Business Feasibility and Development Strategy of Oyster Mushroom Farming in Pandowoharjo Village, Yogyakarta

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Abstract. This study aimed to determine the feasibility study of oyster mushroom farming in Pandowoharjo Village, Yogyakarta. The present study also seeks to identify a suitable business strategy for oyster mushroom business farming. Pandowoharjo is well-known for the location of Jejamuran Restaurant, a unique and famous eating place destination for travelers, as the menus are all made from fresh mushrooms. So far, the supply of mushrooms has to be imported from outside the region. The local community in the village has not yet been involved in fulfilling the mushroom needs. Therefore, the Pandowoharjo Village Government encourages a collaboration business between the oyster mushroom farmers and Jejamuran Restaurant to improve the economic welfare of residents through the triple helix model. Data were taken from the questionnaires and interviews with the farmers, owner, and manager of Jejamuran Restaurant, community leaders, and officials of Pandowoharjo Village. This research is a descriptive quantitative study that deploys feasibility analysis and quadrant analysis of strategy determination using strength weakness opportunity threat (SWOT) analysis. The feasibility study results reveal that oyster mushroom cultivation in the village can generate an income of Rp. 43,908,480.00 per year, including labour income of Rp. 11,640,000.00 per year. The business is financially feasible with the net present value of benefit and cost flows of Rp. 3,271,562.00 with an internal rate of return (IRR) is 26. 86%, gross benefit per cost ratio (Gross B/C) and net benefit per cost ratio (Net B/C) are 1.03 and 1.43, respectively. The SWOT analysis results show that the coordinates of the strategy in the first quadrant indicate an aggressive strategy is applied to ensure the growth of the mushroom business.

Keywords: feasibility · business strategy · oyster mushroom · mushroom farming · swot analysis · triple helix

1 Introduction

As one of Indonesia's most famous tourist destination regions, Yogyakarta offers many unique and interesting places to visit, including eating places. Jejamuran Restaurant is

one of the most popular restaurants in Yogyakarta due to its unique menus. The restaurant serves all dishes made from mushrooms. Various kinds of Indonesian specialties such as rendang, tongseng, soup, satay, and traditional snacks are made from mushrooms. Therefore, Jejamuran Restaurant has been well-known to its visitors for low cholesterol food and vegetarian-friendly dishes.

Situated in Pendowoharjo Village, Sleman District, Yogyakarta, the restaurant was founded by Ratidjo Hardjo Soewarno in 2006 with a small stall in front of his house. According to Ratidjo's interview, at that time he wanted to sell the plentiful mushrooms of his crop, a business he started after he retired. The founder has the vision to educate and inform the public about mushroom growing and usage through culinary business. He believes that increased mushroom consumption in the community will affect mushroom farmers' livelihoods and economies. The restaurant has experienced a very significant business development in the last decade, from the initial capacity of the restaurant only 10 people to 200 people. Initially, the need for mushrooms as raw material for restaurants was supplied by the restaurant's own bag log house. The mushroom log bag capacity has already reached tens of thousands of log bags with standardized mushroom quality. Along with the increase in restaurant production capacity, raw material fulfillment must be sourced from outside the region.

Unfortunately, the high demand for mushrooms in the restaurant has not involved the residents around the village where the restaurant is located. According to the restaurant's owner, besides he could not control the mushroom quality, he did not have the resources to improve the quality of the mushroom produced by the farmers nearby. On the other hand, the Pandowoharjo village government wants to increase the rural economy by empowering farmers through a business collaboration between Jejamuran Restaurant and mushroom farmers. Therefore, the village officials feel it necessary to collaborate with an expert from the university to empower the oyster mushroom farmers to meet the required quality of raw material in the restaurant. Since the village government has been maintaining a close relationship and cooperating with a private university in Yogyakarta, namely Janabadra University, the empowerment activities are led by the university team. Therefore, the empowerment activities were done under the modified triple helix model framework, i.e., Jejamuran Restaurant, Janabadra University, Pandowoharjo Village Government, and an oyster mushroom farmer in Pendowoharjo.

Previous literature confirms that cultivated mushrooms are low in fat and cholesterol, low in sodium, high in essential nutrients (including those that are not often available in large amounts in fresh vegetables), and high in antioxidants. Thus, mushrooms provide the nutritional requirements of health-conscious customers and are an attractive alternative food source, particularly for vegetarians [1, 2]. Therefore, the demand for mushrooms, specifically the oyster variant, is high in Malaysia [3] and Indonesia [4, 5]. Furthermore, studies in the international arena such as China [6], Turkey [1], India [7], and Tanzania [8], state that mushroom farming relates to food security and source of income in rural areas. Similarly, using the Indonesian environment, Haryati [9] argues that mushroom farming is a women-friendly business that ensures household food security in encountering a lack of income during the Covid-19 pandemic.

