

Effectiveness and Contribution of Street Lighting Tax in Pati Regency 2018-2022

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ABSTRACT

Introduction/Objective: This study discusses the effectiveness and contribution of Street Lighting Tax (PPJ) to Pati Regency Regional Tax Revenue during the 2018–2022 period. **Background of the Problem:** The Street Lighting Tax shows fluctuations in its contribution to local taxes, especially during the COVID-19 pandemic. This study aims to analyze the level of effectiveness and contribution of Street Lighting Tax to Pati Regency Regional Tax Revenue. **Novelty:** The study provides a comprehensive evaluation that includes trends in tax effectiveness and contribution, especially with the most recent data to 2022, which has not been widely explored in the region. **Research Method:** The exposition method was used with a secondary data documentation approach from BPKAD Pati Regency. The analysis was carried out to calculate effectiveness and contribution using the target ratio and the realization of tax revenue. **Findings/Results:** The results of the study show that the effectiveness rate of the Street Lighting Tax is very high, with an average of 106.52%. However, its contribution to Regional Tax Revenue shows a downward trend from 51.03% in 2018 to 38.47% in 2022. **Conclusion:** Street Lighting Tax contributes significantly to Regional Tax Revenue, albeit on a downward trend. The results of this study are expected to be a reference for optimizing the management of Street Lighting Tax by local governments.

Pendahuluan/Tujuan: Penelitian ini membahas efektivitas dan kontribusi Pajak Penerangan Jalan (PPJ) terhadap Pendapatan Pajak Daerah Kabupaten Pati selama periode 2018–2022. **Latar Belakang Masalah:** Pajak Penerangan Jalan menunjukkan fluktuasi dalam kontribusinya terhadap pajak daerah, terutama selama pandemi COVID-19. Penelitian ini bertujuan untuk menganalisis tingkat efektivitas dan kontribusi Pajak Penerangan Jalan terhadap Pendapatan Pajak Daerah Kabupaten Pati. **Kebaruan:** Penelitian ini memberikan evaluasi komprehensif yang mencakup tren efektivitas dan kontribusi pajak, terutama dengan data terbaru hingga 2022, yang belum banyak dieksplorasi di wilayah ini. **Metode Penelitian:** Metode eksposisi digunakan dengan pendekatan dokumentasi data sekunder dari BPKAD Kabupaten Pati. Analisis dilakukan untuk menghitung efektivitas dan kontribusi menggunakan rasio target dan realisasi penerimaan pajak. **Temuan/Hasil:** Hasil penelitian menunjukkan bahwa tingkat efektivitas Pajak Penerangan Jalan sangat tinggi, dengan rata-rata 106,52%. Namun, kontribusinya terhadap Pendapatan Pajak Daerah menunjukkan tren menurun dari 51,03% pada tahun 2018 menjadi 38,47% pada tahun 2022. **Kesimpulan:** Pajak Penerangan Jalan berkontribusi signifikan terhadap Pendapatan Pajak Daerah, meskipun dengan tren menurun. Hasil penelitian ini diharapkan menjadi acuan untuk optimalisasi pengelolaan Pajak Penerangan Jalan oleh pemerintah daerah.

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INTRODUCTION

Local governments need a source of funds to build a region. Local Government Law Number 23 of 2014 Article 1 states that Regional Autonomy is the right, authority and obligation of autonomous regions to regulate and manage their own government affairs and the interests of local communities in the Unitary State system of the Republic of Indonesia. Each region is required to maximize its potential with regional autonomy. Regional original revenue is regional revenue that is collected directly in the region. PAD is regional revenue obtained by tax collection in accordance with Law Number 33 of 2004 concerning Financial Balance between the Central and Regional Governments. PAD is the main source of funding to implement the concept of regional autonomy, depending on the financial and economic capabilities of each one. Regional taxes are part of regional revenue, as mandated by a number of regional regulations. Local governments manage the tax collection process to fund various initiatives targeted to improve the welfare of local residents. In Pati Regency, regional tax management is mandated to the Pati Regency BPKAD which is tasked with maximizing tax collection in the region and managing regional wealth and revenue. The Street Lighting Tax is one of the regional taxes managed by the Pati Regency BPKAD which applies to every use of electricity, both internally and externally for street lighting. If an area has street lighting, then the Regional Government bears the cost of the lighting, in which case the Street Lighting Tax applies. Street Lighting Tax revenue will be used to finance a number of projects related to street lighting, such as the maintenance and replacement of city street lights (e.g., Sinjal, 2019; Elim, 2019 Pinatik, 2019).

