



REGIONAL ECONOMIC POTENTIAL IN INCREASING LOCAL OWN-SOURCE REVENUE OF THE PROPOSED MALAMOI REGENCY EXPANSION FROM SORONG REGENCY

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Abstract:

This study aims to analyze the regional economic potential in increasing Local Own-Source Revenue (PAD) in the proposed expansion of Malamo Regency from Sorong Regency. A mixed-methods descriptive approach was employed, incorporating qualitative descriptive analysis, Location Quotient (LQ), and sectoral contribution analysis. The findings reveal that the Malamo region has six main economic potentials: agriculture, livestock, forestry, fisheries and marine, mining, and tourism. Based on LQ analysis, the broad agricultural sector is a base sector ($LQ = 1.42 > 1$) with potential as the primary economic driver, while the mining and tourism sectors are classified as non-base sectors ($LQ < 1$). In terms of contribution, the mining sector contributes the most (15.68%), the broad agricultural sector contributes moderately (9.57%), and tourism contributes minimally (0.33%). The study concludes that the economic potential of Malamo can support PAD growth and strengthen regional fiscal independence when managed optimally with adequate infrastructure support.

Keywords: regional expansion, economic potential, local revenue (PAD), Location Quotient, GRDP

INTRODUCTION

Regional development is a crucial issue in Indonesia's national development agenda. Uneven development generates social and economic disparities, including income inequality and limited access to public services (Siregar et al., 2025). In the context of an archipelagic nation with a vast territory, equitable development remains a primary challenge for local governments. Haggett (1972) describes regional development as a process of transforming land use and resources to improve the living standards of the population.

Sorong Regency in South West Papua Province covers an area of approximately 13,075.28 km², divided into 32 sub-districts. The vast area has resulted in uneven governmental services and development coverage. This situation is the primary motivation behind the proposed expansion of Malamo Regency, which would encompass 11 sub-districts with a total area of 4,526.23 km² and a population of 13,477. Based on Law No. 23 of 2014 on Regional Governance and Government Regulation No. 78 of 2007, this territory has



fulfilled the physical and administrative requirements for establishing a new autonomous region.

According to Pampasa (2024), regional expansion aims to improve the effectiveness of public services and accelerate regional development. Meanwhile, Mariana and Paskarina (2008) state that expansion is an effort to shorten the span of governmental control. Although the proposed expansion of Malamoi Regency is grounded in the need for equitable development, studies specifically analyzing the region's economic potential in supporting PAD growth remain limited even though economic capacity is one of the key indicators in assessing the feasibility of forming a new autonomous region.

Based on this context, this study aims to: (1) identify and describe the economic potential available in the Malamoi region if it is established as a new autonomous territory; and (2) analyze the contribution of that economic potential to Local Own-Source Revenue (PAD).

RESEARCH METHOD

This study employs a mixed-methods approach combining qualitative and quantitative methods (Sugiyono, 2012). The research location is the proposed Malamoi expansion area comprising 11 sub-districts: Klaso, Makbon, Klayili, Maudus, Sayosa, Sayosa Timur, Sunook, Klasafet, Saengkeduk, Moraid, and Selemkai. The study was conducted from December 2025 to April 2026.

Primary data were obtained through field observations, interviews with sub-district heads and community leaders, and visual documentation. Secondary data were sourced from the Sorong Regency Spatial Plan (RTRW) 2023–2042, GRDP data from the Central Statistics Agency (BPS) of Sorong Regency and South West Papua Province for 2024, and Local Own-Source Revenue reports from BP2RD Sorong Regency.

Data analysis used three methods: (1) Qualitative Descriptive Analysis to identify and describe the economic potential of each sub-district; (2) Location Quotient (LQ) Analysis to determine base and non-base sectors; and (3) Sectoral Contribution Analysis to measure the percentage contribution of each sector to GRDP. The LQ formula used is:

$$LQ = (S_i/S) / (N_i/N)$$

where S_i = GRDP of sector i in Sorong Regency; S = Total GRDP of Sorong Regency; N_i = GRDP of sector i in South West Papua Province; N = Total GRDP of South West Papua Province. $LQ > 1$ indicates a base sector; $LQ < 1$ indicates a non-base sector. The sectoral contribution formula is: Sectoral Contribution (%) = (Sector Value / Total All Sectors) \times 100.

RESULTS AND DISCUSSION

Economic Potential of the Malamoi Region

Based on field observations and interviews with sub-district officials, the proposed Malamoi Regency has six main economic potential sectors distributed across all 11 sub-districts. The spatial distribution of these potentials can be seen in Figure 1.

