Financial analysis of cat's eye resin business in West Coast Regency, Lampung province, Indonesia

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Abstract

This study aimed to analyse the financial feasibility business of cat's eye resin in West Coast Regency. The method used in this research was the survey method. Primary and secondary data were collected in this study. Sampling used census sampling. The number of respondents consisted of 60 farmers. The data collection was carried out in June 2023. All financial feasibility criteria, such as *NPV*, Gross B/C, Net B/C ratio, IRR and Payback Period of cat's eye resin business in West Coast Regency, are feasible. The results showed that the business is feasible to run based on an analysis of the financial feasibility.

Key words: business analysis, financial feasibility, non-producing plant, revenue.

Introduction

West Coast Regency is the only underdeveloped region in Lampung Province that has been determined in Presidential Regulation Number 63 of 2020 of the Republic of Indonesia, concerning the determination of underdeveloped regions for 2020–2024. Based on Law No. 22/2012, this regency began to separate itself from West Lampung Regency. The regional development missions are to achieve the vision of 'Realizing a Civilized, Independent and Prosperous West Coast Community'. Overcoming the development of underdeveloped regions includes the development of economic, social, cultural and security aspects (Cabinet Secretariat of the Republic of Indonesia 2024). West Coast Regency has several economic sectors that can be relied upon and has geographical advantages and potential resources, if it can be managed properly, it will improve the economy and welfare of the community and has a very large forest area of more than sixty percent of the area, so the forestry sector also has a significant contribution to the economy

(Regional Development Planning Agency of West Coast Regency 2015).

Resin is the leading commodity in Lampung Province, only found in the West Coast Regency. Resin is one of Indonesia's native timber plants that is spread across Sumatra, Kalimantan, Sulawesi, Maluku and Papua. Resin is usually utilized for its wood because it has a fairly high selling value, especially used for carpentry trees of the meranti-Iranian Dipterocarpaceae tribe, grows predominantly in the lowland forests of Southeast Asia, therefore resin is commonly known in Western Indonesia (Michon et al. 1996).

West Coast Regency produces resin with the number one quality known as 'Mata Kucing' resin. According to Michon et al. (1996), resin has been cultivated by the people of the West Coast since the Dutch era until now. Mastic is one part of the local community's farming system, as is the cultivation of other crops (Makmur et al. 2018).

Cat's eye resin (extracted from the plant *Shorea javanica* Koord. & Valet.) is a superior commodity from Lampung Province, especially in West Coast Regency. This commodity has been famous since the 19th century and has been cultivated by the community in Pesisir Barat Regency in agroforests (cultivation of forestry plants together with agricultural crops) for generations. The cat's eye resin (sap) is used as raw material for paint, ink, cosmetics and food additives industry and can be used as termite repellent and anti-fungal, as well. The sap produced from repong resin from Pesisir Barat is of high quality, highly demanded by importers so its existence and sustainability are very important in the cat's eye resin trade chain in Indonesia. Cat's eye resin in Pesisir Barat has the potential to be developed. Mastic cultivation has two benefits

at once: forest conservation and economy (Appanah and Trunbull 1998).

Resin, a non-timber forest product, is extensively cultivated and employed by the indigenous communities residing for generations along the periphery of the rainforest in South Sumatra, specifically in West Coast, Lampung Province (Mary and Michon 1986, Anasis and Ratna Sari 2015, Gilbert 2016). The forest management techniques originated and refined by indigenous communities have demonstrated their effectiveness in meeting essential household requirements and providing the sustainable utilization of natural resources for over a century (Murniati et al. 2001, Kusters et al. 2008). From the perspective of conserving forest resources, the agroforest system sustains a rich biodiversity and preserves the ecological functions of the forests (Michon et al. 1986). The configuration of the agroforest system provides long-term productivity sustainability by preserving soil water quality, along with offering additional environmental advantages, like carbon sequestration. It also plays role in safeguarding the diversity of forest plants, as well as invertebrate and vertebrate animals (Nyhus and Tilson 2004, Mutuo et al. 2005). When applied within buffer zones, the agroforestry system is anticipated to contribute to the safeguarding of the remaining natural forests (Nyhus and Tilson 2004). Economically, the agroforestry system offers diverse income opportunities for both rural and urban households, as well as the participants involved in the dammar gum trading chain (Bouamrane 1996).