The revenue generated from the 2018–2022 Street Lighting Tax is a source of funding for Pati Regency which is expected to boost regional tax revenue. In Pati Regency, the Administration of Street Lighting Tax is carried out with a self-assessment system that integrates PT. PLN is obliged to collect it. Except for 2019, the number of PLN electricity users in Pati Regency in 2018–2020 increased slightly to reach 403,303 consumers in 2020. These customers include housing, the business world, industry, social services, government buildings, and street lights (bps.co. id, accessed June 2022). The increasing number of users and electricity needs in Pati Regency shows the great potential of the Pati Regency Regional Government in collecting regional taxes, namely the Street Lighting Tax sourced from PLN energy consumers. The benchmark for the realization of ideal Street Lighting Tax revenue can be determined by assessing its effectiveness and contribution to regional tax collection. By evaluating the level of effectiveness, it can be identified to what extent BPKAD Pati Regency has achieved success in effectively collecting street lighting taxes in its area. Calculating the contribution is carried out by evaluating how much the Street Lighting Tax contributes to regional tax revenue. Which allows the measurement of the ability of local governments to meet their government financing needs efficiently, thereby supporting the optimal implementation of various regional development programs. Except for 2020, street lighting tax revenue tends to increase from 2018 to 2022, even though every year the percentage of local revenue decreases.

The correction of the Pati Regency Government's Street Lighting Tax revenue target needs to be carried out because of an incentive scheme involving central government subsidies for electricity. In addition to adding a 50% discount for 900VA power customers, the cut target also includes the extension of electricity subsidies for 450 VA power consumers until March 2021. This can be attributed to the COVID-19 pandemic that hit in 2020–2021. To ensure that overall local tax revenues are positively affected, it is important to find ways to increase Street Lighting Tax revenues. This process also includes setting specific targets related to the Street Lighting Tax for future periods. Research conducted by Victor (2016) on the contribution of street lighting tax to regional taxes in Jayapura City shows that the revenue share of regional taxes in the city fluctuated decreasing in 2010–2014, with the highest contribution in 2010 and the lowest contribution in 2014 of 13.27%. In Sinjal's (2019) analysis of the effectiveness and contribution of street lighting tax revenue in Minahasa Regency, it was found that although the effectiveness of the street lighting tax as a whole varied greatly from 2016–2018, its contribution to regional taxes fluctuated in a moderate range. According to Jaqueline (2022), who researched the effectiveness and contribution of street lighting tax revenues to regional taxes in Bitung City, the street lighting tax in the city was very effective in 2016–2020, with an average annual effectiveness of 117.59%. This tax also made a good contribution to regional tax revenues in 2016–2019, with an average annual contribution of 36.07%.

The findings of Deby (2022) who conducted research on the effectiveness, efficiency, and contribution of street lighting tax revenue to the local original revenue (PAD) of Buleleng Regency in 2015–2019. The results of the analysis show that the street lighting tax has an average effectiveness rate of 92.06% with the effective category, an average efficiency level of 10% with the very efficient category, and an average contribution level of 10.39% which is included in the low category. The findings of Hermanus (2023) regarding the effectiveness and contribution of street lighting taxes to the increase in local revenue in Sikka Regency in 2018–2022 show that tax effectiveness varies with an average of 106.06% and is included in the category of very effective. However, its contribution to the average local revenue is only 7.89%, which shows that the contribution of street lighting tax to city revenue growth is in the very poor category. The street lighting tax has contributed more than any other tax to tax collection over the past five years, and is expected to continue every year.

The contribution to the Street Lighting Tax is determined by comparing its contribution with the total revenue collected from local taxes. This allows for the best optimization of revenue by utilizing the concept of effectiveness obtained from realization based on predetermined goals. The difference between the actual revenue collected by tax and the total revenue determines how much the street lighting tax contributes to the overall regional tax revenue, and vice versa. Guided by the description above, the formulation of the problem discussed is: (1) What is the effectiveness level of Pati Regency Street Lighting Tax revenue in 2018-2022?; (2) What is the contribution level of Street Lighting Tax revenue to Pati Regency Regional Tax Revenue in 2018-2022?. The objectives of this study are: (1) Analyzing the level of effectiveness of Pati Regency Street Lighting Tax revenue in 2018-2022 and; (2) Analyze the contribution level of Street Lighting Tax revenue to Pati Regency Regional Tax Revenue in 2018-2022. Based on the description above, the success of this research is emphasized on its ability to provide a deeper understanding of the effectiveness and contribution generated by the Street Lighting Tax. To maximize their regional revenue, the local government will be able to take more appropriate actions from the findings of this study, which will be the basis for assessing the policies implemented by the Pati Regency Regional Government.