The objective of this study was to determine the feasibility study of oyster mushroom farming in Pandowoharjo Village with a partnership pattern between Jejamuran Restaurant and the local community. The present study also seeks to identify a suitable business strategy for mushroom business farming. Calculation of feasibility and determination of business strategy are parts of the initial stage of empowerment activities.

As stated by Istiyanti et al. [10], the revenue-cost ratio in measuring the feasibility of mushroom farming depends on the capacity of the bag logs. This study proves whether oyster farming in Pandowoharjo, Sleman District, Yogyakarta is profitable and practical to implement. In terms of feasibility study, this article adds to the literature valuing the oyster business, which has been done previously in Bantul Regency [10], Karangayar Regency [11], and Mojokerto City [12].

In addition, this study also contributes to the literature in explaining the empowerment activities among farmers done previously in the different regions such as coconut-sugar farmers [13], women farmers in urban area [14], cocoa farmers [15], and dry land farmer groups [16] under the triple helix model framework.

The presentation of the paper is arranged as follows. The following section discusses the research method. After that, results and discussion is presented in the subsequent section. Then the article ends with the conclusion.

2   Research Method

The present study is a quantitative descriptive research conducted in Pandowoharjo Village, Sleman District, Special Region of Yogyakarta. In line with the study's objective, there are two types of analysis done. First is the feasibility analysis, and second is the strength, weakness, opportunity, and threat (SWOT) analysis. The feasibility analysis is utilized to see whether the oyster mushroom business is worth running, while the SWOT analysis is to identify the most suitable business strategy.

As a data collection instrument, questionnaires and observations were utilized. The village of Pandowoharjo was chosen on purpose as the geographic location of the prominent mushroom restaurant in Yogyakarta, elaborated in the introduction section. Similar to Retnaningsih [11], the sampling of farmers is purposive, which consisted of all farmers in Pandowoharjo who produced oyster mushrooms and at least created four bag logs themselves. Thus, the number of samples is 30.

The SWOT analysis includes identifying external and internal factors that impact oyster mushroom business. The internal factors are useful to determine the strengths and weaknesses, while the external factors are utilized to identify opportunities and threats [1, 17]. Focus Group Discussion (FGD) identifies internal-external factors used in determining the business development strategy [18]. According to Kirichok [19], the FGD involves stakeholders. They have the capacity and authority to develop the potential of Pandowoharjo Village, namely the owner and manager of Jejamuran Restaurant, the village head, the head of economic affairs and welfare in the village, head of the hamlet, and the farmers. The FGD was held on July 24, 2022, in the Pandowoharjo Village meeting hall. It was attended by 30 farmers, four village government officials, one manager, and one owner of Jejamuran Restaurant. The FGD was facilitated by two lecturers and assisted by two students of Janabadra University.

The method of assessing the feasibility of mushroom farming is through the calculation of net present value (NPV), internal rate of return (IRR), net benefit-cost ratio (Net B/C), and gross benefit-cost ratio (Gros B/C). Calculating these financial aspects allows determining the capital to be employed in conducting business at a favorable rate of return [12].

NPV is utilized to calculate the difference in present value between benefits and costs. The formula for NPV is as follows [20].

$$NPV = \sum_{t=0}^{n} \left(\frac{B_t - C_t}{(1 + i)^t} \right) \tag{1}$$

where,
B_t = mushroom sales revenue earned in year t; C_t = expenses incurred in year t; t = project age/investment age (0, 1, 2, 3, … n); i = discount rate, n = project life (number of years).

IRR is used to calculate the interest rate, which shows all project investments' net present value that generates an NPV equal to zero. It is expressed in percentage and counted with the following formula [21].

$$IRR = i_1 + \frac{NPV_1}{(NPV_1 - NPV_2)}(i_1 - i_2) \tag{2}$$

where,
i_1 = interest rate that generates a positive NPV; i_2 = interest rate that genertates a negative NPV;
NPV_1 = a positive NPV; NPV_2 = a negative NPV.

