Analysis of the potential and effectiveness of local revenue receipts at the livestock and animal health service office in Mimika Regency

Raden Roro Ingesti Meilani¹, Transna Putra Urip², Ary Mollet³ Universitas Cenderawasih, Jayapura, Papua, Indonesia^{1,2,3}

ingestimeilani01@gmail.com¹



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Abstract

Purpose: This study aims to analyze the potential and effectiveness of Local Own-Source Revenue (PAD) from the Livestock and Animal Health Service Office in Mimika Regency from 2017 to 2024. The research also seeks to identify strategic efforts to optimize PAD contribution from the livestock sector, particularly through retribution on slaughterhouse services, animal health services, and livestock production.

Research/methodology:. The study employs a mixed-method approach, combining quantitative descriptive analysis with qualitative insights. Data are sourced from secondary documents and primary field observations, using potential analysis, effectiveness ratio calculations, and SWOT analysis to examine income realization and improvement strategies.

Results: The research reveals that PAD from the Livestock and Animal Health Service has strong potential, especially in pig slaughterhouses (RPB), the UPTD breeding unit, and Puskeswan. Effectiveness levels often exceed 100%, indicating very effective performance, though certain units such as RPH-U remain underutilized. The retribution potential is not yet fully maximized due to limited public awareness, regulatory gaps, and infrastructural constraints.

Conclusions: The livestock sector significantly contributes to regional income and has untapped potential. With appropriate regulatory support, infrastructure improvement, and digital system development, PAD from this sector can be optimized further. Strategic planning is essential for sustaining and expanding these gains.

Limitations: The study is limited by the availability of consistent field data and is affected by external disruptions such as disease outbreaks (e.g., ASF). Further, the generalizability may be constrained to similar regional contexts with comparable institutional frameworks.

Contribution: This research provides practical recommendations for local governments to improve fiscal independence through livestock-based revenue streams. It also contributes to regional public finance literature by demonstrating a framework for analyzing PAD potential and effectiveness.

Keywords: Effectiveness, Livestock, Local Government, Local Own-Source Revenue, Potential

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1. Introduction

Regional Retribution is a local government levy paid for services or specific permits that are specifically provided and granted by the local government for the benefit of individuals or entities (Rachman, 2024). Regional retribution is one of the essential elements in supporting Local Own-Source Revenue (PAD) because it can contribute significantly to the sustainability of the local government (Hadiyatno, Susiswo, Patimah, Nainggolan, & Ernayani, 2020). To accommodate the community's needs for livestock as a source of food, the government established Slaughterhouses (RPH) to meet nutritional needs from the livestock sector, while also generating local retribution (Rianto & Demmallino, 2020). According to Anggraeni, Yunus, and Rezki (2020), Regional Retribution is a local levy paid for services or permits specifically provided or granted by the local government for the benefit of individuals or entities.

Revenue from retribution at the Department of Livestock and Animal Health of Mimika Regency consists of retribution for slaughterhouse services (pig slaughterhouses and poultry slaughterhouses), retribution from the sale of livestock production such as the sale of pig breeding stock, sale of straws, sale of culling pigs, and retribution from the utilization of local government assets (utilization of animal health centers/puskeswan).

A phenomenon occurring in Timika City, Mimika Regency, is that pigs are the most populous livestock in Central Papua Province, especially in Mimika Regency (Welerubun, Sairudy, Lainsamputty, & Sirappa, 2023). Additionally, pigs are widely raised by both native Papuans and migrants (from South Sulawesi), due to their close connection with various religious ceremonies, traditional rituals, and cultural practices frequently held in Mimika Regency (Keray, Widiati, & Kusumastuti, 2024). However, despite this, there is no regulation from the local government requiring all pig slaughtering to take place at the pig slaughterhouse owned by the Department of Livestock and Animal Health, leading to underutilization of the potential revenue from the pig slaughterhouse service retribution (Nuhung, 2015). This is because many pig slaughterings still occur outside the government-owned slaughterhouses.

The phenomenon of Broiler Poultry Farming is also a major livestock sector in Mimika Regency, producing fresh chicken meat for sale at the central market in Timika or for supply to the Poultry Slaughterhouse (RPH-U) owned by the Department of Livestock and Animal Health of Mimika Regency. The department has also entered into a cooperation agreement with PT Pangansari Utama; however, there is no regional regulation that requires poultry farmers to slaughter their birds at the government-owned slaughterhouse. As a result, some poultry slaughtering still takes place at privately-owned poultry slaughterhouses at the central market in Timika, resulting in suboptimal retribution revenue.

Local Own-Source Revenue (PAD) is an indicator of fiscal independence for a region (Rizky & Akhyar, 2023). Optimal PAD reflects the region's ability to tap into local economic potential without overly relying on transfer funds from the central government (Haryanto, 2017). PAD is used to finance regional expenditures, and if allocated effectively, it will contribute to regional economic growth through the provision of infrastructure, public services, and community economic empowerment programs (Istikharoh & Purnomo, 2023). The endogenous growth theory emphasizes that public investments funded by PAD, such as in the livestock sector, can increase productivity and create long-term economic growth through the enhancement of human capital and infrastructure (Voto & Ngepah, 2024).

Pigs are an important livestock species for smallholder farmers, especially in rural communities (Okello, Odongo, Aliro, & Ndyomugyenyi, 2021). The significance of pig farming lies in the fact that it can increase income, as the livelihoods of rural communities solely depend on agricultural work (Hegazi & Seyuba, 2024). Income can be enhanced by diversifying into agricultural businesses such as pig farming (Anang & Anning, 2024). This is because pigs have high economic value when marketed correctly (Hua et al., 2024). Pig farming has many benefits, and besides being a source of protein, it can also make a substantial contribution to improving the income of farming families (Mathobela, Molotsi, Marufu, Strydom, & Mapiye, 2024).

Regarding the infrastructure for animal slaughtering, Mimika Regency, through the Department of

Livestock and Animal Health, has established a Poultry Slaughterhouse (RPH-U), which started as a small-scale poultry slaughterhouse and now has the capacity to slaughter 500-1000 birds per day. It is located at the Timika Central Market. The Pig Slaughterhouse (RPB) is located on Irigasi Gang Pisang Street in Timika, built since 2012, beginning with land certification for the RPB, with funding from the APBD 2012 support funds, followed by the construction of the building with APBN Provincial funds. In 2013, road filling, the construction of the RPB fence, and procurement of equipment were carried out. The RPB was officially inaugurated on February 4, 2014, by the Secretary of the Mimika Regency, Ausilius You, accompanied by the head of the Livestock Department, John Wicklif Tegai. The inauguration also marked the first pig slaughtering by a slaughterman, with an average of about 10 pigs slaughtered per day on regular days. However, during the Christmas and New Year's holidays, the number of pigs slaughtered can reach 100 per day. For sales facilities, a pig meat sales stall was built in 2013 using DAK Kabupaten and APBN Provincial Papua funds.

