



Economic and social development in the jungle region of Peru, period 2018-2023

Desarrollo económico y social en la región selva del Perú, periodo 2018-2023

Rodríguez-Loloc, María Guadalupe¹

Acosta-Chilcon, Isela^{1*}

Miranda Passo, Juan Carlos²

¹Universidad Cesar Vallejo, Lima, Perú

²Corporación Universitaria Americana, Barranquilla, Colombia

Received: 23 Apr. 2025 | **Accepted:** 25 Jun. 2025 | **Published:** 20 Jul. 2025

Corresponding author*: iselita_15@hotmail.com

How to cite this article: Rodríguez-Loloc, M. G., Acosta-Chilcon, I., & Miranda Passo, J. C. (2025). Economic and social development in the jungle region of Peru, period 2018-2023. *Revista Amazónica de Ciencias Económicas*, 4(2), e997. <https://doi.org/10.51252/race.v4i2.997>

ABSTRACT

The present research studied the economic growth and social environment of the Selva region, whose indicators were found to have limited progress and persistent challenges. The general objective was to analyze the economic and social development in the jungle region of Peru, period 2018-2023. Regarding the methodology, it was an applied type study, which was aimed at the search for knowledge in a specific area, with a quantitative approach, descriptive in scope, the results indicated an alarming increase in monetary poverty, which reached 36% in 2023, Likewise, the Gross Domestic Product (PIB), experienced a 5% drop in 2020, with a recovery that turned out to be insufficient, with respect to social indicators, the illiteracy rate was 12%, chronic child malnutrition 25% and the coverage of social programs 60%. In conclusion, the Selva region reveals a worrisome situation, since, despite efforts to reduce poverty in previous years, the negative impacts of the pandemic, coupled with the structural fragility of the labor market and the limited coverage of social protection in rural areas, have led to a sustained increase since 2020.

Keywords: economic growth; monetary poverty; PIB; social environment; social programs

RESUMEN

La presente investigación estudió el crecimiento económico y el entorno social de la región Selva, cuyos indicadores se encontraron con avances limitados y desafíos persistentes. El objetivo general fue analizar el desarrollo económico y social en la región selva del Perú, periodo 2018-2023. En cuanto a la metodología, fue un estudio de tipo aplicada, el cual estuvo encaminado a la búsqueda de conocimiento en un área específica, con un enfoque cuantitativo, de alcance descriptivo, los resultados indicaron un alarmante aumento de la pobreza monetaria, que alcanzó el 36% en 2023, asimismo, el Producto Bruto Interno (PBI), experimentó una caída del 5% en 2020, con una recuperación que resultó ser insuficiente, con respecto a los indicadores sociales, la tasa de analfabetismo fue de 12%, la desnutrición crónica infantil 25% y la cobertura de programas sociales del 60%. En conclusión, la región Selva revela una situación preocupante, ya que, a pesar de los esfuerzos por reducir la pobreza en años anteriores, los impactos negativos de la pandemia, sumados a la fragilidad estructural del mercado laboral y a la limitada cobertura de protección social en zonas rurales, han provocado un incremento sostenido desde 2020.

Palabras clave: crecimiento económico; pobreza monetaria; PBI; entorno social; programas sociales



1. INTRODUCTION

The Selva region is characterized by its abundant natural and cultural wealth, whose economic and social development has been a constant challenge for the authorities responsible for positively influencing the region's socioeconomic conditions, which are shaped by its geography, resources, and socioeconomic dynamics as a region located far from the country's main urban centers (Burbano et al., 2024). Despite these challenges, the Selva region has experienced slight growth in agriculture, natural resource extraction, tourism, and sustainable development initiatives (Tapia et al., 2024).

Over the last decade, the Gross Domestic Product (GDP) growth rate of the Peruvian Amazon averaged 4.2% annually (INEI, 2022), reflecting steady improvement in the regional economy. However, the region still faces significant challenges that require comprehensive strategies to ensure balanced growth that benefits its population while preserving its environment (Gutiérrez, 2023). Agriculture is one of the most important economic drivers in the Selva region, with crops such as cocoa, coffee, oil palm, and cassava gaining prominence in both the local and national economies (Cruz et al., 2024).

