

THE MODEL OF DIVIDEND MANAGEMENT MECHANISM TO PROVIDE RELEVANT INFORMATION SYSTEMS FROM CRUDE OIL PRODUCTS & PROFIT SHARING FUNDS OF PLANTATIONS

Iskandar Muda, Dio Agung Herubawa, Fauziah Kumalasari, Nova Yanthi Hasibuan
Universitas Sumatera Utara, Medan, Indonesia

Abstract

To reduce fiscal inequality, Government Regulation No. 38/2023 concerning Oil Palm Plantation Revenue Sharing Funds (DBH) has been stipulated. DBH is part of the transfer to regions based on a certain percentage of the APBN and certain performance, which is distributed to producing regions. The urgency of this study is to provide relevant information on the pattern of results of Oil Dividend Management in Padang Lawas Regency and its impact on PAD related to the issuance of Government Regulation Number 38 of 2023 concerning Oil Palm Plantation Revenue Sharing Funds and increasing economic growth in Padang Lawas Regency, Indonesia. The objectives of this study are (1) to analyze the pattern of results of Oil Dividend Management in Oil companies operating in Padang Lawas Regency (2) to find out and analyze Plantation Revenue Sharing Funds based on Government Regulation Number 38 of 2023 (3) to find out the feasibility of IRR, NPV, Payback Period and ROA in the establishment of Perumda Padang Lawas Regency. To analyze, a business feasibility analysis was carried out including IRR, NPV, Payback Period and ROA. Development of Padang Lawas Petroleum Mining Company with a decrease in selling price benefits, after the calculation of financial analysis shows NPV of IDR. 47,524,668,145, IRRR 84% and BCR 4.9665530854. These figures indicate that the project study In Padang Lawas District On The Establishment Of PERUMDA is Feasible.

Introduction

Padang Lawas Regency is one of the regencies located in the southern part of North Sumatra Province [1]. Geographically, Padang

Lawas Regency has a very strategic geographical location considering that this regency is located on the East Sumatra Trans-Sumatra Route and its administrative area directly borders Riau Province [2]. Based on its economic structure, the main economic sectors that contribute the most to supporting the economy of Padang Lawas Regency are the Agriculture, Forestry and Fisheries Sector and the Processing Industry Sector. This regency has very large development potential to be developed.

In its development, the Padang Lawas Regency Government continues to strive to carry out development in various sectors evenly throughout the regency. This equitable development is evidenced by the low value of the Gini Ratio Index of Padang Lawas Regency when compared to other regencies/cities in North Sumatra Province [3]. As an effort to finance various development programs and activities and community services in Padang Lawas Regency, the Padang Lawas Regency Government continues to strive to empower all sources of financing that can be utilized.

Although it has very large natural resource potential, the potential financing capacity of Padang Lawas Regency still needs to be improved. When compared to other regencies/cities in North Sumatra Province, Padang Lawas Regency has a relatively standard Regional Original Income and can be further optimized. Regional Original Income is a very important source of income in financing regional development needs after the implementation of the decentralization or regional autonomy system [4]. Each region must be more independent in financing its regional development and reduce its level of dependence on financial assistance from the central government.

In 2022, around 70% of the source of income for financing development in Padang Lawas Regency came from the Balancing Fund, where the largest

contribution of the source of income came from the General Allocation Fund, which was close to 50% of total income. The General Allocation Fund comes from APBN revenues which are allocated with the aim of equalizing financial capacity between regions to fund regional needs in the context of implementing decentralization. This means that financing for the development of Padang Lawas Regency is still very dependent on central government finances. Therefore, it is very important for Padang Lawas Regency to be able to increase its Regional Original Income to reduce dependence on funding from the central government and increase the level of independence of regional financing in Padang Lawas Regency. One of the efforts that can be made by the regional government to be able to increase its source of Regional Original Income is through income generated by BUMD [5].

BUMD consists of regional public companies and regional limited companies. Regional public companies are BUMDs whose entire capital is owned by one region and is not divided into shares. The establishment of Regional Public Companies is prioritized in order to organize public benefits in the form of providing quality goods and/or services to fulfill the needs of the community according to the conditions, characteristics and potential of the region concerned based on good corporate governance [6]. Therefore, the establishment of BUMD is based on regional needs and the feasibility of the BUMD business sector to be formed.

BUMD in supporting the regional economy plays a role as one of the sources of regional income. Regional governments in the era of regional autonomy need to carry out regional financial management effectively, efficiently and accountably. Regional governments must be able to empower all potential sources of regional financial income so that the amount of budget allocation needed to finance regional development can be met [7]. Therefore, the existence of BUMD can be one solution in increasing the amount of regional original income that will be allocated for development financing.