Slaughterhouse (RPH) is a place and facility for community services to carry out proper animal slaughter, conduct animal health inspections before and after slaughter, and perform monitoring and surveillance of animal and zoonotic diseases, ensuring that the meat provided is safe and healthy (Dayana, Rudyanto, & Suada, 2019). The Department of Livestock and Animal Health also has a Livestock Breeding Unit (UPTD Pembibitan Ternak Babi) located in SP 6, which produces pig breeding stock to generate retribution income. Additionally, the Department has an animal health center (puskeswan) located on Jalan Sosial No. 1 in Timika, which, although it generates relatively small income, regularly contributes retribution revenue.

The livestock sector is part of the agricultural sector, which plays a significant role in economic development, particularly in rural areas. The agricultural sector (including livestock) contributes to providing food, creating jobs, increasing household income, and serving as a source of raw materials for industry (Ratag, Kapantow, & Pakasi, 2016). In the context of a region, livestock also contributes to Local Own-Source Revenue (PAD) through various activities such as the sale of livestock, breeding stock, and other by-products. The strategic role of the livestock sector is also emphasized by classical economic growth theory, where the development of the primary sector (agriculture and livestock) can serve as the basis for the development of other sectors through multiplier effects and linkages to the industrial and service sectors.

Effectiveness refers to the degree of success of a program or activity in achieving its established objectives. An activity is considered effective if the output generated matches the plan or target (Nuraida, 2019). In the context of regional financial performance, the effectiveness of PAD management refers to the ability of the local government to realize the established revenue targets and utilize them for development. On the other hand, ineffectiveness indicates a gap between targets and realization or failure to achieve the expected results. This may occur due to unrealistic planning, weak implementation, or insufficient human resource and institutional capacity.

2. Literature Review

2.1. Definition of Local Own-Source Revenue

According to Law No. 33 of 2004 on Financial Balance Between the Central and Local Governments, Article 1, Item 18 states that "Local Own-Source Revenue, hereinafter referred to as PAD, is income obtained by the region, collected based on regional regulations in accordance with applicable laws and regulations." Law No. 28 of 2009 also mentions the definition of Local Own-Source Revenue, which refers to the financial sources of the region derived from the region's own territory, consisting of local taxes, local retribution, the management of separated regional wealth, and other legitimate local revenues.

Indiraswari (2024) states that Local Own-Source Revenue (PAD) is the revenue obtained by the Local Government from sources within its own territory, collected based on local regulations. Local Own-Source Revenue (PAD) is income sourced and collected by the local government to finance regional expenditures, with the local government having its own revenue source, which is Local Own-Source Revenue (Indiraswari, 2024). Local Own-Source Revenue is income obtained by the region, collected

based on regional regulations in accordance with the law. The sources of Local Own-Source Revenue consist of local taxes, local retribution, the management of regional wealth (Suprapto & Purbowati, 2024). Local Own-Source Revenue, or PAD, is the revenue obtained by the region from local sources within its territory, collected based on local regulations in accordance with applicable laws and regulations. The regional revenue sector plays a very important role, as it reflects how a region can finance government activities and regional development.

2.2. Local Retribution

Retribution is often directly related to the reward for achievement, as the sole purpose of this payment is to obtain a certain achievement from the government, such as paying for parking, waste fees, and so on. According to the Republic of Indonesia Law No. 28 of 2009 concerning Local Taxes and Local Compensation, local taxes, hereinafter referred to as taxes, are levies imposed by local governments on specific services or permits provided and/or granted solely for the benefit of individuals or entities.

2.3. Slaughterhouse Retribution

The provision of slaughterhouse facilities, including health inspections of animals before and after slaughter, which are provided, owned, and/or managed by the local government. Excluded from the objects of Slaughterhouse Retribution are facilities provided, owned, and/or managed by state-owned enterprises (BUMN), regional-owned enterprises (BUMD), and private parties. Slaughterhouses are community service units that provide meat that is safe, healthy, intact, and halal (ASUH). "Safe" means the meat is free from disease-causing agents, "healthy" means the meat contains nutrients that are beneficial for health and growth, "intact" means the meat is not mixed with other parts of the same animal or other animals, and "halal" means the animal is slaughtered according to Islamic religious requirements. In addition to being a community service unit for providing safe, healthy, intact, and halal meat, slaughterhouses also serve as places for monitoring and surveillance of animal diseases and zoonosis (diseases transmitted from animals to humans).

According to Law No. 33 of 2004 on Financial Balance Between the Central and Local Governments, Article 1, Item 18 states that "Local Own-Source Revenue (PAD) is revenue obtained by the region, collected based on regional regulations in accordance with applicable laws and regulations." Law No. 28 of 2009 also defines Local Own-Source Revenue, which is the financial source derived from the region's territory, consisting of local taxes, local retribution, the management of separated regional wealth, and other legitimate local revenues. Local Own-Source Revenue (PAD) is income received by the local government from sources within its own territory, collected based on regional regulations. Local Own-Source Revenue (PAD) is income sourced and collected by the local government to finance regional expenditures, with the local government having its own revenue source, which is Local Own-Source Revenue. Local Own-Source Revenue is income obtained by the region, collected based on regional regulations in accordance with the law. The sources of Local Own-Source Revenue consist of local taxes, local retribution, the management of regional wealth.

2.4. Retribution Potential

Potential comes from the Latin word "potentia," which means ability. Potential is the ability that has the possibility of being realized. It is a great source that has not yet been discovered and has not been utilized since humans are born into this world. Potential is the ability or power or strength that is latent, power that has not been touched, success that has not been used, hidden blessings, or in other words, potential is the ability, strength, or power that can be developed. In the scientific dictionary, potential is defined as strength, capability, ability, power, influence, energy, and functionality. From the various definitions above, potential can be interpreted as a latent basic ability that can be realized once that ability is developed. While retribution potential refers to the ability of a local government organization/department (SKPD) to tap into unexploited retribution sources, even though regional regulations already exist.