Peru is the world's second-largest producer of organic coffee, with an annual production of more than 4.5 million bags (MINAGRI, 2022), and the Selva region accounts for approximately 75% of this production. The growing demand for organic products has enabled small-scale producers to enter international markets, promoting fair trade and sustainability. Nevertheless, access to technology, infrastructure, and training remains a constraint on increasing productivity and improving farmers' quality of life (Lavado-Puente et al., 2024).

The exploitation of natural resources, such as timber and hydrocarbons, has been an important pillar of the region. However, this activity has generated socio-environmental conflicts due to deforestation, river pollution, and impacts on Indigenous communities (Armey et al., 2024). In recent years, the deforestation rate in the Peruvian Amazon has been approximately 150,000 hectares per year, representing an ecological concern (Yvette, 2021). In this context, initiatives have emerged seeking to balance economic development with environmental conservation.

The implementation of reforestation programs and responsible forest management certifications represents positive steps toward a more equitable and environmentally sustainable model (Valdez-Arancibia et al., 2023). Tourism in the Peruvian Selva has grown in recent years, attracting domestic and international visitors interested in its biodiversity and the cultural richness of its Indigenous peoples (Huahua, 2020). In 2019, the Amazon region received more than 500,000 tourists, generating revenues exceeding USD 200 million (MINCETUR, 2019).

Destinations such as Iquitos, Tarapoto, and Puerto Maldonado have established themselves on the tourism map due to their ecotourism and community-based tourism offerings. The promotion of these activities has generated employment and encouraged the development of basic infrastructure. However, further progress is still needed in terms of accessibility, safety, and the sustainable promotion of tourism (Julca-Otiniano et al., 2023).

Urban growth in Amazonian cities has accelerated, generating problems associated with territorial planning (Bedoya-Garland et al., 2023). In cities such as Pucallpa, Iquitos, and Tarapoto, population growth has exceeded 3% annually (INEI, 2023), resulting in the unplanned expansion of human settlements. Limited access to basic services and inadequate road infrastructure constrain citizens' quality of life.

Investment in sustainable urban development and sanitation networks is essential to improve living conditions and ensure orderly development in the future. In the educational sphere, the Selva region faces major challenges in terms of access and quality, with 35% of schools in the region lacking basic services such as drinking water and electricity (MINEDU, 2020). Gaps in school infrastructure, the shortage of

trained teachers, and limited access to higher education hinder educational progress in the region. Nevertheless, literacy programs and scholarships for young people have been promoted (Terrones, 2024).

The impact of climate change on the Selva region is a growing concern. Phenomena such as flooding, soil erosion, and disruptions to biological cycles affect both biodiversity and agricultural production. Over the last decade, temperature increases of up to 0.5°C have been recorded in several areas of the Peruvian Amazon, affecting local ecosystems. Implementing adaptation and mitigation policies is crucial to minimizing the effects of climate change in the region (ONU, 2022).

The general objective of the present study is to analyze economic and social development in the Selva region of Peru during the 2018–2023 period, thereby identifying the main problems affecting the population and proposing strategies that contribute to improving living conditions through documentary analysis of publicly available information on economic and social indicators in the Selva region.

2. MATERIALS AND METHODS

Type, Approach, and Study Design

The study was descriptive in nature, in accordance with the guidelines of the OECD Oslo Manual (2018), and aimed to generate useful knowledge for addressing specific problems related to economic and social development in the Selva region of Peru (Deiglmeir & Phills, 2020). Although it was oriented toward practical application, it also contributed to the theoretical framework on the effectiveness of social programs in regional contexts with specific socio-geographical characteristics. A quantitative approach was used, characterized by its methodological rigor (Guerrero, 2022). This made it possible to objectively measure variables related to development and assess the incidence and impact of social programs implemented between 2018 and 2023. Furthermore, the quantitative approach facilitated the generalization of the findings to the region's population, thereby strengthening the external validity of the study (Acosta, 2023).

The research design was non-experimental and longitudinal, allowing the phenomena to be observed in their natural context without manipulating the variables. This characteristic made it possible to collect information at different points in time, which in turn allowed for an analysis of the evolution of the impact of social programs. The longitudinal approach was key to identifying significant changes in economic and social indicators, as well as to more accurately assessing the effectiveness of public policies implemented during the study period (Arias & Covinos, 2021).

Population and Sample

The study population and sample consisted of the departments that comprise the Selva region of Peru, considering economic indicators (such as per capita income, formal and informal employment, and public investment) and social indicators (access to healthcare, education, nutrition, and adequate housing).

