JURNAL LOCUS: Penelitian & Pengabdian
Volume 5 No. 11 November 2026, pp 10374-10381
E-ISSN 2829-7334
DOI: 10.58344/locus.v5i11.6493

Population Dynamics in Central Papua Province of Indonesia

Elina Relawaty Situmorang*, Agus Sumule, Hanike Monim, Ketysia Imelda Tewernusa, Els Tieneke Rieke
Universitas Papua, Indonesia
Email : e.situmorang@unipa.ac.id*, agussumule@gmail.com, hmonim@unipa.ac.id, mel35tt@unipa.ac.id, elskatmo20@unipa.ac.if

Keywords:
Population; Human Development; Indigenous Marginallization.

This is an open access article under the CC BY-SA license.

Copyright © 2026 by Author. Published by Riviera Publishing

ABSTRACT

Central Papua Province, one of Indonesia's newest provinces, has a distinctive demographic profile characterized by a substantial Indigenous Papuan (Orang Asli Papua, OAP) population, geographically dispersed settlements, and unequal access to public services. Understanding population dynamics in this region is essential for formulating effective development policies, particularly in education, healthcare, and economic equity. This study examined population dynamics in Central Papua Province by identifying and analyzing key factors influencing demographic changes. The research employed a descriptive approach integrating quantitative and qualitative methods. Secondary data were obtained from Statistics Indonesia (Badan Pusat Statistik, BPS) and reports published by government institutions, including the Population and Civil Registration Office (Dinas Kependudukan dan Pencatatan Sipil), the National Population and Family Planning Board (Badan Kependudukan dan Keluarga Berencana Nasional, BKKBN), and the Health Office (Dinas Kesehatan). Data collection also involved observation, interviews, and document analysis. The findings revealed a poverty rate of 32.25% in Central Papua Province, with Intan Jaya Regency recording the highest poverty rate. The province's Human Development Index (HDI) was 57.60, while Mimika Regency recorded the highest HDI at 75.91. Regarding the Sustainable Development Goals (SDGs), nearly all reported indicators showed achievement levels below 50%, except for the indicator concerning villages with access to clean and renewable energy, which reached 72.54%. These findings highlighted substantial challenges in human development, particularly in educational access, socioeconomic disparities, and equitable economic opportunities. The observed HDI patterns and SDG achievements underscored the need for targeted, evidence-based policies prioritizing Indigenous Papuan communities and geographically underserved populations. Strengthening strategic government programs and implementing innovative educational initiatives could contribute to long-term human capital development, inclusive economic growth, and sustainable regional development.

INTRODUCTION

Central Papua Province is one of Indonesia's newest administrative regions. Established in 2022, it was formed alongside two other provinces through the administrative division of the former Papua Province. Central Papua comprises eight regencies: Mimika, Puncak, Puncak Jaya, Intan Jaya, Nabire, Paniai, Deiyai, and Dogiyai. The province was officially established

under Law No. 15 of 2022, enacted on July 25, 2022 (Indonesian Ministry of Home Affairs, 2022).

Like other provinces in the Papua region, including Papua, West Papua, Southwest Papua, South Papua, and Highland Papua, Central Papua operates under the Special Autonomy (Otonomi Khusus) framework within the Unitary State of the Republic of Indonesia. Special Autonomy, as stipulated in Law No. 21 of 2001 and subsequently amended by Law No. 2 of 2021, aims to protect, support, and empower Indigenous Papuans by safeguarding their rights and promoting their participation in governance and regional development (Kurniawan & Djogo, 2020; Widjojo et al., 2012).

According to Presidential Regulation No. 15 of 2014, population development encompasses coordinated efforts to regulate population growth, improve human capital, strengthen family welfare, manage population distribution and mobility, and enhance population administration systems (Badan Pusat Statistik, 2022). These interconnected dimensions provide a policy framework for understanding demographic changes and addressing population-related development challenges in Central Papua Province (Law Number 15 of 2022 on the Establishment of Central Papua Province, 2022; Organization, 2009).

Demographic transitions and policy implementation in Central Papua should be examined through contemporary demographic transition theories and population mobility models (Bell & Charles-Edwards, 2021; McDonald, 2019). These theoretical perspectives provide a foundation for understanding population growth, migration patterns, and demographic shifts, particularly in regions characterized by geographic isolation, socioeconomic disparities, and uneven access to public services.

