



Financial Feasibility Analysis of Swallow Nest Business (Case Study of Mr. Rusdin's Business) in Lakawoghe Village, Kusambi District, West Muna Regency

Ahmad Aldin Bariuddin¹, Surni², Abdul Gafaruddin²

¹ Student of Agribusiness Department, Faculty of Agriculture, Halu Oleo University,
Kendari, Indonesia

² Lecturer, Faculty of Agriculture, Halu Oleo University, Kendari, Indonesia

Corresponding Author: aldinahmad986@gmail.com

Abstract

This study aims to determine the financial feasibility of swallow nest business in Lakawoghe Village, Kusambi Sub-district, West Muna Regency. This research was conducted in Lakawoghe Village, Kusambi District, West Muna Regency. This research took place from May 2023 until completion. The object of this research is Mr. Rusdin's swallow's nest business. This research uses a case study method with quantitative data analysis. This study aims to determine the feasibility of swallow's nest business in terms of financial aspects. Financial aspects were analyzed using the Net Present Value (NPV) method, Net B/C Ratio, Internal Rate of Return (IRR), Payback Period. The data used in this research are primary data and secondary data. The data collection techniques used are interviews and notes. The results showed that the NPV value was Rp.55,996,868. With the discount factor rate used is 10%, the Net B/C is 1.57, and the IRR value is 21.37%, and the Payback Period is 4.44 or for four years and four months.

Keywords: Swallow Nest; Financial Feasibility; NPV; Net B/C; IRR; PayBack Period

INTRODUCTION

Indonesia is an agricultural country that is rich in natural resources. As an agricultural country, Indonesia has a great opportunity to accelerate the pace of development and economic growth through the agricultural sector. The livestock sector as part of agriculture has an important





role. Livestock development is part of agricultural development that supports the provision of food of livestock origin, which is nutritious and highly competitive, and creates jobs in the field of livestock agribusiness (Hanafiah, 2013).

Livestock businesses have prospects for development due to the high demand for livestock products. Livestock farming also provides high profits and is a source of income for many rural communities in Indonesia. One livestock business that has the ability to generate a lot of profit is swallow farming. In addition to meeting domestic demand, it turns out that the export opportunities are also quite large. Swallow cultivation has recently become more widespread. In various regions in Indonesia, there are always typical buildings for the cultivation of these expensive birds (Agustina, 2017).

Swallow nest business is one of the businesses that has potential prospects to be developed in Indonesia at this time. This is supported by suitable environmental and geographical conditions as well as available resources to support the life of swallows that can be found in certain regions in Indonesia. Swallow nest production depends on the food consumed, if the swallow consumes a lot of food, the swallow's glands will produce abundant saliva. The nests made by swallows are used to settle, breed, care for, and raise their young. From year to year, the price of swallow's nest is relatively increasing. This is due to the increasing knowledge of the public about the benefits of swallow's nest so that the demand for swallow's nest in the world is increasing (Yuniarti, *et al.*, 2015).

West Muna Regency is one of the regencies in Southeast Sulawesi Province, the result of the expansion of Muna Regency in mid-2014 with an area of 1,022.89 km². As a newly established district, West Muna has tremendous agricultural potential to be developed, one of which is paddy rice. For rice crops, the area of paddy fields in West Muna Regency in 2017 was 3,811.00 ha (BPS Sultra, 2020). West Muna Regency has a favorable ecology for swallow breeding. West Muna Regency is a new regency, an expansion of Muna Regency, which has 11 sub-districts. One of the 11 sub-districts is Kusambi sub-district. Kusambi sub-district is the object of the author's research.

