STRATEGY FOR INCREASE OF ORIGINAL REGIONAL INCOME THROUGH CHANGES IN WASTE RETRIBUTION IN MOJOKERTO CITY

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ABSTRACT

This research aims to determine the potential for increasing revenue from waste retribution in Mojokerto City as a means of increasing PAD thus it can maximize the potential of the APBD for the benefit of regional social and economic development. This is qualitative research using a descriptive case study approach. The data used is primary and secondary data collected using interview or FGD, documentation, and questionnaire methods. Data analysis was carried out using Miles and Huberman, starting from data collection, data reduction, data presentation, and conclusion. Data shows that the total revenue from waste retributions is only able to cover 5% of the total waste management costs thus the remaining 95% of these costs are charged to the APBD. Strategies are needed so that the potential for retribution revenue can be increased. The potential calculation is carried out by increasing the rates of 2x and adding household retribution data. The results show that increasing retribution rates and adding household data can increase the percentage of costs that can be covered by up to 50%. So, it can be concluded that this strategy contributes to increasing PAD. The research results are expected to have a theoretical contribution to contribution theory related to research on strategies for increasing Regional Original Income (PAD). Apart from that, it is hoped that the results of this research will have a practical contribution to the Mojokerto City Government in developing strategies to increase waste levy revenues.

Keyword: Strategy, Original Regional Income, Waste Retribution, Potential

ABSTRAK

Penelitian ini bertujuan untuk mengetahui potensi peningkatan penerimaan retribusi persampahan di Kota Mojokerto sebagai sarana peningkatan PAD sehingga mampu memaksimalkan potensi APBD untuk kepentingan pembangunan sosial dan ekonomi daerah. Penelitian ini merupakan penelitian kualitatif dengan menggunakan pendekatan studi kasus deskritif. Data yang digunakan adalah data primer dan sekunder yang dikumpulkan dengan metode wawancara atau FGD, Dokumentasi, dan Kuesioner. Analisis data dilakukan dengan metode Miles dan Huberman yaitu dimulai dari pengumpulan data, reduksi data, penyajian data, dan penarikan kesimpulan. Data menunjukkan total penerimaan retribusi persampahan yang berasal dari non rumah tangga hanya mampu mengcover sebesar 5% dari total biaya pengelolaan persampahan sehingga sisa 95% dari biaya tersebut dibebankan kepada APBD. Strategi diperlukan agar potensi penerimaan retribusi dapat ditingkatkan. Perhitungan potensi dilakukan dengan menaikkan tarif 2x lipat dan menambahkan data retribusi Rumah Tangga. Hasil menunjukkan bahwa kenaikan tarif retribusi dan penambahan data rumah tangga mampu meningkatkan persentase biaya yang dapat dicover sampai dengan 50%. Sehingga dapat disimpulkan bahwa strategi tersebut memberikan kontribusi terhadap peningkatan PAD. Hasil penelitian diharapkan memiliki kontribusi secara teoritis terhadap teori kontribusi yang berkaitan dengan penelitian strategi peningkatan Pendapatan Asli Daerah (PAD). Selain itu, hasil penelitian ini diharapkan memiliki kontribusi secara praktis terhadap Pemerintah Kota Mojokerto dalam menyusun strategi peningkatan penerimaan retribusi persampahan.

Kata kunci: Strategy, Pendapatan Asli Daerah, Retribusi Sampah, Potensi

Introduction

Rapid population growth and increasingly higher economic growth supported by increasing consumption patterns of the community have resulted in increased waste or waste generation around community residential areas (Annisa et al., 2015; Prihatin, 2020; Rembet et al., 2018; Susanto and Rahardyan, 2016; Zohoori and

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Ghani, 2017). Improving living standards tends to increase people's consumption of goods, and this is the forerunner to the production of waste (Prihatin, 2020). The Central Statistics Agency (BPS) and the Indonesian Plastic Industry Association (INAPLAS) stated that Indonesia is the country with the second largest contributor to plastic waste in the world, reaching 64 million tons. This is also in line with data from the World Bank which estimates that there will be an increase in waste generation of 3.4 billion tons in 2025 (Torrente-Velásquez et al., 2021).

