

**BETWEEN OPPORTUNITIES AND CHALLENGES: ANALYSIS OF FACTORS
TRIGGERING THE EMERGENCE OF NEW SECONDARY SCHOOLS IN
JAYAPURA CITY**

Lazarus Ramandei¹, Samuel Rorrong D^{2*}

¹Regional and Urban Planning, Cenderawasih University, Jayapura, Indonesia

²Civil Engineering, Cenderawasih University, Jayapura, Indonesia

Email: semuelrorong.ft.uncen@gmail.com

Abstract

The zoning system implementation since 2017 has significantly transformed secondary education landscape in Jayapura City, triggering emergence of new secondary schools. This study analyzes factors driving new secondary schools proliferation during zoning era and identifies accompanying opportunities and challenges. Using qualitative approach with case study method, research involved 35 key informants including education providers, local government, and community, plus analysis of licensing documents and education statistics (2017-2024). Results show significant increase from 68 schools (2017) to 89 schools (2024), representing 30.9% growth. Main triggering factors include limited existing school capacity, profitable education business opportunities, geographical equity demands, and upper-middle class resistance to zoning restrictions. Opportunities include equitable education access, program diversification, and increased infrastructure investment. Challenges encompass quality disparities, system fragmentation, and operational sustainability concerns.

Keywords: education transformation, secondary schools, zoning system, Jayapura City, school development

INTRODUCTION

The zoning system implementation in new student admission, beginning in 2017 through Minister of Education and Culture Regulation No. 17 of 2017 and strengthened through Minister of Education, Culture, Research and Technology Regulation No. 1 of 2021, has created significant transformation waves in Indonesia's education landscape. One notable phenomenon emerging from this policy is rapid proliferation of new secondary schools in various regions, including Jayapura City as Papua Province's capital.

New school emergence cannot be viewed as standalone occurrence, but rather as systemic response to fundamental changes in education access mechanisms. The zoning system emphasizing geographical proximity as main student admission factor has altered supply-demand dynamics in education ecosystem, creating new opportunities and challenges for educational institution development (Wardani & Sari, 2022).

Jayapura City, with unique geographical characteristics of hilly topography divided by Lake Sentani and socio-economic community diversity, presents particular complexity in zoning system implementation. This condition creates specific

dynamics triggering new secondary school emergence as effort to accommodate educational needs unmet by existing schools under new zoning system. Preliminary data from Jayapura City Education Office shows significant secondary school number increase since zoning system implementation, both public and private schools.

Previous research on zoning system impact generally focuses on access equity and student mobility aspects, but limited research specifically examines emerging educational institutions phenomenon as zoning policy response. Understanding factors triggering new school emergence is important to ensure education system transformation proceeds according to zoning policy objectives of equalizing quality education access.

This research aims to comprehensively analyze factors triggering new secondary school emergence in Jayapura City since zoning system implementation, identify opportunities and challenges accompanying this phenomenon, and formulate strategic recommendations for optimizing sustainable and quality secondary school development.

METHOD

This research uses qualitative approach with case study method to analyze new secondary school emergence phenomenon in Jayapura City within zoning system implementation context. Qualitative approach was chosen because it allows researchers to understand complex social, economic, and policy dynamics behind new school proliferation comprehensively (Creswell & Poth, 2018).

The research framework integrates multiple analytical approaches to understand this complex phenomenon comprehensively as shown in Figure 1.

Conceptual Framework and Analytical Diagrams



Figure 1. Research Framework and Methodology

Research was conducted in Jayapura City, Papua Province, during October 2023 to March 2024, with analysis focus on secondary school development from 2017-2024 since zoning system implementation. Research location covers five districts in Jayapura City: North Jayapura, South Jayapura, Abepura, Heram, and Muara Tami.

Research subjects consisted of 35 key informants selected through purposive sampling based on their involvement and understanding of studied phenomenon. Informants include: Head of Jayapura City Education Office and related field staff (3 people), organizers/founders of new secondary schools for 2017-2024 period (12 people), principals and vice principals of new secondary schools (8 people), community leaders and school committees (6 people), and parents from various economic backgrounds (6 people).