Net B/C Ratio compares the number of present positive values with a current negative value. The formula for net B/C is as follows [21].

$$Net \frac{B}{C} = \frac{\sum_{t=1}^{n} \left(\frac{B_t - C_t}{(1+i)^t} \right)}{\sum_{t=1}^{n} \left(\frac{B_t - C_t}{(1+i)^t} \right)}$$
$$B_t - C_t > 0$$
$$B_t - C_t < 0 \tag{3}$$

where,
B_t = the benefit in year t; C_t = the costs in year t, n = project age; i = discount rate; t = project age (year).

Gross B/C Ratio compares the revenue or benefits of an investment with the costs incurred. The following formula is utilized to calculate the ratio [1, 21].

$$GROSS \frac{B}{C} = \frac{\sum_{t=1}^{n} \frac{B_t}{(1+i)^t}}{\sum_{t=1}^{n} \frac{C_t}{(1+i)^t}} \tag{4}$$

where,
B_t = the benefit in year t; C_t = the costs in year t, n = project age; i = discount rate; t = project age (year).

3   Result and Discussion

3.1   Cash Inflow and Outflow of Mushroom Farming

Cash inflow in oyster mushroom farming is obtained from the number of sales of fresh mushrooms. The feasibility analysis of the oyster mushroom business was calculated within three years. Table 1 presents the average cash inflow in the oyster mushroom business per farmer.

Based on Table 1, the benefit is the gross sales or revenue of the oyster mushroom business. The benefit is obtained from the multiplication of the price of mushrooms per kilo with the total production of mushrooms. For example, oyster mushroom farmers in Pandowoharjo Village sell oyster mushroom products to collectors at Rp 10,000–12,000 per kilogram.

Outflows are expenses or operating costs during the construction and operational costs of kumbung home (bag log house) when the business is running. For example, outflow on oyster mushroom cultivation in Pandowoharjo Village consists of labor, bag log purchase, and electricity costs. The operational costs of oyster mushroom farming in Pandowoharjo Village can be seen in Table 2.

As presented in Table 2, the total operational costs of oyster mushroom business per year per farmer are around Rp 37,104,000 to Rp 39,744,000. It consists of purchasing baglog, labor costs, and electricity costs. Labor costs include the placement of baglog in the kumbung house, maintenance personnel, and harvest costs. As shown in the table, the cost of electricity in oyster mushroom cultivation is Rp 1,704,000.00 per year. The cost of using electricity is relatively small because it is only used for lighting.

The cost of purchasing a bag log of oyster mushroom cultivation in Pandowoharjo Village is presented in Table 3. As demonstrated in the table, the total bag log cost is the multiplication between bag log price and the usage of bag log per year.

Table 1. The average inflow

Year	Mushroom selling price per kg (Rp)	Number of mushroom production per year on average (kg)	Benefit per year (Rp)
1	10.000	3,991.68	39,916,800.00
2	12.000	3,991.68	43,908,480.00
3	12.000	3,991.68	47,900,160.00

Table 2. The average outflow

Year	Bag log cost (Rp)	Labor cost (Rp)	Electricity (Rp)	Total Cost (Rp)
1	23,760,000.00	11,640,000.00	1,704,000.00	37,104,000.00
2	25,080,000.00	11,640,000.00	1,704,000.00	38,424,000.00
3	26,400,000.00	11,640,000.00	1,704,000.00	39,744,000.00

Table 3. The average cost of purchasing oyster mushroom bag log per farmer

Year	Bag log price per unit (Rp)	The average usage of bag log per year	Total bag log cost (Rp)
1	1.800	13,200	23,760,000.00
2	1.900	13,200	25,080,000.00
3	2.000	13,200	26,400,000.00

Table 4. The average investment cost of oyster mushroom business per farmer

Investment costs	Total value	Number of farmers	Average cost per farmer
Bag log house	180,000,000.00	30	6,000,000.00
Sprayer	5,880,000.00	30	196,000.00
Harvesting tools	4,500,000.00	30	150,000.00
Total			6,346,000.00

3.2 Investment Cost

Investment costs are costs incurred at the beginning of a business with more than one year of economic life. Investment goods that have expired before the business period must be repurchased or reinvested. Investment costs are incurred in year zero; these costs decrease with different values depending on the type of goods invested. The investment costs incurred by oyster mushroom farmers in Pandowoharjo Village include making kumbung mushrooms (bag log house), sprayers, and harvesting equipment. Table 4 provides a detailed description of the investment cost of the oyster mushroom business per farmer.

