

Exploring the Benefits of Tertiary Education Programs in Peru

Implications for Economic and Social Mobility

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Executive Summary

This research report details the impacts of tertiary education on Peruvians' economic and social outcomes. It is divided into four sections, which detail economic benefits, education as a means of fostering gender equality, geographic variations in the availability of resources, and shortcomings of current policy.

Key Points:

- Obtaining a tertiary education strengthens financial independence, and Peruvians with a tertiary degree are more likely to have their own independent source of income.
- Education provides a means of decreasing the gender wage gap. Peruvian women with higher education have consistently earned incomes closer to their male counterparts over the past decade.
- The accessibility of Peru's higher education systems varies significantly amongst regions, with the most evident disparities occurring between rural and urban districts.

Recommendations:

- Using community outreach programs to encourage and inform students of the benefits of tertiary and higher education programs.
- Raising awareness of the different forms of higher education (ex: vocational schools and technical colleges) that might be more accessible to students than conventional bachelor's degree programs.

I. Introduction

Education remains a critical tool for socioeconomic mobility and financial independence. It fosters labor productivity, which often leads to higher incomes among workers and a reduction in poverty levels (Mamani et al., 2024). In 2023, the Peruvian government spent 4.2% of its GDP on education, a value that has remained relatively constant over the past decade (*World Bank Open Data, n.d.*). Despite its slow and steady progress in educational programs over the years, Peru remains behind other Latin American countries in the proportion of its GDP investment in education (Mamani et al., 2024). Moreover, educational opportunities remain largely disproportionate, with Peruvians from lower-income and rural backgrounds having less access to educational resources (*Peru - Education, 2022*). Given the pivotal role education plays in development and financial progress, it is necessary to ensure and promote adequate access across all socioeconomic groups. If higher education and its benefits are only accessible to those within higher income brackets, the divide in wages and standards of living is at risk of being further exacerbated.

Notably, the benefits of education are not only experienced within the financial sphere. Education can foster gender equality by providing more opportunities for female workers. The acquisition of a tertiary education can increase financial independence and help minimize gender wage disparities. While Peru has made substantial efforts to increase the efficiency of their educational institutions programs over the years, there is still room for improvement. Progress necessitates evaluations of shortcomings. Thus, this report seeks to investigate the socioeconomic benefits of tertiary education programs in Peru and explore ongoing dynamics that inhibit access to adequate education nationwide. Moreover, the report also discusses the importance of educational programs in bridging gaps within communities.