The waste problem in a region is a duty and obligation of the Regional Government (Jaya et al., 2022). However, apart from having to be managed in an integrated manner by the government, the community must also be empowered optimally and need to be involved in efforts to handle waste in the form of fees (Hertomo et al., 2018 and Sumbodo et al., 2021). Receiving levies from the community is one of the most important aspects of financing because it is a source of Regional Original Income (PAD) (Safitri and Zulkarnaini, 2022). Receipt of Regional Levy is one solution that can be used by the government to overcome various regional economic development problems (Dwiastuti, 2018). Retribution revenues can be used by the Regional Government to improve optimal services to the community (Rembet et al., 2018 and Saifullah et al., 2016). One component of regional levies is the general services levy which includes a waste levy component. It is hoped that the receipt of waste levies regulated by the regional government will be able to make a positive contribution to increasing Regional Original Income (PAD) which will later be used to improve the regional economy.

Mojokerto City Regional Regulation No. 8 of 2011 concerning General Services Levy is a regulation issued by the Mojokerto City Government that regulates waste levy rates in Mojokerto City. Since this regulation was established and implemented, there have been no new regulations regarding changes or increases in waste levy rates in the City of Mojokerto. Based on data from the Mojokerto City Environmental Service, levy revenues at the rates that have still in effect for the last few years have only been able to cover 5% of the total waste management burden in the Mojokerto City environment. So far, the operational waste management burden of the Mojokerto City Government has not been balanced with adequate levy revenues. So, 95% of the waste management burden is borne entirely by APBD funds. Based on this data, it can be concluded that the current tariff is less effective in increasing PAD and therefore less able to strengthen the APBD. On the other hand, levy revenues should be able to make a positive contribution to increasing PAD. The increase in PAD can be used by regional governments to finance development and improve service facilities in their respective regions. (Aini and Mubarak, 2022 and Amory and Suryati, 2022). So, the hope is that by increasing PAD, the Mojokerto City Government can optimally allocate APBD to improve services to the community in the form of building infrastructure or other facilities. So, it is hoped that the economy of Mojokerto City can improve further.

Research related to the receipt of levies on Regional Original Incoma has been carried out a lot, such as research related to the effectiveness of receipt of waste levies (Aini, and Mubarak, 2022; Amory, and Suryati, 2022; Rembet et al.,2018; Saifullah et al.,2016), and related research strategy to increase waste levy Revenue in several

regions (Hertomo et al., 2018 and Manan, 2023). The results of several studies all argue that the receipt of waste levies in several regions is still not effective and still needs to be evaluated and reviewed. On the other hand, contribution theory emphasizes that an action carried out by an individual or group will always have a real impact, both positive and negative, on other parties (Amory and Suryati, 2022). Collecting waste levies based on the theory of retribution should have a real impact on increasing PAD (Rahmadia, 2018). However, several research results indicate that waste levies are still not effective and need to be reviewed, including in the city of Mojokerto. So, a strategy is needed to overcome this problem. One strategy that can be implemented is to increase levy rates and collect data on mandatory household levies.

This research aims to explore the potential for revenue from waste levies so that the ultimate goal is to increase PAD. The increase in PAD is intended to optimize the potential of the APBD towards regional economic development. This research uses a qualitative research method using a descriptive case study approach. Data analysis was carried out using the Miles and Huberman (1992) method, starting from data collection, data reduction, data presentation, and conclusion. It is hoped that the research results will have a theoretical contribution, namely increasing literature related to theoretical contributions related to research in the social and economic fields, especially research on strategies for increasing waste levy revenues to increase Regional Original Income (PAD). Apart from that, it is hoped that the results of this research will have a practical contribution, namely as a consideration for the Mojokerto City Government, especially the Mojokerto City Environmental Service, in determining new levy rates so that levy revenues can be increased. Increasing levy revenues aims to spur PAD independence which will indirectly influence the optimization of the Mojokerto City APBD to improve the community's economy.

Literature Review
Contribution Theory

According to the Big Indonesian Dictionary (KBBI), contribution is defined as a contribution that can be interpreted as the involvement of individuals or groups that can have both positive and negative impacts on other parties. Contribution provides opportunities for individuals and groups to improve the efficiency and effectiveness of their lives following their competencies. Contributions can be demonstrated in several ways, namely ideas, professionalism, material or financial, and others (Amory and Suryati, 2022).

