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Evaluating The Feasibility of Replacing Official Vehicle Facility (ROVF) in Balangan Regency: Case Study In Cost-Benefit Analysis

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Abstract

Official vehicles are facilities that support the mobility of local officials. There are three options for acquiring those vehicles: purchasing, renting, or replacing official vehicle facility (ROVF) options. This study aimed to evaluate the efficiency, effectiveness, and feasibility of ROVF in the Balangan Regency. This research is a case study involving data analysis techniques using documentation and the literature. The analysis method used was a cost-benefit analysis. There are six stages of cost-benefit analysis in this study: setting goals to be achieved, determining alternatives to be used in the analysis, identifying the cost-benefit component of each alternative that has been set, predicting the impact quantitatively during the time of the project/policy, assessing the monetary value of all impacts (benefits and costs) that have been identified and detailed quantitatively, drawing conclusions, and making recommendations. The research findings indicate that ROVF reduces regional revenue and expenditure budget burden compared to acquiring official vehicles through purchase and rental options. ROVF also enhances officials' performance. The analysis concludes that ROVF in the Balangan Region is feasible.

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INTRODUCTION

The increase in locally generated revenue (PAD) is a demand for Balangan Regency. Therefore, a more creative and innovative regency civil apparatus is required to improve the PAD. The regency civil apparatus within the local government environment is regarded as a component of state and community servants who carry out local government and development duties. This is in line with the functions and responsibilities of local governments as stated in the law. In carrying out their duties, officials are provided with facilities and infrastructure that can effectively and efficiently support mobility.

The facilities and infrastructure provided by local governments are regional property purchased or obtained at the expense of the regional revenue and expenditure budget (APBD) or other acquisitions. One of the facilities and infrastructure provided is official vehicles. Permendagri Number 19 of 2016 concerning regional property management has regulated the type and use of official vehicles. Official vehicles are government-owned vehicles whose use is specifically for official purposes. There are several types of official vehicles, namely: individual official vehicles, operational service vehicles/position service vehicles, and special/field service vehicles. The office vehicle is a vehicle that is provided and used for various office operational activities by Primary High Officials (Echelon II), Administrator Officers (Echelon III), and Supervisory Officers (Echelon IV). Given the importance of providing official vehicles for local officials to carry out their duties and obligations, each local Government provides official vehicles.

Procuring official vehicles by the Balangan Regency Government can be done with a purchase system. The purchase system is the procurement of official vehicles by charging purchase costs. In addition to the purchase costs, there are components of expenses related to the procurement of official vehicles with a purchase system: maintenance, petrol, tax, and asset write-off.

The procurement of official vehicles with a purchase system results in many cost components that must be incurred. In addition, there is an additional cost component, namely the cost of heavy repairs for vehicles with an age of more than ten years. Based on data from the Balangan Regency Government, 142 official vehicles have an economic lifespan of more than ten years. Service vehicles with a lifespan of more than ten years require greater maintenance and repair costs. Then it will burden the cost of the regional budget. In addition, the value of vehicle assets becomes low, resulting in low selling prices. Therefore, other alternatives are needed relating to the acquisition of official vehicles.

Another alternative that the Local Government of Balangan Regency can do is the rental system, meaning that the Local Government can rent a car that local officials will use to a third party. The acquisition of official vehicles with a rental system has been carried out by several regencies in Indonesia, such as Boalemo Regency, Gorontalo Province, which is regulated in Regent Regulation Number 5 of 2019, Way Kanan Regency of Lampung Province, which is regulated in Regent Regulation Number 56 of 2018, and Tanah Laut Regency, South Kalimantan Province, which is regulated in the Regulation of the Regent of Tanah Laut Number 147 of 2020.

Previous research has analyzed many alternatives to the procurement of official vehicles, namely with rental and purchase systems. Arifin & Biswan (2020) compare rental and purchase options in the procurement of official vehicles at the General Secretariat of the Ministry of Finance. Based on the study results, the purchase option charges costs such as the purchase price of the vehicle, maintenance expenses, vehicle tax expenses (STNK), overhaul expenses, and write-off expenses. At the same time, the rental option will only incur petrol expenses. The results showed that the purchase option was more efficient at around 21% of the rental option.