As an effort to optimize the potential resources of Padang Lawas Regency as well as to support the increase in the value of regional original income of Padang Lawas Regency, one of the efforts that can be made is the establishment of BUMD in Padang Lawas Regency. Currently, Padang Lawas Regency does not have a BUMD unit that can help increase Regional Original Income [8]. Therefore, through this study, the Economic Section of the Regional Secretariat of Padang Lawas Regency aims to conduct a study on the formation of a BUMD in Padang Lawas Regency by compiling a Feasibility Study on the Establishment of a BUMD Unit in Padang Lawas Regency. This study was conducted to identify the potential of BUMD units that can be formed in Padang Lawas Regency and to analyze the feasibility of establishing the BUMD.

Literature Review

Regional Public Company (Perumda)

Regional Companies were legally recognized in Indonesia in 1962 with the enactment of Law No. 5 of 1962 concerning Regional Companies. Philosophically, the existence of Regional Companies cannot be separated from efforts to realize economic democracy as mandated in Article 33 of the 1945 Constitution of the Republic of Indonesia (UUD 1945) and politically it is the embodiment of Article 18 of the 1945 Constitution which requires that the autonomous regions that are formed can organize and manage their own households as well as possible [9]. However, the regulation of the management of Regional Companies after the issuance of Law No. 5 of 1962 was not followed up with the issuance of a Government Regulation (PP) as a technical guideline for the management of Regional Companies. Furthermore, in 1969, Law No. 6 of 1969 concerning the Declaration of the Invalidity of Various Laws and Government Regulations in Lieu of Laws was enacted. In Appendix III of the Law, it is stated that Law No. 5 of 1962 concerning Regional Companies is included in the list of laws that have been revoked with an effective period of revocation since the enactment of the new law as a replacement [10].

However, for a long time since the enactment of Law No. 6 of 1969, the new law as a replacement for Law No. 5 of 1962 concerning Regional

Companies has not been enacted. In 1990, the term regional company changed to BUMD based on the Instruction of the Minister of Home Affairs No. 5 of 1990 concerning Changes in the Form of BUMD into two forms, Perumda and Perseroda [11], [12]. The use of the term regional company shifted to BUMD. In accordance with the Instruction of the Minister of Home Affairs No. 5 of 1990, the Minister of Home Affairs has ordered the Regional Heads to change the form of Regional Companies to Regional Public Companies (Perumda) or Regional Limited Companies (Perseroda). However, this instruction was not followed by the issuance of implementing regulations for the management of BUMD with a new form [13], [14].

Furthermore, to organize existing regional companies, the Minister of Home Affairs issued Regulation of the Minister of Home Affairs Number 3 of 1998 concerning the Legal Form of BUMD which stipulates that the legal form of Regionally-Owned Enterprises (BUMD) can be a Regional Company (PD) or a Limited Liability Company (PT). In carrying out operations, each BUMD is subject to the respective provisions governing their respective legal entities, in other words, for Regional Companies, the provisions on Regional Companies as regulated in Law Number 5 of 1962 concerning Regional Companies apply and Limited Liability Companies are subject to Law Number 1 of 1995 concerning Limited Liability Companies (now replaced by Law No. 40 of 2007 concerning Limited Liability Companies).

Relevant Information Systems

Relevant information systems are systems that collect and manage data that is relevant to an organization. Relevant information is information that is useful to its users that can influence the user's economic decisions [17].

The characteristics of relevant information systems are:

[1].Relevant information is available before the decision maker loses its ability to influence

his or her decision

[2].Relevant information can help users evaluate past, present, or future events

[3].Relevant information can help users confirm or correct the results of their past evaluations

[4].Relevant information can influence the policies taken by the company by predicting the results of existing events.