Cat's eye resin is an important part of people's lives in West Coast Regency, both for farmers who own resin businesses, people involved in resin tapping (tapping laborers, sorting laborers, resin

porters, renting transportation for transporting resin), and the buying and selling process (large traders, collectors). There is a dependence on the income from the resin sold in determining the level of welfare of farmers and their next generation. The importance of this research can be seen from several aspects: 1) local economic growth, 2) environmental conservation, 3) local community empowerment. Through previous research by Maryati (2020), it was explained that cat's eye resin is the main livelihood for most of the people of Pahmungan village, West Coast Regency. Therefore, authors want to examine whether the cat's eye resin business is feasible or not to be cultivated. Based on the existing problems and information, the primary objective of this research is to thoroughly examine the financial feasibility of the cat's eye resin business in West Coast Regency.

Object and Methods

The research location is in the West Coast Regency area, Lampung Province. It was chosen purposively with the consideration that West Coast Regency is the only regency in Lampung Province that is included in the status of underdeveloped regencies based on the Presidential Regulation Number 63 of 2020 of the Republic of Indonesia, concerning the determination of underdeveloped regions for 2020–2024, while this district area has abundant natural resources and has great potential to be developed.

Respondents of business actors in this study are farmers who do business based on superior commodities of West Coast, which is done by saturated sampling also called census technique. There were 60 farmers representing the respondents in this study who came from 3 sub-districts with the highest cat's eye resin land area in West Coast Regency, namely Way Krui Sub-district, Karya Penggawa Sub-district and Pesisir Selatan Sub-district (Fig. 1).

The research method used is the survey method, using questionnaires as a research tool conducted on large and small populations, but the data studied is from samples taken from these populations, so that relative incidence, distribution and relationships between variables, sociological and psychological are found (Sugiyono 2013). Primary and secondary data were collected in this study. Primary data in this research was obtained by conducting interviews with 60 cat's eye resin farmers, while secondary data used in this research was data from the Regional Spatial Plan of West Coast Regency 2017–3017.

The production of cat's eye resin is the result obtained by farmers during the implementation of the business, from the beginning of the business, cultivation, to the end of the economic life of the plant. The production of the plant used in this study is the result of direct interviews with 60 farmers regarding the production of cat's eye resin sap for the last five years, where each farmer has a different starting year.

The cost of the cat's eye resin business is incurred from the beginning of the resin business until the end, which is calculated per one hectare of land. The costs of the resin business include costs incurred during the non-producing plant and costs incurred during the producing plant. Expenditures include the purchase of seeds, fertilizers family labour, business equipment and taxes.

The data has been compiled and processed in tabulated form with a financial aspect approach with the assumption that:

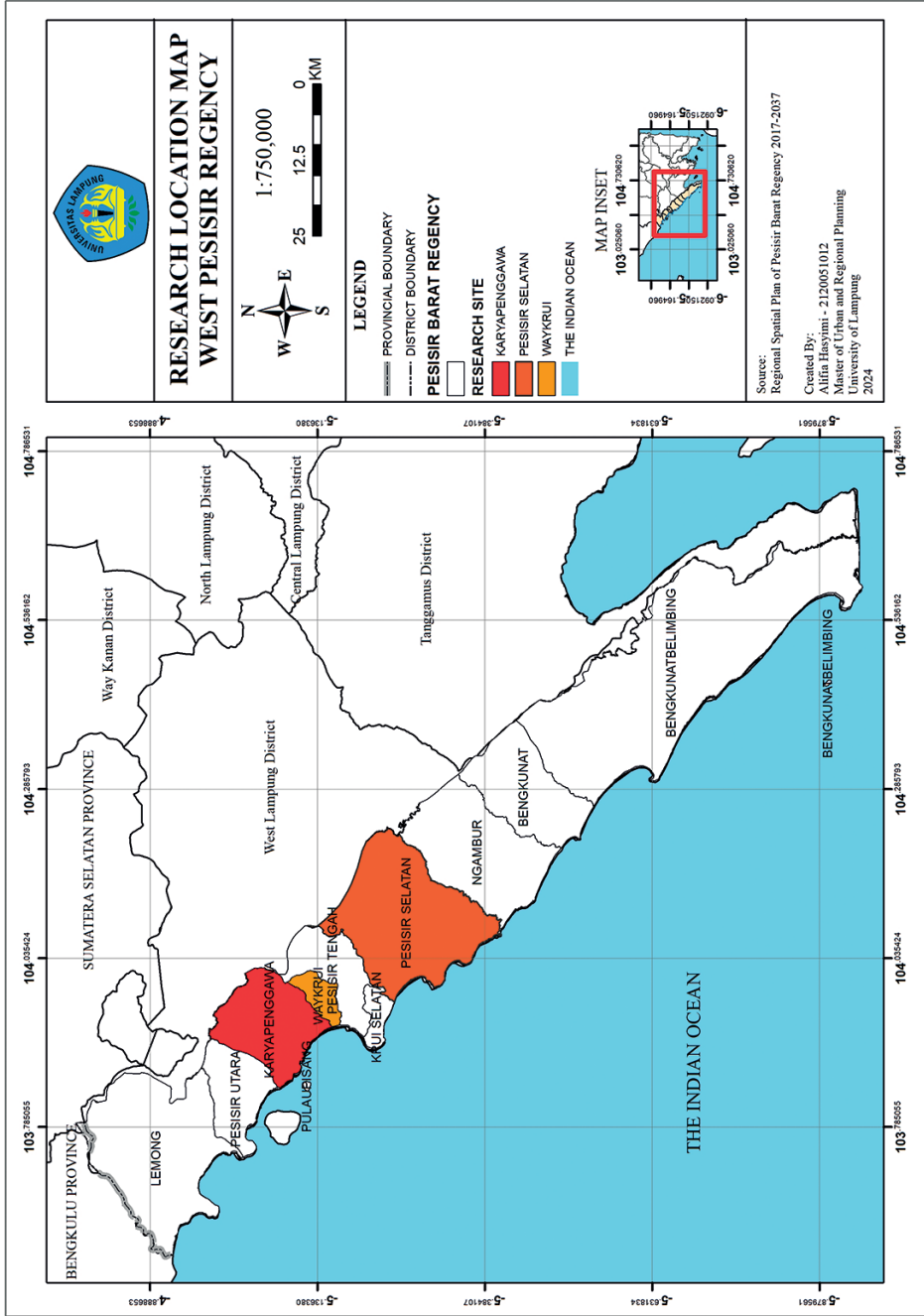- all input and output prices used in this analysis are based on prices prevailing

Fig. 1. Map of research location, Way Krui Sub-district, Karya Penggawa Sub-district, and Pesisir Selatan Sub-district.
Source: Regional Spatial Plan of West Coast Regency 2017–2037.

during the research year at the research location;

- using an interest rate of 6%;

- the state of the country's economy is stable during the study period;

- the unit used is Rupiah per year per ha;

- working day is valued at the prevailing wage in the location;

- income starts to be calculated when the land that has been planted is producing;

- repong resin income is calculated when the age of the resin > 20 years;

- non-gum income is calculated according to fruiting periodization.

Cat's eye resin plants are assumed to have an economic life or productive life of 50 years.

The calculation of business profit is calculated using an average for each year from 21 years to 50 years. The calculation results obtained are then valued using compound factors and discount factors to determine the value of benefits provided in the past and future.

Net present value (*NPV*) was a method that calculated the difference between benefits/receipts and costs/expenses with formula (1) (Rustiadi et al. 2011).

$$NPV = \sum_{t=0}^{n} \frac{Bt - Ct}{(1+t)^t}, \qquad (1)$$

where: *Bt* is benefits of the business; *Ct* is cost of the business; *i* is interest rate 6%; *t* is number of *t*-time periods, years.

The three investment criteria are:

- if *NPV* > 0, the business is profitable and can be implemented;

- if *NPV* < 0, then the business is loss-making and not feasible to implement;

- if *NPV* = 0, then the business is neither profitable nor loss-making (break event point).

Net B/C ratio is the comparison between net benefits that have been discounted by positive factors and net benefits that have been discounted negatively. To determine B/C we used formula (2) (Novianti 2021).

$$Net \frac{B}{C} = \frac{\sum_{t=1}^{n} \frac{Bt - Ct}{(1+t)^t} \quad \text{for } Bt - Ct > 0}{\sum_{t=1}^{n} \frac{Bt - Ct}{(1+t)^t} \quad \text{for } Bt - Ct < 0}, \qquad (2)$$

where: *Bt* is benefit in a year *t*; *Ct* is cost in year *t*, IDR; *i* is interest rate 6%; *t* is number of *t*-time periods, years.