This study examines population dynamics in Central Papua Province by identifying and analyzing the principal factors influencing demographic changes. It addresses population growth, human development, internal migration, disparities among regencies, the marginalization of Indigenous communities, and sociopolitical conflicts. The implications of these factors for regional development and community well-being are also examined using theoretical perspectives on human development (Alkire & Santos, 2014) and structural marginalization (Barakat & Urdal, 2019). Specifically, the study aims to identify and document population dynamics in Central Papua Province, including population size and distribution, demographic characteristics, human development indicators, and village-level Sustainable Development Goal (SDG) achievements, while interpreting these patterns within relevant demographic and development frameworks. The findings are expected to provide empirical evidence to support provincial and regency governments in formulating targeted, evidence-based policies, establish baseline information for future demographic monitoring, and contribute to the academic literature on population dynamics in Indonesia's newly established provinces (Badan Pusat Statistik Provinsi Papua, 2026b, 2026a).

METHOD

This study employed a descriptive research approach integrating quantitative and qualitative methods to examine population dynamics in Central Papua Province. Secondary data were obtained from Statistics Indonesia (Badan Pusat Statistik, BPS) and reports published

by relevant government agencies, including the Population and Civil Registration Office (Dinas Kependudukan dan Pencatatan Sipil), the National Population and Family Planning Board (Badan Kependudukan dan Keluarga Berencana Nasional, BKKBN), and the Health Office (Dinas Kesehatan). Additional data were collected through observation, interviews, and document analysis. The study focused on identifying and examining population dynamics in Central Papua Province, particularly population size and distribution, population quality, and village-level achievements related to the Sustainable Development Goals (SDGs).

RESULTS AND DISCUSSION

Population Size and Distribution

As of 2022, the estimated population of Central Papua Province was 1,430,951 individuals (Badan Pusat Statistik, 2022). The largest population concentration is found in Mimika Regency, while Deiyai Regency has the smallest population. The high population density in Mimika is primarily attributed to the presence of PT Freeport Indonesia, a major mining corporation that attracts significant labor migration from within and beyond Papua (Elmslie, 2017; Hodge, 2021).

The province exhibits a sex ratio of 1.12, indicating that for every 100 females, there are 112 males. This imbalance may be influenced by labor migration patterns, particularly in the mining and construction sectors, which predominantly employ male workers (OECD, 2020). Recent migration models (Skeldon, 2020) provide a useful framework for understanding these migration trends, as they explain rural-urban migration based on perceived employment opportunities rather than actual job availability.

The demographic and socio-economic landscape of Central Papua Province presents unique challenges and opportunities. Analyzing population projections alongside indigenous dominance and poverty levels offers insights into the region's development dynamics.

Table 1. Population Projection of Central Papua Province (2020–2022)

	Projected Population (June)		
Regency/Province	**2022**	**2021**	**2020**
Nabire	173.043	170.914	169.136
Paniai	227.254	223.467	22.041
Puncak Jaya	231.499	227.641	224.527
Mimika	321.657	316.295	311.969
Puncak	116.279	115.474	114.741
Dogiyai	119.815	117.818	116.206
Intan Jaya	139.236	136.916	135.043
Deiyai	102.168	100.466	99.091
Central Papua Province	1.430.951	1.408.991	1.192.754

Source: Badan Pusat Statistik, Jakarta, 2021.

The data indicates a steady population growth across all regencies from 2020 to 2022. Notably, Mimika Regency exhibits the highest population, likely due to its economic opportunities, particularly the presence of PT Freeport Indonesia's mining operations.

Table 2. Indigenous Population Percentage and Poverty Levels by Regency in Central Papua Province

Regency/Province	Percentage of Papuan Indigenous People as per 2010 Indonesian Population Census (%)	Poverty Level (%)
Mimika	41,25	14,17
Nabire	47,76	23,83
Paniai	97,38	36,58
Puncak Jaya	98,24	36
Dogiyai	99,01	28,81
Puncak	99,26	36,26
Intan Jaya	99,81	41,66
Deiyai	99,11	40,71

Source: Badan Pusat Statistik, Jakarta, 2021.