Result and Discussion

Result

Geographical Conditions and Regional Distribution

Padang Lawas Regency is the result of the expansion of South Tapanuli Regency. Padang Lawas Regency was officially established based on the Law of the Republic of Indonesia Number: 38 of 2007, precisely on August 10, 2007, along with the formation of North Padang Lawas Regency, following the Bill approved on July 17, 2007. In general, Padang Lawas Regency has a tropical climate with an average temperature of between 14-36 °C. Based on the altitude of its area, Padang Lawas Regency is at an altitude of 915m above sea level (asl). In 2007, Padang Lawas Regency had an average rainfall of 167 mm/year with an average rainfall of 167 mm/month. Rainfall in Padang Lawas Regency in the last 5 (five) years (2003-2007), namely the highest rainfall occurred in 2006, namely 2,014 mm/year with an average rainfall of 168 mm/month. While the lowest rainfall occurred in 2004, namely 1,865 mm/year with an average rainfall of 155 mm/month. Astronomically, Padang Lawas Regency is located between 1 26' North Latitude and 2 11' South Latitude and between 91 01'–95 53' East Longitude. Based on the results of the analysis of assumptions, historical data and projections, the following conclusions can be show as a follows:

Table 1. Recapitulation of Feasibility Study of Perumda Padang Lawas Building

Explanation	Net Cash Flows	Shared Profit	Cashflow available
Capital Injection of PERUMDA	(15,900,000,000)		(15,900,000,000)
Net Cash Flows 2024	(32,000,000,000.00)	15,000,000,000	(17,000,000,000)
Net Cash Flows 2025	1,000,000,000.00	15,000,000,000	16,000,000,000
Net Cash Flows 2026	2,153,440,000.00	15,000,000,000	17,153,440,000
Net Cash Flows 2027	1,260,780,800.00	15,000,000,000	16,260,780,800
Net Cash Flows 2028	1,507,526,926.36	15,000,000,000	16,507,526,926
Net Cash Flows 2029	7,348,008,216.40	15,000,000,000	22,348,008,216
Net Cash Flows 2030	4,049,672,725.11	15,000,000,000	19,049,672,725
Net Cash Flows 2031	7,538,214,600.12	15,000,000,000	22,538,214,600
Net Cash Flows 2032	4,648,763,195.63	15,000,000,000	19,648,763,196
Net Cash Flows 2033	7,748,793,041.26	15,000,000,000	22,748,793,041
Net Cash Flow 2034	4,841,160,292.36	15,000,000,000	19,841,160,292
Market Interest Rates and Bonds		12%	
Internal Rate of Return (IRR)		42.76%	
Net Present Value (NPV)		50,927,674,998	
Profitability Index (PI)		8x	
Conclusion		Feasible	
Return on Equity (Nett Income/Total Assets Average)			
ROE 2024		13.27%	
ROE 2025		13.53%	
ROE 2026		13.81%	
ROE 2027		14.12%	
ROE 2028		14.41%	
ROE 2029		14.68%	
ROE 2030		14.98%	
ROE 2031		15.92%	
ROE 2032		16.25%	
ROE 2033		16.54%	
ROE 2034		16.88%	

Source: Projection Results (2024).

Table 2. Net Present Value (NPV) Method of Petroleum

Years	Revenue	Investment	Expenditure	Net Cash Flow	12%	Present Value
0		11,000,000,000		-11,000,000,000	11000000000	-
1	20,000,000,000		11,000,000,000	9,000,000,000	8035714286	1080000000
2	20,000,000,000		10,100,000,000	9,900,000,000	7892219388	1188000000
3	20,000,000,000		11,200,000,000	8,800,000,000	6263666181	1056000000
5	20,000,000,000		12,300,000,000	7,700,000,000	4369186789	924000000
6	25,000,000,000		13,000,000,000	12,000,000,000	6079573454	1440000000
7	25,000,000,000		15,494,000,000	9,506,000,000	4300031641	1140720000
8	25,000,000,000		14,000,000,000	11,000,000,000	4442715508	1320000000
9	25,000,000,000		14,200,000,000	10,800,000,000	3894588270	1296000000
10	25,000,000,000		14,200,000,000	10,800,000,000	3477310955	1296000000
11	25,000,000,000		14,200,000,000	10,800,000,000	3104741924	1296000000
12	25,000,000,000		14,200,000,000	10,800,000,000	2772091004	1296000000

Net Present Value= IDR. 47.524.668.145 Internal Rate of Return = 84%

Benefit Cost Ratio = 4,966530854 (Feasible)

The development of the Padang Lawas Petroleum Mining Company with a decrease in the selling price benefit, after the calculation of the financial analysis showed an NPV of IDR. 47,524,668,145, IRRR 84% and BCR 4.9665530854. These figures indicate that the project is Feasible.