Feasibility criteria:

- if net B/C > 1, then the business is feasible;

- if net B/C < 1, then the business is not feasible to implement;

- if net B/C = 1, then the business is in a state of break event point.

To calculate the Gross benefit cost ratio (gross B/C) value, we used formula (3) (Novianti 2021).

$$Gross\,B/C = \frac{\sum_{t=1}^{n} \frac{Bt}{(1+t)^t}}{\sum_{t=1}^{n} \frac{Ct}{(1+t)^t}}, \qquad (3)$$

where: *Bt* is benefit in year *t*, IDR; *Ct* is cost in year *t*, IDR; *i* is interest rate 6%; *t* is number of *t*-time periods, years.

Indicators of investment assessment based on gross B/C are:

- if the gross B/C value > 1, then the business is worth continuing;

- if gross B/C < 1, then the business is not worth continuing;

- if gross B/C = 1, then then the business is in a state of break event point.

Internal rate of return (*IRR*) is an interest rate that shows *NPV* is equal to the sum of all project investments or in other words the interest rate that results in *NPV* = 0. To determine *IRR*, we used formula (4) (Tarigan 2004).

$$IRR = i_1 + \frac{NPV_1}{NPV_1 + NPV_2} \cdot (i_2 - i_1), \qquad (4)$$

where: NPV_1 is positive present value; NPV_2 is negative present value; i_1 is discount factor, if $NPV > 0$; i_2 is discount factor, if $NPV < 0$.

The resulting *IRR* value must be greater than the prevailing interest rate, which is 6% to assume that the cat's eye resin business is able to pay when making credit loans. *IRR* is calculated in an indirect way, namely by calculating the *NPV* of two discounts whose value is close to zero and whose value is negative (Grey et al. 2002).

Investment criteria:

- if the *IRR* value > the interest rate, then the business is feasible;

- if the *IRR* value < the interest rate, then the business is not feasible;

- if the *IRR* value = the interest rate, then the business breaks event point.

Payback period is an investment appraisal of a project based on the repayment of investment costs based on the net benefits of a business.

Criteria for feasibility:

- if the payback period is shorter than the economic life of business, the project is viable;

- if the payback period is longer than the economic life of the business, the project is not viable.

Result and Discussion

Cost of non-producing plant

Farmers buy cat's eye resin seedlings for IDR 3000 per stem. One hectare of planting land requires 277 seeds with spacing 6×6 m, so the cost of seeds that must be incurred by farmers is IDR 831,000 (the exchange rate of Indonesian Rupiah is 1 IDR = $59 \cdot 10^{-6}$ €).

However, not all cat's eye resin farmers spend money on seeds, because the majority of farmers have plantations from the inheritance of parents or from generation to generation.

Business equipment is used to support and facilitate farmer activities. The types of equipment used in the cat's eye resin sap business include axes for hollowing out, axes for harvesting sap, machetes, bebalang or baskets, ambons, sacks and buckets. The use of cat's eye resin business equipment in West Coast Regency amounted IDR 464,006.11.

Non-producing plant fertilizer costs are calculated based on the use of 1 fertilizer per year. The types of fertilizers used during the non-producing plant period of the cat's eye resin business are NPK fertilizer and manure. Fertilization is done once a year. The use of fertilizer during non-producing plant period of the cat's eye resin business amounted to IDR 547,400.

In addition to requiring agricultural inputs, such as fertilizers, cat's eye resin business also requires labour to carry out its business activities. The labour used can come from within the family, namely domestic family labour, or from outside the family, namely outside family labour. In this business, the labour used is entirely from within the family. The breakdown of labour costs based on the cat's eye resin business activity amounted to IDR 3,257,250.

Tax is something that must be paid by the people of Indonesia. Taxes are paid as mandatory community contribution to support the development of the Indonesian state. Planting land that is owned by farmers is subject to annual tax fees. Tax costs incurred by the farmers depend on the size of the land, type of land and location. The tax cost incurred by cat's eye resin farmers is IDR 515,483 per ha per year.