Swallow nesting in Kusambi Sub-district is a relatively new business in the last few years. One of the villages that has the potential to develop a swallow's nest business is Lakawoghe Village. Lakawoghe Village with its favorable environmental factors is a suitable place for swallow cultivation. The environmental conditions in question include air temperature and humidity, water sources and vegetation as feed providers with the location of the village near the coast. Swallow nests in Lakawoghe Village are still rare to find. One of the swallow nest businesses in Lakawoghe Village is Mr. Rusdin's swallow nest business. Mr. Rusdin's business is the largest and longest-established swallow nest business in the village, which was established in 2018. The





increasing demand and the large price offered make the swallow's nest cultivation business attractive to some people in Lakawoghe Village and other villages in Kusambi Sub-district. Therefore, the researcher wants to conduct a study with the title "Financial Feasibility Analysis of Swallow Nest Business (Case Study of Mr. Rusdin's Business) in Lakawoghe Village, Kusambi District, West Muna Regency", so that it can be a source of information for other entrepreneurs who are interested in starting a swallow nest business.

METHOD

This research will be conducted in Lakawoghe Village, Kusambi Sub-district, West Muna District, Southeast Sulawesi Province. The location was selected *purposively* with the consideration that Mr. Rusdin's business is the largest and longest-running swallow's nest business in the village since 2018. This research was conducted from May 2022 until completion.

The data analysis used in this research is quantitative in analyzing business development prospects. The data collected is then tabulated in tabular form or transformed in graphical form which is then analyzed using descriptive methods. The data that has been obtained is then entered into the following formulas:

According to Rianse and Abdi, (2009) data analysis in calculating business feasibility as seen from the financial aspect, the following formula is used:

Net Present Value (NPV)

Net Present Value (NPV) is the *present value* of the difference between benefits and costs at a certain *discount rate*. NPV shows the excess of *benefits* over *costs*.

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

Where:

B_t : Benefits earned in year t

C_t : Costs incurred in year t

N : Economic life of the business

I : Interest Rate

T : Year period t

The feasibility assessment based on NPV is as follows:

- NPV > 0: This means that the swallow business is feasible to implement because the benefits obtained are greater than the costs incurred.
- NPV < 0: This means that the swallow business is not feasible to implement because the benefits obtained are smaller than the costs incurred (Nurmalina *et al.* 2020).



Net Benefit Cost Ratio (Net B/C)

Net Benefit Cost ratio (B/C) is the ratio between the sum of positive NPV and negative NPV. This Net B/C shows how many times the *benefits* will be obtained from the *costs* incurred.

Formula:

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

Where:

B/C Benefit/Cost Ratio

R Revenue (Rp)

TC Total Cost (Rp)

A business is said to be useful or feasible to implement if the Net B/C value is greater than one and the business is not feasible or rejected if the Net B/C value is smaller than one (Khotimah and Sutiono, 2014).

Internal Rate of Return (IRR)

Internal Rate of Return (IRR) is an investment criterion to determine the percentage of profit from a project each year and IRR is also a measure of the project's ability to return loan interest.

$$\text{Formula: IRR} = i_1 + \frac{\text{NPV}_1}{\text{NPV}_1 - \text{NPV}_2} (i_2 - i_1)$$

Where:

i_1 : Interest rate when NPV is positive

i_2 : Interest rate when NPV is negative

NPV_1 : NPV value that is positive

NPV_2 : NPV value that is negative

A business is said to be feasible if the IRR value is greater than the *discount rate* that has been determined, otherwise if the IRR value is smaller than the *discount rate*, the business is not feasible to run (Nurmalina *et al.* 2020).

Payback Period

Payback Period is an investment feasibility assessment by measuring the period of return on investment. The basic calculation used is *cash flow*, so the calculation method used is the *discounted payback period*. The faster the capital returns, the better the swallow's nest cultivation business to be attempted because the returned capital can be used to finance other activities (Yuniarti *et al.*, 2013).

Sensitivity Analysis

According to Devy *et al.* (2018), sensitivity analysis is carried out to see what happens to the results of financial analysis if there is an error or change in the calculation of costs or revenues. The purpose of this analysis is to assess what will happen to the results of the feasibility analysis of an investment activity or business activity, if there is a change in the calculation of costs or benefits (Nurmalina *et al.* 2020).