Contribution theory emphasizes the impact of value that can be felt in real terms from social and economic aspects (Rahmadia, 2018). Waste levies are a form of contribution made by the community, both households and industry, as a form of reciprocity for the services provided by the local government. Total revenue from waste levies will automatically contribute to PAD revenue. A region's independence from PAD will reduce dependence on the APBD. Increasing PAD provides an opportunity for local governments to maximize APBD to improve the local economy. So indirectly the receipt of levies makes a big contribution or impact on regional development (Ramadhan dan Jalil, 2022). The contribution theory in this research is

used to strengthen the research results that the strategy of increasing PAD through changing waste levy rates in Mojokerto City is feasible.

Original Regional Income

Original Regional Income (PAD) is income obtained by the region which is collected based on statutory regulations. Regions have greater authority to regulate and manage their PAD in the current era of regional autonomy (Irwan et al., 2022). This flexibility in authority aims to improve services from the government to the community and also make it easier to control and use funds (Asmorowati et al., 2022; Barter and Wangge, 2022; Talitha et al., 2020). Thus, local governments are expected to be more creative in exploring more revenue potential (Irwan et al., 2022).

Some sources of PAD that can be maximized by local governments are revenues originating from regional taxes, regional levies, and other legitimate income (Andjarwati et al., 2021 and Dwiastuti, 2018). Regional taxes are coercive levies on Indonesian citizens. Meanwhile, levies are regional levies as payment for certain services or permits granted expressly by the regional government for the benefit of individuals or entities. Retribution is a cushion that can help with problems in people's lives (Dwiastuti, 2018). The government provides services to increase regional income needed for development funds sourced from PAD sources (Rembet et al., 2018 and Saifullah et al., 2016).

Waste Levy

Waste levies are regulated in Law Number 28 of 2009 concerning Regional Taxes and Regional Levies. The waste cleanup levy is a regional levy that is included in the general services levy category, the rates and management of which are left to the regional government. The principle of determining the amount of waste cleanup levy rates is to pay attention to service costs, pay attention to community capabilities, and pay attention to justice. The Mojokerto City Government has a regional policy that regulates public service fees, namely Regional Regulation (Perda) Number 8 of 2011. In it, some regulations discuss waste/cleaning fees in detail in Chapter IV. The structure and amount of waste levy rates regulated in Regional Regulation Number 8 of 2011 are still in effect today and there have been no changes to date.

Based on Regional Regulation Number 8 of 2011 Chapter IV Part One Article 26, waste/cleaning service levies are levies collected as payment for waste/cleaning services provided by the Regional Government, which are obtained/enjoyed by every individual or entity. The object of the waste/cleaning service levy based on Article 27, includes the provision of a location for final waste disposal/destruction as well as the provision and rental of mobile toilets. Excluded objects are places that can be used by the general public and are managed by the Regional Government, including cleaning services for public roads, parks, places of worship, and social places. The object of retribution for waste/cleaning services as intended in Artcile 110 paragraph (1) letter b of Law No.28 of 2009 is waste/cleaning service provided by the Regional Government which consists of providing a place for disposal or final disporal of waste, collection or collection of waste from the source to a temporary disposal site

transportation of waste from the source and/or a temporary disposal site to the final waste disposal site. The subject of the levy is an individual or entity that utilizes or enjoys waste or cleaning services. Mandatory levies must pay levies when using waste or cleaning services.

The Ratio of Waste Levy Revenue to Waste Management Costs

The ratio of waste levy receipts to waste management costs for one year within the Mojokerto City Environmental Service refers to Minister of Home Affairs Regulation No. 7 of 2021 where the basis for determining levy rates is the total amount of levy requirements. Retribution requirements are calculated using the formula: **Retribution Total Needs = Ideal Waste Handling Cost – Waste Handling Cost that Covered.** According thatt formula it is known that:

1. The levy requirement is the difference between the total annual waste handling costs and the amount of waste handling cost allocation covered by non-retribution. The total amount of levy requirements is the basis for determining levy rates.
2. Ideal waste handling costs are the costs required for waste management which include:
   a. collection/collection of waste from the source to temporary disposal locations;
   b. transporting waste from its source and/or temporary disposal location to the final waste disposal/disposal location; And
   c. Providing a location for final disposal/destruction of waste.
3. Total Waste Handling Costs covered by Non-Retribution (IDR/Year) is the regional expenditure allocated for waste handling costs in 1 year sourced from non-levy