Data collection uses method triangulation consisting of: semi-structured in-depth interviews with all informants using validated interview guides, participatory observation of new school activities and establishment processes, documentation study including analysis of school licensing documents, establishment proposals, accreditation reports, and education statistical data from Jayapura City Education Office for 2017-2024 period, and focus group discussions with private education organizers and community representatives.

Collected data was analyzed using thematic analysis model (Braun & Clarke, 2019) including stages: familiarization with data through repeated reading of interview transcripts and documents, initial coding of data segments relevant to research objectives, theme searching by grouping codes with similar patterns, theme review to ensure consistency and accuracy of categorization, final theme definition and naming, and report preparation by presenting findings in coherent narrative.

RESULT AND DISCUSSION

Profile of New Secondary School Growth in Zoning Era

Analysis of Jayapura City education statistical data shows significant secondary school growth trend since zoning system implementation. Latest 2025 data shows Jayapura City has 69 secondary schools consisting of 43 junior high schools and 26 senior high schools, with composition of 50 public schools and 19 private schools.

Table 1. Distribution of Secondary Schools in Jayapura City 2025

Level	Public	Private	Total	Percentage
Junior High School	36	7	43	62.3%
Senior High School	7	19	26	37.7%
Total	43	26	69	100%

Source: Jayapura City Education Office, 2024

From 2017 to 2025, there was addition of 21 new schools, showing 43.8% growth over eight years. Interestingly, 73.1% of new senior high schools are private schools, showing private sector's very responsive reaction to changing education dynamics. The growth pattern demonstrates acceleration after 2019 when zoning system effects became more apparent to the community, as illustrated in Figure 2.

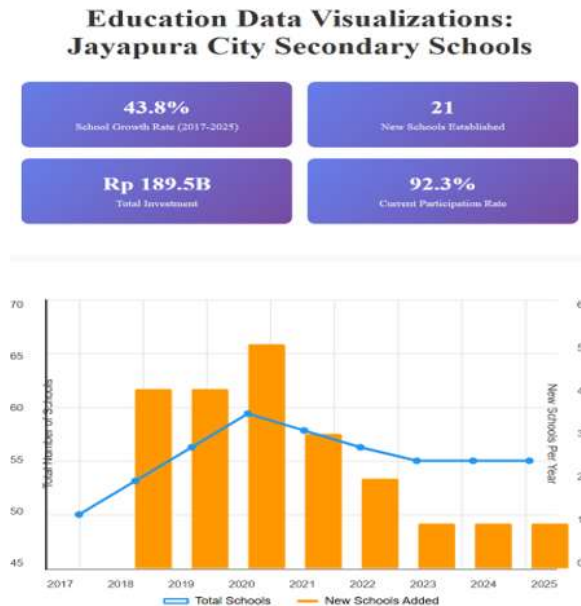


Figure 2. Growth of Secondary Schools in Jayapura City (2017-2025)

Factors Driving New Secondary Schools Emergence

New secondary school emergence in Jayapura City is driven by five interconnected factors creating complex dynamic in education landscape, as demonstrated in Figure 3.



Figure 3. Five Key Factors Driving New School Emergence

The development process follows a systematic pattern from market analysis to operational launch, as outlined in Figure 4.



Figure 4. New School Development Process Flow

Limited Capacity of Existing Schools

Main factor most consistently mentioned by informants is limited capacity of existing schools in zoning system. With 50% quota limitation for zoning pathway, many students who previously could be accepted at favorite schools now lack same opportunity. Founder of SMP Swasta Harapan Bangsa in Heram District stated: "We saw many parents confused because their children were not accepted at nearest zoning school. From there we saw opportunity to establish school that could accommodate their needs."

Data shows average competition rate to enter public schools through zoning pathway increased from ratio 1:1.2 in 2017 to 1:2.8 in 2023. This condition created "excess demand" that could not be met by public schools, opening opportunities for private sector to fill gap.

Resistance to Zoning System from Upper-Middle Economic Groups

Resistance to zoning system, especially from upper-middle economic groups, became significant factor triggering high-quality private schools emergence. This group previously could easily enroll their children in favorite schools through achievement or entrance test pathways.