RESULTS AND DISCUSSION

Production Cost

Production costs in Mr. Rusdin's swallow nest cultivation business consist of 2 types of costs, namely investment costs and operational costs.

a) Investment Costs

Investment costs are the initial costs used in establishing a swallow's nest business, including buildings, and various equipment used to resemble the swallow's original habitat. The total investment capital for Mr. Rusdin's swallow's nest cultivation business amounted to Rp.212,5700,000. the need for investment costs for the financial aspect is entirely charged at the beginning of the business year. In the course of this swallow's nest business will continue to improve business infrastructure so that it will require additional investment costs later. This cost breakdown will determine how much investment is needed in the construction and development of a swallow's nest business, which can also be used as a guideline for other entrepreneurs who want to develop this type of business. Details of investment costs can be seen in Table 1.

Table 1. Investment Costs of Mr. Rusdin's Swallow Nest Business

No.	Cost Component	amount	Unit	Unit Price (Rp/Unit)	Total Investment Cost (Rp)
1	Building/Building	1	unit	180.000.000	180.000.000
2	Cassette	3	unit	1.500.000	4.500.000
3	Amplifier	1	unit	4.500.000	4.500.000
4	Soun System	1	unit	2.800.000	2.800.000
5	cable	4	roller	280.000	1.120.000
6	Kapit (harvest knife)	2	unit	200.000	400.000
7	Tarpaulin/skat	3	roller	150.000	450.000

8	Fins/Boards	6	cubic	2.800.000	16.800.000
9	Twitter	48	unit	30.000	1.440.000
10	Basin	16	unit	35.000	560.000
Total Investment Cost					212.570.000

Table 1 shows that the cost of building a swallow's nest business is the largest cost incurred with a value of Rp.180,000,000 or has a percentage of 84.68% of the total investment costs incurred with a value of Rp.212,570,000. The cost of equipment in Mr. Rusdin's swallow nest business is Rp.32,570,000 with a percentage of 15.32% of the total investment cost.

The cost of building a swallow nest business building has the largest percentage of 84.68% with a value of Rp.180,000,000. This shows that in starting a swallow nest business one of the things that needs to be prepared is about business capital. As for the investment costs that have the next largest percentage are fins / boards that function as a means or a place for swallows to make nests with a percentage of 7.90% with a value of Rp.16,800,000 and then followed by Cassette and Amplifier equipment which has a percentage of 2.12% each with a value of Rp.4,500,000. The investment cost of buildings and equipment is the basic or first thing and as a support that needs to be prepared in Mr. Rusdin's swallow nest business.

b) Operational Costs

In the swallow nest business, there are also operational costs consisting of fixed costs and variable costs that will be incurred in this business.

Table 2: Operational Costs of Mr. Rusdin's Swallow Nest Business

Year	Variable Cost (Rp)	Fixed Cost (Rp)	Operating Cost (IDR)
2018 (0)	1.075.000	30.158.317	31.233.317
2019 (1)	2.620.000	30.158.317	32.778.317
2020 (2)	2.620.000	30.158.317	32.778.317
2021 (3)	6.620.000	30.158.317	36.778.317
2022 (4)	10.620.000	30.158.317	40.778.317
2023 (5)	3.335.000	30.158.317	33.493.317
Total	26.890.000	180.949.902	207.839.902
Average	4.481.667	30.158.317	34.639.984

Table 2 shows that the total operational cost of production of Mr. Rusdin's swallow nest business is Rp.207,839,902 which is the cost incurred during the 6 years of production with an

average cost of Rp.34,639,984 per year consisting of variable costs and fixed costs. Operating costs incurred each year vary due to variable costs which also change annually.

Based on the table above, it is known that the total variable costs incurred are Rp.26,890,000 with an average spent per year of Rp.4,481,667. While the total amount of fixed costs used each year is Rp.180,949,902 with an average used every one year is Rp.30,158,317.

Total Production and Revenue

Production is the final result obtained from a business, in this case the swallow's nest harvesting process. While the revenue referred to in this study is the amount of production obtained multiplied by the price per unit expressed in rupiah (Rp). Every time production in 1 year Mr. Rusdin's swallow nest business produces a different amount of nest production. The revenue obtained in this swallow's nest business always increases. The following table shows the production and revenue from the swallow's nest business per year.