An intriguing pattern emerges when examining the relationship between indigenous population percentages and poverty levels. Regencies with a higher proportion of indigenous residents, such as Intan Jaya and Deiyai, experience elevated poverty rates. Conversely, Mimika and Nabire, with significant non-indigenous populations, report lower poverty levels.

This phenomenon can be analyzed through the lens of the "Resource Curse" theory, which posits that regions rich in natural resources may experience less economic growth and worse development outcomes due to factors like governance challenges and socio-economic disparities. In Mimika, the influx of non-indigenous migrants attracted by mining opportunities has diversified the economy, potentially contributing to lower poverty rates. However, this migration may also lead to socio-economic tensions and disparities between indigenous and non-indigenous populations.

Fertility and mortality rates are critical indicators of population dynamics. The Total Fertility Rate (TFR) in Deiyai Regency stands at 3.34, suggesting that, on average, a woman bears more than three children during her reproductive years. Early marriages contribute to this figure, with Dogiyai Regency recording the lowest median age at first marriage at 20 years. High fertility rates can strain resources and impede poverty alleviation efforts.

Mortality rates further highlight health disparities. Infant mortality rates in Dogiyai and Deiyai Regencies are alarmingly high, at 45.19 deaths per 1,000 live births. Child mortality rates are also concerning, particularly in Puncak and Intan Jaya Regencies, with 16.4 deaths per 1,000 live births. These figures underscore the need for improved healthcare services and infrastructure in these regions.

In essence, the demographic and socio-economic patterns in Central Papua Province reflect complex interactions between migration, resource distribution, and indigenous population dynamics. Addressing these challenges requires nuanced policies that consider cultural contexts, equitable resource allocation, and targeted development programs to uplift indigenous communities

Population Quality in Central Papua Province

The quality of the population in Central Papua Province can be assessed using the Human Development Index (HDI) at the regency level (Table 3). The HDI is a composite measure of life expectancy, education, and per capita income, serving as a crucial indicator of human development (UNDP, 2020).

Table 3. Human Development Index of Regencies in Central Papua Province

Region	Life Expect-ancy at Birth (year)	Expected Years of Schooling (year)	Mean Years of Schooling (year)	Expend-iture per head per year (Rps 000)	Human Develop-ment Index (HDI)	HDI Growth 2014-2021 (%)	When will HDI of 70 be reached? (year)	When will HDI of 80 be reached ? (year)
Mimika	72,83	12,96	10,47	12.076	75,91	0,58		7,05
Nabire	69,82	12,64	10,33	9.381	71,36	0,41		21,07
Paniai	69,49	10,53	4,79	6.977	58,83	0,4	33,25	52,93
Puncak Jaya	67,77	7,51	4,23	5.731	51,49	0,67	27,63	42,55
Dogiyai	66,49	10,62	4,97	6.182	56,74	0,39	38,46	59,64
Puncak	66,77	5,59	2,19	5.975	44,71	0,73	36,75	48,34
Intan Jaya	66,69	7,69	3,27	6.140	50,39	0,69	31,39	42,91
Deiyai	66,52	9,85	3,27	5.104	51,4	0,26	77,08	110,00
Central Papua	68,30	9,67	5,44	7.196	57,60	0,52	30,57	43,38
INDONESIA	73,93	13,15	8,77	11.899	74,39			

Source: (Statistik, 2021).

Table 3 shows that the average HDI of Central Papua Province is 68.30, categorized as moderate but significantly below the national HDI of 74.39. Among the regencies, Puncak has the lowest HDI, while Mimika has the highest, likely due to economic opportunities created by mining activities (Rohmah, 2023). HDI projections indicate that Central Papua Province may need 31 years to reach an HDI of 70 and 43 years to attain 80, assuming the current growth rate continues.

The Human Capital Theory (Becker, 1993) suggests that investment in education and health is essential for improving human quality. However, the data reflects stark inequalities, with indigenous-majority regencies such as Puncak, Intan Jaya, and Deiyai experiencing lower educational attainment and economic opportunities. This supports the Resource Curse theory (Auty, 2001), where regions rich in natural resources often suffer from underdevelopment due to governance challenges and socio-economic inequalities.

Sustainable Development Goals (SDGs) at the Village Level

Further insights into population quality can be observed through the Sustainable Development Goals (SDGs) at the village level (Table 4). These indicators assess progress in economic, health, education, and environmental sustainability across regencies.