Internal Rate of Return (IRR)

IRR is the discount rate value i that makes the NPV of the project equal to zero. The discount rate used to find the present value of a benefit/cost must be equal to the opportunity cost of capital as seen from the perspective of the project appraiser [16]. The basic concept of opportunity cost is essentially a sacrifice given as the best alternative to obtain a result and benefit or can also state the price that must be paid to obtain it. Based on the analysis results, it can be seen that the IRR value is 42.76% while the market interest rate is 12% ($IRR > i$). Manually, the calculation formula is as follows:

$$\$0 = \sum_{t=1}^n \frac{CF_t}{(1 + IRR)^t} - CF_0$$

Where is the Sigma sum of the existing incoming cash flow divided by the discount rate at a certain time period. Thus it can be concluded that funding of IDR.15,900,000,000.- is considered feasible.

Table 3. Net Present Value (NPV) Method for Palm Oil

Years	Reevenue	Investment	Expenditure	Net Cash Flow	12%	Present Value
0		14,900,000,000		14,900,000,000	14900000000	1788000
1	14,000,000,000		4,800,000,000	9,200,000,000	8214285714	11040000
2	14,000,000,000		5,420,000,000	8,580,000,000	6839923469	10296000
3	14,000,000,000		5,930,000,000	8,070,000,000	5744066600	9684000
5	14,000,000,000		6,450,000,000	7,550,000,000	4284072761	9060000
6	14,000,000,000		9,810,000,000	4,190,000,000	2122784398	5028000
7	14,000,000,000		8,200,000,000	5,800,000,000	2623625449	6960000
8	14,000,000,000		8,220,000,000	5,780,000,000	2334445058	6936000
9	14,000,000,000		8,220,000,000	5,780,000,000	2084325944	6936000
10	14,000,000,000		8,220,000,000	5,780,000,000	1861005307	6936000
11	15,000,000,000		8,320,000,000	6,680,000,000	1920340375	8016000
12	15,000,000,000		8,320,000,000	6,680,000,000	1714589621	8016000

Net Present Value =

IDR. 27.116.887.366,34

Internal Rate of Return = 54%

Benefit Cost Ratio =

IDR 2,667346624 (Feasible)

Development of the Palm Oil Plantation Company PERUMDA Padang Lawas with a decrease in the benefit of selling prices, after the calculation of financial analysis shows NPV of IDR. 27,116,887,366.64 at an interest rate of 12%, IRR shows 54% and BCR 2.667346624. These figures indicate that the project is feasible.

Discussion

The establishment of Perumda BUMD Padang Lawas in the palm oil plantation sector and the participation of oil mining capital is a strategic step that can have a positive impact on regional economic development. Based on the analysis and considerations, the following is the conclusion of the proposal to establish Perumda BUMD Padang Lawas. Perumda BUMD has the potential to become the main driver of economic growth in Padang Lawas Regency. The palm oil plantation and oil mining sectors are strategic sectors, and BUMD participation in them can create jobs, increase regional income, and reduce dependence on certain sectors.

The establishment of Perumda BUMD will support regional economic diversification by exploring sectors that have growth potential. By focusing on palm oil plantations and oil mining, regions can benefit from their natural resources. Through Perumda BUMD activities,

local communities can be more involved in economic added value. Community empowerment programs, skills training, and involvement in the value chain can improve welfare and economic inclusion.

The establishment of Perumda BUMD is expected to increase regional income through taxes, royalties, and dividends. This positive contribution can be used to finance development projects and improve public services. erumda BUMD is expected to adopt a sustainable development strategy by considering social, economic, and environmental aspects. Sustainable business practices will support the sustainability and public acceptance of the existence of Perumda. Perumda BUMD can play an important role in the development of infrastructure that supports plantation and mining activities. This infrastructure improvement will open up better marketing access and support business growth.

Through equity participation in petroleum mining, Perumda BUMD can access natural resources of strategic value. This provides opportunities for economic growth and diversification of regional income resources. By being actively involved in strategic sectors, Perumda BUMD Padang Lawas can increase regional competitiveness. Collaboration with stakeholders and involvement in regional projects can provide mutual benefits.

Conclusion

Considering the positive potential and impacts that can be generated, the establishment of Perumda BUMD Padang Lawas is considered the right step in supporting sustainable regional development. It is important to manage its operations with transparency, accountability, and comply with applicable regulations to achieve the desired development goals. The development of the Padang Lawas Petroleum Mining Company with a decrease in the selling price benefit, after the calculation of the financial analysis shows an NPV of IDR. 47,524,668,145, IRRR 84% and BCR 4.9665530854. These figures indicate that the project is Feasible.