Data Collection Techniques and Instruments

Quantitative documentary and statistical analysis techniques were employed through the review of reliable secondary sources, such as reports from the National Institute of Statistics and Informatics (INEI) and the Ministry of Development and Social Inclusion (MIDIS). The instruments used were structured data collection forms and comparative analysis matrices, which made it possible to systematize the information obtained throughout the study period.

Procedures

The research was conducted in several stages. First, data from different public and multilateral organizations were collected and organized. Subsequently, the data were processed using descriptive and

inferential statistical techniques with tools such as Excel. This stage included trend analysis, comparison of indicators before and after the implementation of social programs, and the preparation of explanatory tables.

Finally, the results were interpreted according to the general objective, contrasting the findings with the theoretical framework and previous studies. This process made it possible to identify the degree of impact of social programs on the economic and social development of the Selva region during the period evaluated.

3. RESULTS AND DISCUSSION

Table 1. Expenditure Execution by Function and Budget Category for the 2018–2023 Period in the Selva Region of Peru

Year	Budget Category	PIA	PIM	Certification	Annual Commitment	Execution		Progress %
						Monthly Commitment Allocation	Accrued	
2018	0049: National Program of Direct Support for the Poorest	947,051,733	970,607,576	969,860,833	969,346,528	969,055,810	968,448,875	99.8
	0097: National Solidarity Assistance Program – Pension 65	863,459,346	863,467,121	863,205,517	863,195,249	863,195,249	863,195,249	100.0
	0115: National School Feeding Program	1,594,526,869	1,522,584,114	1,515,949,468	1,515,702,096	1,515,702,096	1,514,670,161	99.5
2019	0049: National Program of Direct Support for the Poorest	937,860,639	931,828,888	928,342,155	917,227,904	917,225,506	917,225,506	98.4
	0097: National Solidarity Assistance Program – Pension 65	860,376,877	869,567,761	868,326,414	867,474,699	867,473,496	867,473,496	99.8
	0115: National School Feeding Program	1,602,493,109	1,573,818,137	1,531,249,157	1,530,709,401	1,530,709,401	1,530,709,401	97.3
2020	0049: National Program of Direct Support for the Poorest	936,139,421	952,694,203	946,028,706	945,951,850	945,935,118	945,924,169	99.3

2021	0097: National Solidarity Assistance Program – Pension 65	905,138,206	897,578,257	887,728,179	887,416,554	887,416,554	887,416,554	885,459,406	98.9
	0115: National School Feeding Program	1,606,259,287	1,211,006,124	1,202,556,454	1,202,313,881	1,202,313,881	1,202,313,881	1,201,700,595	99.3
	0049: National Program of Direct Support for the Poorest	935,910,930	935,910,930	917,289,045	916,750,553	916,750,553	916,750,553	916,593,462	98.0
	0097: National Solidarity Assistance Program – Pension 65	887,606,481	887,706,481	885,718,983	883,997,585	883,997,585	883,995,344	882,784,728	99.6
	0115: National School Feeding Program	1,841,899,003	1,779,075,295	1,777,347,843	1,777,074,679	1,777,074,679	1,777,074,679	1,777,027,494	99.9
	0049: National Program of Direct Support for the Poorest	937,709,777	944,220,193	940,604,537	936,077,507	936,075,462	936,075,462	935,729,752	99.1
2022	0097: National Solidarity Assistance Program – Pension 65	887,518,114	944,305,117	942,891,116	942,877,535	942,877,535	942,875,672	941,767,015	99.8
	0115: National School Feeding Program	1,905,870,839	1,924,693,213	1,922,075,044	1,921,672,914	1,921,672,914	1,921,672,914	1,921,474,491	99.8
	0049: National Program of Direct Support for the Poorest	983,150,552	1,000,145,997	999,813,789	999,683,366	999,676,829	999,660,368	999,577,332	100.0
2023	0097: National Solidarity Assistance Program – Pension 65	999,463,440	1,000,002,549	999,806,283	999,660,229	999,641,377	999,635,565	998,551,881	100.0

0115: National School Feeding Program	2,039,897,728	2,179,460,429	2,103,234,664	2,103,234,664	2,103,234,664	2,103,234,664	2,101,067,893	96.5
---------------------------------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------	------

Source: MEF Friendly Consultation

Between 2018 and 2023, public expenditure execution by function and budget category in the Peruvian Jungle Region showed moderate progress, although with notable deficiencies in efficiency and coverage. Health and education accounted for the largest share of the budget, especially during the pandemic, although their effective execution was limited by weaknesses in local management. Social programs showed greater efficiency, while infrastructure projects, such as transportation, faced delays due to technical and administrative problems. The year 2020 marked a significant decline in expenditure execution due to the health emergency, followed by a gradual recovery in subsequent years. By 2023, some improvements in planning and execution were evident, although significant gaps in basic services and infrastructure persisted, particularly in rural and Indigenous areas.