LITERATURE REVIEW

Definition of Tax

Article 1 Paragraph 1 of Law Number 28 of 2007 refers to taxation in connection with the third amendment of Law Number 6 of 1983 which regulates general provisions and tax procedures stating "Taxes are mandatory contributions to the state that are owed by individuals or entities that are coercive under the Law, by not getting direct rewards and used for state purposes for the greatest possible prosperity of the people." As stated by Prof. Dr. Rochmat Soemitro, S.H. (quoted in Mardiasmo, 2018:3), taxes are contributions from the general public to the state treasury in accordance with the law. It can be enforced without requiring the government to prove a direct infringement and is used to cover public costs. From this explanation, it is concluded that taxes consist of several elements, namely: (1). Donations from the community to the state, which only the state is authorized to collect and is monetary; (2) Based on the law, which means that the power of relevant laws and regulations is used to collect taxes; (3) The government is not allowed to directly neutralize or respond to the taxpayer community; (4) It is used to finance government needs, especially when spending on things that help the whole community.

Tax Grouping

Tax grouping allows taxes to be categorized based on collecting institutions, types, and classes, as explained by Mardiasmo (2018). One of the groupings is by group. Taxes according to their groups consist of direct taxes and indirect taxes. Direct tax is a tax obligation that must be borne by the taxpayer himself without being able to charge the cost to a third party, for example Income Tax. Meanwhile, indirect taxes are a type of tax that can be collected or charged to other people, for example Value Added Tax. Furthermore, tax grouping can also be seen based on its nature. Subjective taxes are taxes that are influenced by the unique circumstances of each taxpayer, for example Income Tax. In contrast, objective taxes are taxes that ignore the unique circumstances of taxpayers and are based on taxable objects, such as Sales Tax on Luxury Goods and Value Added Tax. Other tax groupings are based on the collecting institutions, namely central taxes and regional taxes. Central taxes are imposed by the central government to fund its operations, for example Income Tax, Sales Tax on Luxury Goods, Value Added Tax, and Stamp Duty. Meanwhile, regional taxes are collected by local governments to fund regional needs. These regional taxes consist of provincial taxes such as Motor Vehicle Tax and Motor Vehicle Fuel Tax, as well as district/city taxes such as Hotel Tax, Restaurant Tax, and Entertainment Tax. In addition, regional revenue is also an important thing that is closely related to taxes. Regional revenue is the right of local governments that is recognized as an addition to the value of net worth in the period of the year concerned, as regulated in Law Number 33 of 2004. Regional revenue consists of Regional Original Revenue (PAD), Balance Fund, and other revenues. PAD itself includes regional taxes, regional levies, the results of segregated regional wealth management, and other valid PAD.

The legal basis related to regional taxes includes several regulations, including Law Number 28 of 2009 concerning Regional Taxes and Levies, which replaces Law Number 34 of 2000. An example of a related regional regulation is the

Pati Regency Regulation Number 3 of 2011. By definition, regional taxes are mandatory contributions to regions that are coercive based on the law, without direct compensation, and used for the prosperity of the people, as stipulated in Article 1 Number 10 of Law Number 28 of 2009. This regional tax is divided into two forms, namely provincial taxes and district/city taxes. Provincial taxes include motor vehicle tax, motor vehicle name return duty, motor vehicle fuel tax, surface water tax, and cigarette tax. Meanwhile, district/city taxes include hotel taxes, restaurant taxes, entertainment taxes, billboard taxes, street lighting taxes, non-metallic minerals and rocks taxes, parking taxes, groundwater taxes, swallow's nest taxes, rural and urban land and building taxes, as well as land and building rights acquisition duties.