Table 3. Production and Revenue of Mr. Rusdin's Swallow Nest Business

Year	Total Production (kg)	Selling Price (Rp/kg)	Total Revenue (IDR)
2018 (0)	-	-	-
2019 (1)	-	-	-
2020 (2)	4,8	11.000.000	52.800.000
2021 (3)	9,6	10.500.000	100.800.000
2022 (4)	16,5	10.000.000	165.000.000
2023 (5)	23	9.300.000	213.900.000
Total	53,9	40.800.000	532.500.000
Average	13,475	10.200.000	133.125.000

Table 3 shows the production of swallow nests obtained from the initial year of harvest, namely 2020 to 2023, which has a total revenue of Rp.532,500,000 with an average annual revenue of Rp.133,125,000. In 2020 the amount of swallow nest production obtained was 4.8 kg with a selling price of Rp.11,000,000 Rp / kg so that the revenue obtained was Rp.52,800,000. Meanwhile, from 2021 to 2023 each experienced an increase in production. But on the other hand, the selling price of swallow nests has decreased every year. The total amount of production obtained was 53.9 kg with an average production gain per year of 13.475 kg.

Revenue

Revenue is the amount of revenue earned which is then reduced by the amount of costs incurred by Mr. Rusdin's swallow's nest business which is expressed in rupiah (Rp). Revenue is income or an increase in business assets or settlement of business liabilities during a certain period due to the sale of a product, service, or other activity which is the main activity of a sustainable business. The amount of income earned in Mr. Rusdin's swallow's nest business.

Table 4. Total Revenue of Mr. Rusdin's Swallow Nest Business

Year	Revenue (Rp)	Operating Cost (IDR)	Revenue (Rp)
2018 (0)	-	31.233.317	-31.233.317
2019 (1)	-	32.778.317	-32.778.317
2020 (2)	52.800.000	32.778.317	20.021.683
2021 (3)	100.800.000	36.778.317	64.021.683
2022 (4)	165.000.000	40.778.317	124.221.683
2023 (5)	213.900.000	33.493.317	180.406.683
Total	532.500.000	207.839.902	324.660.098
Average	133.125.000	34.639.984	54.110.016

Table 4. shows that the revenue earned in 2018 and 2019 entrepreneurs did not earn revenue but only incurred operational costs without any production or revenue. In 2020 is a year where entrepreneurs earned an income of Rp.20,021,683. this income is obtained from the results of revenue in 2020, which amounted to Rp.52,800,000 minus the operational costs incurred in the same year, which amounted to Rp.32,778,317. From 2021 to 2023 the revenue obtained always increases every year, so that the revenue earned increases. In 2021 the revenue generated was IDR 64,021,683, which was obtained from the 2021 revenue of IDR 100,800,000 minus the 2021 operating costs of IDR 36,778,317. Revenue in 2022 is Rp.165,000,000, with total costs incurred of Rp.40,778,317 so that the revenue earned is Rp.124,221,683. while the revenue earned in 2023 is Rp.180,406,683.

The total revenue of Mr. Rusdin's swallow nest business is Rp.532,500,000 with an average revenue of Rp.133,125,000 per year. The total production operating costs obtained amounted to Rp.207,839,902 with an average of Rp.34,693,984 per year, and the total income value obtained was Rp.324,660,098 with an average of Rp.54,110,016.

Business Feasibility Analysis Assessment

A business is established with the aim of obtaining the maximum possible profit to maintain the continuity of the business being run. A business is said to be feasible if it is able to have the potential to provide adequate financial benefits and can survive in a long enough period of time. Business feasibility analysis was conducted to determine the feasibility of Mr. Rusdin's swallow nest business from a financial aspect using *Net Present Value* (NPV), *Net Benefit Cost Ratio* (Net B/C Ratio), *Internal Rate of Return* (IRR), and *Payback Period* (PP) analysis. Some fixed criteria used to measure the feasibility of a business include, among others, if the resulting NPV shows a number greater than zero or positive, the Net B / C ratio value obtained is greater than one, the resulting IRR value is greater than the interest rate value, and the *Payback Period* where the capital return period is not in a long time. The interest rate or *discount factor* used is 10% which is taken from the interest rate at Bank Rakyat Indonesia (BRI). The results of the financial feasibility analysis of Mr. Rusdin's swallow nest business can be seen in Table 5.