Figure 1. Map of Economic Potential Distribution in the Malamoi Region
 Source: BPS Sorong Regency & South West Papua Province (2024/2026). Processed by: Krimadi, Sipora (2026). Projection: Equirectangular WGS-84 | Department of Urban and Regional Planning, Faculty of Engineering, Universitas Cenderawasih, Jayapura 2026

Table 1. Distribution of Economic Potential by Sub-District in the Malamoi Region

Sub-District	Agriculture	Livestock	Forestry	Fisheries & Marine	Mining	Tourism	Notes
Klaso	✓	✓	✓	✓ (freshwater)	-	-	Sago, freshwater fisheries
Makbon	✓	✓	✓	✓	✓ (quarry C)	✓	Malaumkarta, Pulau Um, marine tourism
Klayili	✓	✓	✓	✓ (freshwater)	✓ (quarry C)	✓	Waterfall, hot spring, palm oil
Maudus	✓	✓	✓	-	-	-	Sayosa Raya area
Sayosa	✓	✓	✓	-	✓ (quarry C)	-	Palm oil plantation, timber
Sayosa Timur	✓	✓	✓	-	✓ (quarry C)	-	Sayosa Raya area
Sunook	✓	✓	✓	-	-	✓	River, nature tourism
Klasafet	✓	✓	✓	✓ (freshwater)	✓ (oil & gas)	-	Pertamina EP Papua Field, palm oil
Saengkeduk	✓	✓	✓	-	✓ (mineral)	-	Sago, potential mineral
Moraid	✓	✓	✓	✓ (sea)	-	-	Jetty, coastal fisheries
Selemkai	✓	✓	✓	✓ (sea)	-	-	Marine conservation zone

Source: Field survey and interviews, 2025–2026

Table 1 shows that all 11 sub-districts have potential in agriculture and livestock. The forestry sector is also widely distributed, while fisheries and marine sectors are more concentrated in coastal sub-districts (Moraid, Makbon, Selemkai). Mining is present in Klasafet (petroleum by PT Pertamina EP Papua

Field), Sayosa, Sayosa Timur, Klayili, and Makbon (quarry class C). Tourism is concentrated in Makbon (Malaumkarta, Pulau Um) and Klayili (Asbaken Waterfall, Hot Spring, Malagufuk Ecotourism).

Location Quotient (LQ) Analysis

LQ analysis was conducted using GRDP data from Sorong Regency and South West Papua Province for 2024 at Current Prices (ADHB). Total GRDP of Sorong Regency was IDR 12,450.0 billion, and total GRDP of South West Papua Province was IDR 76,177.48 billion.

Table 2. LQ Analysis of Economic Sectors in Sorong Regency and South West Papua Province, 2024

Business Field Category	GRDP Sorong Regency (Billion IDR)	GRDP South West Papua Province (Billion IDR)	LQ	Note
A - Agriculture, Forestry, Fisheries	1,192.1	5,124.21	1.42	Base
B - Mining & Quarrying	1,951.6	19,336.57	0.62	Non-Base
C - Manufacturing Industry	5,504.9	29,652.80	1.13	Base
D - Electricity & Gas Supply	5.3	31.62	1.02	Base
E - Water, Waste & Recycling Supply	8.8	52.22	1.03	Base
F - Construction	1,632.0	6,009.44	1.66	Base
G - Wholesale & Retail Trade	504.7	3,588.85	0.86	Non-Base
H - Transportation & Storage	89.8	1,250.68	0.44	Non-Base
I - Accommodation & Food Service	40.9	367.73	0.68	Non-Base
J - Information & Communication	54.2	763.22	0.44	Non-Base
K - Financial Services & Insurance	90.9	906.70	0.61	Non-Base
L - Real Estate	75.2	689.66	0.67	Non-Base
M,N - Business Services	9.2	47.29	1.19	Base
O - Government Administration	989.0	6,865.68	0.88	Non-Base
P - Education Services	213.3	926.42	1.40	Base
Q - Health & Social Services	74.4	418.39	1.09	Base
R,S,T,U - Other Services	13.2	146.00	0.55	Non-Base
TOTAL	12,450.0	76,177.48	-	-

Source: BPS Sorong Regency and BPS South West Papua Province, 2025/2026 (processed by researcher)

Based on Table 2, out of 17 business field categories, there are 8 base sectors ($LQ > 1$) in Sorong Regency. The Agriculture, Forestry, and Fisheries sector (Category A) has an LQ value of 1.42, indicating a comparative

advantage and positioning it as a base sector with the potential to serve as the primary economic driver. The Mining and Quarrying sector (LQ = 0.62) and Tourism/ Accommodation (LQ = 0.68) are non-base sectors, yet both still make significant contributions to the regional GRDP.

Table 3. Base/Non-Base Classification of the Six Main Economic Potentials of the Malamoi Region

Main Potential	GRDP Category	GRDP Sorong Regency (Billion IDR)	LQ	Base/Non-Base
Agriculture	A - Agriculture, Forestry, Fisheries	1,192.1	1.42	Base
Livestock	A - Agriculture, Forestry, Fisheries	1,192.1	1.42	Base
Forestry	A - Agriculture, Forestry, Fisheries	1,192.1	1.42	Base
Fisheries & Marine	A - Agriculture, Forestry, Fisheries	1,192.1	1.42	Base
Mining	B - Mining & Quarrying	1,951.6	0.62	Non-Base
Tourism	I - Accommodation & Food Service	40.9	0.68	Non-Base

Source: BPS Sorong Regency and South West Papua Province 2024, processed by researcher 2026

Sectoral Contribution Analysis to PAD

Sectoral contribution analysis shows the magnitude of each sector's contribution to the total GRDP of Sorong Regency, which indirectly reflects the fiscal capacity and PAD potential.