Research Methods
Research Types

This research is qualitative research using a descriptive case study approach. Descriptive case studies aim to describe a phenomenon or case in detail (Yin, 2014). Descriptive research provides an objective picture of a situation using numbers, starting from data mining to data analysis (Arikunto, 2006). The object of case study research can be an individual, community, organization, event, or even a decision (Vaus, 2001). The case that is the object of this research is the waste levy rate determined by Mojokerto City Regional Regulation Number 8 of 2011 concerning Public Service Levy. The levy rate influences how much PAD the City of Mojokerto will get.

Research Sites

This research was conducted at the Mojokerty City Environmental Service. The Environmental Service was chosen because one of its duties and function is related to waste management in the City of Mojokerto. This research chose the City of Mojokerto because Mojokerto City Regional Regulation Number 8 of 2011 concerning Public Service Levy, which is the legal umbrella for the imposition of waste levies in Mojokerto City, has been around for too long so it needs to be updated so that the waste levies received can reduce the burden on the APBD.

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Data Types and Sources

This research uses qualitative and quantitative data. The data sources used are primary and secondary. Primary data is data obtained directly from the research site. Meanwhile, secondary data is data obtained indirectly or through data processing (Rachmat and Ibrahim, 2021 dan Zhang et al., 2003). The primary data in this research are the results of a questionnaire distributed to the people of Mojokerto City to find out the amount of waste levy rates paid by the Compulsory Household Levy. Meanwhile, secondary data in this research is data on the realization of waste levy receipts for mandatory non-household levies, waste management cost reports for one year, and BPS data which includes PDAM customer data.

Data Collection

This research uses 3 data collection methods, namely Interviews, Documentation, and Questionnaires. The interview method was carried out through a Forum Group Discussion (FGD) together with the Head of the Mojokerto City Environmental Service and Regional Apparatus Organizations with an interest in determining levy rates such as the Legal Bureau, Regional Finance Department, BPS, and other related OPDs. Meanwhile, the documentation method is carried out by collecting information that is already owned by the Environmental Service and the Mojokerto City Government. Apart from that, the questionnaire method is carried out by distributing structured research instruments aimed at the community or mandatory household levies.

Data Analysis Method

This research uses the qualitative data analysis method from Miles and Huberman (1992) which consists of interconnected components or stages. The data analysis stages start from data collection, data reduction, data presentation, and conclusion. Data collection in this research was carried out using several methods, namely interviews or FGDs, documentation, and distributing questionnaires. Data reduction means summarizing and selecting the focus of the discussion that will be presented in the discussion in the form of analysis results. In this research, data reduction was carried out by selecting the data that had been collected, both primary and secondary data, which were suitable to answer the problem formulation and research objectives. Presenting data means providing a narrative of data that has been reduced from the original data. The process of providing data in this research is to provide an analysis of the research results, namely calculating the potential receipt of waste levies that have an impact on strategies for increasing Original Region Income. Furthermore, the results of the analysis that has been carried out previously following the problem formulation and research objectives. The results of this research will be validated using the data source triangulation method by comparing the primary and secondary data that have been obtained.

Results

Existing Waste Levy in Mojokerto City

Levy for Waste or Cleaning Services in Mojokerto City is regulated in Mojokerto City Regional Regulation Number 8 of 2011 concerning Public Service Levy. The structure and amount of levy rates are classified based on the services provided, and the type and volume of waste produced based on the cummunity's

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capabilities. The concept of a Waste/Cleaning Service Retribution in this case is a service paid for services for collecting, transporting, and processing waste at Temporary Storage Places (TPS), as well as final processing at Final Processing Places (TPA). See table 1 to number of non-household waste retribution receipts.

Table 1. Number of Non-Household Waste Retribution Receipts

Waste Source	Retribution value collected/year (IDR)
Industrial area	5.214.000
Hotel/lodging	1.980.000
Restaurant	8.316.000
Office	34.399.200
Health facility	5.346.000
Trading facilities	107.606.400
Gas station	792.000
Entertainment/tourism facilities	4.158.000
Independent disposal to landfill	110.583.000
TOTAL	278.394.600

Source: Processed data, 2023

Table 1 shows the mandatory number of levies and collection of waste levies from each category of non-household waste sources. In the table, it can be seen that the imposition of waste levy rates in the City of Mojokerto has been adjusted to the structure of the Garbage/Cleaning Service Levy rates. Waste levy income (non-household) is calculated at around IDR 278,394,600 during 2022.