Table 4. Villages Achieving Sustainable Development Goals (SDGs) in Central Papua Province (%)

No	SDGs	Deiyai	Dogiyai	Mimika	Nabire	Puncak Jaya	Puncak	Paniai	Intan Jaya	Average
1	No poverty	5,46	36,03	16,69	40,66	n.a	3,21	41,3	14,77	30,67
2	Zero hunger	30,89	34,49	43,09	44,79	n.a	21,05	36,4	23,68	35,13
3	Good health and well-being	44,21	57,98	47,29	52,04	n.a	29,45	53,6	27,39	48,31
4	Quality education	38,51	32,75	29,45	50,79	n.a	10,85	38,2	19,67	34,70
5	Gender equality	53,81	50,71	41,52	70,09	n.a	24,83	53,3	38,83	51,04

6	Clean water and sanitation	32,09	36,85	44,73	49,00	n.a	33,88	40,3	36,72	40,02
7	Decent work and economic growth	62,75	73,54	75,37	71,04	n.a	68,55	73,1	75,44	72,54
8	Pertumbuhan Ekonomi Desa Merata	20,60	22,79	25,87	30,50	n.a	13,53	23,2	16,31	22,86
9	Industry, innovation, and infrastructure	9,24	20,31	4,76	18,88	n.a	0,00	24,1	1,32	16,07
10	Reduced indequalities	33,82	37,36	52,12	46,97	n.a	22,17	38,8	18,68	37,13
11	Sustainable communities	43,15	37,92	40,10	46,21	n.a	29,11	41,4	26,63	39,05
12	Responsible consumption and production	4,89	9,38	4,51	6,33	n.a	1,91	8,3	1,32	6,43
13	Climate action	1,93	4,37	2,46	2,62	n.a	0,00	7,1	0,00	4,09
14	Life below water	14,91	43,25	8,00	13,57	n.a	7,89	34,8	3,29	24,15
15	Life on land	20,06	31,94	12,64	15,18	n.a	7,89	37,6	7,24	25,12
16	Peace, justice and strong institutions	58,40	63,89	75,24	75,13	n.a	36,11	62,4	36,58	60,64
17	Partnerships for the goals	24,39	29,49	9,70	11,31	n.a	4,21	44,3	1,71	26,07
18	Dynamic Village Institutions and Adaptive Village Culture	46,85	55,58	33,73	47,94	n.a	36,80	51,1	24,68	45,30

Source: Ministry of Villages and Development of Disadvantaged Regions

Policy Recommendations and Future Directions

To improve population quality, four development pillars must be prioritized: education, health, economic opportunities, and social stability. These align with the Indonesian government's initiatives such as *Papua Sehat* (Healthy Papua), *Papua Cerdas* (Smart Papua), *Papua Produktif* (Productive Papua), and *Papua Damai* (Peaceful Papua) (Indonesian Ministry of National Development Planning 2022).

Innovative education models are crucial to addressing disparities. The University of Papua has pioneered the *All Day School* (SSH) and *Remedial School* programs to reduce dropout rates and improve literacy in reading, mathematics, science, and digital skills. If adopted across 553 elementary schools in Central Papua, these programs could significantly improve education outcomes and workforce readiness (Macksey, 2021).

CONCLUSION

Central Papua Province had a larger male population than female population, with Indigenous Papuans (Orang Asli Papua, OAP) accounting for 85.23% of the total population.

The provincial poverty rate was 32.25%, with Intan Jaya Regency recording the highest poverty rate. The Human Development Index (HDI) for Central Papua Province was 57.60, while Mimika Regency recorded the highest HDI at 75.91. Based on village-level Sustainable Development Goals (SDGs) data, the highest achievement was recorded for the indicator related to clean and renewable energy. Meanwhile, the achievement levels for poverty-free villages, healthy and prosperous villages, and quality village education were 30.67%, 48.31%, and 34.70%, respectively.

Central Papua Province faced substantial human development challenges, particularly in educational access, socioeconomic disparities, and equitable economic opportunities. The observed HDI patterns and village-level SDG achievements highlighted the urgent need for targeted, evidence-based policies prioritizing Indigenous Papuan communities and underserved populations. Strengthening strategic government programs and introducing innovative educational initiatives could improve long-term human capital development, promote inclusive economic growth, and support sustainable regional development.