Another study by Santi et al. (2020) analyses the procurement of government operational service vehicles by buying, leasing, or renting at the Padang State Polytechnic. Considering the costs incurred and calculating the net present value of the buy, leasing, or rental system, the result is that purchasing official vehicles is more efficient than the leasing or rental system. This is in line with the research results of Windarta & Amrullah (2020) that the procurement of official vehicles with a purchase system is more efficient than rent by measuring the present value over the useful life of the official vehicle.

The next alternative that Balangan Regency can do is the replacement of office vehicle facilities (ROVF). ROVF is money given to officials instead of a service car facility. The ROVF in the regional apparatus aims to increase civil servants' effectiveness, motivation, and discipline and realize the efficiency of budget use within the Balangan Regency Local Government. The ROVF initiative has been carried out by the Paser Regency of East Kalimantan Province, which is regulated in Regent Regulation No.9 of 2021 concerning the Replacement of Office Vehicle Facilities in Regional Devices.

This study is to analyze cost efficiency in the procurement of official vehicles. Cost efficiency analysis is carried out with three options. The first option is purchasing a service vehicle, the second option is rental, and the third option is the replacement of official vehicle facilities in Balangan Regency.

LITERATURE

Cost efficiency

An assessment of the three options' efficiency is necessary so local governments can reduce the burden on local budgets intended for official vehicles. Cost efficiency assessment is calculated using relevant, sunk, and opportunity costs. Relevant costs are predictions of future costs that differ among alternatives. Identifying relevant costs is comparing costs that may be incurred in the future and is the basis for decision-making. Relevant costs have criteria that the information must be in the form of expectations of costs incurred in the future and have different elements between alternatives (Hongren et al., 2016). Identifying relevant costs becomes the basis for tactical decision-making (Hansen & Mowen, 2007).

Relevant costs are based on different analyses for different purposes, meaning that different analyses are needed. Relevant cost analysis is capable of being the basis of decision-making. Identifying relevant costs means that the chosen alternative will provide the least cost expenditure (Krismiaji & Aryani, 2019). Costs can be said to be relevant for decision-making if they are unavoidable. Avoidable costs can be defined as costs that can be eliminated (entirely in part) as a result of the selection of alternatives or others in a decision-making situation. All costs are considered avoidable except sunk costs and future costs, which do not differ between alternatives.

Sunk cost cannot be affected by any future actions because it has been done in the past and cannot be recovered (Arifin & Biswan, 2020). Sunk cost becomes the expense of purchasing certain assets but does not generate the benefits expected (Hongren et al., 2016). Furthermore, opportunity cost is the anticipated value of "what may happen" when there are two options (Buchanan, 1991). Opportunity cost assesses the benefits sacrificed when an alternative is chosen. According to Deakin & Maher (1997), benefit assessment can be done by measuring costs that need to be measured precisely or estimating costs from various existing alternatives.

Opportunity cost is the cash flow that should be obtained for the best use of the asset. The loss of opportunity to use the asset becomes the cost of loss of opportunity. The cost of each alternative is measured and determined by the value of the loss and profit when an alternative has been selected. Thus, the opportunity cost assessment results can be considered and can be the basis for decision-making.

The cost component of each alternative will be determined and analyzed. With the number of alternatives available, it is necessary to study the cost efficiency of replacing official vehicle facilities and procurement of official vehicles using the purchase and rental systems. The Local Government of Balangan Regency must consider the advantages and disadvantages of procuring official vehicles by purchasing, renting, and ROVF.

METHOD

This research is a case study. A case study is a study that examines an event, program, and activity carried out by an individual or institution. These events are actual and ongoing events. This study's case study is the cost efficiency of efforts to procure office vehicles in the Balangan Regency.

Three options are available: procurement of vehicles with purchase, rental, and ROVF options. A cost-benefit analysis was carried out to test the three options. The data used in this analysis are secondary. Secondary data is a source of research data obtained indirectly through intermediary media.