Existing Waste Management Costs in Mojokerto City

The results of research using secondary data originating from the Mojokerto City Environmental Service show that the total waste management costs in 2022 are IDR. 5,477,061,600, -. Details can be seen in table 2.

Table 2. Mojokerto City Waste Management Costs

Types of Cost	Total costs incurred (IDR)
Cost for sand and rock	113.652.000
Cost for janitorial services	3.564.000.000
Cost for BPJS smployment insurance	251.100.000
Cost for cleaning supplies and equipment	89.314.500
Cost for heavy equipment maintenance	93.722.400
Cost for tires and accu procurement	194.893.699
Cost for oil procurement	76.202.500
Cost for operational vehicle maintenance expenditure	190.322.200
Cost for BBM	903.854.400
Total of cost	5.477.061.600

Source: Processed data, 2023

Table 2 shows the types of costs and total costs for handling waste in Mojokerto City in 2022. Based on Minister of Home Affairs Regulation No. 7 of 2021 concerning the Calculation of Retribution Tariffs in the Implementation of Waste Management, the retribution requirement is the difference between the total

waste handling costs per year and the amount of waste handling cost allocation which is covered by Non-retribution. Because the Mojokerto City Environmental Service's funding sources come entirely from the Mojokerto City APBD, no waste handling costs are covered by non-retribution costs. So the value of the waste levy requirement should be the same as the waste handling cost (Total Levy Requirement = Ideal Waste Handling Cost). Table 1 and table 2 show that the total waste levy revenue is only able to cover 5% of the total waste handling costs required.

Calculation Results of Potential Waste Retribution Revenue in Mojokerto City
Result 1 – Potential Non-Household Retribution Revenue

Result 1 is the result of calculating the potential receipt of waste levies by only obtaining receipts from Mandatory Levy (WR) from Non--households. The calculation is carried out by trying to make projections by increasing the current levy rates by 2x every year. This calculation was carried out to find out the potential increase in levy tariff revenues in the next 5 years (2024 – 2028). The calculation results are presented in table 3.

Table 3. Calculation Results of Potential Increase in Mojokerto City Non-Household Waste Retribution Revenue (in IDR 000)

Information	Year of Revenue					
	2022 - 2023	2024	2025	2026	2027	2028
Mandatory Levy / Year	167.811	335.623	671.246	1.006.869	1.342.492	1.678.116
Independent Levy / Year	110.583	221.166	442.332	663.498	884.664	1.105.830
Mandatory + Independent	278.394	556.789	1.113.578	1.670.367	2.227.156	2.783.946
Total waste handling costs	5.477.061	5.477.061	5.477.061	5.477.061	5.477.061	5.477.061
Percentage of cost covering from levy revenue	5,08%	10,17%	20,33%	30,50%	40,66%	50,83%

Source: Processed data, 2023

Table 3 is a table of the potential increase in levy revenue from 2023 to 2028 using the 2x increase approach from the initial rate periodically every year. Considering that the volume of waste will increase every year, the realization of levy revenues in the coming years may also increase. Based on the table above, it shows that the total revenue from waste levies for 2022 and 2023 is IDR 278,394,600. Then in 2024, it will increase to IDR 556,789,200, -, in 2025 it will become IDR 1,113,578,400, -, in 2026 it will become IDR 2,227,156,800, -, then in 2027 it will become IDR 2,024,688,000, -, and in 2028 the total revenue levy of IDR 2,783,946,000.-. It is assumed that total waste handling costs will not increase or decrease. Based on the calculation results in table 3, it shows that after the basic rate was increased 2x every year, total levy revenues automatically increased and the percentage of costs that could be covered by levy revenues increased as well. After experiencing an increase in revenue, in 2024 the percentage of waste handling costs that can be covered will be 10.17%. Then in 2025, it will be 20.33%, in 2026 it will be 30.50%, in 2027 it will be 40.66%, and in 2028 it will have reached 50.83%.