Street Lighting Tax

Pati Regency Regional Tax Regulation Number 3 of 2011 concerning Regional Taxes states "Street Lighting Tax is a tax on the use of electric power, both self-generated and obtained from other sources". According to Article 22 of the Pati Regency Regulation Number 3 of 2011 concerning Regional Taxes, the objectives of the Street Lighting Tax are: (1) The purpose of the street lighting tax is the use of energy, both domestically produced and obtained from external sources; (2) All power plants generate their own electricity; (3) Goods that are not included in the object of the Street Lighting Tax, namely: (a) Electricity use of local, provincial and national governments; (b) Reciprocal use of electricity in places used by embassies, consulates, and foreign missions; (c) Using electricity generated at the site up to a certain capacity without requiring permission from the competent technical body; (d) The use of electricity in places of worship.

Subjects and Taxpayers of Street Lighting

Article 23 of the Pati Regency Regulation Number 3 of 2011 concerning Regional Taxes states that the subjects and taxpayers of street lighting include: (1) The subjects of the Street Lighting Tax include a person or object that can use electricity; (2) Street Lighting Taxpayers include individuals or private organizations that utilize energy; (3) The party providing electricity is the party responsible for the Street Lighting Tax if the electricity comes from other sources.

Basis for Imposition of Street Lighting Tax

Article 23 of the Regional Regulation (PerDa) of Pati Regency Number 3 of 2011 concerning Regional Taxes states that the basis for the imposition of the Street Lighting Tax includes the selling value of electric power. The selling value of this electric power is the basis for the implementation of the Street Lighting Tax. The factors used to calculate the selling price of electricity are: (1) the selling value of electricity if purchased from other sources, which is equal to the entire load/fixed cost bill plus the kWh/variable usage price stated on the electricity bill, and (2) for self-generated energy, the selling value is determined by considering the available capacity, the amount and duration of electricity use, and local electricity unit prices.

Street Lighting Tax Rates

Article 25 of the Pati Regency Regulation Number 3 of 2011 regulates the Street Lighting Tax rate as follows: (a) A tax of 9% is imposed on the use of electricity from sources other than industry, natural gas extraction, and petroleum mining; (b) A tax of 3% is imposed on the use of electricity derived from natural gas, petroleum mining, and other sources of electricity by industry; (c) A tax of 1.5% is imposed on the use of electricity generated on site.

How to Calculate Street Lighting Tax

Article 26 of the Pati Regency Regulation Number 3 of 2011 explains the process of calculating the Street Lighting Tax. The calculation is carried out by multiplying the tax rate by the basis of imposition of tax to obtain the principal amount of the Street Lighting Tax payable. Part of the cost of street lighting is financed from revenue obtained through the Street Lighting Tax.

Effectiveness Analysis

Effectiveness, according to the Great Dictionary of the Indonesian Language (KBBI), is the ability to have a certain impact, influence, or result. Harefa (2017) stated that effectiveness describes the level of achievement of program results in accordance with the set targets. In the context of the Street Lighting Tax, effectiveness is measured to assess the extent

to which the Regional Finance and Asset Management Agency (BPKAD) of Pati Regency is able to realize this tax target. If the effectiveness ratio is close to 100%, then the Pati Regency Regional Government is considered to function optimally in the management of the Street Lighting Tax.

Contribution Analysis

Contribution, as defined in KBBI, is a gift or donation. Harefa (2017) refers to contribution as the amount of donations given in an activity. The contribution analysis was carried out to find out the extent to which Street Lighting Tax revenue affected the total Regional Tax Revenue of Pati Regency in 2018–2022. This contribution is calculated by comparing the realization of the Street Lighting Tax with the total Regional Tax Revenue.

RESEARCH METHOD

Sujarweni (2019) explained that "Data collection techniques are a way for researchers to reveal or capture quantitative information from respondents according to the scope of the research". One of the techniques for collecting scientific work data is documentation, by searching for information that focuses on documents or historical data. A comparison of the dynamics of the things being researched using document sources can show the accuracy of the data collected from the field and existing documents. According to Yaniawati & Indrawan (2017) "Data collection techniques through documentation studies are interpreted as efforts to obtain data and information in the form of written notes/images stored related to the problem being studied". In this study, data will be collected on the target and realization of Street Lighting Tax revenue in BPKAD Pati Regency in 2018–2022 using the exposition method. The exposition method is used to convey opinions, explain, explain, and convey information based on the research that has been conducted. Alek & Achmad (2020) explained "Writing that aims to provide information, explanation, information, or understanding includes the class of exposure". In this Scientific Paper, the results of the calculation of the contribution and effectiveness of the street lighting tax to the regional tax revenue of Pati Regency in 2018–2022 are explained.