References

1. Central Bureau of Statistics (2024). Publication - BPS Padang Lawas - Central Bureau of Statistics.
2. Harahap, R. S. A., Harahap, M. I., & Dharma, B. (2024). Analysis of the Impact of the UP2K Program on Community Income and Welfare Reviewed from the Masalahah Side in Pagaran Baringin Village, Padang Lawas Regency. *Jesya (Jurnal Ekonomi dan Ekonomi Syariah)*, 7(1), 1053-1068.
3. Maulana, M. A., Yulyana, E., & Aryani, L. (2024). Comparative Analysis of Strategies to Increase Local Original Income in Anambas Islands Regency and Padang Lawas. *Innovative: Journal Of Social Science Research*, 4(2), 967-974.
4. Daulay, A. Y., Hidayat, M., & Hadi, M. F. (2024). Analysis of Factors That Influence the Financial Performance of the Regional Government of North Padang Lawas Regency. *Journal of Sustainable Economic Studies*, 1(1), 8-17.
5. Aldiansyah, Y. (2023). Pengaruh Kompetensi Sumber Daya Manusia, Karakteristik Individu, Karakteristik Pekerjaan Terhadap Kualitas Pelayanan Publik Pegawai Pada Perumda Air Minum Tirta Baribis Kabupaten Brebes (Doctoral dissertation, Universitas Pancasakti Tegal).
6. Margaretha, S., Emirzon, J., & Ridwan, R. (2024). Legal Implications of Tirta Musi Palembang Regional Drinking Water Company Choosing Perumda or Perseroda as the Form of BUMD. *Lex LATA*, 6(1).
7. Ihsannovsi, H. (2023). Form of Village-Owned Enterprises with Legal Entity Status Based on Article 117 of Government Regulation in Lieu of Law Number 2 of 2022 and Government Regulation Number 11 of 2021 compared to BUMN and BUMD (Case Study of Village-Owned Enterprises in Sleman Regency) (Doctoral dissertation, Universitas Gadjah Mada).
8. Maramis, R. A., Tumanduk, B. R. J., & Pinasang, D. R. (2023). Legal Analysis of Regional Government Authority in BUMD Financial Management Based on Statutory Regulations. *Innovative: Journal Of Social Science Research*, 3(3), 3765-3771.
9. Liu, M. (2024). Research on investment project evaluation: Comparative analysis based on NPV and IRR. *Highlights in Business, Economics and Management*, 24, 1133-1138.
10. Lin, Z. (2024). Comparative Analysis of NPV and IIRR in Financial Market Applications. *Highlights in Business, Economics and Management*, 24, 1739-1743.
11. Lampert, A. (2024). Global non-sustainable harvest of renewable resources reduces their present price but increases their net present value. *Resource and Energy Economics*, 76, 101409.
12. Gozan, M., Khisan, G., & Safitra, E. (2024). Techno-economic analysis of solanesol production from tobacco leaves using ultrasound-assisted extraction. In *E3S Web of Conferences* (Vol. 503, p. 04009). EDP Sciences.
13. Sastra, M., Junery, M., Fahrizal, K., & Ilahi, A. (2024, February). Feasibility Study of Cassava Plantation and Tapioca Flour Industry in Bengkalis Regency. In *Proceedings of the 11th International Applied Business and Engineering Conference, ABEC 2023, September 21st, 2023, Bengkalis, Riau, Indonesia*.
14. Chkareuli, V., Darguashvili, G., Atstaja, D., & Susniene, R. (2024). Assessing the Financial Viability and Sustainability of Circular Business Models in the Wine Industry: A Comparative Analysis to Traditional Linear Business Model Case of Georgia. *Sustainability*, 16(7), 2877.
15. Chalgybayeva, A., Balogh, P., Szöllösi, L., Gabnai, Z., Apáti, F., Sipos, M., & Bai, A. (2024). The Economic Potential of Agrivoltaic Systems in Apple Cultivation—A Hungarian Case Study. *Sustainability*, 16(6), 2325.
16. Sun, W. (2024). Financial Analysis and Performance Evaluation of Lululemon Athletica. *Highlights in Business, Economics and*

Management, 24, 1967-1972.

17. Benbasat, I., & Zmud, R. W. (1999). Empirical research in information systems: The practice of relevance. *MIS quarterly*, 3-16.
https://www.jstor.org/stable/249403?casa_token=5TX9W4MsKEEAAAAA:uDg3k-bVBEQfIlegodVZMk3Xpd-LR_LGQj7aoBb3oDioD4wCEhKKV1i9sUNyhq7y-e2Yy4WTiOaFkIOkvHy_Hfo45mA3vkKfXaUGOW-r5SwbvEg