Table 2. Gross Value Added (GVA) per capita in the Peruvian Jungle Region, 2018–2023

N°	Department	2018	2019	2020	2021	2022	2023
1	Amazonas	3,118,373	3,168,990	3,030,350	3,120,928	3,061,207	3,155,359
2	Loreto	8,932,782	9,336,037	8,031,794	8,900,658	9,357,026	9,533,555
3	Madre de Dios	2,255,653	2,124,983	1,607,653	1,753,297	1,785,305	1,786,230
4	San Martín	6,063,316	6,081,464	5,850,487	6,278,254	6,308,304	6,421,054
5	Ucayali	4,440,780	4,625,127	4,022,097	4,569,174	4,710,705	4,726,099

Source: MEF Friendly Consultation

Between 2018 and 2023, Gross Value Added (GVA) per capita in the Peruvian Jungle Region showed uneven development, influenced by national economic factors, health crises, and structural limitations specific to the region. During the first years of the period, growth was moderate, driven mainly by activities such as agriculture, forestry, and local trade. However, beginning in 2020, the impact of the COVID-19 pandemic led to a sharp contraction in GVA per capita due to the suspension of economic activities and the decline in household income. In subsequent years, particularly between 2021 and 2023, a gradual recovery was recorded, driven by economic reopening and increased domestic demand, although growth was not homogeneous across all departments of the Jungle Region and did not fully reverse the existing productivity and development gaps. GVA per capita in the Jungle Region showed a fluctuating trend, with a partial recovery toward the end of the period, but remained constrained by informality, low productive diversification, and limited investment in infrastructure and technology.

Table 3. Estimated Population of the Peruvian Jungle Region, 2018–2023

N°	Department	2018	2019	2020	2021	2022	2023
1	Amazonas	419,833	423,863	426,806	428,512	429,483	429,943
2	Loreto	1,000,350	1,015,212	1,027,559	1,037,055	1,044,884	1,051,560
3	Madre de Dios	161,324	167,674	173,811	179,688	185,478	191,259
4	San Martín	866,861	884,283	899,648	912,674	924,384	935,194
5	Ucayali	558,767	574,509	589,110	602,400	615,024	627,233

Source: INEI

Between 2018 and 2023, the estimated population of the Peruvian Jungle Region showed sustained, although moderate, growth, reflecting both natural population growth and internal migration. This population increase was concentrated mainly in urban areas such as Pucallpa, Tarapoto, and Iquitos, driven

by the search for better employment and educational opportunities and improved access to basic services. However, in rural areas and Indigenous communities, population growth was slower, and in some cases a slight decline was observed due to migration toward urban centers or coastal regions.

This demographic growth placed greater demands on healthcare, education, housing, and infrastructure, many of which have yet to be fully addressed by regional and local governments. Overall, population trends in the Jungle Region during this period highlight the need for more inclusive and targeted public policies that respond to population growth and reduce territorial inequalities.

Table 4. Social Progress Index of the Peruvian Jungle Region, 2018–2023

N°	Department	2018	2019	2020	2021	2022	2023
1	San Martín	52.9	53.3	55.1	54.7	54.8	55.9
2	Amazonas	53.4	52.0	52.7	51.9	55.6	52.8
3	Madre de Dios	51.8	54.2	54.2	53.0	52.4	51.3
4	Ucayali	48.2	49.5	51.5	52.1	48.0	49.4
5	Loreto	49.8	49.2	49.8	48.6	49.4	50.4

Source: Pontifical Catholic University of Peru: Regional Social Progress Index of Peru 2024

Between 2017 and 2024, the Social Progress Index (SPI) of the Peruvian Jungle Region showed partial improvements but continued to reflect significant gaps compared with other regions of the country. Although progress was made in areas such as access to primary education, vaccination coverage, and the provision of drinking water in urban areas, serious limitations persisted in basic healthcare services, rural sanitation, security, and economic opportunities. The impact of the pandemic between 2020 and 2021 exacerbated these shortcomings, particularly in Indigenous communities and remote areas, negatively affecting key indicators such as nutrition, maternal mortality, and access to medical services.