Primary and secondary data are collected, analyzed, and processed to provide information and conclusions used in decision-making. This process includes a data analysis approach. The main idea of the data analysis method is to organize the data collection approach in such a way that the analysis is simple and produces reliable findings, as well as applying the right processes and techniques to interpret the results. Sujarweni (2019) stated that "Data analysis is defined as an effort of data that is already available and then processed with statistics and can be used to answer the formulation of problems in research". Data analysis techniques were used to evaluate the performance of street lighting taxes and their contribution to Pati Regency Regional Tax Revenue. The data analysis techniques used to compile this scientific paper.

Effectiveness Analysis

Effectiveness can be understood as a measure of how well or poorly a task achieves a predetermined goal. According to Harefa (2017) states that "Effectiveness is a state that describes the level of achievement of program results with set targets". In assessing the level of effectiveness, a measuring tool or indicator is needed to assess how successful BPKAD Pati Regency is in collecting Street Lighting Tax. The effectiveness of the Street Lighting Tax can be calculated using the formula: the realization of Street Lighting Tax revenue is divided by the Street Lighting Tax revenue target, then multiplied by 100%. This formula aims to measure the extent of tax revenue obtained compared to the target that has been set. If the calculation results are close to or exceed 100%, then it can be said that tax revenues have been managed effectively. On the other hand, if the result is far below 100%, this shows that tax revenue is still not optimal.

The results of the calculation of the effectiveness of the Street Lighting Tax will provide an overview of the level of success in achieving the tax revenue target. This effectiveness criterion is classified based on the percentage of calculation results, as stipulated in the Ministry of Home Affairs No. 690.900-327 of 1996 concerning Guidelines for Financial Performance Assessment. Based on these guidelines, tax revenue is declared very effective if the percentage is above 100%, effective in the range of 90% to 100%, moderately effective at 80% to 90%, less effective at 60% to 80%, and ineffective if less than 60%. This criterion is a reference to assess the success rate of the management of the Street Lighting Tax (Harefa, 2017).

Contribution Analysis

The evaluation of the contribution of street lighting tax is carried out using a formula that compares the realization of Street Lighting Tax revenue with the realization of Regional Tax Revenue revenue, then multiplied by 100%. This contribution is classified into several criteria as explained by the R&D Team of the Ministry of Home Affairs-Fisipol UGM in 1991, (Harefa, 2017). The criteria are very low if the percentage is in the range of 0.00-10%, less than 10.10%-20%, moderate at 20.10%-30%, quite good at 30.10%-40%, good at 40.10%-50%, and very good if above 50%. This assessment provides an overview of the level of contribution of the Street Lighting Tax to the overall regional tax revenue.

RESULTS

Electricity consumption, whether generated internally or externally, is subject to a levy known as a "street lighting tax". BPKAD Pati Regency oversees regional tax revenue, one of the main sources of which is tax. Therefore, the Street Lighting Tax plays an important role in encouraging regional economic growth. The number of PLN electricity customers covering housing, business, industry, social services, government offices, and street lighting is increasing. This shows the possibility of increasing tax collection from street lighting, which may be optimized to increase regional tax revenue. Collaboration between local governments and communities is needed to be able to handle this potential well. The objectives set by the Pati Regency Regional Government and the receipt of community participation in paying the street lighting levy in 2018–2022 are presented in Table 1.

Table 1. Targets and Realization of BPKAD Street Lighting Tax Revenue in Pati Regency in 2018-2022

Year	Target Admissions Street Lighting Tax (Rp)	Realization of Receipts Street Lighting Tax (Rp)
2018	38.162.235.000	42.128.342.576
2019	43.100.000.000	45.622.025.738
2020	39.000.000.000	39.710.287.581
2021	39.172.000.000	42.021.052.499
2022	51.000.000.000	54.713.529.847

Source: BPKAD Pati Regency, 2024

The growth of Street Lighting Tax can be calculated to determine the status of the growth target and realization shown in Table 1. Positive changes that show an improvement in budget performance are anticipated from the calculation of the increase in Street Lighting Tax. On the other hand, if the calculation of the growth of the Street Lighting Tax is negative, it indicates that there is a decline in budget performance that needs to be looked for as the cause of the decrease. The following is a calculation of the growth in the realization of the Street Lighting Tax presented in table 2:

Table 2. Calculation of the Growth of BPKAD Street Lighting Tax Realization in Pati Regency in 2018-2022

Year	Realization (Rp)	Year Realization Previously (Rp)	Growth Realization (Rp)	Percentage Growth Realization (%)
(1)	(2)	(3)	(4)=(2)-(3)	(5)=(4)/(3)x100%
2018	42.128.342.576	42.128.342.576	-	0,00%
2019	45.622.025.738	42.128.342.576	3.493.683.162	8,29%
2020	39.710.287.581	45.622.025.738	- 5.911.738.157	-12,96%
2021	42.021.052.499	39.710.287.581	2.310.764.918	5,82%
2022	54.713.529.847	42.021.052.499	12.692.477.348	30,21%
Average				6,27%

Source: Reprocessed Secondary Data, 2024

The growth rate of the realization of the Street Lighting Tax in Pati Regency in 2018–2022 is presented in Figure 1 below:

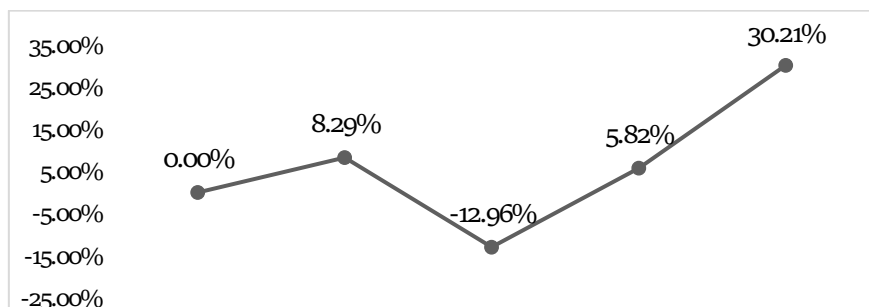


Figure 1. Growth Chart of Pati Regency Street Lighting Tax Realization in 2018-2022

Source: Reprocessed Secondary Data, 2024

The growth rate of the realization of street lighting tax shows that the average realization of street lighting tax increased by 6.27%. As seen in Figure 1, there will be fluctuations in the increase in the realization of the Street Lighting Tax between 2018 and 2022. The largest increase in the realization of the Street Lighting Tax is expected to occur in 2022 with a positive growth rate of 30.21%. In 2020 there was a negative increase of -12.96% in the realization of the Street Lighting Tax, which is the lowest growth to date. It can be seen from table 2 and figure 1 that the realization of Street Lighting Tax revenue in 2018 amounted to Rp 42,128,342,576. The realization of revenue in 2019 increased by Rp. 3,493,683,162 to Rp. 45,622,025,738 with an increase in the percentage of realization growth to 8.29% from 2018. In 2020, the realization of revenue decreased by Rp. 5,911,738,157 to Rp. 39,710,287,581 accompanied by a decrease in the percentage of realization growth to -12.96% from 2019. The realization of revenue in 2021 increased by Rp. 2,310,764,918 to Rp. 42,021,052,499 with an increase in realization growth to 5.82% from 2020. The realization of revenue in 2022 has experienced a fairly high increase of Rp. 12,692,477,348 with an increase in realization growth to 30.21% from 2021. The decline in the growth of the realization of the Street Lighting Tax in 2020 was negative due to COVID-19. Less funds were collected by the Street Lighting Tax as a result of the central government's incentive scheme, which was extended until March 2021 and involved electricity subsidies.

DISCUSSION

Effectiveness of Pati Regency Street Lighting Tax in 2018-2022

An organization's ability to achieve its goals is measured by its effectiveness. An organization can be said to have worked effectively if its goals are successfully achieved. In general, street lighting tax revenue will increase between 2018-2022. However, this increase does not mean that BPKAD Pati Regency's efforts in collecting street lighting taxes have been effective. The measurement of the effectiveness of a service is associated with the set targets. By comparing the actual potential with the goals that have been set, the effectiveness of BPKAD Pati Regency can be assessed from its ability to generate revenue from regional taxes, especially the Street Lighting Tax. The results of the calculation of the Effectiveness of the Street Lighting Tax in Pati Regency in 2018–2022 are shown in table 3.