All costs incurred during the non-pro-

ducing plant period of the business were calculated as non-producing plant costs. The length of time to return non-producing plant costs that had been incurred was calculated using the payback period calculation, indicating how long it took for the business to recover the costs incurred before the plant produced. This entire cost includes the cost of intercropping crops.

Cost of producing plants

Producing plant costs were costs that had to be incurred in the business and were used up in one use during the period of the plant production. Producing plant costs were incurred annually until the productive age of the resin plant was exhausted and had to be incurred in the form of labor costs and taxes.

The labour used is from in-family labour, which also includes the use of labour for intercropping crops. There are differences in the use of labour during the non-producing plant and producing plant periods. This difference is caused by different business activities during the non-producing plant and producing plant periods. The amount of male and female labour during the producing plant period is IDR 75,000 per person per day and IDR 50,000 per person per day. Based on the research results, the average cost of labour use during the producing plant period in West Coast Regency was IDR 2,030,208.

Taxes incurred by farmers during the period are assumed to be the same as those incurred during the non-producing plant period. Tax costs incurred by the farmers amounted to IDR 515,483 per year.

The business costs incurred in the cat's eye resin also include the cost of intercropping. The business costs incurred by the farmers are assumed to be the same amount during this period until the end of the productive life of the plant. This is because, based on the results of the study, there were no significant differences in the costs incurred by farmers each year. The overall costs incurred by cat's eye resin farmers from year 1 to year 50 are detailed in Table 1.

Production and revenue of cat's eye resin sap business

Cat's eye resin plants in years 1 to 20 have not yet produced production. The plants produce sap from year 21 to year 50. The results showed that the production of cat's eye resin fluctuated from year to year. The results of the plant production from year 21 to year 50 can be seen in Figure 2.

The selling price of cat's eye resin in West Coast Regency fluctuates every year. In this study, the selling price of resin used is the selling price of dirty resin (unclassified resin), the average selling price of cat's eye resin in West Coast Regency for the last 5 years is IDR 16,800 per kg. Based on the results of the research, the selling price of cat's eye resin in West Coast Regency received by cat's eye resin farmers is IDR 13,000 per kg, the price is the selling price from 2022 to 2023.

Acceptance of cat's eye resin production is calculated by multiplying the amount of the production by the prevailing resin selling price. Acceptance of this business is obtained from the acceptance of the resin production and intercropping plants. In addition, the costs incurred have also included the cost of intercropping.

From year 10 to year 20, cat's eye resin farmers get revenue from the production of intercropping crops. Jensen (2007) states that increased profits for farmers may cause them to change the scale of

Table 1. Total revenue and total cost of cat's eye resin business per hectare per year in West Coast Regency.

Age of resin, years	Cat's eye resin		Age of resin, years	Cat's eye resin	
	Revenue, IDR	Cost, IDR		Revenue, IDR	Cost, IDR
1	0	2,302,729	26	63,864,244	3,847,859
2	0	69,225	27	64,756,020	3,745,608
3	0	69,225	28	64,962,050	3,734,358
4	0	69,225	29	66,358,121	3,859,108
5	0	69,225	30	66,639,913	3,734,358
6	0	900,475	31	68,651,636	3,790,184
7	0	900,475	32	68,269,364	3,892,434
8	0	900,475	33	70,903,750	3,790,184
9	0	900,475	34	69,287,895	3,778,934
10	0	900,475	35	63,497,516	3,903,684
11	15,450,741	1,415,958	36	67,795,222	3,778,934
12	15,450,741	1,388,614	37	67,545,267	3,790,184
13	15,450,741	1,388,614	38	57,987,292	3,892,434
14	15,450,741	1,388,614	39	71,899,714	3,790,184
15	15,450,741	1,388,614	40	68,670,000	3,778,934
16	15,450,741	1,381,583	41	62,333,333	3,804,158
17	15,450,741	1,381,583	42	72,308,333	3,679,408
18	15,450,741	1,381,583	43	60,742,333	3,690,658
19	15,450,741	1,381,583	44	63,522,500	3,792,908
20	15,450,741	1,778,278	45	58,213,500	3,690,658
21	61,150,667	4,012,012	46	51,377,000	3,558,158
22	71,326,000	4,000,684	47	64,859,000	3,682,908
23	68,076,000	4,125,434	48	56,509,000	3,558,158
24	66,588,667	4,000,684	49	63,570,000	3,569,408
25	66,501,455	4,011,934	50	55,357,338	3,671,658

production and marketing decisions; they may farm more intensively, sell in larger quantities, adopt new technologies and move land from non-agricultural uses.