2.5. Effectiveness

Effectiveness indicators reflect the extent of the outcome (effect) and impact (outcome) from the output of a program in achieving the program's objectives (Mardiasmo, 2018). The greater the contribution of

the output produced toward achieving the set goals or objectives, the more effective the process performed by an organizational unit. Effectiveness indicates the success of whether the set objectives have been achieved. If the results of the activities increasingly approach the target, it indicates higher effectiveness. In this qualitative research, the effectiveness of Retribution Income at the Department of Livestock and Animal Health is measured. Effectiveness can be calculated using the following effectiveness ratio formula:

Effectiveness = Realized Retribution Income x 100% Target Income

The formula above will be used to determine the effectiveness level of retribution income at the Department of Livestock and Animal Health in Mimika Regency. The criteria table and effectiveness percentages are as follows:

Table 1. Effectiveness Percentage Table

Effectiveness Criteria	Effectiveness Percentage
Very Effective	>100%
Effective	90% - 100%
Moderately Effective	80% - 90%
Less Effective	60% - 80%
Ineffective	< 60%

Source: Ministry of Home Affairs, No.690.900.327

The greater the contribution of the output to the achievement of the objectives, the more effective the organization, program, or activity. If economics focuses on inputs and efficiency focuses on outputs or processes, effectiveness focuses on outcomes (results). An organization, program, or activity is considered effective if the output produced meets the expected objectives, or in other words, if spending is done wisely.

3. Research Methods

3.1. Location and time of research

The location of this research is within the Department of Livestock and Animal Health of Mimika Regency, specifically at the Slaughterhouses (RPB and RPH-U) at Timika Central Market, the Livestock Breeding Unit at SP 6, the Animal Health Center (Puskeswan) on Jalan Sosial No.1 Timika, and the Office (Bappenda) of the Local Revenue Agency of Mimika Regency. The research will be conducted from April 5, 2025, to April 25, 2025.

3.2. Types and sources of data

3.2.1. Types of Data

- a) Qualitative Data refers to data obtained in the form of information, either orally or in writing, related to the regulations and provisions regarding the retribution for slaughterhouse services (RPB/RPH-U), retribution from the sale of livestock products, and retribution from the utilization of regional assets (utilization of Puskeswan), as set out in the Regional Regulation of Mimika Regency No. 4 of 2023 on Local Taxes and Retribution.
- b) Quantitative Data refers to data obtained in the form of documents, such as reports on retribution income from the Department of Livestock and Animal Health or reports on the realization of Local Own-Source Revenue (PAD) for the years 2017-2024.

3.2.2. Data Sources

The data sources required for this research come from fieldwork and literature, including:

- a) Primary Data
 - Primary data is obtained directly from the research site, based on field research results through interviews and observations to obtain data related to the problems being studied.
- b) Secondary Data

Secondary data is obtained from official documents such as Regional Regulations, Bupati Regulations, books related to the research subject, research reports in the form of theses, dissertations, papers, legislation, and others.

3.3. Population and sample

According to Arikunto (2006:130), "The population is the entire object of research." Research can only be conducted for a finite population where the number of subjects is not too large. The population in this study consists of all staff or workers at the slaughterhouses of the Department of Livestock and Animal Health of Mimika Regency, the livestock breeding unit at UPTD, the animal health center, and the community around the department, as well as livestock owners in Mimika Regency.

According to Sugiyono (2008:118), "A sample is part of the number and characteristics possessed by that population." In this study, the sampling technique used is probability sampling with simple random sampling, meaning the sample is randomly selected from the population as it is considered homogeneous. The sample used in this research includes:

- 1) Head of the Department of Livestock and Animal Health
- 2) Head of UPTD Puskeswan and Laboratory of the Department of Livestock and Animal Health
- 3) Head of the Animal Health Division at the Department of Livestock and Animal Health of Mimika Regency.
- 4) Head of the Production Division at the Department of Livestock and Animal Health of Mimika Regency
- 5) Head of the Veterinary Public Health Division at the Department of Livestock and Animal Health of Mimika Regency.
- 6) Head of the Breeding Division at the Department of Livestock and Animal Health of Mimika Regency.
- 7) Treasurer of the Department of Livestock and Animal Health of Mimika Regency
- 8) Assistant Treasurer of the Department of Livestock and Animal Health of Mimika Regency
- 9) Veterinarian at the RPB of the Department of Livestock and Animal Health of Mimika Regency.
- 10) Veterinarian at the RPH-U of the Department of Livestock and Animal Health of Mimika Regency.
- 11) Retribution Collectors
- 12) Coordinator of RPB/RPH-U
- 13) Slaughterman at RPB
- 14) Staff at RPH-U
- 15) Pig Meat Buyers at the Timika Central Market Stall
- 16) Staff and managers at the UPTD Livestock Breeding Unit at SP 6, Officers and staff at the Department of Livestock and Animal Health, and RPH, Puskeswan service users, sellers, buyers at the central market, and UPTD staff, interviewed using the Accidental Sampling method.

The population in this study consists of all employees involved in the management and services at the UPTD Livestock Breeding Unit SP6. Based on internal data from UPTD, the total population is 32 individuals. This study uses a data collection approach through interviews. Therefore, the sample selection is adjusted according to the characteristics of each data collection method:

For interviews, the purposive sampling technique is used, which means selecting informants intentionally based on their roles, experiences, and relevance to the research topic. The individuals interviewed are those considered to have in-depth knowledge related to managerial aspects, policies, and operations at UPTD, including the head of the RPH-U, head of Puskeswan, as well as the head of UPTD, technical staff, and representatives from the Department of Livestock and Animal Health.

3.4. Data collection techniques

This research uses both primary and secondary data collected through:

a) Observation

This is the primary method of data collection commonly used by qualitative researchers. Therefore, the researcher directly visits the research site to observe, pay attention to, and collect information regarding issues related to this study.

b) Literature Review

This aims to gather theoretical data by studying theories that have been learned and seeking other sources based on literature and financial data regarding regional retribution income.

c) Interview

This is the method of collecting data through direct question and answer with respondents who are related to the research issues in order to complete the required data.

3.5. Analysis method

Once the data is systematically organized, the next step is data analysis. The analysis is done systematically, qualitatively, comprehensively, and thoroughly. The systematic analysis in this study is explained in accordance with the concept to provide answers to the research questions. The analysis of absolute potential calculation is necessary to establish rational targets. By comparing the existing potential with the projected income for the future, we can determine the latent potential and plan actions to tap into that potential in order to estimate future revenue plans.

Another benefit of analyzing potential is if we plan to cooperate with a third party in the collection of regional retribution, we can determine the potential retribution income to be handed over to that third party, so the contract price can be estimated based on the available potential. Example of Slaughterhouse Retribution (RPB - Pig Slaughterhouse):

- 1) Data on animal slaughtering in RPB and outside RPB
- 2) Retribution rates for animals in RPB and outside RPB
- 3) Data Processing

3.6. Data Analysis Method

The data analysis is carried out with both quantitative and qualitative approaches according to each research problem formulation.