Result 2 – Potential Revenue from Household and Non-Household Retributions

Result 2 is the result of calculating the potential revenue from waste levies by combining the receipts from mandatory household and non-household levies. A mandatory Household Levy was added with the hope of being able to leverage levy

revenue so that it can increase Mojokerto City's PAD. The number of households in Mojokerto City, which reached 46,555, contributed to the waste levy revenue in Mojokerto City. However, it is necessary to realize that there are several reasons why not all families are willing and able to pay the waste levy. These reasons include: (a). families who cannot afford to pay (income/poverty factor), (b). families who deal with garbage by burning or washing it away, (c). there is more than 1 family head in 1 house, and (d). other causative factors.

for the reasons above, it is necessary to narrow down the target number of potential waste levy revenues from the household category. So, researchers used data on the number of PDAM customers as a basis for calculations. The use of data on the number of PDAM subscribers as mandatory household levies was chosen with the assumption that households that subscribe are considered economically capable and thus can pay the levies. Apart from that, PDAM data can also determine the amount of water used. Water discharge usage also shows how many water users there are in one house. This means it can also be seen that the more water users there are, the more waste produced will also be. The number of households that are PDAM customers in Mojokerto City is presented in detail in table 4.

Table 4. Number of Households Who Are PDAM Customers in Mojokerto City

Household Category	Number of Household Customers
Household of Social	13
Household A	647
Household B	3.261
Household C	1.316
Household D	96
Total Customers	5.333

Source: Regional Drinking Water Companies of Mojokerto City, 2022

Table 4 shows the number of PDAM customers used as the basis for determining mandatory household levies. Table 4 shows that 5,333 PDAM customers are classified into 5 categories, namely Social Households, A Households, B Households, C Households, and D Households. Each household category will be given a different tariff. To find out how much tariff should be charged to each household group, questionnaires were distributed randomly to households in the city of Mojokerto. Questionnaires were distributed to obtain information regarding the number of levies that have been paid and willingness to pay levies. The results of the questionnaire can be seen in table 5.

Table 5. Mojokerto City Household Waste Levy Costs (in IDR)

Waste levies/contributions paid	Percentage
0	11%
1.000 - 5000	11%
6.000 - 10.000	41%
11.000 - 15.000	25%
> 15.000	12%
Total	100%

Source: Processed data, 2023

Table 5 is the result of a questionnaire distributed to obtain information regarding the amount that has been paid and is willing to be paid by Household Taxpayers. Based on the results of the questionnaire, 41% of respondents were known to pay waste levies in the range of IDR 6,000 - IDR 10,000. If it is assumed that all households pay the lowest value in the levy range of IDR 6,000, then the value of the waste levy rate for households in 2022 and 2023 is IDR 383,976,000. This value, if added to the Mandatory + Independent (Non-Household) Levy, is IDR. 278,394,600 can only cover waste handling costs of 12% or IDR. 662,370,600. This value can be used to increase the potential for increasing levy revenues in the City of Mojokerto. However, the classification of households is needed to determine appropriate levy rates so that it is hoped that it will be able to narrow social disparities in the city of Mojokerto. From the results of the questionnaire, the levy rate can be determined as follows (in IDR): 1) Social Household 6,000; 2) Household A 7,000; 3) Household B 8,000; 4) Household C 9,000; and 5) Household D 10,000. The results of Table 4 and Table 5 are used to calculate the potential amount of waste levy revenue for the Mandatory Household Levy in Mojokerto City. The results of calculating the number of households with the range of rates paid are then added to the calculation of potential levy receipts in table 3, thus showing new results. The calculation results after adding the number of households can be seen in table 6.