From year 21 to year 50 farmers earn revenue from the total receipts of the production and intercropping. The intercrops include jengkol (*Archidendron pauciflorum* (Benth.) I.C.Nielsen), durian (*Durio zibethinus* L.), petai (*Parkia speciose* Hassk.), cempedak (*Artocarpus integer* Merr.) and duku (*Lansium parasiticum* (Osbeck) Sahni & Bennet). Based on the data in Table 1, it is known that the difference between the total cost and total revenue of the business shows that the cat's eye resin business provides profit.

Financial feasibility analysis

The financial feasibility analysis in this study was used to determine the financial viability of cat's eye resin business. Financial analysis is very important because farmers will be willing to do the business if it provides a profit. The profit of the farmers calculated in this analysis comes from the overall profit obtained by farmers during
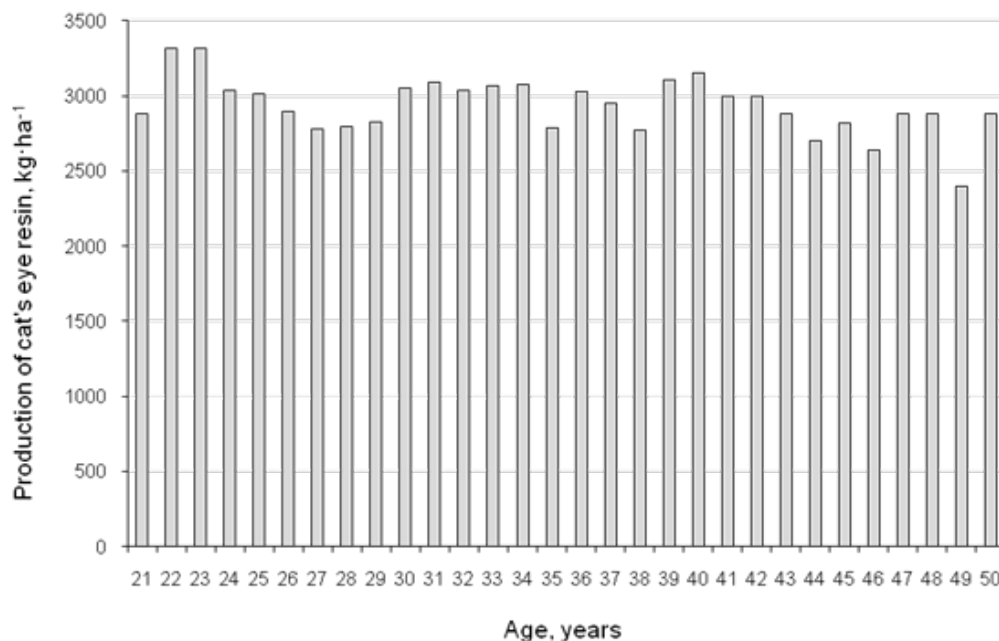
Fig. 2. Production of cat's eye resin in West Coast Regency from year 21 to year 50.

the economic life of the business. Cat's eye resin plants are assumed to have an economic life or productive life of 50 years.

The calculation of business profit is done using an average for each year from 21 years to 50 years of cat's eye resin. Obtained results are then valued using compound factors and discount factors to determine the value of benefits provided in the past and future. This research uses an interest rate of 6% based on the Bank Rakyat Indonesia People's Business Credit interest rate. This interest rate has the same value as the interest rate in 2022. This relatively low-interest rate is expected to support small and medium enterprises, especially businesses in the agricultural sector. The calculation and results of the financial feasibility of the cat's eye resin business per hectare can be seen in Table 2 and Table 3.

The data in Table 3 shows that the business produced a net present value of IDR 4,491,493,713. The business is feasible to implement because the resulting net present value is greater than zero (*NPV* > 0). So, it is concluded that the business is profitable to cultivate. The results of this study are in line with the research of Koeswindarti et al. (2021), the results of net present value financial analysis of rubber plants in the area of PT Inhutani III Tanah Laut Regency were obtained at IDR 11,384,378,028, where the net present value > 0 and categorized as feasible. Gross B/C of 12.71, this value is greater than one (gross B/C>1) indicating that the business is feasible. Payback period value of the business is 21.60, meaning that the payback period is 21 years and 6 months. The payback period of non-producing plant costs in this business is faster than the productive life of the business (50 years), so the business

Table 2. Financial feasibility analysis of cat's eye resin business per hectare at 6% interest rate in West Coast Regency.