In the final years of the period, particularly in 2023 and 2024, some Amazonian departments demonstrated efforts to improve their performance through social programs and public investment projects; however, the results were heterogeneous and remained insufficient. Overall, the SPI of the Jungle Region indicates slow and uneven improvement, underscoring the need for sustained and culturally appropriate interventions to promote more equitable and inclusive development.

Economic and Social Indicators (2018–2023)

Table 5. Evolution of Monetary Poverty in the Peruvian Jungle Region, 2018–2023

Year	Monetary Poverty (%)
2018	30.0
2019	28.5
2020	35.0
2021	32.5
2022	34.0
2023	36.0

Source: INEI

Monetary poverty in the Peruvian Jungle Region has shown an increasing trend since 2019, a phenomenon that has significantly affected the quality of life of its inhabitants. In particular, this situation reached its highest point in 2023, when an alarming 36.0% of the population was living in monetary poverty. Several factors have contributed to this problem, among which the devastating COVID-19 pandemic stands out, as it not only affected public health but also caused an unprecedented economic crisis.

Employment conditions, which are particularly unstable in the region, were severely affected, resulting in job losses and a drastic reduction in household income. Added to this are persistent economic challenges,

such as limited access to basic services, infrastructure deficiencies, and a lack of opportunities for sustainable development. These factors have created a complex and discouraging environment in which communities struggle not only to survive but also to break the cycle of poverty that threatens to persist over time.

Table 6. Evolution of Monetary Poverty in the Main Departments of the Peruvian Jungle Region, 2018–2023

Department	2018 (%)	2019 (%)	2020 (%)	2021 (%)	2022 (%)	2023 (%)
Loreto	32	30	38	36	37	39
Ucayali	29	27	34	31	32	34
San Martín	26	25	30	28	29	31
Madre de Dios	17	16	24	22	23	25
Amazonas	38	37	43	40	42	44
Huánuco (Jungle)	36	34	41	38	39	41
Pasco (Jungle)	33	32	38	36	37	38

Source: INEI

Most Amazonian departments had relatively high poverty levels (between 25% and 40%). However, a slight downward trend was observed, driven by social programs, agricultural growth, and domestic tourism.

Between 2018 and 2023, the evolution of monetary poverty in the main departments of the Peruvian Jungle Region, such as Loreto, Ucayali, San Martín, and Amazonas, showed a fluctuating trend strongly influenced by external factors such as the health crisis and the structural limitations of the regional labor market. During the first years of the period, poverty remained relatively stable, although at levels above the national average, reflecting persistent gaps in access to services, formal employment, and productivity.

However, in 2020, as a result of the COVID-19 pandemic, poverty levels increased markedly, especially in rapidly growing urban areas such as Pucallpa and Iquitos, where a large proportion of the population depends on informal and precarious economic activities. In the following years, from 2021 to 2023, there was a slight recovery driven by social programs, economic reactivation, and conditional cash transfers, although pre-pandemic levels had not yet been reached. Despite these efforts, monetary poverty remains a structural problem in the region, highlighting the need for comprehensive strategies that promote sustainable employment, quality education, and equitable access to basic services.

Table 7. Gross Domestic Product (GDP) Growth in the Peruvian Jungle Region, 2018–2023

Year	GDP Growth (%)
2018	4.0
2019	3.5
2020	-5.0
2021	2.0
2022	1.5
2023	2.5

Source: INEI

In 2020, the Jungle Region faced a major economic challenge when its Gross Domestic Product (GDP) contracted by 5.0% due to the effects of the COVID-19 pandemic, a crisis that had both local and global impacts as a result of the health restrictions imposed. As the world gradually adapted to the new reality, the economy of the Jungle Region showed signs of recovery in the following years, with modest growth of 2% in 2021; however, this progress slowed in 2022, recording an increase of only 1.5%, reflecting the social and economic difficulties resulting from the crisis. Despite these challenges, growth of 2.5% was observed

in 2023, although still below pre-pandemic levels, indicating that the recovery remains slow and faces multiple obstacles.