Table 6. Calculation Results of Potential Increase in Mojokerto City Non-Household Waste Retribution Revenue (in IDR 000)

Information	Year Revenue					
	2022–2023 Initial Rate	2024 2x more	2025 4x more	2026 6x more	2027 8x more	2028 10x more
Household Levy / Year	521.988	1.043.976	2.087.952	3.131.928	4.175.904	5.219.880
Mandatory + Independent Levy (Non-Household)/Year	278.394	556.789	1.113.578	1.670.367	2.227.156	2.783.946
Total Retribution Revenue	800.382	1.600.765	3.201.530	4.802.295	6.403.060	8.003.826
Total waste handling costs	5.477.061	5.477.061	5.477.061	5.477.061	5.477.061	5.477.061
Percentage of cost covering from levy revenue	14,61%	29,23%	58,45%	87,68%	116,91%	146,13%

Source: Processed data, 2023

Table 6 is a table of the potential increase in revenue from new levies after adding the Mandatory Household Levy. Table 6 shows the increase in the percentage of costs that can be covered by the total waste handling costs as a whole compared to the results of previous calculations. Based on the calculation results, the potential revenue from household waste levies in 2022 and 2023 is IDR 521,988,000. Then in 2024, it will be IDR 1,043,976,000, -, in 2025 it will be IDR 2,087,952,000, -, in 2026 it will be IDR 3,131,928,000, -, in 2027 it will be IDR 4,175,904,000, - and in 2028 it will be IDR. 5,219,880,000, -. As in previous calculations, it is assumed that the total waste handling costs will not increase or decrease. The calculation results in Table 6 show that after p Households are added to the calculation, it can be seen that the potential for receiving waste levies also increases. Based on these calculations, the percentage of costs that can be covered by levy revenues in 2024 is 10.17%. Then in 2025, it will be 20.33%, in 2026 it will be 30.50%, in 2027 it will be 40.66%, and in 2028 it will have reached 50.83%.

Discussion

Waste levy rates in Mojokerto City are regulated through Mojokerto City Regional Regulation No. 8 of 2011 concerning Public Service Levy. Since these regulations were established until now there have been no new regulations. So up to now, the applicable waste levy rates are the rates stated in the Regional Regulations. Automatically, the total levies received by the Mojokerto City Regional Government also follow these rates. Based on data on the realization of waste levy receipts from the Mojokerto City Environmental Service, it shows that the realization of waste levy receipts only comes from mandatory non-household levies such as industry, hotels, restaurants, offices, health facilities, trade facilities, petrol stations, tourism, and other mandatory levies. carry out independent disposal to the landfill. Research data shows that the total revenue from waste levies in 2022 is IDR 278,394,600. This value is only able to cover 5% of the total costs incurred for waste management in Mojokerto City. It is known that the total cost of waste management is IDR 5,477,061,600. Of the total 100% waste management costs, it can be interpreted that the remaining 95% of these costs are charged to the Mojokerto City APBD.

This result is less effective because it is known that waste levies are one of the factors driving Original Region Income (PAD). Thus, the independence of Mojokerto City's PAD is not yet optimal so it is still dependent on the APBD. The very small total revenue from waste levies is a serious problem that must be resolved immediately by the Government. One solution that can be done is to change and increase the current levy rates. The results of this research are in line with the results of previous research that has been carried out regarding the effectiveness of receiving waste levies such as (Aini and Mubarak, 2022; Amory and Suryati, 2022; Hertomo et al., 2018; Manan, 2023; Rembet et al., 2018; Saifullah et al., 2016).

This research aims to explore the potential for revenue from waste levies so that the ultimate goal is to increase PAD. The increase in PAD to optimize the potential of the APBD towards regional economic development. The calculation of potential levy receipts is carried out by simulating periodic rate increases from 2024 to 2028. In addition, the calculation is carried out by adding potential levy receipts originating from the Mandatory Household Levy. Questionnaires were distributed to find out how much levy rates were paid by households in the city of Mojokerto, which so far had not been included in the report on the realization of waste levy receipts from the Mojokerto City Environmental Service.

The research results show an increase in the potential for solid waste levy revenues after experiencing a 2x increase in rates from the base rate each year. Apart from that, increasing the potential for retribution receipts from households also provides leverage to increase the potential for retribution receipts in the City of Mojokerto. The research results show that the increase in revenue causes the percentage of costs that can be covered to also increase, from previously only 5%, increasing to 50%. So, it can be concluded that the levies paid from both the Mandatory Household and Non-Household Levy have a contribution that has a real impact on increasing PAD (Rahmadia, 2018). By increasing PAD, it can be interpreted that the City of Mojokerto has financial independence so that it can maximize the APBD to improve services to the community in the form of building public facilities and infrastructure that can support regional socio-economic

development. So indirectly the receipt of levies makes a big contribution or impact on regional development (Ramadhan and Jalil, 2022). The results of this research are in line with contribution theory which emphasizes individual/group actions that have an impact on other parties (Amory and Suryati, 2022). Contribution theory emphasizes the impact of value that can be felt in real terms from social and economic aspects (Rahmadia, 2018).