Data analysis techniques use documentation studies and literature studies. A documentation study is a collection of secondary data in documents related to official vehicle data and the costs in laws and regulations. The study collects data from literature and related references such as journals, books, and other relevant information to support the analysis results.

The analysis method uses cost-benefit analysis. Cost of Benefits Analysis is a method to review or assess a policy by measuring all its impacts based on monetary units (money)(Boardman, 2018). Cost-benefit analysis can be used to decide on a policy, considering the costs borne and the perceived benefits.

Governments can use cost-benefit analysis to create a regulation or policy. In Law Number 12 of 2011 concerning laws and regulations, every draft law (RUU) must be supported by academic manuscripts (Ramadhan, 2021). Academic manuscripts are research reports used as the basis for making regulations. A cost-of-benefit analysis is one of the approaches that can be the basis for analyzing academic manuscripts. It can be concluded that the results of the cost-benefit analysis have the potential to become the basis of regulatory making in Indonesia. Cost-benefit analysis can provide information to regulators.

The stage of cost-benefit analysis is the first stage, setting the goals to be achieved. The second stage determines the alternatives that will be used in the analysis. The third stage identifies the beneficial costs of each predetermined alternative. Identify all impacts in the form of costs needed and benefits resulting from a program or policy. The important thing at this stage is an inventory of all possible impacts.

The fourth stage is to predict the impact quantitatively and then predict the impact during the project/policy. Analysts need to understand the causal impact of a policy/program. The fifth stage of the analysis needs to assess monetarily or give monetary value to all the impacts (benefits and costs) that have been identified and quantitatively detailed. Finally, the sixth stage of analysts needs to recommend policies/programs with the most efficient total value (Boardman, 2018).

RESULTS AND DISCUSSION

Purchase Option

The costs attached to procuring official vehicles with a purchase option are purchase costs, shrinkage expenses, maintenance expenses, overhaul costs, tax fees, fuel, and removal expenses. All cost components will be described below:

Purchase Cost

The type of vehicle at each level of position has been regulated in Permendagri Number 11 of 2007 concerning Amendments to the Regulation of the Minister of Home Affairs Number 7 of 2006 concerning standardization of local government work facilities and infrastructure. Based on this regulation, an estimate of the type of official vehicle that the Balangan Regency Government will use is carried out. Based on the market price in Balangan Regency in 2022, which can be seen in the e-catalog of the Government Goods/Services Procurement Policy Institute (LKPP), the following is the purchase price of official vehicles for each echelon position level:

Table 1. Vehicle Purchase Price

Position	Vehicles Types	Engine capacities	Vehicles purchase prices
IIa	Toyota Fortuner 2.4 G 4X2 M/T DSL	2393 cc	540,500,000
IIb	Honda CRV 2.0 CVT	1996 cc	504,600,000
IIIa	Toyota Veloz 1.5 CVT	1496 cc	288.200.000

IIIb	Toyota Rush 1.5 G A/T	1496 cc	283.700.000
IVa	Yamaha All New NMAX 155 Standard Version	155 cc	36,270,000
IVb	Yamaha All New Aerox 155 Connected version	155 cc	27.280.000

Source: e-catalogue LKPP 2022

Based on Table 1, it can be known the purchase price of official vehicles for each level of position. Vehicles for echelon IIa positions of Rp. 540,500,000, Echelon IIb of Rp. 504,600,000, Echelon IIIa of Rp. 288,200,000 and Echelon IIIb, Rp. 283,700,000. While the IVa position is Rp. 36,270,000 and IVb is Rp. 27,280,000. The total cost of purchasing a vehicle, according to Table 1 above, is Rp. 1,680,550,000.