Year	Investment cost, IDR	Operational cost, IDR	Total cost (CT), IDR	Benefit (Bt), IDR	Net (Bt-Ct), IDR	Interest rate (6%)	CT*6%, IDR	BT*6%, IDR	NPV, IDR
	1	2	3 = 1 + 2	4	5 = 4 − 3	6	7 = 3 * 6	8 = 4 * 6	9 = 5 * 6
1	2,302,729	0	2,302,729	0	-2,302,729	12.99	29,902,052	0	-29,902,052
2	69,225	0	69,225	0	-69,225	12.25	848,038	0	-848,038
3	69,225	0	69,225	0	-69,225	11.56	800,036	0	-800,036
4	69,225	0	69,225	0	-69,225	10.90	754,751	0	-754,751
5	69,225	0	69,225	0	-69,225	10.29	712,029	0	-712,029
6	900,475	0	900,475	0	-900,475	9.70	8,737,766	0	-8,737,766
7	900,475	0	900,475	0	-900,475	9.15	8,243,175	0	-8,243,175
8	900,475	0	900,475	0	-900,475	8.64	7,776,581	0	-7,776,581
9	900,475	0	900,475	0	-900,475	8.15	7,336,397	0	-7,336,397
10	900,475	515,483	1,415,958	15,450,741	14,034,783	7.69	10,883,176	118,755,736	107,872,560
11	873,131	515,483	1,388,614	15,450,741	14,062,127	7.25	10,068,877	112,033,714	101,964,836
12	873,131	515,483	1,388,614	15,450,741	14,062,127	6.84	9,498,941	105,692,183	96,193,242
13	873,131	515,483	1,388,614	15,450,741	14,062,127	6.45	8,961,265	99,709,606	90,748,341
14	873,131	515,483	1,388,614	15,450,741	14,062,127	6.09	8,454,023	94,065,666	85,611,643
15	873,131	515,483	1,388,614	15,450,741	14,062,127	5.74	7,975,494	88,741,195	80,765,701
16	866,100	515,483	1,381,583	15,450,741	14,069,158	5.42	7,485,953	83,718,108	76,232,155
17	866,100	515,483	1,381,583	15,450,741	14,069,158	5.11	7,062,219	78,979,347	71,917,128
18	866,100	515,483	1,381,583	15,450,741	14,069,158	4.82	6,662,471	74,508,818	67,846,347
19	866,100	515,483	1,381,583	15,450,741	14,069,158	4.55	6,285,350	70,291,338	64,005,988
20	1,237,258	515,483	1,752,741	15,450,741	13,698,000	4.29	7,522,539	66,312,583	58,790,044
21	1,237,258	2,774,754	4,012,012	61,150,667	57,138,655	4.05	16,244,375	247,595,053	231,350,678
22	1,226,008	2,774,676	4,000,684	71,326,000	67,325,316	3.82	15,281,613	272,447,464	257,165,852
23	1,350,758	2,774,676	4,125,434	68,076,000	63,950,566	3.60	14,866,157	245,314,413	230,448,256
24	1,226,008	2,774,676	4,000,684	66,588,667	62,587,982	3.40	13,600,581	226,372,407	212,771,827