Table 8. Poverty Incidence in the Jungle Region by Department

Department	Poverty 2018	Poverty 2022	Poverty 2023
Loreto	38.8%	38.8%	43.5%
San Martín	25.5%	25.5%	25.5%
Ucayali	22.3%	22.3%	22.3%
Amazonas	25.6%	25.6%	25.6%
Madre de Dios	13.7%	13.7%	16.6%

Source: INEI

Loreto, in addition to being one of the largest regions in the Peruvian Amazon, experiences severe poverty, with approximately 43.5% of its population living below the poverty line. This figure not only reveals the difficult economic reality faced by a considerable proportion of its residents but also reflects several structural determinants, such as stagnant employment opportunities, limited provision of basic services, and insufficient investment in infrastructure. In sharp contrast to this region is Madre de Dios, which has the lowest poverty rate in the Amazon, at 16.6%.

This phenomenon can be examined from different perspectives. For example, the exploitation of natural resources such as gold and timber has generated a certain flow of income that helps reduce existing poverty in this area to some extent. Nevertheless, it is necessary to examine all the consequences that these activities may have, both from ecological and sociocultural perspectives. In conclusion, the difference between the two regions sheds light on the complexity of poverty in the Peruvian Amazon, while also underscoring the need for multifaceted and integrated policies designed to address not only economic factors but also the deeply rooted environmental factors that perpetuate these conditions.

Table 9. Extreme Poverty in the Jungle Region

Department	Extreme Poverty 2018	Extreme Poverty 2022	Extreme Poverty 2023
Loreto	7.1%	7.1%	13.7%
San Martín	4.7%	4.7%	4.7%
Ucayali	2.9%	2.9%	2.9%
Amazonas	7.1%	7.1%	7.1%
Madre de Dios	1.6%	1.6%	1.6%

Source: INEI

Loreto has the highest extreme poverty rate in the Peruvian Amazon, reaching an alarming 13.7% in 2023. This figure illustrates the difficult situation faced by many people struggling to meet basic needs such as food, housing, and healthcare. These challenges stem from economic, social, and geographical constraints; the unequal allocation of resources, together with the inaccessibility of many communities that lack viable employment opportunities, contributes to the problem.

In comparison, the Madre de Dios region has a notably lower proportion of people living in extreme poverty—only 1.6%—due to the development of extractive industries, ecotourism, and more efficient public policies focused on employment support and social spending. Nevertheless, it is essential to analyze the paradoxes associated with the use of these natural resources, which may generate future socioeconomic tensions.

The difference between Loreto and Madre de Dios illustrates not only the regional inequality gaps within the Peruvian Amazon but also the lack of adequate policies to address severe poverty. Therefore, it is important that policy strategies integrate social inclusion, educational and employment opportunities, and environmentally sustainable development in an effort to improve living standards while alleviating poverty in areas such as Loreto.

Social Indicators

Table 10. Social Interventions of the PAIS Program

Social Indicator	Value (%)
Illiteracy Rate (%)	12.0
Chronic Childhood Malnutrition (%)	25.0
Infant Mortality (per 1,000 live births)	20.0
Social Program Coverage (%)	60.0

Source: MIDIS

The educational and health-related problems of the Amazon region are of major strategic importance, along with other pressing issues affecting its inhabitants. With an alarming illiteracy rate of 12%, a considerable proportion of the population is unable to access education, limiting their personal and professional development. In addition, the region also faces an alarming child malnutrition rate of 25%. This significantly reduces access to adequate nutrition for the healthy growth and development of children in the region. The effects of malnutrition extend beyond physical well-being during childhood; it also impairs their long-term cognitive, social, and emotional development.

In contrast, the high infant mortality rate of 20% indicates serious shortcomings in healthcare services and basic medical care. Although it is positive that current social programs support 60% of the population, it must be recognized that this effort remains insufficient. There is an urgent need to substantially increase funding for these underserved social sectors in order to achieve significant improvements and respond effectively to these alarming indicators. Only then can there be a more hopeful outlook for communities in the Amazon region, where all children and adults can have access to quality education and adequate healthcare services.

Table 11. Households Benefiting from Economic Inclusion Programs (FONCODES)

Program	Beneficiary Households	Rural Enterprises
Noa Jayatai	58,111	14,849

Source: MIDIS

The Noa Jayatai program, implemented by FONCODES, has the primary objective of improving the living conditions of rural households experiencing poverty through the development of productive capacities and the promotion of sustainable enterprises. In the Jungle Region, this program has strengthened these capacities in more than 58,000 households, promoting economic activities that value local resources and family labor. Of these, nearly 15,000 households have succeeded in developing sustainable enterprises, which is key to improving household incomes and reducing exclusive dependence on government subsidies, thereby facilitating a gradual transition toward economic self-sufficiency.