Vehicle Residue Value

The calculation of the residual value is carried out to help determine the depreciation of fixed assets and the value of these assets if the asset's useful life has expired. Assets that have expired their useful life can be written off or resold according to a predetermined residual value. In other words, the residual value is the amount estimated to be realizable when the asset is depreciated. The following is a table of estimated residual values for each type of vehicle:

Table 2. Residual Value of Office Vehicles

Position	Vehicles type	Engine capacities	Residual Value
IIa	Toyota Fortuner 2.4 G 4X2 M/T DSL	2393 cc	162,150,000
IIb	Honda CRV 2.0 CVT	1996 cc	151,380,000
IIIa	Toyota Veloz 1.5 CVT	1496 cc	86,460,000
IIIb	Toyota Rush 1.5 G A/T	1498 cc	85,110,000
IVa	Yamaha All New NMAX 155 Standard Version	155 cc	10,881,000
IVb	Yamaha All New Aerox 155 Connected version	155 cc	8,184,000

Source: Data processed, 2022

Based on Table 2, it is known the residual value of each type of vehicle. The estimated residual value used in this analysis is 30% of the vehicle's purchase price. The residual value can be an asset's selling price when its useful life has expired.

Maintenance Expenses

The expense of maintaining official vehicles is regulated in the South Kalimantan Governor Regulation Number 102 of 2020 (chapter 2, page 24) concerning Guidelines for the Preparation of Budget Work Plans for Regional Apparatus Work Units and Budget Work Plans for Regional Financial Management Officials Changes in the Regional Revenue and Expenditure Budget of South Kalimantan Province for the fiscal year 2020. The maintenance expense is determined according to the capacity of the engine. Here is the data:

Table 3. Maintenance costs per year

Position	Type of Vehicles	Engine capacity	Maintenance expense per year
IIa	Toyota Fortuner 2.4 G 4X2 M/T DSL	2393 cc	13,000,000
IIb	Honda CRV 2.0 CVT	1996 cc	11,000,000
IIIa	Toyota Veloz 1.5 CVT	1496 cc	11,000,000
IIIb	Toyota Rush 1.5 G A/T	1498 cc	11,000,000
IVa	Yamaha All New NMAX 155 Standard Version	155 cc	5,000,000
IVb	Yamaha All New Aerox 155 Connected version	155 cc	5,000,000

Source: Pergub No. 102 of 2020

Based on Table 3, it is known that based on Governor Regulation No. 102 of 2020, echelon IIa has a maintenance expense budget of Rp. Thirteen million with an engine capacity of 2393 cc or more than 2000 cc, echelons IIa, IIb, IIIa, and IIIb are Rp. 11,000,000 with an engine capacity between 1300 – 2000 cc and echelons IVa and IVb of Rp. 5,000,000, judging from the number of vehicle wheels.

Heavy Repair or Overhaul Cost

An overhaul is a procedure for disassembling the engine to be checked and repaired if there are damaged components. One of the benefits and functions of an overhaul in car engines is to restore engine performance that has been worn out due to long service life. An overhaul fee is charged once during the useful life of the vehicle. Here is the data:

Table 4. Heavy Repair Cost

Position	Type of Vehicles	Useful life	Heavy Repair Cost
IIa	Toyota Fortuner 2.4 G 4X2 M/T DSL	Ten years	15,000,000
IIb	Honda CRV 2.0 CVT	Ten years	15,000,000
IIIa	Toyota Veloz 1.5 CVT	Ten years	15,000,000
IIIb	Toyota Rush 1.5 G A/T	Ten years	15,000,000
IVa	Yamaha All New NMAX 155 Standard Version	Eight years	-
IVb	Yamaha All New Aerox 155 Connected version	Eight years	-

Source: Pergub No. 102 of 2020

Based on Table 4, it is known, based on Governor Regulation 102 of 2020, that heavy repair costs are charged to four-wheeled vehicles and not to two-wheeled vehicles. Overhaul costs will arise when local governments procure official vehicles with a purchase system. The cost of the overhaul will appear when the useful life of the service vehicle is more than five years.