3.6.1. Analysis of Retribution Income Potential

To answer the first research question:

"What is the potential for retribution income at the Department of Livestock and Animal Health?" The methods used include:

Analysis of retribution potential using the formula:

PPP=JH×THP

Means:

- PPP = Retribution income potential
- JH = Number of animals or services subject to retribution
- TH = Retribution rate per animal or service
- Comparison analysis by comparing actual retribution income with the maximum potential income that can be obtained based on data on service users and applicable rates.
- Projection of retribution income using trend analysis or time series based on historical retribution income data from recent years.

3.6.2. Analysis of Retribution Income Effectiveness

to answer the second research question:

"How effective is the retribution income at the Department of Livestock and Animal Health?" The methods used include:

• Effectiveness analysis using the effectiveness ratio formula: Effectiveness = (Realized Retribution Income / Target Income) × 100%

Means:

E = Effectiveness of retribution income (%)

R = Realized retribution income

T = Target retribution Income Interpretation: $\geq 100\%$ = Very Effective 80% - 99% = Effective 60% - 79% = Moderately Effective < 60% = Ineffective

Analysis of Inhibiting Factors, carried out through interviews and observations on obstacles in retribution collection, such as the level of compliance among retribution payers, effectiveness of supervision, and the administration system of collection.

3.6.3. Analysis of Efforts to Improve Retribution Income

To answer the third research question: "What efforts are being made to increase retribution income at the Department of Livestock and Animal Health in Mimika Regency?" The methods used include:

SWOT Analysis

- Strengths: Internal advantages such as supportive regulations, human resources, and the large potential from the livestock sector.
- Weaknesses: Internal barriers such as suboptimal administration or low compliance from retribution payers.
- Opportunities: External factors such as economic growth and increasing demand for animal health services.
- Threats: External challenges such as low public awareness and potential misuse in retribution collection.
- 3.7. Retribution Improvement Strategies, based on the analysis above, include strategies such as:
- Optimizing retribution collection through digitalization and increasing transparency in the collection system.
- Increasing awareness and compliance of retribution payers through socialization and education for farmers and business owners.
- Evaluating and adjusting retribution rates based on economic conditions and the purchasing power of the community.
- Strengthening supervision and enforcement of regulations to reduce leakage in retribution collection.

3.8. Operational definitions of variables

Operational definitions are based on the characteristics of the observed variables. The operational definitions of each variable in this study are as follows:

1) Potential

Potential refers to the maximum capacity or ability of the Department of Livestock and Animal Health to generate Local Own-Source Revenue (PAD).

2) Effectiveness

Effectiveness is defined as the extent to which PAD income from the livestock and animal health sectors achieves the set targets and is optimally used to support regional development.

3) Income

Income refers to the amount of revenue obtained by the Department of Livestock and Animal Health of Mimika Regency from various sources, especially from animal health service retribution and the livestock sector.

4) Retribution

Retribution is a local government levy imposed on individuals or businesses in exchange for services provided by the local government, in this case, the Department of Livestock and Animal Health of Mimika Regency.

5) Local Own-Source Revenue (PAD)

Local Own-Source Revenue (PAD) refers to income obtained by the local government from

legitimate local sources, including local taxes, local retribution, the management of separated regional assets, and other legal local revenues.

4. Results and Discussion

4.1. Research Results

4.1.1. Potential Results Based on the Problem Formulation: The Potential Revenue from Levies at the Department of Livestock and Animal Health of Mimika Regency

1) Analysis of Retribution Potential

a) Pig Slaughterhouse (RPB):

- Average slaughter: 11 pigs/day

- Rates: IDR 70,000 per pig

- Annual potential: $11 \times 365 \times 70,000 = IDR 281,050,000$

Tabel 2. Recapitulation of Pig Slaughterhouse Retribution Potential Calculation

Year	Specific Retribution for Pig Slaughterhouses in Mimika Regency	Average Daily Slaughter	Rate (IDR)	Annual Retribution Potential (IDR)
2017	IDR 305,530,000	12 pigs	70,000	IDR 306,600,000
2018	IDR 272,860,000	11 pigs	70,000	IDR 281,050,000
2019	IDR 232,860,000	9 pigs	70,000	IDR 229,950,000
2020	IDR 251,720,000	10 pigs	70,000	IDR 255,500,000
2021	IDR 248,060,000	11 pigs	70,000	IDR 281,050,000
2022	IDR 268,380,000	11 pigs	70,000	IDR 281,050,000
2023	IDR 267,050,000	11 pigs	70,000	IDR 281,050,000
2024	IDR 79,100,000	3 pigs	70,000	IDR 76,650,000

Source: Report on RPH Retribution Income Data Processed, 2025

The table above shows the development of the average daily pig slaughter at the Pig Slaughterhouse (RPB) owned by the Department of Livestock and Animal Health of Mimika Regency from 2017 to 2024, along with the actual and potential retribution revenue based on a retribution rate of IDR 70,000 per pig. In 2017, the average slaughter reached 12 pigs per day, generating retribution of IDR 305.53 million, with a maximum potential of IDR 306.6 million. This figure decreased to 9 pigs per day in 2019 due to various factors, including socio-economic impacts. In 2020 and 2021, the slaughter rate began to rise again to 10–11 pigs per day, with potential annual levies also increasing and remaining stable at around IDR 255–281 million. This figure remained steady in 2023, indicating the optimal use of RPB facilities. However, in 2024, there was a drastic drop to only 3 pigs per day due to an outbreak of African Swine Fever (ASF), which severely affected pigs in the area, causing the annual potential retribution to plummet to IDR 76.65 million, much lower than in previous years.

b) Farm Production Sales (UPTD):

- Realization 2023: IDR 500,900,000

- Maximum potential (20% improvement): IDR 601,080,000

Table 3. Recapitulation of UPTD Retribution Potential Calculation

Year	Realization (IDR)	Growth (%)
2018	IDR 346,900,000	
2019	IDR 414,000,000	19.27%
2020	IDR 341,000,000	-17.63%
2021	IDR 350,300,000	2.72%
2022	IDR 381,600,000	8.94%
2023	IDR 399,600,000	4.71%
2024	IDR 500,900,000	25.37%

Source: Report on UPTD Retribution Income Data Processed, 2025

In 2018, the initial realization was recorded at IDR 346,900,000. The following year (2019) saw a sharp increase of 19.27% to IDR 414,000,000, indicating high demand and optimal performance of the breeding unit. However, in 2020, there was a significant decline of -17.63%, possibly due to disease outbreaks or a decrease in the success of artificial insemination. Recovery began in 2021, with a 2.72% increase, and the trend continued to rise gradually in the following years. Significant growth occurred again in 2024, with a 25.37% increase, bringing total revenue to IDR 500,900,000, the highest during the period. This reflects improvements in production systems, increased breeding capacity, and high market demand.

c) Animal Health Center:

- Realization 2024: IDR 28,650,000

- Maximum potential (30% improvement): IDR 37,245,000

Tabel 4. Presentation of UPTD Retribution Potential Calculation

Year	Realization (IDR)	Growth (%)
2018	IDR 10,200,000	
2019	IDR 11,100,000	8.82%
2020	IDR 12,750,000	14.86%
2021	IDR 14,250,000	11.76%
2022	IDR 19,800,000	38.95%
2023	IDR 23,250,000	17.42%
2024	IDR 28,650,000	23.23%

Source: Report on UPTD Retribution Income Data Processed, 2025

Starting at IDR 10,200,000 in 2018, revenue has increased steadily each year with relatively stable growth. In 2020 and 2021, growth rates of 14.86% and 11.76% were recorded, indicating growing public awareness of the importance of animal health services. 2022 saw the largest spike, with a 38.95% increase, followed by positive growth in 2023 and 2024. In 2024, revenue reached IDR 28,650,000, a 23.23% increase compared to the previous year, likely due to enhanced facilities, the growing number of pets, and effective promotion of animal health services to the community.

d) Poultry Slaughterhouse (RPH-U):

Capacity: 500 birds/dayRates: IDR 2,000 per bird

- Annual potential: $500 \times 365 \times 2,000 = IDR 365,000,000$

Table 5. Recapitulation of RPH-U Retribution Potential Calculation

Year	Retribution at RPH-U in Mimika Regency	Average Daily Retribution
2018	Rp. 5.995.500	9 birds
2019	Rp. 2.450.000	4 birds
2020	Rp.0	-
2021	Rp. 0	-
2022	Rp, 2.982.000	5 birds
2023	Rp. 67.768.000	93 birds
2024	Rp.175.040.000	240 birds

Source: Report on RPH-U Retribution Income Data Processed, 2025

This table shows the development of revenue from levies and the average number of poultry slaughtered per day at the Poultry Slaughterhouse (RPH-U) owned by the Department of Livestock and Animal Health of Mimika Regency from 2018 to 2024. At the beginning of its operation in 2018, RPH-U recorded a levy of IDR 5,995,500 with an average of 9 birds slaughtered per day. However, in 2019, the figures dropped drastically to only IDR 2,450,000 with 4 birds per day, and there was no activity in 2020 and 2021 due to facility rebuilding and renovations.

Table 6. Potential Retribution Income per Item Department of Livestock and Animal Health

of Mimika Regency (2017–2024)

Year	Pig Slaughterhouse (RPB) (IDR)	Farm Production Sales (UPTD) (IDR)	Puskeswan (IDR)	Poultry Slaughterhouse (RPH-U) (IDR)	Total Potential (IDR)
2017	305,530,000	-	-	-	305,530,000
2018	272,860,000	346,900,000	25,000,000	5,995,500	650,755,500
2019	232,860,000	414,000,000	22,000,000	2,450,000	671,310,000
2020	251,720,000	341,000,000	20,000,000	-	612,720,000
2021	248,060,000	350,300,000	26,265,000	-	624,625,000
2022	268,380,000	381,600,000	23,800,000	2,982,000	676,762,000
2023	267,050,000	399,600,000	25,000,000	67,768,000	759,418,000
2024	79,100,000	500,900,000	28,650,000	175,040,000	783,690,000

Source: Retribution Income Report Data Processed, 2025

4.1.2. Analysis of Retribution Income Effectiveness

To answer the second research question: "How effective is the retribution income at the Department of Livestock and Animal Health?"

Target PAD 2024: IDR 700,000,000 Realization PAD 2024: IDR 783,690,000

Effectiveness Formula: (Realization / Target) × 100%

Effectiveness = $(783,690,000 / 700,000,000) \times 100\% = 112\%$

Interpretation: Very Effective (because > 100%)

Table 7. Recapitulation of the Calculation of Slaughterhouse Retribution Effectiveness

Year	Target Local Own- Source Revenue from Slaughterhouse Retribution (IDR)	Slaughterhouse Retribution (Realization) (IDR)	Contribution Rate (%)	Contribution Criteria
2017	500,000,000	738,630,000	147.73	Very Effective
2018	500,000,000	650,755,500	130.15	Very Effective
2019	500,000,000	671,310,000	134.26	Very Effective
2020	500,000,000	612,720,000	122.54	Very Effective
2021	500,000,000	660,625,000	132.13	Very Effective
2022	500,000,000	676,762,000	135.35	Very Effective
2023	700,000,000	759,418,000	108.49	Very Effective
2024	700,000,000	783,690,000	112	Very Effective

Source: Effectiveness Calculation Report Data Processed, 2025

The table above illustrates that the contribution of Slaughterhouse Retribution to the Local Own-Source Revenue of Timika City has been excellent from 2017 to 2024. The highest contribution rate was recorded in 2017 at 147.73%, while the lowest was in 2023, with a contribution rate of 108.49%.

Table 8. Comparison Analysis of Effectiveness Based on Potential and Realization 2017-2025

Year	Type of Retribution	Potential (IDR)	Realization (IDR)	Effectiveness (%)
	RPH-B	306,600,000	305,530,000	99.65%
2017	UPTD	500,000,000	346,900,000	69.38%
2017	Puskeswan	30,000,000	25,000,000	83.33%
	RPH-U	5,000,000	0	0.00%
	Total	841,600,000	677,430,000	80.49%
2018	RPH-B	280,250,000	272,860,000	97.36%
	UPTD	600,000,000	346,900,000	57.82%

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	Puskeswan	30,000,000	25,000,000	83.33%
	RPH-U	10,000,000	5,995,500	59.96%
	Total	920,250,000	650,755,500	70.72%
	RPH-B	229,950,000	232,860,000	101.27%
2019	UPTD	650,000,000	414,000,000	63.69%
2019	Puskeswan	30,000,000	22,000,000	73.33%
	RPH-U	10,000,000	2,450,000	24.50%
	Total	919,950,000	671,310,000	72.97%
	RPH-B	255,500,000	251,720,000	98.52%
2020	UPTD	600,000,000	341,000,000	56.83%
2020	Puskeswan	30,000,000	20,000,000	66.67%
	RPH-U	0	0	0.00%
	Total	885,500,000	612,720,000	69.19%
	RPH-B	280,250,000	248,060,000	88.51%
2021	UPTD	650,000,000	350,300,000	53.89%
2021	Puskeswan	30,000,000	26,265,000	87.55%
	RPH-U	5,000,000	0	0.00%
	Total	965,250,000	624,625,000	64.71%
	RPH-B	280,250,000	268,380,000	95.76%
2022	UPTD	700,000,000	381,600,000	54.51%
2022	Puskeswan	30,000,000	23,800,000	79.33%
	RPH-U	10,000,000	2,982,000	29.82%
	Total	1,020,250,000	676,762,000	66.33%
	RPH-B	280,250,000	267,050,000	95.29%
2022	UPTD	750,000,000	399,600,000	53.28%
2023	Puskeswan	30,000,000	25,000,000	83.33%
	RPH-U	100,000,000	67,768,000	67.77%
	Total	1,160,250,000	759,418,000	65.45%
	RPH-B	76,650,000	79,100,000	103.20%
2024	UPTD	700,000,000	500,900,000	71.56%
2024	Puskeswan	50,000,000	28,650,000	57.30%
	RPH-U	300,000,000	175,040,000	58.35%
	Total	1,126,650,000	783,690,000	69.56%
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Source: Effectiveness Comparison Calculation Report Data Processed, 2025

