value Added Ratio(%)	(l) = ((k) / (j)) x 100%	46.6
12	a. Labor Income (IDR/kg)	(m) = (e) x (g)	3,771.43
	b. Labor Share (%)	(n) = ((m) / (k)) x 100%	17.9
13	a. Profit (IDR/kg)	(o) = (k) - (m)	17,302.46
	b. Profit Rate (%)	(p) = ((o) / (k)) x 100%	82.1
III. Reward for the Production Owner			
14	Profit Margin (IDR/kg)	(q) = (j) – (h)	30,225
	a. Labor Income(%)	(r) = ((m) / (q)) x 100%	12.48
	b. Other Input Contribution (%)	(s) = ((i) / (q)) x 100%	30.28
	c. Company Profit (%)	(t) = ((o) / (q)) x 100%	57.25

3.3 The Impact of Value Added on the Business Sustainability

Vina Jaya Company has been operating for 32 years, within that period there are important factors to maintain business sustainability. Business sustainability is a condition in which there are ways or efforts to continue, maintain and protect all the resources in it. The sustainability of a business can be measured from the results of the calculation of added value obtained from the Hayami method based on three indicators: value added ratio, labor share, and profit level. Then of the three indicators are used to measure the category of business sustainability which according to Utami et al. (2020). The ratios are categorized as low (0%-33%), medium (34%-66%), and high (67%-100%). The value added ratio in Table 2 was 46.6%, which was medium classified. The resulting labor share amounted to 17.9% which means low categorized. Furthermore, the last business sustainability indicator is the level of profit with the results obtained, namely 82.1% and is in the category (3) high because the acquisition of results is between 67%-100%. The value in each category can be denoted by low (1), medium (2), and high (3). The company can be considered sustainable if the value of the total category score is between 6 - 9, then it can be considered not sustainable if the value of the total category score is between 3 - 5. Based on the calculation of the total category score of the three indicators in Table 3. the result is 6, meaning that the business is considered sustainable because the score is between 6 - 9 according to the criteria. Based on this, it can be concluded that the level of business sustainability of the Vina Jaya Company has good business sustainability.

Table 3. Indicators of tofu agroindustry business sustainability at Vina Jaya Company Jakarta

No.	Indicators of Business Sustainability	Category
1	Value-added Ratio	Medium
2	Labor Share	Low
3	Profit Rate	High

Utomo et al. (2019) revealed that business sustainability can also be seen from various factors, including (1) profitable business; (2) environmentally friendly; (3) accepted in the social environment; and (4) easy to use technology. One of the important factors mentioned to maintain business sustainability is business profitability. Business sustainability could be occurred when the company has been optimally operated (Miradji et al., 2020). Vina Jaya Tofu Company maintains its business sustainability by striving for a profitable business, which can be seen using value added analysis. Based on the value added analysis shown in Table 2, the result of the value added of tofu agroindustry is IDR21,073.89 per kg with a value added ratio of 46.6%. According to Hubeis (1997, in Nurrafika, 2016), the value added is included in the high category since the value-added ratio is greater than 40%. Then the profit obtained by the company is IDR 17,302.46 per kg and when accumulated in one production process, the profit of the company is IDR10,381,476.9 with a profit ratio of 57.25%. Therefore, it can be concluded that the high value added and profit of

Vina Jaya Tofu Company will result in a profitable business economy, which is one of the factors in creating business sustainability.

In addition to the economic factors of profitable company stated by Utomo et al. (2019), there are other business sustainability factors that are pursued by Vina Jaya Tofu Company to maintain its business sustainability influenced by several things including:

(a) Environmentally friendly.

Vina Jaya Company maintains environmental friendliness in order to maintain business sustainability by reprocessing production process waste, such as soybean dregs left over from making tofu to be reprocessed into tempe gembus.

(b) Accepted in the social environment.

The company also maintains business sustainability by minimizing pollution, waste and noise that can disrupt the social environment around the business and affect business sustainability. Liquid waste from tofu making is made a special channel directly to the disposal so that liquid waste does not flood the surrounding social environment. Special channels for the flow of liquid waste are also made closed so as not to cause odors that can disturb the surrounding social environment.

(c) Easy-to-use technology.

Technology that is easy to apply makes it easier for agro-industry workers to know at Vina Jaya Tofu Company in the process of making tofu, for example in the grinding process using a milling machine, with easy technology, the workforce is faster in mastering the machines used so as to streamline production time which has an impact on the sustainability of the company.

4. CONCLUSION

Based on the results and discussion, it could be concluded that the value added obtained from tofu agroindustry in Vina Jaya Company was Rp 21,073.89 per kg soybeans with value added ratio of 46.6% (high categorized). The profit obtained by Vina Jaya Company was IDR17,302.46 per kg soybeans or IDR10,381,476.9 based on one time production process with the percentage of net profit obtained by the company of 57.25%. The value-added affects to the business sustainability. The acquisition of high added value also affects company profits which was one of the factors in creating business sustainability.

ACKNOWLEDGMENTS

The authors express their gratitude honorable to Mr. Liong Kwet Liong as owner of the Vina Jaya Company and Toiman and Erik as the Vina Jaya Company production division staff and administration staff, respectively for their willingness to be surveyed. Many thanks also to the research project advisor for his scientific support of this research implementation.

REFERENCES

Dewi, I. A. N. U., & Yuliarmi, N. N. (2017). The Influence of Capital, Labor, and Land Area on the Total Arabica Coffee Production in Kintamani District, Bangli Regency. UNUD EP E-Journal, 6(6), 1127–1156.

Hamidah, M., Hamid Yusra, A. A., & Sudrajat, J. (2015). Analysis of the Added Value of the Sweet Potato Chips Agroindustry in Pontianak City. In Journal of Social Economics of Agriculture (Vol. 4, Number 2).

Hubeis, M. (1997). Towards Professional Small Industries in the Era of Globalization Through Industrial Management Empowerment [Scientific Oration]. Bogor Agricultural Institute.

Miradji, M. A., Suhardiyah, M., Utomo, S. P., & Dyatmika, S. W. (2020). Analysis of the Sustainability of Micro, Small and Medium Enterprises Undergoing New Normal during the Corona Pandemic in Banjarsari Village, Cerme District, Gresik Regency. Ekobis Abdimas: Journal of Community Service, 1(2), 155-161.

Nurrafika, I. (2016). Analysis of Added Value and Profitability of the "So Kressh" Jackfruit Chips Agroindustry at CV Kajeyefood Malang.

Rastana, I. D. G., Rusdianta, I. G. M., & Guna, I. N. A. (2022). Analysis of Factors that Influence Tofu Production in Tabanan District, Tabanan Regency. Untab Scientific Magazine, 19(2), 157–162.

Setyawan, G., & Huda, S. (2022). Analysis of the influence of soybean production, soybean consumption, per capita income, and exchange rate on soybean imports in Indonesia. Journal of Economics and Management, 19(2), 215–225.

Udayana, I. G. B. (2011). The Role of Agroindustry in Agricultural Development (Vol. 44).

Utami, A., Utama, S. P., & Asriani, P. S. (2020). Added Value and Sustainability of Banana Processing Business in Curup Tengah District, Rejang Lebong Regency (Case Study of Banana Sari Gizi Kamiso Karto). Journal of AGRISEP Review of Socio-Economic Problems in Agriculture and Agribusiness, 19(1), 191-206.

Utomo, M. N., Rita, M. R., Pratiwi, S. R., & Puspitasari, I. (2019). Green Business: Strategies for Building Competitive and Sustainable Entrepreneurship. Syiah Kuala University Press.