Petrol Expense

The provisions for petrol expenses are regulated in the South Kalimantan Governor Regulation Number 55 of 2019 concerning Guidelines for Providing Petrol Cost for Official Vehicles. Every Primary High Officer (echelon II), Administrator Officer (Echelon III), and Supervisory Officer (echelon IV) who is given service vehicle facilities are given money for petrol costs. Here is the data:

Table 5. Petrol expense per year

Position	Type of Vehicles	Engine capacity	Petrol expense per year
IIa	Toyota Fortuner 2.4 G 4X2 M/T DSL	2393 cc	30,000,000
IIb	Honda CRV 2.0 CVT	1996 cc	30,000,000
IIIa	Toyota Veloz 1.5 CVT	1496 cc	18,000,000
IIIb	Toyota Rush 1.5 G A/T	1498 cc	18,000,000
Iva	Yamaha All New NMAX 155 Standard Version	155 cc	3,600,000
IVb	Yamaha All New Aerox 155 Connected version	155 cc	3,600,000

Source: Pergub No. 55 of 2019

Based on Table 5, it is known the petrol expense per year for each echelon level. The petrol expense is an expense that the local Government must bear for each level of office. The provision of petrol expense is accounted for in real cost and only for one official vehicle.

Vehicle Tax Fees

A vehicle tax fee is a tax that every vehicle owner must pay. Local governments should pay for office vehicles, imposing taxes on motor vehicles according to each vehicle cylinder capacity.

Table 6. Vehicle Tax Fee per year

Position	Type of Vehicles	Vehicle Tax Fee per year
IIa	Toyota Fortuner 2.4 G 4X2 M/T DSL	4,000,000
IIb	Honda CRV 2.0 CVT	3,000,000
IIIa	Toyota Veloz 1.5 CVT	3,000,000
IIIb	Toyota Rush 1.5 G A/T	3,000,000
IVa	Yamaha All New NMAX 155 Standard Version	300,000
IVb	Yamaha All New Aerox 155 Connected version	300,000

Source: Data processed, 2022

Based on Table 6, it is known the vehicle tax fees that local governments must incur. The tax value listed above is the estimated value that has been adjusted to the type of vehicle. Tax fees are a routine burden that must be incurred by local governments every year.

Write-off expenses

Official vehicles are fixed assets that have a useful life. When the useful life of the official vehicle has expired, the asset write-off process can be carried out. The process of removing official vehicles requires coordination with various parties. Therefore, the expenses associated with the write-off should be considered. Based on research from Arifin & Biswan (2020), the expenses associated with the write-off of assets are meeting expenses, the honorarium of speakers, and the cost of announcing the auction in print. In the study, it was detailed that the write-off expense per vehicle was Rp. 4,063,767. Following these data, the estimated expenses of removing official vehicles in this study are IDR 4,000,000 per year. Here is the data:

Table 7. Write-off expenses per vehicle

Position	Type of Vehicles	Write off expenses
IIa	Toyota Fortuner 2.4 G 4X2 M/T DSL	4,000,000
IIb	Honda CRV 2.0 CVT	4,000,000
IIIa	Toyota Veloz 1.5 CVT	4,000,000
IIIb	Toyota Rush 1.5 G A/T	4,000,000
IVa	Yamaha All New NMAX 155 Standard Version	4,000,000
IVb	Yamaha All New Aerox 155 Connected version	4,000,000

Source: Arifin & Biswan, 2020

Based on Table 7, it is estimated that each vehicle will have to incur asset write-off expenses. The asset write-off cost component is adjusted to the needs of asset write-off operations. Local governments that procure official vehicles with a purchase system can make abolitions when the useful life of official vehicles has exceeded the useful life and is no longer used.

Replacement of Office Vehicle facilities

The replacement of office vehicle facilities (ROVF) is measured by giving money to local officials instead of procuring official vehicles. ROVF is given to officials who do not yet have a service vehicle, as evidenced by an official affidavit. The cost components taken into account in the vehicle facility replacement money are vehicle shrinkage expenses, maintenance expenses, heavy repair expenses, petrol expenses, and vehicle tax fees.