Table 4. Contribution of Main Economic Potentials of Malamoi to GRDP of Sorong Regency, 2024

Main Potential	GRDP Category	GRDP Value (Billion IDR)	Contribution (%)	Category
Agriculture, Livestock, Forestry, Fisheries & Marine	A - Agriculture, Forestry, Fisheries	1,192.1	9.57%	Moderate
Mining	B - Mining & Quarrying	1,951.6	15.68%	High
Tourism	I - Accommodation & Food Service	40.9	0.33%	Low

Source: BPS Sorong Regency and South West Papua Province 2024, processed by researcher 2026

Based on Table 4, the mining sector provides the highest contribution at 15.68%, despite being classified as a non-base sector in the LQ analysis. This indicates that mining particularly petroleum managed by PT Pertamina EP Papua Field in Klasafet Sub-District is the dominant source of regional revenue through the Oil and Gas Revenue Sharing Fund (DBH Migas) mechanism. The

broad agricultural sector contributes moderately at 9.57% and is a base sector, reflecting its role as the economic backbone of the Malamoi community. The tourism sector has the lowest contribution (0.33%), yet holds significant development potential through destinations such as Malaumkarta, Asbaken Waterfall, and Malagufuk Ecotourism.

Table 5. Potential PAD Sources Based on Economic Sectors of the Malamoi Region

Economic Sector	Economic Activities	Potential PAD Sources
Agriculture	Production & trade of agricultural products, palm oil plantations	Service retribution (regional markets), taxes from plantation companies
Livestock	Community livestock enterprises (cattle, poultry)	Business licensing retribution for livestock
Forestry	Utilization of forest products (timber and non-timber)	Forestry natural resource revenue sharing, forest product utilization permits
Fisheries & Marine	Sea fishing, aquaculture, processing and distribution	Port/jetty retribution, fish landing dock (TPI), and business licensing
Mining	Petroleum (Pertamina), quarry class C	Oil & gas revenue sharing (DBH Migas), mineral revenue sharing (DBH Minerba), mining permit retribution
Tourism	Hotels/lodging, restaurants, nature & ecotourism	Hotel tax, restaurant tax, tourist attraction retribution

Source: Researcher's analysis, 2026

Prospects and Comparative Discussion

The findings of this study are consistent with Hakim (2017), who found that the expansion of Meranti Islands Regency from Bengkalis Regency had not fully succeeded in driving regional economic growth because leading sectors' contributions to GRDP remained low and dependence on central transfer funds remained high. For Malamoi, dependence on the non-renewable mining sector particularly petroleum poses a long-term strategic challenge.

Meanwhile, the LQ analysis result classifying the broad agricultural sector as a base sector (LQ = 1.42) aligns with Amelia and Guswandi (2021) in South Sumatra Province, who found that agriculture constitutes the primary economic base in potential regions. The development of palm oil plantations by PT Hendrison Inti Persada (HIP), which has operated since 2004 in four sub-districts with a licensed area of 32,546 hectares only 41.3% of which has been planted indicates significant room for production expansion that could increase the agricultural sector's contribution to PAD.

Apriadi et al. (2024) on the expansion of Natuna Regency also reinforces the argument that expansion of archipelagic/remote regions can accelerate development in the maritime and tourism sectors. This is particularly relevant to Malamoi's fisheries and marine potential, especially in Moraid, Makbon, and Selemkai sub-districts, which fall within a marine conservation reservation area under the Decree of the Governor of West Papua No. 523/87/4/2020.

CONCLUSION

Based on the research findings, two main conclusions can be drawn. First, the proposed Malamoi Regency has diverse economic potential encompassing agriculture, livestock, forestry, fisheries and marine, mining, and tourism sectors. Based on Location Quotient (LQ) analysis, the broad agricultural sector is a base sector with an LQ value of 1.42, positioning it as the primary economic driver of the region, while the mining sector (LQ = 0.62) and tourism (LQ = 0.68) are non-base sectors, yet still hold strategic roles.

Second, based on sectoral contribution analysis, the economic potential of the Malamoi region is capable of contributing to Local Own-Source Revenue (PAD). The mining sector provides the highest contribution (15.68%), the broad agricultural sector contributes moderately (9.57%), and the tourism sector contributes minimally (0.33%). Overall, the economic potential can support PAD growth and strengthen regional fiscal independence if the regional expansion is realized, provided that optimal resource management is accompanied by adequate infrastructure development.

This study recommends that local governments develop financial management strategies based on local economic potential, improve basic infrastructure development in isolated sub-districts, tighten oversight of illegal activities (illegal logging and unlicensed mining), and conduct a further participatory study on the readiness of Klasafet Sub-District within the structure of the proposed Malamoi Regency. Future research is encouraged to conduct more detailed and in-depth economic value estimation for each leading sector.

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