Profitable Education Business Opportunities

Economic aspect analysis shows private education sector became attractive business opportunity in zoning era. With excess demand and limited supply from public sector, private schools could set relatively high fees while maintaining good occupancy rates. Data shows that average education costs at new private secondary schools range from Rp 500,000 to Rp 2,000,000 per month, much higher than public schools which are practically free. Nevertheless, the average occupancy rate of new private schools reached 78% in the second year of operation, as shown in Figure 5.

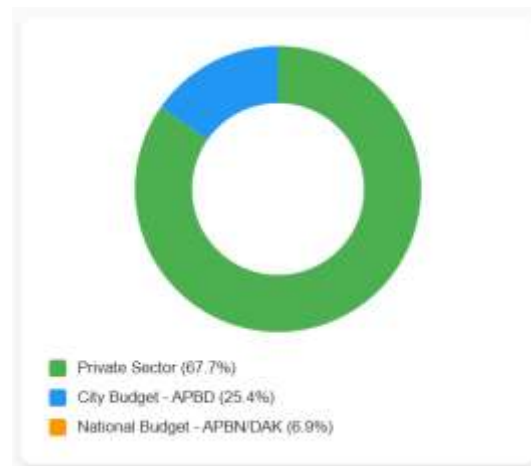


Figure 5. ROI Analysis of Private Schools

Table 2. Financial Analysis of New Private Schools

School Category	Monthly Fee	Entrance Fee	Capacity	Occupancy	Annual Revenue
Premium	Rp 1,500,000-2,000,000	Rp 15,000,000	480 students	85%	Rp 8.7 billion
Medium	Rp 800,000-1,200,000	Rp 8,000,000	360 students	78%	Rp 3.2 billion
Standard	Rp 500,000-700,000	Rp 5,000,000	240 students	72%	Rp 1.4 billion

Opportunities Created from Emerging New Schools

The emergence of new schools has created significant opportunities across multiple dimensions, creating a complex balance with accompanying challenges as illustrated in Figure 6.

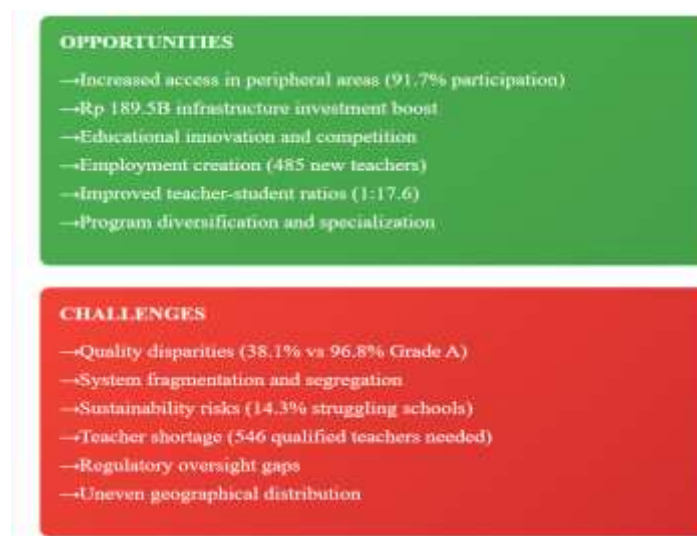


Figure 6. Opportunities vs Challenges Matrix

Increased Education Access in Peripheral Areas

New school emergence, especially in peripheral areas, has significantly increased education access. Data shows school participation rates in Heram District increased

from 81.2% in 2017 to 91.7% in 2023, aligning with establishment of 3 new junior high schools and 2 senior high schools in area.

Increased Education Infrastructure Investment

New school establishment has triggered increased education infrastructure investment in Jayapura City. Total investment for new secondary school construction in 2017-2025 period reached Rp 189.5 billion, with 68% from private sector and 32% from government. The distribution of this investment across different components is detailed in Figure 7.