Based on Table 4, the total investment costs per farmer are Rp 6,346,000.00. This number represents the asset of each farmer's oyster mushroom business. Therefore, the number should be depreciated within its economic value of life. The economic value of life is estimated at five years; therefore, the depreciation expense per year is Rp 6,346,000.00 divided by five years = Rp 1,448,000.00 per year per farmer.

3.3 Feasibility Analysis

3.3.1 Net Present Value (NPV)

The NPV of a project is the difference between the present value of its benefits and its costs [20, 21]. Table 5 presents the NPV of the oyster mushroom business in Pandowoharjo Village.

Based on Table 5, the NPV value obtained in the cultivation of oysters is Rp. 6,314,486.02. This number indicates that the business will provide net benefits of Rp. 6,314,486.02 for 3 years of cultivation. If the NPV > 0, then the business is feasible.

Table 5. The NPV of the oyster mushroom business

Year	Investment Cost (Rp)	Operating Cost (Rp)	Total Cost (Rp)	Benefit (Rp)	Net Benefit (Rp)	DF (10%)	Present Value (Rp)
	A	B	C = A + B	D	E = D − C	F	G = E × F
	6,346,000.00	-	6,346,000.00	-	(6,346,000.00)	1	(6,346,000.00)
1.	0	37,104,000.00	37,104,000.00	39,916,800.00	2,812,800.00	0.909090909	2,557,090.91
2.	0	38,424,000.00	38,424,000.00	43,908,480.00	5,484,480.00	0.82644628	4,532,628.09
3.	0	39,744,000.00	39,744,000.00	47,900,160.00	8,156,160.00	0.683013455	5,570,767.02
NPV =							6,314,486.02

Table 6. The IRR of oyster mushroom business

No.	Net Benefit	DF (10%)	Present Value (DF 10%)	DF (27%)	Present Value (DF 27%)
	A	B	C = A × B	D	E
	(7,546,000.00)	(7,546,000.00)	(7,546,000.00)	1	(7,546,000.00)
1.	172,800.00	0.909090909	157,090.91	0.787401575	136,062.99
2.	5,484,480.00	0.826446281	4,532,628.10	0,620001240	3,400,384.40
3.	8,156,160.00	0.751314801	6,127,843.73	0.488189953	3,981,755.37
			3,271,562.73		(27,797.24)
IRR = 26.86%					

3.3.2 Internal Rate of Return (IRR)

IRR is the discount rate i at which the project's net present value equals zero. Table 6 displays the NPV of the oyster mushroom business in Pandowoharjo Village.

Detail of the calculation of IRR in Table 6 is as follow.

$$NPV_1 = 3,271,562.73 \text{ dan } NPV_2 = (27,797.24)$$
$$i_1 = 10\% \text{ dan } i_2 = 27\%$$
$$IRR = 10 + \frac{3,271,562.73}{14.146.249 - (-831.268)} \times (27 - 10)$$
$$IRR = 10 + \frac{3,271.562.73}{3,271,562.73 - (27,797.24)} \times (17)$$
$$IRR = 10 + 0.991574959 \times 17$$
$$IRR = 10 + 16.85677431$$
$$IRR = 26.86\%$$

As shown in Table 6, the IRR calculation on the cultivation of oyster mushrooms in the Pandowoharjo Village resulted in a value of 26.86%. These results indicate that

Table 7. The net B/C ratio of oyster mushroom business

Year	Net Benefit	DF (10%)	Present Value (DF 10%)
	A	B	C = A × B
	-26.183.333	-	-26,183,333
1.	18,869,085	0.909090909	17,153,714
2.	15,353,751	0.826446280	12,689,050
3.	15,353,751	0.683013455	10,486,818
Net Benefit-Cost Ratio 1,54			

the oyster mushroom cultivation business in the village is feasible, with the IRR value greater than the bank's interest rate, i.e., 10%.

3.3.3   Net Benefit-Cost Ratio (Net B/C Ratio)

Net B/C ratio is a comparison between the benefits and the costs. The calculation of the net B/C ratio of the oyster mushroom business in Pandowoharjo Village is presented in Table 7.

The detail of the net B/C ratio calculation in Table 7 is as follows.

The total of the positive present value in Table 7 = 17.153.714 + 12.689.050 + 10.486.818 = 40.329.582. The total of the negative present value in Table 7 = -26.183.333.

$$\text{Net B/C} = \frac{40.329.582(+)}{-26.183.333(-)}$$

$$\text{Net B/C} = 1.54$$

As presented in Table 7, the net B/C ratio is 1.54. Therefore, it suggests that the oyster mushroom business in Pandowoharjo Village is feasible as the net B/C ratio is higher than 1.