Table 3. Effectiveness of Pati Regency Street Lighting Tax in 2018-2022

Year (1)	Target (2)	Realization (3)	Effectiveness (%) (4)=(3)/(2)x100%	Criterion (5)
2018	38.162.235.000	42.128.342.576	110,39%	Highly Effective
2019	43.100.000.000	45.622.025.738	105,85%	Highly Effective
2020	39.000.000.000	39.710.287.581	101,82%	Highly Effective
2021	39.172.000.000	42.021.052.499	107,27%	Highly Effective
2022	51.000.000.000	54.713.529.847	107,28%	Highly Effective
	Average		106,52%	Highly Effective

Source: Reprocessed Secondary Data, 2024

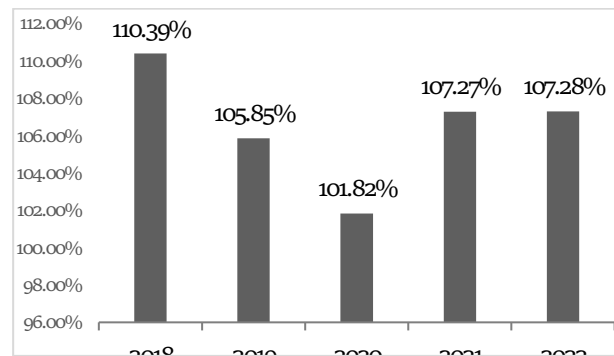


Figure 2. Graph of the Effectiveness of Street Lighting Tax in Pati Regency in 2018-2022
Source: Reprocessed Secondary Data, 2024

Table 3 illustrates how the purpose of the Street Lighting Tax is compared to the realization of revenue to calculate the appropriate amount of street lighting tax. Table 3 presents the details of the findings of the calculation, which shows that the Pati Regency Street Lighting Tax revenue collected from 2018 to 2022 has a very high average effectiveness of 106.52%. Based on Figure 2, there are variations in the efficacy of Street Lighting Tax revenues from 2018 to 2022. The effectiveness of the Street Lighting Tax in 2018 was 110.39%. There was a decrease to 105.85% in 2019. In 2020, it decreased again to 101.82%. Meanwhile, in 2021 it increased to 107.27%. In 2022 there was an increase of 107.28%. The Street Lighting Tax is the most effective in 2018 and the least effective in 2020, as can be seen from the explanation of the 2018-2022 period. Based on the calculation of the effectiveness of the Street Lighting Tax, the ability of BPKAD Pati Regency to generate revenue is shown by an average effectiveness ratio exceeding 100%. And it was said to have worked.

Contribution of Street Lighting Tax to Regional Tax Revenue of Pati Regency in 2018-2022

Annual fluctuations in regional taxes and street lighting levies have an impact on the income of Pati Regency. The regional revenue target for the Street Lighting Tax from 2018 to 2022 has been achieved. This contribution must be taken into account to determine the amount of contribution of the Street Lighting Tax to the Regional Tax Revenue of Pati Regency. Table 4 displays the findings of the calculation of the contribution rate of the Pati Regency Street Lighting Tax in 2018-2022.

Table 4. Contribution of Street Lighting Tax to Regional Tax Revenue

Year (1)	Realization of Street Lighting Tax Revenue (2)	Realization of Regional Tax Revenue (3)	Contribution (%) (4) = (2)/(3)x100%	Criteria (5)
2018	42.128.342.576	82.553.070.563	51,03%	Excellent
2019	45.622.025.738	93.020.249.056	49,05%	Good
2020	39.710.287.581	97.884.137.026	40,57%	Good
2021	42.021.052.499	108.637.584.364	38,68%	Pretty Good
2022	54.713.529.847	142.237.812.783	38,47%	Pretty Good
	Average		43,56%	Good

Source: Reprocessed Secondary Data, 2024

Figure 3 shows a graph of the percentage of street lighting tax on Pati Regency Regional Tax Revenue in 2018-2022 based on Table 6.