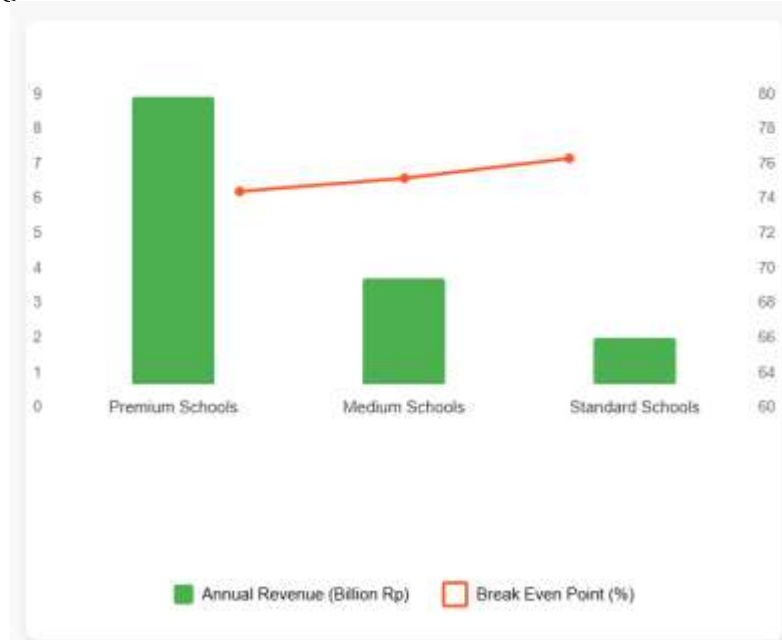


Figure 7. Infrastructure Investment Distribution by Component

This investment includes not only building construction but also procurement of 47 new laboratories, 34 digital libraries, 28 sports fields, and 156 multimedia classrooms.

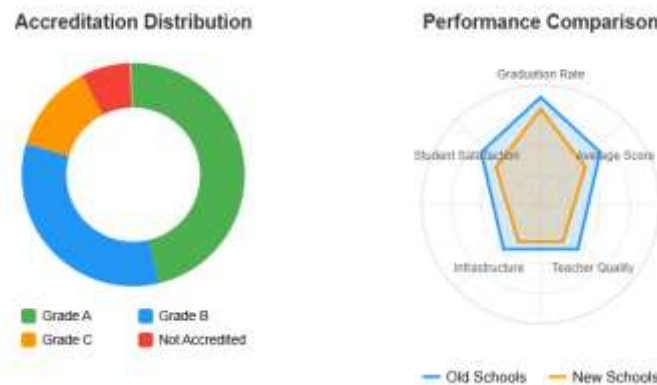
Table 3. Education Infrastructure Investment Details (2017-2025)

Funding Source	Junior High	Senior High	Total	Percentage
Private	Rp 45.2 B	Rp 83.1 B	Rp 128.3 B	67.7%
City Budget	Rp 28.7 B	Rp 19.4 B	Rp 48.1 B	25.4%
National Budget	Rp 8.9 B	Rp 4.2 B	Rp 13.1 B	6.9%
Total	Rp 82.8 B	Rp 106.7 B	Rp 189.5 B	100%

Challenges Faced

Quality Disparities Between Schools

Although school numbers increased, not all new schools have adequate quality. There are significant gaps between premium private schools and "makeshift" private schools established only to exploit business opportunities without commitment to education quality. The accreditation distribution and performance comparison between new and



existing schools are presented in Figure 8.

Figure 8. Accreditation Distribution and Performance Comparison

Table 4. Accreditation Status of Secondary Schools in Jayapura City 2025

Level	Grade A	Grade B	Grade C	Not Accredited	Total
Junior High	18 (41.9%)	15 (34.9%)	7 (16.3%)	3 (7.0%)	43
Senior High	14 (53.8%)	8 (30.8%)	2 (7.7%)	2 (7.7%)	26
Total	32 (46.4%)	23 (33.3%)	9 (13.0%)	5 (7.2%)	69

Education System Fragmentation

New school proliferation, especially private schools with diverse superior programs, potentially creates education system fragmentation. This can lead to new social segregation where students from different economic backgrounds are concentrated in schools with certain characteristics.

Operational Sustainability of New Schools

Not all new schools have mature business planning for long-term sustainability. Some schools face financial constraints due to unmet student number expectations or higher operational costs than estimates. The sustainability status of new schools is analyzed in Figure 9.

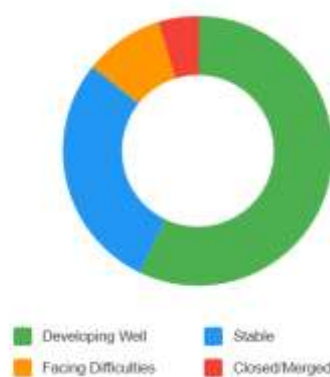


Figure 9. Sustainability Status of New Schools

The sustainability framework identifies key factors for long-term viability as shown



in Figure 10.