Shrinkage Expenses

Shrinkage expenses are impairments of assets that can be considered indirect costs that must be borne. The calculation of shrinkage expenses uses a straight-line method by determining the vehicle's purchase price, residual value, and economic life. Here is the data:

Table 8. Shrinkage expenses per year

Position	Type of Vehicles	Vehicles prices	Shrinkage expenses per year
IIa	Toyota Fortuner 2.4 G 4X2 M/T DSL	540,500,000	37,835,000
IIb	Honda CRV 2.0 CVT	504,600,000	35,322,000
IIIa	Toyota Veloz 1.5 CVT	288.200.000	20,174,000
IIIb	Toyota Rush 1.5 G A/T	283.700.000	19,859,000
IVa	Yamaha All New NMAX 155 Standard Version	36,270,000	2,538,900
IVb	Yamaha All New Aerox 155 Connected version	27.280.000	2,387,000

Source: Data Processed, 2022

Based on Table 8, shrinkage expenses for each type of vehicle are known by estimating the residuvehicle's residual value% of the purchavehicle's purchase price. Meanwhile, the useful life of vehicles is estimated at ten years for four-wheeled vehicles and eight years for two-wheeled vehicles.

Maintenance expenses

The expenses of maintaining official vehicles are regulated in the South Kalimantan Governor Regulation Number 102 of 2020 concerning Guidelines for the Preparation of the Regional Apparatus Work Unit Budget Work Plan and the Budget Work Plan of the Regional Financial Management Officer changes to the Regional Revenue and Expenditure Budget of the South Kalimantan Province for the fiscal year 2020. Maintenance expenses are one of the components taken into account in the formation of the budget for ROVF. Here is the data:

Table 9. Maintenance Expenses per year

Position	Type of Vehicles	Maintenance Expenses per year
IIa	Toyota Fortuner 2.4 G 4X2 M/T DSL	13,000,000
IIb	Honda CRV 2.0 CVT	11,000,000
IIIa	Toyota Veloz 1.5 CVT	11,000,000
IIIb	Toyota Rush 1.5 G A/T	11,000,000
IVa	Yamaha All New NMAX 155 Standard Version	5,000,000
IVb	Yamaha All New Aerox 155 Connected version	5,000,000

Source: Pergub No. 102 of 2020

Based on Table 9, it can be known the budgeted maintenance expenses for each echelon position per year. The budgeting of maintenance expenses in the ROVF aims to provide money that officials can use to maintain the vehicles' performance to support mobility and improve performance.

Heavy Repair or Overhaul costs

Heavy repair costs are earmarked for repairing damaged vehicle components. One of the benefits and functions of an overhaul in car engines is to restore engine performance that has been worn out due to long service life. The unit cost of heavy repair is regulated in Governor Regulation Number 102 of 2020. The calculation of heavy repair costs for the replacement of official vehicle facilities so that the performance of the vehicles used by officials continues to be good when used.

Table 10. Cost of Heavy Repairs

Position	Type of Vehicles	Cost of Heavy Repairs
Ila	Toyota Fortuner 2.4 G 4X2 M/T DSL	15,000,000
Ilb	Honda CRV 2.0 CVT	15,000,000
IIIa	Toyota Veloz 1.5 CVT	15,000,000
IIIb	Toyota Rush 1.5 G A/T	15,000,000
Iva	Yamaha All New NMAX 155 Standard Version	-
IVb	Yamaha All New Aerox 155 Connected version	-

Source: Pergub No. 102 of 2020

Table 10 shows that the heavy repair cost is one of the components of determining the budget of the ROVF. The fee is only charged at the echelon level that uses four-wheeled vehicles. The table follows Pergub No. 102 of 2020.

Petrol Expenses

Petrol expenses are regulated in the Regulation of the Governor of South Kalimantan Number 55 of 2019 concerning Guidelines for Providing Petrol Expenses for Official Vehicles. Each Primary High Officer (echelon II), Administrator Officer (Echelon III), and Supervisory Officer (echelon IV) who is given a service vehicle facility is given money for petrol expenses, which is accounted for in real cost and only for one official vehicle. Here is the data:

Table 11. Petrol Expenses

Position	Type of Vehicles	Petrol Expenses per year
Ila	Toyota Fortuner 2.4 G 4X2 M/T DSL	30,000,000
Ilb	Honda CRV 2.0 CVT	30,000,000
IIIa	Toyota Veloz 1.5 CVT	18,000,000
IIIb	Toyota Rush 1.5 G A/T	18,000,000
IVa	Yamaha All New NMAX 155 Standard Version	3,600,000
IVb	Yamaha All New Aerox 155 Connected version	3,600,000

Source: Pergub No. 55 of 2019

Table 11 shows that the petrol expenses must be budgeted in the ROVF is Rp. 30,000,000, Rp. 18,000,000 and Rp. 3,000,000 in a year for each position level. The petrol expense is one of the cost components that are taken into account in the formation of money for ROVF to support the implementation of duties.