FUNDING

This study did not receive any specific funding from governmental institutions, private organizations, or other funding agencies.

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest related to the conduct of the research, preparation, or publication of this article.

AUTHOR CONTRIBUTIONS

All authors contributed to the preparation of this article. Authors 1, Authors 2, Authors 3, Authors 4, Authors 5, was responsible for the conceptualization of the study, data collection and analysis, interpretation of the results, and manuscript preparation. The other authors contributed to the review, editing, and final approval of the manuscript.

GENERATIVE AI STATEMENT

The authors declare that no generative artificial intelligence was used in the preparation of this article.

REFERENCES

Alkire, S., & Santos, M. E. (2014). Measuring Acute Poverty in the Developing World: Robustness and Scope of the Multidimensional Poverty Index. *World Development*, *59*, 251–274.

Auty, R. M. (2001). *Resource Abundance and Economic Development*. Oxford University Press.

Badan Pusat Statistik Provinsi Papua. (2026a). *Provinsi Papua Tengah dalam angka 2026*. https://papua.bps.go.id/id/publication/2026/02/27/b279a1f308faccfc5eb3f454/provinsi-papua-tengah-dalam-angka-2026.html

Badan Pusat Statistik Provinsi Papua. (2026b). *Statistik daerah Provinsi Papua Tengah 2026*. https://papua.bps.go.id/id/publication/2026/09/28/5fbb26385eb0d6afed43c918/statistik-daerah-provinsi-papua-tengah-2026.html

Barakat, B., & Urdal, H. (2019). Population Age Structure and Insecurity: A Review of the Evidence. *Environmental and Security Journal*, *34*(1), 1–17.

Becker, G. S. (1993). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education* (3, Ed.). University of Chicago Press. https://press.uchicago.edu/ucp/books/book/chicago/H/bo3684031.html

Bell, M., & Charles-Edwards, E. (2021). Measuring Internal Migration around the World: A Comparative Assessment. *Population, Space and Place*, *27*(2).

Elmslie, J. (2017). The Great Divide: West Papuan Demographics Revisited; Settlers Dominate Coastal Regions, Natives in the Highlands. *The Asia-Pacific Journal: Japan Focus*, *15*(2). https://apjjf.org/2017/02/elmslie.html

Hodge, P. (2021). Extractive Industries and Indigenous Rights in Indonesia. *Asia Pacific Journal of Anthropology*, *22*(3), 415–432.

Kurniawan, Y., & Djogo, T. (2020). Special Autonomy Policy and Indigenous Papuans: A Critical Review. *Journal of Contemporary Southeast Asian Studies*, *42*(1), 89–105.

Law Number 15 of 2022 on the Establishment of Central Papua Province (2022).

Macksey, J. (2021). The Life of Papuans, the Native People of Indonesia's Largest Treasure Island. *The Macksey Journal*, *2*(1). https://mackseyjournal.scholasticahq.com/article/39756-the-life-of-papuans-the-native-people-of-indonesia-s-largest-treasure-island

McDonald, P. (2019). The Demography of Indonesia in Comparative Perspective. *Asian Population Studies*, *15*(3), 298–315.

OECD. (2020). *Public Governance Review: Strengthening Fiscal Transparency and Accountability. Paris: OECD Publishing.*

Organization, I. L. (2009). *The Life of Papuans, the Native People of Indonesia's Largest Treasure Island*. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40asia/%40ro-bangkok/%40ilo-jakarta/documents/publication/wcms_125574.pdf

Rohmah, A. (2023). Indonesia's Easternmost Province Faces Resource Curse. *Asia Sentinel*. https://www.asiasentinel.com/p/indonesia-papua-resource-curse

Skeldon, R. (2020). Managing Migration for Development: Is Circular Migration the Answer? *Journal of International Migration and Integration*, *21*(4), 1139–1155.

Statistik, B. P. (2021). *Provinsi Papua Tengah Dalam Angka 2021*. Badan Pusat Statistik.

UNDP. (2020). *Human Development Report 2020: The Next Frontier – Human Development and the Anthropocene*. United Nations Development Programme.

Widjojo, M. S., Chauvel, R., Farhadian, C. E., & Sumule, A. (2012). *The Papua Road Map: Negotiating the Past, Improving the Present and Securing the Future*. Yayasan Pustaka Obor Indonesia.