II. Economic Benefits

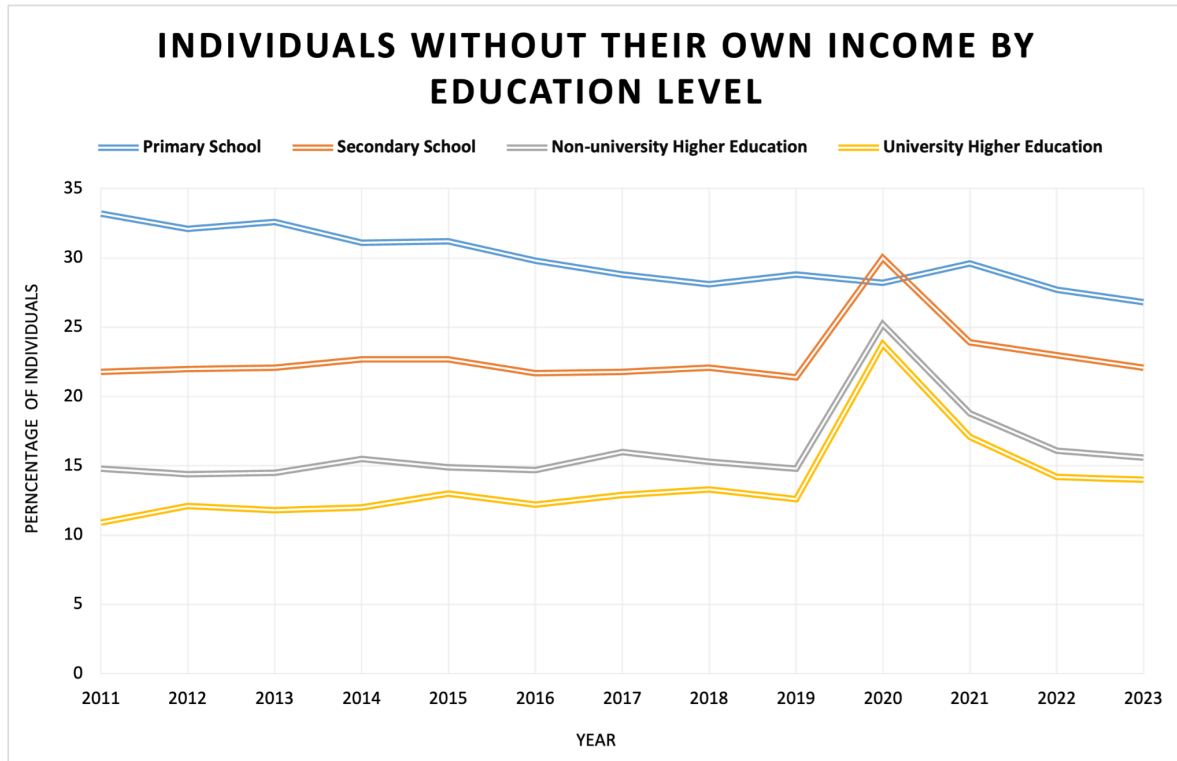
The pursuit of higher education has significant returns in the long run and often expands the opportunities available to workers. A study conducted demonstrated a 14.34% positive rate of return on education level amongst Peruvians (Quispe-Mamani et al., 2022). The rate of return, which is a means of monetizing and calculating the effects of a venture, is a strong indicator of the effectiveness of a decision. In this case, the investment is the process of furthering one's education. Education is an investment in human capital that is positively correlated with economic income and growth (Quispe-Mamani et al., 2022). Notably, the benefits of higher education extend past individuals and have broader lasting effects on the general population. A more educated workforce can promote innovation which leads to advancements in jobs (OECD: Education GPS, 2024). Thus, the advantages of human capital also extend to future generations.

According to an OECD (2024) report on the general economic and social outcomes of education, individuals with higher education and proficiency levels are more likely to have higher earnings. Namely, 48% of Peruvians aged 25-64 without an upper secondary education earn at or below half of the median income. This contrasts with 34% of those with upper secondary or non-tertiary post-secondary education and 26% of those with a tertiary qualification (OECD, 2024). This pattern emphasizes the trend in which educational attainment fosters positive economic outcomes.

Furthermore, obtaining a tertiary education strengthens financial independence and expands avenues for revenue generation. Over the past twelve years, Peruvians with a tertiary degree have consistently been more likely to have their own income. Notably, this pattern is evident for both university and non-university higher education programs such as technical and vocational schools. It is important to highlight the different forms of higher education. The data,

which is acquired through Peru's National Institute of Statistics and Information (INEI), is demonstrated in Figure 1 below.

Figure 1.



Data source: Instituto Nacional de Estadística e Informática (INEI)

The inactivity rate, which describes the amount of people who are not actively partaking in the labor force, can be another helpful indicator of the economic outcomes of higher education. In Peru, the inactivity rate of 25-64-year-olds with below upper secondary education is 18.6%, compared to the 4.2% inactivity rate of 25-64-year-olds with tertiary and master degrees (*Peru: Overview of the Education System, 2024*). This means that those with tertiary education are over four times more likely to be involved in the job market and labor force. In a world with progressively saturated labor markets, education is an increasingly important tool.