**Table 5. Results of NPV, NBCR, IRR and PP Calculation of Nest Business
Mr. Rusdin's Swallow.**

Assessment Criteria	Results	Description
<i>Net Present Value</i> (NPV)	55.996.868	Worth
<i>Net Benefit Cost Ratio</i> (Net B/C)	1,57	Worth
<i>Internal Rate of Return</i> (IRR)	21,37%	Worth
<i>Payback Period</i> (PP)	4,44	Worth

a) *Net Present Value* (NPV) Analysis

Net Present Value (NPV) analysis is used to determine the net present value of revenue obtained from an investment activity. The NPV calculation of Mr. Rusdin's swallow nest business is based on data on the total *benefits* obtained and the total *costs* incurred.

Based on the results of the NPV calculation, it shows that the *net present value* (NPV) at a 10% *Discount Factor* is Rp.55,996,868. This means that Mr. Rusdin's swallow nest business is feasible to implement or develop because the benefits obtained are greater than the costs incurred.

b) *Net Benefit Cost Ratio* (Net B/C) Analysis

Net Benefit Cost Ratio (Net B/C) is the ratio between the positive *Net Present Value* (NPV+) and the negative *Net Present Value* (NPV-). In other words, the *Net Benefit Cost Ratio* (Net B/C) is used to determine the ratio between the present value of benefits and the present value of costs

at an interest rate of 10%.

Based on the results of the analysis, the positive NPV value obtained with a *discount factor* of 10% is Rp.182,981,007, while the negative NPV value obtained at a *discount factor* level of 10% is Rp.116,700,690, resulting in a Net B/C value of 1.57. This value shows that the Net B / C Ratio is greater than 1. This means that every additional cost of 1 unit will generate benefits of 1.57 units or every investment of Rp.100,000 will generate benefits or profits of Rp.157,000 in swallow nest business activities. Based on the feasibility indicators of the Net B / C Ratio criteria, it can be concluded that swallow nest business activities are feasible.

A business or investment activity can be said to be feasible if the *Net Benefit Cost Ratio* is greater than one and is said to be unfeasible if the *Net Benefit Cost Ratio* is smaller than one. Thus, Mr. Rusdin's swallow nest business is feasible to be cultivated or developed because the *Net Benefit Cost Ratio* value obtained is greater than one (Net B / C Ratio > 1).

c) *Internal Rate of Return* (IRR) Analysis

Internal Rate of Return (IRR) is used to determine the rate of *return* on cultivation of a number of investments issued by Mr. Rusdin's swallow nest business. The results of the IRR analysis show that the IRR value obtained is 21.37%.

The interest rate used in Mr. Rusdin's swallow nest business is a 10% interest rate. The results of the IRR calculation at an interest rate of 10% for the swallow's nest business were obtained at 21.37%. Based on the results of the analysis of IRR assessment criteria, it is said to be feasible if the IRR value is greater than the loan interest or *discount rate*, otherwise if the IRR value is less than the loan interest or *discount rate*, it is rejected. So that the results of the analysis of the IRR feasibility assessment criteria for Mr. Rusdin's swallow nest business are declared to remain feasible or profitable because the IRR value obtained is 21.37%, greater than the prevailing interest rate of 10%.

d) *Payback Period* (PP)

Payback Period shows the time required for Mr. Rusdin's swallow nest business to return the investment capital that has been issued during the running of the business. Based on data on total investment costs and net benefits per year, it is known that the payback period for Mr. Rusdin's swallow nest business is 4.4 or four years and four months. The faster the payback time, the better Mr. Rusdin's swallow's nest business is to be cultivated or developed. In other words, because the *payback period* value of Mr. Rusdin's swallow's nest business is faster than the age of the business that has been running, which is six years.

e) Sensitivity Analysis

The results of the sensitivity analysis of an increase in production operating costs and a

fixed amount of revenue, fixed production operating costs and decreased revenue, as well as a decrease in production operating costs and an increase in the amount of revenue from Mr. Rusdin's swallow nest business simultaneously are presented in Table. 6.