25	1,237,258	2,774,676	4,011,934	66,501,455	62,489,520	3.21	12,866,817	213,279,174	200,412,357
26	1,339,508	2,508,350	3,847,859	63,864,244	60,016,386	3.03	11,642,079	193,227,626	181,585,547
27	1,237,258	2,508,350	3,745,608	64,756,020	61,010,411	2.85	10,691,237	184,835,642	174,144,406
28	1,226,008	2,508,350	3,734,358	64,962,050	61,227,692	2.69	10,055,778	174,928,040	164,872,262
29	1,350,758	2,508,350	3,859,108	66,358,121	62,499,013	2.54	9,803,492	168,572,965	158,769,473
30	1,226,008	2,508,350	3,734,358	66,639,913	62,905,555	2.40	8,949,607	159,706,430	150,756,823
31	1,237,258	2,552,926	3,790,184	68,651,636	64,861,452	2.26	8,569,242	155,214,756	146,645,514
32	1,339,508	2,552,926	3,892,434	68,269,364	64,376,929	2.13	8,302,283	145,613,655	137,311,372
33	1,237,258	2,552,926	3,790,184	70,903,750	67,113,566	2.01	7,626,596	142,672,276	135,045,680
34	1,226,008	2,552,926	3,778,934	69,287,895	65,508,960	1.90	7,173,546	131,529,111	124,355,565
35	1,350,758	2,552,926	3,903,684	63,497,516	59,593,832	1.79	6,990,904	113,714,381	106,723,477
36	1,226,008	2,552,926	3,778,934	67,795,222	64,016,288	1.69	6,384,430	114,538,601	108,154,172
37	1,237,258	2,552,926	3,790,184	67,545,267	63,755,082	1.59	6,040,978	107,656,893	101,615,915
38	1,339,508	2,552,926	3,892,434	57,987,292	54,094,857	1.50	5,852,782	87,191,446	81,338,664
39	1,237,258	2,552,926	3,790,184	71,899,714	68,109,530	1.42	5,376,449	101,991,119	96,614,670
40	1,226,008	2,552,926	3,778,934	68,670,000	64,891,066	1.34	5,057,067	91,895,950	86,838,884
41	1,323,675	2,480,483	3,804,158	62,333,333	58,529,175	1.26	4,802,662	78,694,397	73,891,735
42	1,198,925	2,480,483	3,679,408	72,308,333	68,628,925	1.19	4,382,234	86,120,382	81,738,148
43	1,210,175	2,480,483	3,690,658	60,742,333	57,051,675	1.12	4,146,823	68,250,086	64,103,262
44	1,312,425	2,480,483	3,792,908	63,522,500	59,729,592	1.06	4,020,482	67,333,850	63,313,368
45	1,210,175	2,480,483	3,690,658	58,213,500	54,522,842	1.00	3,690,658	58,213,500	54,522,842
46	1,198,925	2,359,233	3,558,158	51,377,000	47,818,842	0.94	3,356,753	48,468,868	45,112,115
47	1,323,675	2,359,233	3,682,908	64,859,000	61,176,092	0.89	3,277,775	57,724,279	54,446,504
48	1,198,925	2,359,233	3,558,158	56,509,000	52,950,842	0.84	2,987,498	47,446,046	44,458,548
49	1,210,175	2,359,233	3,569,408	63,570,000	60,000,592	0.79	2,827,305	50,353,394	47,526,089
50	1,312,425	2,359,233	3,671,658	55,357,338	51,685,680	0.75	2,743,676	41,366,223	38,622,547
Total	53,962,486	81,813,360	135,775,846	2,113,481,281	1,977,705,435	216.96	383,583,010	4,875,076,722	4,491,493,713

Table 3. Result of financial feasibility analysis of cat's eye resin business per hectare at 6% interest rate in West Coast Regency.

Criteria		Cat's eye resin	
		Value	Result
Net present value, IDR	> 0	4,491,493,713	Feasible
Net B/C ratio	> 1	69.98	Feasible
Gross B/C ratio	> 1	12.71	Feasible
Payback period, year	< 25	21.60	Eligible
Internal rate of return, %	> 6	38.73	Eligible

is feasible to cultivate. Internal rate of return value is 38.73 %. This shows that the business is feasible to cultivate because the resulting internal rate of return value is greater than 6 %. These results are in line with Azizah et al. (2016) research, the results of the internal rate of return financial feasibility analysis of the rubber industry in Musi Rawas Regency, South Sumatra amounted to 18.6 % and fell into the feasible category.

The results of the calculation of this financial feasibility analysis can be used as a consideration for farmers to decide which business to pursue. These results can help farmers in making decisions to switch to doing cat's eye resin business because this business is feasible and profitable to run.

Conclusion

Based on these results, all criteria for the financial feasibility of the cat's eye resin business in West Coast Regency were found to fall into the feasible category. Therefore, the study concluded that the cat's eye resin business in West Coast Regency, Lampung province, provides benefits and is feasible to run, offering diverse income opportunities for both rural and urban households and contributing to the welfare of the community.

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