From the period 2017–2024, the retribution from RPH-B shows the highest and most consistent effectiveness, even exceeding its potential twice (in 2019 and 2024). UPTD tends to fluctuate and remains below 75%, indicating the need for improvements in the collection system or targets. Puskeswan is relatively stable, with effectiveness ranging from 66–87%, although it saw a sharp decline in 2024. Meanwhile, RPH-U has shown significant improvements since 2022, but its effectiveness is still relatively low. Overall, the annual effectiveness ranges from 64% to 80%, indicating that regional retribution income is relatively effective, but there is still room for improvement, especially in the UPTD and RPH-U sectors.

4.1.3. PAD Income Projection Results (Trend Analysis)

Table 9. Projection of Regional Retribution Income from 2017–2027

Year	RPH-B (IDR)	RPH-U (IDR)	Puskeswan (IDR)	UPTD (IDR)	Total (IDR)
2017	305,530,000	0	25,000,000	346,900,000	677,430,000
2018	272,860,000	5,995,500	25,000,000	346,900,000	650,755,500
2019	232,860,000	2,450,000	22,000,000	414,000,000	671,310,000

2020	251,720,000	0	20,000,000	341,000,000	612,720,000
2021	248,060,000	0	26,265,000	350,300,000	624,625,000
2022	268,380,000	2,982,000	23,800,000	381,600,000	676,762,000
2023	267,050,000	67,768,000	25,000,000	399,600,000	759,418,000
2024	79,100,000	175,040,000	28,650,000	500,900,000	783,690,000
2025*	65,213,400	175,040,000	29,213,230	527,890,000	797,356,630
2026*	53,764,700	175,040,000	29,787,530	556,334,300	814,926,530
2027*	44,325,900	175,040,000	30,373,120	586,311,200	836,050,220

Source: PAD Income Projection Report Data Processed, 2025

2025–2027 is a a result of projection based on growth trends 2017–2024.

Notes:

- The contribution from UPTD Services becomes the largest source of income each year, highlighting the importance of optimizing technical services in the livestock sector.
- RPH-U experienced a significant spike in 2023, which statistically boosts projections for the following years.
- RPH-B experienced a sharp decline in 2024, reducing estimates for 2025–2027.
- Overall, the projections indicate a moderate upward trend in potential income, which can serve as the basis for setting more realistic and focused PAD targets.

4.1.4. SWOT Analysis Results

Based on the Problem Formulation: What Efforts Are Being Made to Increase Retribution Income at the Department of Livestock and Animal Health in Mimika Regency?

Table 10. SWOT Analysis of PAD Income from Retribution at the Department of Livestock and

Animal Health of Mimika Regency

Aspect	Factor	Urgency Score	Position	Value	Short Description
Weaknesses	Low public awareness of utilizing RPH and RPH-U	3	W	9	Many people still slaughter animals privately, outside government facilities.
Weaknesses	Limited infrastructure at Puskeswan	2	W	6	Animal health services are suboptimal, impacting retribution income.
Weaknesses	Lack of socialization on Puskeswan availability and animal slaughter regulations	2	W	6	Many people are unaware of the importance of Puskeswan services and official RPHs.
Opportunities	High demand for fresh and healthy meat (ASUH)	2	О	6	The need for safe and healthy meat consumption is increasing, opening opportunities for optimizing RPH and Puskeswan.
Opportunities	Support from local government programs for increasing PAD	2	О	6	Policy support enhances opportunities for the development of the livestock and animal health sectors.
Threats	Livestock diseases such as ASF (African Swine Fever)	3	Т	9	Outbreaks can drastically reduce the number of animal slaughters and livestock sales.

Threats	Competition with illegal slaughter outside official facilities	2	Т	6	Illegal slaughter reduces the potential retribution income at RPH and RPH-U.
Threats	Fluctuations in market demand due to economic and social changes	2	Т	6	Economic changes can affect meat consumption levels.

Source: SWOT Analysis of PAD Income Report Data Processed, 2025

Value (Rating 1–4 or 1–5)

- Determined by the researcher based on the impact or strength of the factor on the success of UPTD.
- Based on interviews with key informants, internal documents, and observations.
- For example, if "adequate workforce" is considered very influential, it can be rated 4 (high).

2. Urgency Score

- The researcher assigns weight based on the urgency or relative significance between factors.
- The sum of all weights is typically adjusted to total 1 to 10.
- Can be determined based on the frequency of issues raised in interviews/documents, or through logical considerations by the researcher.

a) Strengths

The Department of Livestock of Mimika Regency has strong internal factors, notably the high livestock population of pigs and poultry. This is a significant asset for increasing PAD revenue through retribution from livestock services. Additionally, the existence of slaughterhouses (RPH) and poultry slaughterhouses (RPH-U) is sufficient to serve the public's needs. The availability of the Livestock Breeding Unit (UPTD) is also a crucial factor in supporting the regeneration and improvement of livestock quality.

b) Weaknesses

Some weaknesses identified include the low public awareness of using official facilities such as RPH and Puskeswan. Many animal slaughters are conducted privately or traditionally outside the supervision of the department, reducing the potential for retribution. Furthermore, the infrastructure at Puskeswan remains limited, both in terms of equipment and medical personnel, meaning animal health services are not optimal.

c) Opportunities

There is a significant opportunity in the potential implementation of a Regional Regulation that mandates slaughtering animals at official RPHs. This would significantly increase retribution income. Additionally, the growing demand for ASUH (Safe, Healthy, Whole, Halal) meat drives the use of official services, opening opportunities to boost the department's income.

d) Threats

A significant threat is the potential for livestock diseases, such as African Swine Fever (ASF), which can destroy livestock populations and damage the supply of slaughter animals. Additionally, competition from illegal slaughtering outside official RPH facilities threatens regional income. Market fluctuations and changes in public consumption preferences also pose challenges.

e) Overall Analysis

The Department of Livestock has considerable internal strengths with its livestock population and RPH facilities. However, the main weakness lies in the low public awareness and limited supporting infrastructure. To optimize the existing potential, regulatory strengthening, service facility improvements, and extensive public outreach are required.