3.3.4   Gross Benefit-Cost Ratio (Gross B/C Ratio)

The Gross B/C ratio is between the number of present benefits (PVB) and Present Value Cost (PVC). The calculation of the gross B/C ratio of the oyster mushroom business in Pandowoharjo Village is presented in Table 8.

The detail of the gross B/C ratio calculation in Table 8 is as follows.

$$\text{Gross B/C} = \frac{156.386.708}{142.249.459}$$

$$\text{Gross B/C} = 1,10$$

As presented in Table 8, the gross B/C ratio is 1.10. Therefore, it suggests that the oyster mushroom business in Pandowoharjo Village is feasible as the gross B/C ratio is greater than 1.

Table 8. The gross B/C ratio of oyster mushroom business

Year	Total Cost	Benefit	DF 10%	Present Value of Total Cost	Present Value
	A	B	C		
	26.183.333	-	-	26.183.333	-
1.	45,792,248	64,661,333	0.909090909	41,629,316	58,783,030
2.	49,307,582	64,661,333	0.826446280	40,759,068	53,439,118
3.	49,307,582	64,661,333	0.683013455	33,677,742	44,164,560
				142,249,459	156,386,708
Gross Benefit Cost Ratio (Gross B/C Ratio) 1.10					

3.4 Analysis of the Development Strategy for Oyster Mushroom Farming

To determine the strategic factors affecting the growth of oyster mushroom farming in Pandowoharjo, the internal factor analysis (IFAS), external factor analysis (EFAS), and SWOT analyses were used (Namah, 2012). The present study looks at internal and external variables affecting the oyster mushroom business in Pandowoharjo Village to identify strategic options. While internal factors include strengths and weaknesses of the company, external factors include opportunities and threats. As stated in the Method section, the IFAS, EFAS, and SWOT of the mushroom business was assessed through FGD. Tables 9 and 10 provide matrix analysis of IFAS and EFAS respectively on the development of oyster mushroom farming in Pandowoharjo Village.

The IFAS analysis of oyster mushroom farming in Pandowoharjo Village shows five strength indicators with weights ranging from 0.11 to 0.33. They include the village geographic conditions, the existence of Jejamuran Restaurant in the village, the support of village government in the business development, the assistance from a higher education institution, and brand "Pandowoharjo" as a place that is well-known for mushroom relate products. The support of the village government achieves the highest weighted score on the strength factor in developing mushroom farming. The village government of Pandowoharjo actively facilitates mushroom farmers to have access to the business industry, such as Jejamuran Restaurant and the university. The synergy between farmers, Jejamuran Restaurants, and the university made the technology transfer from the restaurant to farmers more fluent. The lowest weighted score for strength factor is on indicator stating Pandowoharjo is well-known for the mushroom-related product. The popularity of Pandowoharjo is the impact of the existence of Jejamuran Restaurant, which controls the mushroom supply chain from upstream to downstream.

For the weaknesses analysis, there are six indicators with weights vary from 0.10 to 0.33. The highest weighted score is on the indicator suggesting the farmers' dependence on bag log producers, while the lowest is on unpredictable weather and climate, which affect the quality of harvested mushrooms.

Table 10 provides the EFAS analysis on the development of oyster mushroom farming. There are three indicators on an opportunity with weight ranging from 0.20 to 0.54 and four on the threat with weight ranging from 0.15 to 0.36. The highest weighted score

Table 9. Matrix analysis of IFAS on the development of oyster mushroom farming

Factor	Indicators	Weight (0–1)	Rating (1–4)	Weighted Score
Strengths	Village geographic conditions are suitable for cultivation	0.11	3.5	0.39
	The existence of Jejamuran Restaurant may facilitate the transfer of technology	0.22	3.5	0.77
	The village government is very supportive in encouraging the development of the mushroom business	0.33	3.4	1.12
	The existence of higher education assistance through various empowerment programs	0.23	3.1	0.71
	Pandowoharjo is well-known for its mushroom product	0.11	3.3	0.36
	Total	1		3.35
Weakness	Unpredictable weather and climate	0.10	2.3	0.23
	Pests and diseases that are difficult to control	0.14	2.1	0.29
	Farmers' dependence on bag log producers	0.33	2.3	0.76
	Mushroom farmer is a part-time job	0.11	2.5	0.28
	High skilled farmers are needed for mushroom cultivation	0.16	2.2	0.35
	Characteristics of perishable mushroom products	0.16	2.7	0.43
	Total	1		2.34

of opportunity is on the indicator stating that the market potential is still wide open. It supports previous studies which suggest that oyster mushroom sales are high in economic value for the farmers [3, 4, 9]. The limited production capacity of bag log suppliers is the biggest threat for developing oyster mushroom farming in Pandowoharjo Village. It certainly may disrupt the production capacity of mushroom farmers, especially those related to meeting high demand.