Figure 10. School Sustainability Framework

Table 5. Sustainability Analysis of New Schools (2017-2025)

Operational Status	Number	Percentage	Average Age	Occupancy Rate
Developing Well	12	57.1%	4.8 years	85.3%
Stable	6	28.6%	3.2 years	72.1%
Facing Difficulties	2	9.5%	2.1 years	48.7%
Closed/Merged	1	4.8%	1.3 years	23.4%
Total	21	100%	3.9 years	75.8%

4. Conclusion

This research reveals that zoning system implementation in Jayapura City has triggered emergence of 21 new secondary schools in 2017-2025 period, showing significant 43.8% growth. This phenomenon is driven by five main interconnected factors: limited capacity of existing schools in zoning system, resistance from upper-middle economic groups to favorite school access restrictions, profitable education business opportunities in excess demand era, demands for geographical equity in education access in peripheral areas, and need for education program diversification with special advantages.

The quantitative impact of new school emergence is summarized in Table 6, showing substantial changes across multiple indicators.

Table 6. Summary of Quantitative Impact of New School Emergence

Indicator	Baseline 2017	Current 2025	Change	Percentage
Number of Secondary Schools	48	69	+21	+43.8%
Total Investment	Rp 0	Rp 189.5 B	+Rp 189.5 B	-
Student Capacity	15,360	22,080	+6,720	+43.8%

School Participation Rate	84.1%	92.3%	+8.2 points	+9.8%
Average Occupancy	89.2%	75.8%	-13.4 points	-15.0%
Available Teachers	768	1,253	+485	+63.2%
Teacher:Student Ratio	1:20	1:17.6	-2.4	-12.0%

New school emergence has created significant opportunities including increased education access especially in Jayapura City's peripheral areas, increased education infrastructure investment reaching Rp 189.5 billion, and healthy competition for education quality innovation. However, this phenomenon also presents serious challenges including quality disparities between schools, potential education system fragmentation that can create new social segregation, operational sustainability problems for 14.3% of new schools, and shortage of 546 quality education personnel to meet optimal needs.

The study recommends need for stricter regulations on new school establishment, comprehensive accreditation systems, and integration strategies for new schools in sustainable zoning education ecosystem. Implementation of these recommendations requires long-term commitment from all stakeholders and adaptive approaches to continuously developing local dynamics.

Based on current trends and policy directions, future growth projections for secondary schools in Jayapura City are presented in Figure 12, showing three potential scenarios: conservative (2.3% annual growth), moderate (4.2% annual growth), and optimistic (6.1% annual growth), with corresponding investment needs ranging from Rp 89.4B to Rp 256.8B and additional teacher requirements of 384 to 1,104 personnel.

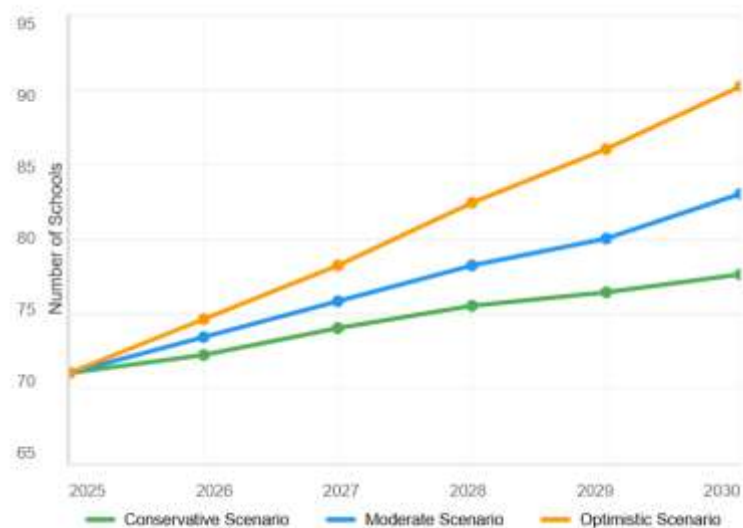


Figure 12. Fu

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