III. Education and Gender Equality

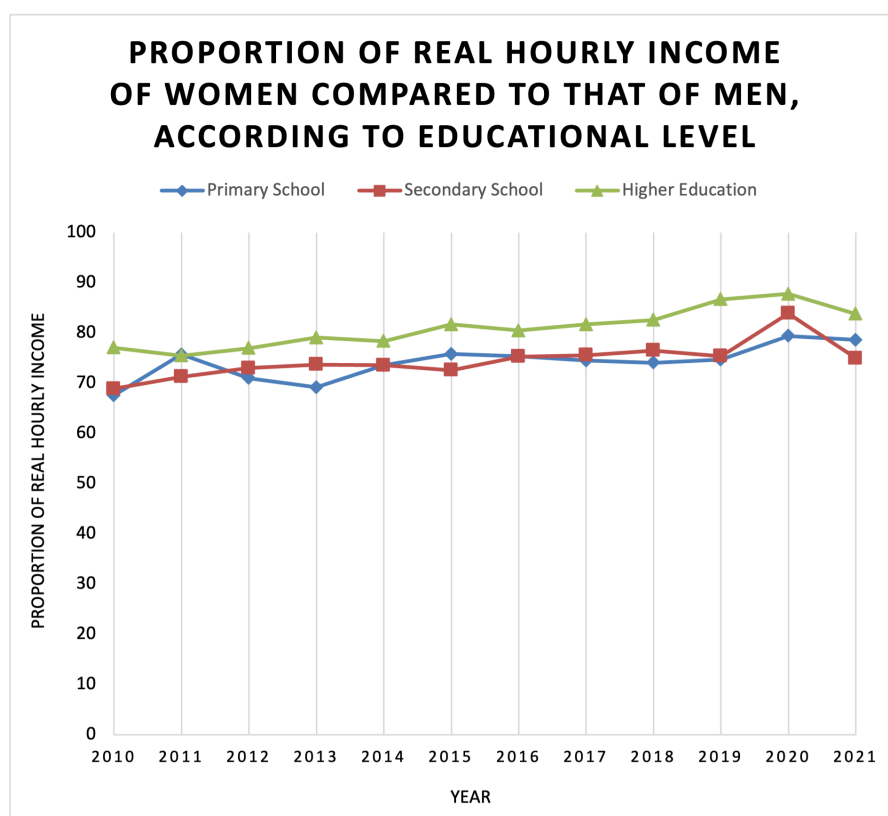
Gender gaps in education in Peru remain, with women possessing significantly lower rates of educational attainment. While men in Peru face an illiteracy rate of 2.9%, women see one of 8.3%. In rural areas, 22.6% of women are illiterate, accounting for five times the national average (Ministry of Women and Vulnerable Populations (MIMP), 2019). Although female enrollment in tertiary education has been trending upward over the years, women still remain underrepresented in science, technology, engineering, and mathematical (STEM) related fields (Guerrero & Rojas, 2019; “*Education at a Glance 2016*,” 2016). While considerable progress has recently been made, much is left to accomplish in terms of correcting gender inequities in education in Peru.

The 2017 Peruvian National Census revealed that the number of women who had completed tertiary education surpassed men's by 28,375 thousand individuals (INEI, 2017). Although the data seems positive, especially considering the disparity in educational access women faced decades before, one needs to interpret the numbers carefully. Within this number, women who have fewer financial resources and are from rural areas are still underrepresented in higher education (Guerrero & Rojas, 2019). When the education attainments of indigenous girls are analyzed, the situation becomes significantly worse. Ames (2013), looking at the data from the 2007 National Census, noticed that only 6% of women whose mother tongue is Spanish have never been schooled, in comparison to 31% of women whose native language is Quechua, an indigenous language widely spoken in Peru. Despite the numbers produced in the 2017 census, there are evident disparities in women's opportunity and access to education.

Education in women's lives is connected to their sense of empowerment. According to Soharwardi and Ahmad (2020), female empowerment results from a variety of terms such as “autonomy, control over resources, workforce participation, and self-esteem.” Education is

directly related to each of these concepts, being a determinant factor for women no longer being restricted to the domestic environment and finally occupying the public sphere (Cuenca & Patiño, 2014). Through higher education, women can occupy jobs that they would probably not have been able to access without a university degree. The gender wage gap is another inequality factor that is lessened by the acquisition of higher education. As demonstrated by Figure 2 below, women with higher education have consistently earned incomes closer to their male counterparts per hour over the past decade.

Figure 2.



Data source: Instituto Nacional de Estadística e Informática (INEI)

Moreover, gender disparities in employment reduce as educational attainment increases (OECD: Education GPS, 2024). Though the gender earnings gap remains an issue worldwide, and policy intervention is necessary, education provides a means of addressing the problem.