Vehicle Tax Fees

The vehicle tax fee is a tax that every vehicle owner must pay. In this study, the value of tax costs was estimated at Rp. 4,000,000, Rp. 3,000,000 and Rp. 300,000 for each position level adjusted to the type of vehicle used. Here is the data:

Table 12. Vehicle Tax Fee per year

Position	Type of Vehicles	Vehicle Tax Fee per year
IIa	Toyota Fortuner 2.4 G 4X2 M/T DSL	4,000,000
IIb	Honda CRV 2.0 CVT	3,000,000
IIIa	Toyota Veloz 1.5 CVT	3,000,000
IIIb	Toyota Rush 1.5 G A/T	3,000,000
IVa	Yamaha All New NMAX 155 Standard Version	300,000
IVb	Yamaha All New Aerox 155 Connected version	300,000

Source: Data Processed, 2022

Local governments have the responsibility to pay taxes for every service vehicle owned. Tax fees should also be considered in determining the value of ROVF because it is one of the components of costs that local governments must pay yearly.

Rental Option

The cost component of procuring an official vehicle with a rental option is simpler than the other options outlined previously since the rental option only considers rental and petrol expenses. The rental input expense standard regulated in the Minister of Finance Regulation Number 60 of 2021 concerning Input expense Standards for Fiscal Year 2022 for echelon II of South Kalimantan Province is IDR 14,030,000 per month. Here is a breakdown of the expenses that local governments must incur when using rental options:

Table 13. Unit Cost of Renting Official Vehicles

Position	Type of Vehicles	Unit	Rental Expenses
IIa	Toyota Fortuner 2.4 G 4X2 M/T DSL	month	23,500,000
IIb	Honda CRV 2.0 CVT	month	16,600,000
IIIa	TOYOTA VELOZ 1.5 CVT	month	9,700,000
IIIb	Toyota Rush 1.5 G A/T	Month	7,370,000
IVa	Yamaha All New NMAX 155 Standard Version	-	-
IVb	Yamaha All New Aerox 155 Connected version	-	-

Source: e-Catalog LKPP, 2022

Table 13 shows that the rental cost value of each four-wheeled position service vehicle is above the echelon II ceiling price regulated in Permekeu Number 60 of 2021. Echelon IV for renting this type of two-wheeled vehicle does not exist. So that Balangan Regency does not efficiently carry out these costs.

Cost Efficiency Analysis

Table 14. Result

Position	PURCHASE		ROVF	RENT
	Purchase Cost	Expenses per month	Expenses per month	Expenses per month
IIa	540,500,000	(7,527,917)	7,194,583	23,500,000

Iib	504,600,000	(7,068,500)	6,735,167	16,600,000
IIIa	288,200,000	(4,806,167)	4,472,833	9,700,000
IIIb	283,700,000	(4,728,250)	4,446,583	7,370,000
IVa	36,270,000	(1,138,242)	953,242	-
IVb	27,280,000	(1,085,800)	940,583	-
Total	1,680,550,000	(26,354,875)	24,742,992	57,170,000

Source: Data Processed, 2022

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Based on Table 14, it can be seen that the costs contained in the purchase option are the purchase costs and the monthly expenses attached to the official vehicle. The total cost for the purchase option is Rp. 1,680,550,000 and with Rp. 26,354,875 expenses. The purchase option is not feasible for the efficiency of the regional budget. Meanwhile, the monthly expenses that should be borne for the rental option raise a monthly rental fee of Rp. 23,500,000 for echelon IIa, Rp. 16,000,000 for echelon IIb, Rp. 9,700,000 for IIIa and Rp. 7,370,000 for IIIb. These numbers follow the market price on the 2022 e-catalog in Balangan Regency. The rental option is declared unfeasible because every month, the local Government has to spend expenses of Rp 57,170,000. Lastly, the expenditure for the ROVF option is Rp. 24,742,992 per month. Each of echelons IIa and IIb amounted to Rp 7,194,583 and Rp 6,735,167, echelons IIIa and IIIb amounted to Rp 4,446,583 and Rp 4,446,583 and Rp 953,242 and Rp 940,583 for echelons IVa and IVb. ROVF is the most feasible option because the expenditure for office vehicles is only Rp every month. 24,742,992.