CONCLUSIONS

The evolution of monetary poverty in the Jungle Region reveals a concerning situation, as despite efforts to reduce poverty in previous years, the negative impacts of the pandemic, combined with the structural fragility of the labor market and the limited coverage of social protection in rural areas, have led to a

sustained increase since 2020. The lack of effective economic recovery mechanisms has prevented a significant reduction in subsequent years, thereby consolidating a persistent gap of inequality and vulnerability in the region. The analysis of regional GDP shows that the economy of the Jungle Region is still in the process of recovering from the 2020 recession. Although there have been signs of positive growth since then, these have been moderate and reflect the limited capacity for productive recovery, particularly in sectors such as agriculture, trade, and tourism. Economic recovery requires greater coordination with public and private investment plans, as well as productive diversification aimed at strengthening local value chains through a sustainable approach. The coverage of basic services in the Jungle Region reveals significant shortcomings that limit human and social development. Although progress has been made in access to electricity, the low levels of access to drinking water, sanitation, and internet services reflect inadequate infrastructure and the persistent exclusion of rural communities. This situation directly affects the health, education, and productivity of the population, making it urgent to implement comprehensive territorial development programs that prioritize equitable access to these essential services. Social indicators in the Peruvian Jungle Region reflect a critical situation that requires priority attention. High rates of illiteracy, chronic childhood malnutrition, and infant mortality indicate weaknesses in the education and public healthcare systems. Despite government efforts through social programs, their coverage remains insufficient to reverse these structural gaps. A sustained multisectoral approach is needed to coordinate educational, health, and social interventions from a territorially and culturally appropriate perspective.

FUNDING

The authors received no funding to conduct this study.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest related to the subject matter of this study.

AUTHOR CONTRIBUTIONS

Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Visualization, Writing – original draft, Writing – review and editing: Rodríguez-Loloc, M. G., Acosta-Chilcon, I. and Miranda Passo, J. C.

REFERENCES

- Acosta, S. (2023). Los enfoques de investigación en las ciencias sociales. *Revista Latinoamericana*, 3(8), 82–95. <https://doi.org/10.53595/rlo.v3.i8.084>
- Arias, J., & Covinos, M. (2021). *Diseño y metodología de la investigación* (1ª ed.). Enfoques Consulting. https://gc.scalahed.com/recursos/files/r161r/w26022w/Arias_S2.pdf
- Armeý, R., Hiocamotti, J., Reunel, C., Palacios-Ramos, S., & Linares-Palomino, R. (2024). Tree diversity in secondary forests of the montane and premontane strata in the province of Chanchamayo (Peru). *Lilloa*, 61(1), 47–64. <https://doi.org/10.30550/j.lil/1882>
- Bedoya-Garland, E., Aramburú, C. E., & López, A. (2023). The production of new natures in the Peruvian Upper Amazon (1940–1981) and Ester Boserup's theses. *Revista Kawsaypacha: Sociedad y Medio Ambiente*, 1(12), 1–27. <http://dx.doi.org/10.18800/kawsaypacha.202302.a008>
- Burbano, A., Paz, J., Solarte, A., Pradro, D., & Villareal, C. (2024). Paisajes culturales en la frontera colombiana, ecuatoriana, peruana. *EducAcción Sentipensante*, 4(2), 53–74.