Tabel 11. Development Strategy

SO (Strengths - Opportunities)	Optimize the use of RPH and RPH-U facilities by strengthening regulations on mandatory slaughter.
	Actively promote ASUH meat products from official facilities.
	Develop livestock breeding with support from government programs.
WO (Weaknesses - Opportunities)	Increase socialization to the public about the availability and benefits of RPH and Puskeswan.
	Improve Puskeswan facilities with local government policy support.
	Launch campaigns to promote the use of government facilities for animal slaughter.
ST (Strengths - Threats)	 Establish strict protocols to anticipate and handle livestock diseases. Provide incentives for farmers using official facilities for slaughtering. Ensure the availability of safe meat even during market fluctuations.
WT (Weaknesses - Threats)	 Form a monitoring team for illegal slaughter and educate the public on health risks. Provide mobile animal health services for remote areas. Develop collaborative programs between agencies to accelerate service improvement.

Table 12. SWOT Analysis of Internal Factors at the Department of Livestock and Animal Health of Mimika Regency

No	Internal Factor	Category	Weight	Rating	Score
1	Availability of veterinarians and medical staff	Strength	0.15	4	0.60
2	Operational budget support from the government	Strength	0.10	3	0.30
3	Existence of basic retribution regulations	Strength	0.10	3	0.30
4	Limited operational facilities and infrastructure	Weakness	0.20	2	0.40
5	Lack of a system for tracking potential retribution	Weakness	0.25	1	0.25
6	Low human resources in financial administration	Weakness	0.20	2	0.40

Source: SWOT Analysis of PAD Income Report Data Processed, 2025

Internal factors are elements that originate from within the organization and directly affect the ability of the Department of Livestock and Animal Health of Mimika Regency in managing and optimizing Local Own-Source Revenue (PAD). Internal factors are divided into two main categories: strengths and weaknesses..

Table 13. SWOT Analysis of External Factors at the Department of Livestock and Animal Health of Mimika Regency

No	Factor	Category	Weight	Rating	Score
1	High livestock population	Opportunity	0.20	4	0.80
2	High demand for services	Opportunity	0.15	4	0.60
3	Government support for digitization	Opportunity	0.10	3	0.30
4	Low public awareness of paying retribution	Threat	0.20	2	0.40

5	Geographical difficulty in reaching remote areas	Threat	0.20	1	0.20
6	Competition with private/traditional services	Threat	0.15	2	0.30

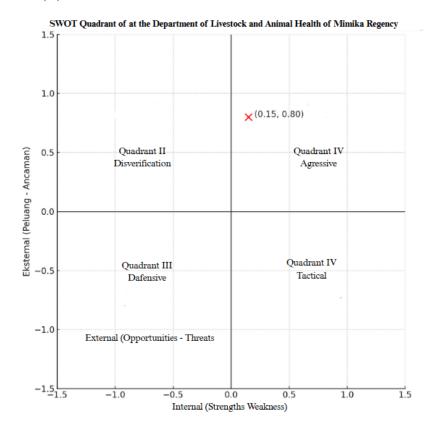
Source: SWOT Analysis of PAD Income Report Data Processed, 2025

External factors are conditions and dynamics outside the department's direct control but have a significant impact on the effectiveness of task implementation and PAD target achievement. These factors consist of opportunities and threats.

Strategic Position: SWOT Quadrant

Based on the calculations:

- Internal Value (X) = 0.15
- External Value (Y) = 0.80



The coordinate point is located in Quadrant I (Aggressive), which indicates that the organization is in a strong internal position and has significant external opportunities. The recommended strategy is an active growth and development strategy.

Table 14. SWOT Analysis Priority Scale

Priority	Strategy	Strategy Type	Description
1	Optimize technical services for all types of livestock	SO	Use veterinary human resources and a high livestock population to increase paid services
2	Build a digital system for PAD potential data collection	WO	Address data weaknesses with the opportunity of public service digitalization
3	Conduct intensive socialization to rural communities	ST	Utilize regulatory strength and human resources to combat low retribution awareness

	Add operational facilities		Address operational and
4	through third-party	WT	geographical weaknesses
	cooperation		through external collaboration

5. Conclusion

Based on the literature review, problem formulation, and research objectives presented in this thesis, the following conclusions can be made: Retribution income potential the potential retribution income at the Department of Livestock and Animal Health of Mimika Regency is very large. This is reflected in the realization of retribution income, which generally exceeds the target during the period 2017–2024. However, this potential has not been fully optimized, particularly in the livestock slaughterhouse (RPH), animal health center (Puskeswan), and farm production sales sectors. Many retribution potentials remain untapped, such as cattle, goat, and poultry (DOC) breeding. The potential income from UPTD SP6 activities, which includes the sale of livestock products (straw, culling pigs, and pig breeding), shows that the average total potential income per year reaches IDR 500,900,000. The largest income source comes from the sale of pig breeding, contributing around 25.37%. Compared to the PAD targets imposed on UPTD SP6 over the last five years, the potential achievement significantly exceeds the PAD target. These findings suggest that UPTD SP6 has significant potential to increase its contribution to PAD.

Effectiveness of retribution income the effectiveness of retribution income in most service units is classified as very effective, with an average realization above 100% of the target. However, certain units, such as RPH-U, still have low effectiveness (58%) due to the dominance of slaughtering practices outside government facilities. This highlights the need for stronger regulations and enforcement to mandate the use of official facilities.

Efforts to increase retribution income efforts to increase retribution income can be made through regulatory strengthening, facility optimization, capacity building of human resources, digitalization of the retribution collection system, and increased socialization to the public. These strategies can support the sustainability of PAD income from the livestock sector and enhance its contribution to regional development.

Suggestions

Based on the conclusions above, the following suggestions are proposed:

The Local Government Should Establish Regulations Mandating the Use of Government Facilities. The Mimika Regency Government is expected to immediately establish a Regional Regulation that mandates livestock entrepreneurs to utilize government-owned slaughterhouses (RPB and RPH-U) and use animal health services from Puskeswan to ensure more secure retribution income.

Optimization of Digitalization and PAD Information System. A digital-based information system should be developed for transparency and efficiency in the retribution collection process. This system can also be used to monitor slaughter data, sales transactions, and animal health services.

Improvement of Facilities and Human Resources. The Mimika Regency Government must improve the quality and quantity of livestock facilities, such as modern cutting tools at RPH, livestock isolation rooms, and training and recruitment of additional veterinary medical personnel at Puskeswan.