A SWOT diagram is assessed to determine the right strategy applied in the mushroom business following the SWOT analysis. The value of the X-axis is equal to 1.01, which represents the reduction between the factors of strength and weakness of the internal environmental factors, and the value of the Y-axis is equal to 1.24, which means the reduction between the aspects of opportunity and threats from external environmental factors. The coordinate of the X and Y-axis is described in the SWOT diagram as presented in Fig. 1. The figure suggests that the right strategy for oyster mushroom farming is quadrant 1, which calls for an aggressive strategy. Furthermore, the strategic location implies that the farming development plan in this region should focus on maximizing current strengths current opportunities.

Table 10. Matrix analysis of EFAS on the development of oyster mushroom farming

Factor	Indicators	Weight (0–1)	Rating (1–4)	Weighted Score
Opportunity	The market potential is still wide open	0.54	3.10	1.67
	Several types of mushrooms are of high value	0.20	3.00	0.60
	The price of oyster mushroom is competitive	0.36	3.10	0.81
	Total	1.00		3.08
Treat	Competitors from the outside region are quite a lot	0.24	1.40	0.34
	The limited production capacity of bag log suppliers	0.36	1.90	0.68
	The bag log industry is unable to supply the needs of farmers	0.25	2.10	0.53
	The price fluctuation of mushroom is quite dynamic	0.15	2.00	0.30
	Total	1.00		1.85
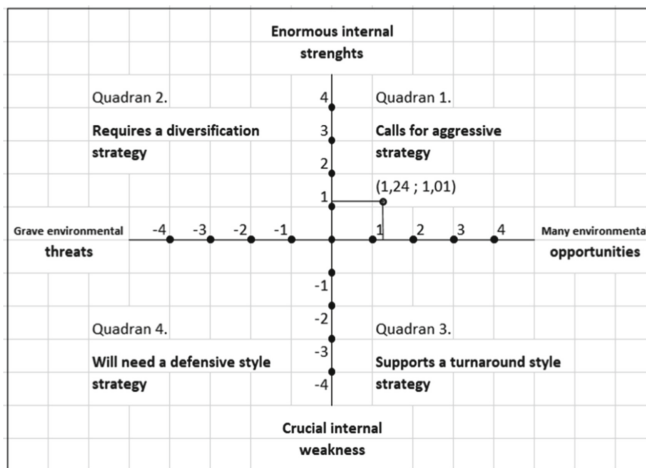
Fig. 1. The coordinate position of mushroom farming development strategy in Pandowoharjo Village

The suitable strategy taken by farmers in maximizing both strengths and opportunities is as follows. (1) Optimize the role of village government, industry (Jejamuran Restaurant) as well as Higher Education in encouraging business development. It is also

part of the efforts to capture fungus market opportunities that are still wide open with different types of mushrooms offered. (2) Improve farmers' skills in mushroom cultivation by transferring technology which involves Jejamuran Restaurant and the university.

4   Conclusion

This study examines the business feasibility of oyster mushroom farming in Pandowoharjo Village with a partnership pattern between Jejamuran Restaurant and the local community. In addition, the present study also seeks to determine the suitable business strategy for mushroom business farming. According to the feasibility analysis utilizing the NPV, IRR, gross B/C ratio, and net B/C ratio, oyster mushroom farming in Pandowoharjo Village is economically viable. Furthermore, according to the SWOT analysis, the most feasible strategy development choice for oyster mushroom farming is an aggressive approach (using both strengths and opportunities force to expand business), which falls into quadrant 1.

Authors' Contributions. Bernadus Tresno Sumbodo is the leader of the research team. He designs the research and together with a student form agribusiness department, Torikul Mujamil collect the data research and conduct an interview. They also organize focus group discussion with oyster mushroom farmers, village government officers, and the management of the Jejamuran Restaurant. Siti Rochmah Ika is responsible for data analysis and research report. She and a student from accounting department, Dudi Ducati analyse the research data and presents the data into tables.

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