<https://doi.org/10.22490/28057597.8167>

- Cruz, M., Morales, A., & Cortez, R. (2024). El necesario y urgente «golpe de timón» de la gestión pública en el Perú. *Apuntes*, 51, 1–29. <http://dx.doi.org/10.21678/apuntes.96.1913>
- Deiglmeir, K., & Phills, J. (2020). *Manual de Oslo: Guía para la recogida e interpretación de datos sobre innovación*. OCDE. <https://www.researchgate.net/profile/Jaime-Gonzalez-4/publication/347460775>
- Guerrero, V. (2022). Enfoque cuantitativo: Taxonomía desde el nivel de profundidad de la búsqueda del conocimiento. *Llalliq*, 2(1), 13. <https://www.academia.edu/112337746>
- Gutiérrez, G. (2023). Retos del desarrollo sostenible: Estrategias efectivas para enfrentarlos y superarlos. *Ecología Digital*, 1(1), 1–5. <https://ecologiadigital.bio/cuales-son-los-principales-retos-de-desarrollo-sostenible-y-como-abordarlos/>
- Huahua, I. (2020). La diplomacia cultural como política de inserción estratégica internacional del Perú: Análisis del periodo 2003–2018. *Dspace*, 1(1), 20–50. <https://repositorio.iaen.edu.ec/xmlui/handle/24000/6130>
- Instituto Nacional de Estadística e Informática. (2022). Producto bruto interno creció a una tasa promedio anual de 3,7% durante el periodo 1950–2021. <https://www.gob.pe/institucion/inei/noticias/611931>
- Instituto Nacional de Estadística e Informática. (2023). Magnitud y crecimiento poblacional. <https://www.inei.gob.pe/estadisticas/indice-tematico/poblacion-y-vivienda/>
- Julca-Otiniano, A., Alvarado-Huamán, L., Borjas-Ventura, R., Castro-Cepero, V., León Rojas, F., Valderrama Palacios, D., & Bello, S. (2023). Coffee varieties (*Coffea arabica*), a review and some experiences in Perú. *Revista de Investigación e Innovación Agropecuaria y de Recursos Naturales*, 10(2), 1–22. <https://doi.org/10.53287/ruyx4519vm15b>
- Lavado-Puente, C., Sánchez-Castro, A., Lavado-Meza, C., & Huaraca-García, A. (2024). Actitudes hacia la investigación en una filial universitaria de la Selva Central del Perú. *Formación Universitaria*, 17(6), 57–66. <http://dx.doi.org/10.4067/s0718-50062024000600057>
- MIDIS. (2025). La propuesta del MIDIS para medir la pobreza multidimensional excluye algunas de las carencias más importantes para los peruanos. *Apoyo Consultoría*. <https://www.apoyoconsultoria.com/es/la-propuesta-del-midis-para-medir-la-pobreza-multidimensional-excluye-algunas-de-las-carencias-mas-importantes-para-los-peruanos/>
- MINAGRI. (2022). Perú y Etiopía lideran producción mundial de café orgánico. *Junta Nacional del Café*. <https://juntadelcafe.org.pe/peru-y-etiofia-lideran-produccion-mundial-de-cafe-organico/>
- MINCETUR. (2019). *Reporte regional de turismo Amazonas* (1ª ed.). Ministerio de Comercio Exterior y Turismo. <https://cdn.www.gob.pe/uploads/document/file/436931>
- MINEDU. (2020). *Ruralidad y educación en el Perú*. Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura. https://unesdoc.unesco.org/in/documentViewer.xhtml?v=2.1.196&id=p::usmarcdef_0000374789
- OCDE. (2018). *Manual de Oslo: Guía para la recogida e interpretación de datos sobre innovación*. https://www.conacyt.gov.py/sites/default/files/detiec/concurso/Manual_de_Oslo.pdf
- ONU. (2022). El aumento de las temperaturas mundiales es alarmante. *Organización de las Naciones Unidas*. <https://www.unep.org/es/noticias-y-reportajes/reportajes/el-aumento-de-las-temperaturas-mundiales-es-alarmante>

- Tapia, R., Cano, J., Quispe, R., & Cruz, K. (2024). El desarrollo sostenible y su implicancia en la Amazonía peruana: Una revisión sistemática. *Aula Virtual*, 15(2), 1–15.
<https://doi.org/10.5281/zenodo.11301897>
- Terrones, J. (2024). Las asociaciones público-privadas como propuesta de solución para la adecuada prestación de los servicios de agua potable y saneamiento en el Perú [Tesis de licenciatura, Pontificia Universidad Católica del Perú]. <https://tesis.pucp.edu.pe/items/70c97327-34a5-4c0a-8fe1-e8c68b810389>
- Valdez-Arancibia, J., Veli-Chuquillanqui, R., & Cerron-Juzcamayta, R. (2023). Analysis of the sociocultural impact of tourism in central jungle of Peru. *Revista Interamericana de Ambiente y Turismo*, 19(2), 1–6. <http://dx.doi.org/10.4067/S0718-235X2023000200143>
- Yvette, P. (2021). Perú alcanza cifra de deforestación más alta en los últimos 20 años. *Latinoamérica*. <https://es.mongabay.com/2021/10/peru-aumenta-deforestacion-cifras-bosques/>