Table 6. Calculation Results of Sensitivity Analysis of Increasing Production Operational Costs by 5% and Fixed Revenue, Fixed Production Operational Costs and Decreased Revenue, and Decreased Costs and Increased Revenue on Mr. Rusdin's Swallow Nest Business.

No.	Description	Sensitivity Analysis Results			
		NPV (Rp)	NBCR	IRR (%)	PP (Year)
1	Costs Rise and Revenue Remains	47,776,754	1.57	19.98%	4.78
2	Fixed Costs and Decreased Revenue	37,752,808	1.57	18.54%	5.45
3	Costs Down and Revenue Up	82,427,982	1.86	26.49%	3.53

The first simulation, an increase in production operational costs by 5% and fixed revenue. Under normal conditions, Mr. Rusdin's swallow nest business incurs an average cost of Rp.34,639,984 per year and if there is an increase in production operational costs by 5% which makes the average cost incurred per year to Rp.36,371,017. Under the condition of fixed revenue and costs incurred increasing by 5%, the swallow's nest business owned by Mr. Rusdin is still feasible to run because the NPV value obtained at a *discount factor of 10%* is positive or greater than zero, which is Rp.47,776,754 and the NBCR value is 1.57 or greater than one ($NBCR > 1$), then the IRR value obtained is 19.98% or greater than the prevailing interest rate of 10% and the PP value is lower than the business life of 4.78 or two years and eight months. So that Mr. Rusdin's swallow nest business in cultivating swallow nests is still feasible to run or develop if there is an increase in production operational costs.

Based on the results of the calculation, overall the swallow nest business owned by Mr. Rusdin is financially feasible to be cultivated. The resulting level of feasibility is quite large, this can be proven by the results of the calculation of NPV, NBCR and IRR analysis obtained quite large and relatively short *Payback Period* (PP). In addition, Mr. Rusdin's swallow nest business in conditions where there are changes in production operational costs and revenues where if production operational costs increase by 5% and revenues remain, costs remain and revenues decrease by 5%, and if production operational costs decrease by 5% and revenues increase by 5%,

Mr. Rusdin's swallow nest business can still be said to be feasible.

CONCLUSION

Based on the description of the results and discussion of the research conducted, it can be concluded that the analysis of financial aspects based on the financial feasibility criteria of Mr. Rusdin's swallow nest business shows that this business is feasible to run or develop. This is because the NPV value obtained is positive or amounting to RP.55,996,868, the NBCR value of 1.57 is greater than one ($NBCR > 1$) and the IRR of 21.37% is greater than the *discount rate* (10%) determined ($IRR > DR$) and the PP value is lower than the business life of 4.44 or for four years and four months.

Some things that can be suggested based on the description of the results and discussion of the research are as follows.

1. For swallow nest business owners, it is recommended to improve cooperative relationships, especially in the field of marketing, so that they can increase the frequency of production and can further increase the revenue and income from the swallow nest business.
2. The government is expected to help and pay more attention to swallow entrepreneurs in small villages so that the swallow's nest business can develop even better.
3. For researchers who want to conduct this kind of research, especially the issue of financial feasibility analysis, they should pay attention to the bookkeeping and financial recording aspects of the business to be studied.