CONCLUSION

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Based on the cost-benefit analysis, the procurement of vehicles with the purchase option is not feasible because they have to incur the cost of purchasing official vehicles of Rp. 1,680,550,000, and the expenses attached to the vehicle of Rp. 26,534,875 per month. Therefore, the total costs incurred in the first year are Rp. 1,707,084,875. Meanwhile, the rental option will charge a regional budget of Rp 57,170,000 per month. Lastly, the ROVF option will cost Rp. 24,742,992 per month. There is a difference of Rp 32,427,008. Therefore, the efficiency of the ROVF option is 57%. It was concluded that the ROVF in Balangan Regency is efficient and feasible because it can reduce the burden on the regional budget and increase the work motivation of officials.

The study's results contained several things that recommended the replacement of official vehicle facilities efficiently in reducing regional cost budgets. Replacement of official vehicle facilities is feasible for Balangan Regency to reduce leakage expenses in the maintenance of official car vehicles. The replacement of official vehicle facilities is expected to motivate and improve the performance of the state civil apparatus, especially in the Balangan district.

REFERENCES

- 1
Arifin, Z., & Biswan, A. T. (2020). Pengambilan Keputusan Manajerial: Opsi Sewa atau Beli dalam Pengadaan Kendaraan Dinas (Studi Kasus pada Sekretariat Jenderal Kementerian Keuangan). *Indonesia Treasury Review*, 5(1), 17–29.
- Boardman, A. E. (2018). *Cost-Benefit Analysis: Concept and Practice* (5th ed). Cambridge University Press.
- 2
Buchanan, J. M. (1991). Opportunity Cost. *The World of Economics*, 520–521.
- 3
Fakir, E. B., & Maher, M. W. (1997). *Akuntansi Biaya* (Terjemahan). Erlangga.
- Hansen, D. R., & Mowen, M. M. (2007). *Managerial Accounting*.
- Hongren, C. T., Sundem, G. I., Burgstahler, D., & Schatzberg, J. (2016). *Pengantar Akuntansi Manajemen* (Bahasa Ind). Penerbit Erlangga.
- Krismiaji, & Aryani, Y. A. (2019). *Akuntansi Manajemen*. UPP STIM YKPN.
- Ramadhan, C. R. (2021). Analisis Manfaat-Biaya dalam Pembentukan Regulasi: Praktik, Kritik, dan Instrumen Demokratis. *Jurnal Rechts Vinding*, 10(2), 229–247.

- Santi, E., Wirahadi, A., Saputra, A. W., Mustika, R., & Ferdawati. (2020). Analisis Sistem Pengadaan Kendaraan Dinas Operasional Pemerintah Melalui Sistem Pembelian dan Sewa (Studi Pada Politeknik Negeri Padang). *Akuntansi Dan Manajemen*, 15(1), 91–101.
- Windarta, W. R., & Amrullah, M. (2020). Biaya Termurah Pengadaan Kendaraan Dinas Satuan Kerja Pemerintah: Sewa atau Beli. *Simposium Nasional Keuangan Negara*, 1–22.
- Peraturan Gubernur Kalimantan Selatan Nomor 60 Tahun 2019 Tentang Pedoman Penyusunan Rencana Kerja Anggaran Satuan Kerja Perangkat Daerah Dan Rencana Kerja Anggaran Pejabat Pengelola Keuangan Daerah Anggaran Pendapatan Dan Belanja Daerah Provinsi Kalimantan Selatan Tahun Anggaran 2020
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