Waste problems in an area require cooperation between the Government and the Community. The government is in charge of determining regulations and services, while the community or the Retribution Compulsory Party contributes by paying levies. Contribution can also be interpreted as a form of individual or group cooperation according to their capacity. The strategy for increasing PAD in this research focuses on looking for leverage or potential that can have a positive impact on increasing waste levy revenues so that in the end it can contribute to increasing PAD. Waste levies are included in the PAD component which can be interpreted as a form of payment for waste/cleaning services provided by the Regional Government. So, through payment of levies, the community or mandatory levies contribute to PAD revenues.

The research results show that when the levies paid by households are added to the calculation, the potential revenue that will be obtained becomes much greater. Households, either as individuals or groups, make contributions that have a positive impact on the potential for increasing waste levy revenues. Apart from that, the research results also show that changes in tariffs can also be leveraged to increase levy revenues. Changes rates are considered a product of the Regional Government and also contribute to a positive impact on the potential for increasing waste levy revenues. Following the respective capacities owned by the government and mandatory levies, both of them provide a positive contribution to the potential for increasing PAD revenues. Contribution Theory strengthens research results because it can also be interpreted as a form of collaboration between individuals or groups according to their respective capacities. It is very important to implement a cooperative strategy between the government and the community to become a leverage for increasing PAD. So that when PAD has increased, the Mojokerto City Government can more freely maximize the APBD for the benefit of economic development in other fields.

Conclusion

Research data shows that the total revenue from waste levies in 2022 will only be able to cover 5% of the total expenses incurred for waste management in Mojokerto City. From these results, it can be concluded that the remaining 95% of these costs are charged to the Mojokerto City APBD. This result becomes less effective and has a less-than-optimal impact on increasing PAD. A solution is needed to overcome the retribution problem. One strategy that can be implemented is to increase levy distribution rates and collect data on mandatory household levies. This research aims to explore the potential for revenue from waste levies so that the ultimate goal is to increase PAD. The increase in PAD is intended to optimize the potential of the APBD towards regional economic development. The research results

show an increase in the potential for solid waste levy revenues after experiencing a 2x increase in rates from the base rate each year. Apart from that, increasing the potential for retribution receipts from households also provides leverage to increase the potential for retribution receipts in the City of Mojokerto. The research results show that the increase in revenue causes the percentage of costs that can be covered to also increase, from previously only 5%, increasing to 50%.

Limitation

This research certainly has limitations, including the unavailability of accurate data from the Mojokerto City Environmental Service regarding mandatory household levies, so in this research data on mandatory household levies are justified based on data from PDAM customers issued by the Mojokerto City Central Statistics Agency (BPS). Household data has not yet been identified in detail whether all households can be categorized as mandatory levies. So, the number of households included in the calculation results will likely be different.

Suggestions

It is hoped that the Mojokerto City government, especially the Mojokerto City Environmental Service, will be able to review the current tariffs so that it can spur increased PAD independence and waste management costs will not be too dependent on APBD availability. For future researchers, of course, there is still a lot of research that can be explored again through further research. Such as finding more accurate data on the mandatory amount of household levies so that the calculation of potential levy receipts is more relevant than just using PDAM customer data. Apart from that, future researchers can re-examine this topic by directly linking the contribution of waste levies to the optimization of the APBD.

Implication

The practical implications of this research can be used as consideration for the Mojokerto City Government in determining a strategy to increase PAD independence, namely by setting new tariffs and strengthening the database of mandatory household levies so that levy revenues can be increased. By increasing PAD, the difference in waste handling costs that have been charged to the APBD can be reduced so that the Mojokerto City Government can maximize the potential of PAD to repair and increase public service facilities for the community, which can automatically improve the socio-economic climate of Mojokerto City. Apart from practical implications, it is hoped that this research can add to the literature related to theoretical contributions in the field of social and economic research. It is also hoped that this research can provide additional literature for further research, especially those related to strategies for increasing waste levies to increase Regional Original Income (PAD).

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