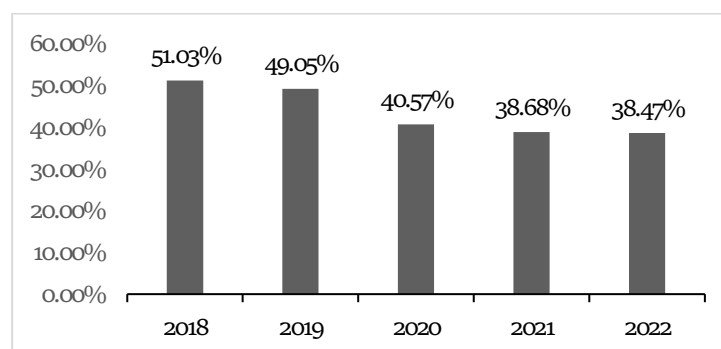


Figure 3. Contribution of Street Lighting Tax to Regional Tax Revenue of Pati Regency in 2018-2022
Source: Reprocessed Secondary Data, 2024

Table 4 explains how to determine the contribution of the Street Lighting Tax and also presents the results of the calculation, showing that the contribution of Pati Regency's revenue from the Street Lighting Tax between 2018 and 2022 averaged 43.56% which is considered satisfactory. As seen in Figure 3, the annual portion of Street Lighting Tax revenue for regional tax collection has decreased from 2018 to 2022. Regional Tax Revenue in 2018 was contributed by the Street Lighting Tax of 51.03%. In 2019, it decreased to 49.05% and decreased significantly to 40.57% in 2020. Due to the decline in the realization of the Street Lighting Tax due to the COVID-19 outbreak, it fell again to 38.68% in 2021. It will decrease by 38.47% in 2022. This explanation explains why the Street Lighting Tax contributed the least to regional tax revenue in 2022 and the largest in 2018. The decrease in contribution was also caused by variations in the realization of Street Lighting Tax and Regional Tax revenues. Based on this explanation, it is known that although the amount of Street Lighting Tax contribution every year has decreased, the average contribution to the Regional Tax Revenue of Pati Regency is still relatively good. This shows that the Street Lighting Tax makes a considerable contribution to the growth of Regional Tax revenue. This is also a challenge for BPKAD Pati Regency to continue to explore the possibility of receiving Street Lighting Tax. The contribution of regional tax revenues to regional revenue will increase if the street lighting tax can make a greater contribution. The goal of BPKAD Pati Regency to increase Regional Revenue will be achieved in order to create an independent government in financing programs and activities of the Pati Regency government.

CONCLUSION

The effectiveness level of the Street Lighting Tax in Pati Regency during the 2018-2022 period averaged 106.52%, which is classified as very effective. The realization of tax revenue exceeded the annual target, despite fluctuations in 2020 due to the impact of the COVID-19 pandemic. This shows the ability of the Regional Financial and Asset Management Agency (BPKAD) to manage this tax revenue. The contribution of Street Lighting Tax to Regional Tax Revenue of Pati Regency shows a downward trend from 51.03% in 2018 to 38.47% in 2022. The average contribution for five years is 43.56%, which is considered good. This decline was influenced by variations in the realization of taxes and electricity subsidy incentives from the central government.

MANAGERIAL IMPLICATION

This study shows that the Street Lighting Tax makes a significant contribution to Regional Tax Revenue, although the trend of its contribution has decreased in the last five years. Therefore, local governments need to prioritize the optimization of this tax management policy. Policies that are adaptive and responsive to change, such as the implementation of electricity subsidy incentives during the pandemic, must be re-evaluated to ensure the stability of tax revenues in the future. In addition, a more proactive approach is needed to manage tax potential, including increasing efficiency in tax collection and supervision. Socialization and education to the public is a strategic step to increase taxpayer participation. Public awareness of the importance of the Street Lighting Tax as the main source of funding for regional development needs to be increased through structured campaigns. Close collaboration between the Regional Finance and Asset Management Agency (BPKAD) and electricity providers such as PLN also needs to be strengthened to create a more transparent, efficient, and integrated tax management system. In addition, diversification of regional revenue sources is no less important. Dependence on Street Lighting Tax as one of the main contributors to regional taxes can be minimized by developing other sources of tax revenue. In the long term, this step not only reduces the risk of declining revenues, but also strengthens regional fiscal independence. Thus, the implementation of policies that support the sustainability of regional development can run more optimally.

The application of technology in tax management is also a key element that must be considered. A transparent digital system will increase efficiency in the tax collection process while building public trust. With integrated data, local governments can conduct more accurate analysis to determine tax policies that are data-based and in accordance with regional needs. This implication is expected to be a strategic guide for the Pati Regency Government in increasing the contribution of the Street Lighting Tax to regional revenue and supporting sustainable local economic growth.

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