REFERENCE

- Agustina, Selfiana, Budi S. 2017. Prospek Pengembangan Usaha Sarang Burung Walet di Kecamatan Jeunieb Kabupaten Bireuen (Studi Kasus Usaha Sarang Burung Walet H. Aswadi). *Jurnal S. Pertanian*. 1(1):20-27.
- Andel. 2018. Analisis Pendapatan Pedagang Ayam Broiler (Bakul) Yang Bermitra Dengan Perusahaan Peternakan Di Kota Kendari. Universitas HaluOleo. Kendari.
- Anoraga P. 2007. *Pengantar Bisnis: Pengelolaan Bisnis Dalam Era Globalisasi*. Jakarta. Rineka Cipta.
- Budiman A. 2008. *Budidaya dan Bisnis Sarang Walet*. Depok. Penebar Swadaya.
- Cita I. 2019. *Pertanian dalam arti luas dan sempit*. <https://belajartani.com/pertanian-dalam-arti-luas-dan-arti-sempit/>. Akses: 29 Januari 2022.
- Danang, Prasetyo. 2006. Komperasi Pendapatan Peternak Broiler Pada Kemitraan CV. Intan Sukses

- Abadi dan PT. Karya Mitra Kendari di Kabupaten Konawe Selatan. Fakultas Peternakan Universitas Halu Oleo. Kendari.
- Hanafiah AM. 2013. Analisis Sistem Agribisnis. *Makalah Analisis Agribisnis Ternak Puyuh*. Di akses 17 November 2021.
- Harapuspa A, Fitriani D. 2018. Analisis Faktor-Faktor yang Mempengaruhi Ekspor Sarang Burung Walet di Indonesia. *Jurnal Fokus*. 8(2):150-162.
- Irwan. 2019. Dampak Rumah Walet Terhadap Peningkatan Kesejahteraan Masyarakat di Desa Takkalala. *Skripsi*. Fakultas Ekonomi dan Bisnis Islam. Institut Agama Islam Negeri Palopo.
- Krugman PR, Maurice O. 2005. *Ekonomi Internasional Teori dan Kebijakan*. Jakarta. PT Indeks Kelompok Gramedia.
- Maulidah S. 2012. *Pengantar Manajemen Agribisnis*. Malang. UB Press.
- Ningrum WY. 2020. Analisis Kelayakan Usaha Sarang Burung Walet di Desa Panggali Kecamatan Walenrang Kabupaten Luwu Provinsi Sulawesi Selatan. *Skripsi*. Fakultas Pertanian Universitas Halu Oleo. Kendari.
- Nurhamidin F, Halid A, Bempah I. 2019. Analisis Pendapatan Usaha Penangkaran Burung Walet di Desa Ikhwan Kecamatan Dumoga Barat Kabupaten Bolang Mongondow. *Agrinesia*. 4(1):18-25.
- Padangaran AM. 2013. *Analisis Kuantitatif Pembiayaan Perusahaan Pertanian*. Bogor. IPB Press.
- Saputri PM, Susilowati S, Dinasari IR. 2021. Analisis Kelayakan Usaha Budidaya Sarang Burung Walet di Desa Jotang Kecamatan Empag Kabupaten Sumbawa. *Jurnal Dinamika Rekasatwa*. 4(1):130-135.
- Saipullah. 2018. Analisis Kelayakan Finansial Usaha Budidaya Sarang Burung Walet Di Kecamatan Penyinggahan Kabupaten Kutai Barat (Studi Kasus Usaha Sarang Burung Walet Bapak Jurni). *Administrasi Bisnis*. 6 (2).
- Sugiyono. 2013. *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung Alfabeta.
- Soekartawi. 2006. *Ilmu Usaha Tani*. Universitas Indonesia. Jakarta.
- Syahrantau G, Yandrizal M. 2018. Analisis Usaha Sarang Burung Walet di Kelurahan Tembilahan Kota (Studi Kasus Usaha Sarang Burung Walet Pak Sutrisno). *Jurnal Agribisnis*. 7(1)
- Yahya AM. 2020. *Budidaya Walet Milenial*. Sleman. Deeppublish.
- Yida Z, Imam MU, Ismail M. 2014. In vitro bioaccessibility and antioxidant properties of edible bird's nest following simulated human gastrointestinal digestion. *BMC complementary and alternative medicine*. 14(1):468