Socialization and Education to the Public. Massive efforts should be made to educate the public on the importance of using official government facilities for animal slaughter, breeding, and animal health services. This socialization can be carried out through direct counseling, social media, and collaboration with community leaders.

References

Anang, S. A., & Anning, A. (2024). Profitability and market analysis of the piggery industry in the Prestea/Huni-Valley Municipality of Western Region, Ghana. *International Journal of*

- *Entrepreneurship and Small Business, 51*(2), 238-256. doi:https://doi.org/10.1504/IJESB.2024.135708
- Anggraeni, R. D., Yunus, N. R., & Rezki, A. (2020). Local tax collection system and regional retribution in the era of regional autonomy in Indonesia. *ADALAH*, *4*(3), 124-126. doi:DOI: https://doi.org/10.15408/adalah.v4i3.18546
- Dayana, A., Rudyanto, M. D., & Suada, I. K. (2019). Aplikasi Kesehatan dan Keselamatan Kerja (K3) pada Juru Sembelih Halal dan Pekerja Pemotong Daging di Rumah Pemotongan Hewan Mambal dan Pesanggaran. *Indonesia Medicus Veterinus*, 8(1), 99-105. doi:https://doi.org/10.19087/imv.2019.8.1.99
- Hadiyatno, D., Susiswo, S., Patimah, S., Nainggolan, H., & Ernayani, R. (2020). The effect of local taxes, regional retribution, and other legal district own source revenues on the increase of district own source revenue. *Humanities and Social Sciences Reviews*, 8(1), 1-3. doi:https://doi.org/10.18510/hssr.2020.8153
- Haryanto, J. T. (2017). Mapping the Local Own Resources (PAD) Performance and Regional Dependence in Indonesia 2008-2014: Quadrant Method Approach. *Jurnal Bina Praja*, 9(1), 41-52. doi:https://doi.org/10.21787/jbp.09.2017.41-52
- Hegazi, F., & Seyuba, K. (2024). Gender, livelihood diversification and food security: Insights from rural communities in Zambia. *Journal of Rural Studies*, 109, 103321. doi:https://doi.org/10.1016/j.jrurstud.2024.103321
- Hua, J., Ding, J., Chen, Y., Kang, L., Zhang, H., & Zhang, J. (2024). The fluctuation of pig prices and the identification of major drivers in China. *PloS one*, *19*(11), e0313982. doi:https://doi.org/10.1371/journal.pone.0313982
- Indiraswari, S. D. (2024). Determination Of Local Own-Source Revenue (Pad) In Districts And Cities Across East Java Province In 2020-2021. *Journal of Tourism Economics and Policy*, 4(2), 221-231. doi:DOI: https://doi.org/10.38142/jtep.v4i2.1072
- Istikharoh, I., & Purnomo, D. (2023). THE ROLE OF LOCAL REVENUE (PAD) REALIZATION IN CENTRAL JAVA'S ECONOMIC GROWTH BETWEEN 2010 AND 2022. *Jurnal Ekonomi,* 12(04), 446-456.
- Keray, A. S., Widiati, R., & Kusumastuti, T. A. (2024). The role of local pigs for economic and socio-cultural in East Flores District, East Nusa Tenggara, Indonesia. *Biodiversitas Journal of Biological Diversity*, 25(1). doi:https://doi.org/10.13057/biodiv/d250124
- Mardiasmo. (2018). Akuntansi Sektor Publik Edisi Terbaru. Yogyakarta: Penerbit Andi.
- Mathobela, R. M., Molotsi, A. H., Marufu, M. C., Strydom, P. E., & Mapiye, C. (2024). Transitioning opportunities for sub-Saharan Africa's small-scale urban pig farming towards a sustainable circular bioeconomy. *International Journal of Agricultural Sustainability*, 22(1), 2315918. doi:https://doi.org/10.1080/14735903.2024.2315918
- Nuhung, I. A. (2015). *Kinerja, kendala, dan strategi pencapaian swasembada daging sapi*. Paper presented at the Forum Penelitian Agro Ekonomi.
- Nuraida. (2019). Efektifitas Pelaksanaan Program Keluarga Harapan (PKH) di Kecamatan Cisalak Kabupaten Subang. *The World of Public Administration Journal*, 1(2), 148-165. doi:https://doi.org/10.37950/wpaj.v1i2.741
- Okello, D. M., Odongo, W., Aliro, T., & Ndyomugyenyi, E. (2021). An assessment of pig feed diversity amongst smallholder pig farmers in Northern Uganda. *Cogent Food & Agriculture*, 7(1), 1937867. doi:https://doi.org/10.1080/23311932.2021.1937867
- Rachman, E. (2024). Enhancing Local Retribution as a Key Source of Local Revenue. *Journal of Indonesian Scholars for Social Research*, 4(1), 26-32. doi:https://doi.org/10.59065/jissr.v4i1.132
- Ratag, J. P., Kapantow, G. H., & Pakasi, C. B. (2016). Peranan Sektor Pertanian Terhadap Perekonomian di Kabupaten Minahasa Selatan. *Agri-Sosioekonomi*, 12(2), 239-250. doi:https://doi.org/10.35791/agrsosek.12.2A.2016.12878
- Rianto, M., & Demmallino, E. (2020). *The slaughter control on the productive cows on animal health division in food security, animal husbandry, and animal health service in Merauke Regency*. Paper presented at the IOP Conference Series: Earth and Environmental Science.
- Rizky, S., & Akhyar, C. (2023). The Influence Of Local Own-Source Revenue (PAD) On The Financial Independence Of Regencies/Cities Throughout Sumatra Island. *Journal of Accounting*

- Research, Utility Finance and Digital Assets, 1(4), 353-358. doi:DOI: https://doi.org/10.54443/jaruda.v1i4.55
- Suprapto, S., & Purbowati, R. (2024). Kontribusi pajak daerah, retribusi daerah, hasil pengelolaan kekayaan daerah yang dipisahkan dan lain-lain pendapatan asli daerah yang sah terhadap Pendapatan Asli Daerah (PAD). *Jurnal Akuntansi Neraca*, 2(1). doi:ttps://doi.org/10.59837/jan.v2i1.28
- Voto, T. P., & Ngepah, N. (2024). Income inequality: The effects of public education expenditure and information and communications technology in sub-Saharan Africa. *South African Journal of Economic and Management Sciences*, 27(1), 5647.
- Welerubun, I., Sairudy, A., Lainsamputty, J. M., & Sirappa, I. P. (2023). Analisis Strategi Pengembangan Usaha Peternakan Babi Di Kabupaten Pania (Studi Kasus Di Desa Itoka Distrik Nakama). *Jurnal Peternakan Sabana*, 2(3), 158-169. doi:https://doi.org/10.58300/jps.v2i3.689