Notably, between 2011-2021, there have been instances in which women with only a primary education earned more per hour than their peers with a secondary education. Conversely, women with higher education have constantly had the highest earnings compared to both their primary and secondary educated counterparts. This trend emphasizes the importance of continued education and also highlights the potential shortcomings of secondary education programs.

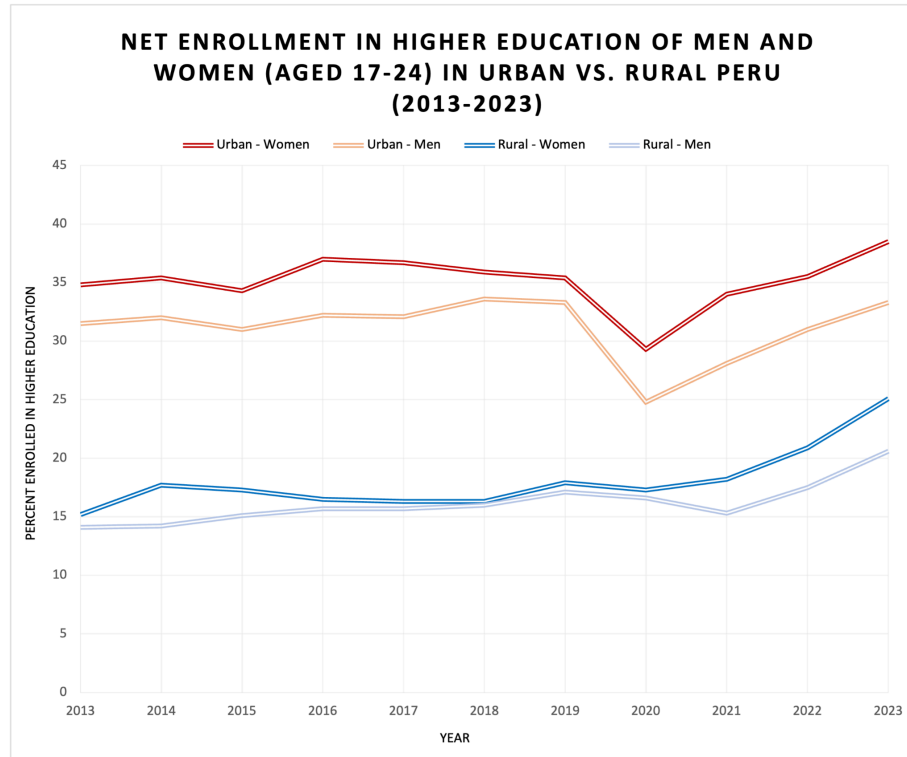
Access to higher paying jobs generates a greater amount of income for females, consequently contributing towards their financial independence. That is also a way through which girls who come from poor backgrounds can escape the cycle of poverty that their families are inserted in. Cuenca & Patiño (2014), for instance, affirm that many of the Indigenous girls they interviewed viewed education as one of the few tools they had to achieve a better quality of life. Their perception is not far from reality, as a past study showed a 14.34% positive rate of return on education level amongst Peruvians (Quispe-Mamani et al., 2022). Still, there is a persisting gap between genders in the employment rate among adults with a bachelor's degree. Peru, however, has managed to decrease it by 2.3 percentage points from 2016 to 2023 (OECD, 2024).

Women's access to higher education also seems to be vital for the reduction of gender-based violence. According to ENDES, the Demographic and Family Health Survey, 53.8% of the Peruvian women interviewed had suffered physical or psychological violence. Through tertiary education, however, such high numbers might be reduced, as it seems that women who have a university degree are less likely to suffer violence (Castro, Cerellino & Rivera, 2017). This possibly occurs because they might have more tools to recognize signs of an abusive relationship as well as knowledge of the available resources that might help them leave the situation of aggression (Castro, Cerellino & Rivera, 2017).

Education plays a vital role in promoting gender equality and empowering women, being a fundamental means through which they can access socioeconomic mobility. Through the dissemination of knowledge, skills, and opportunities for professional growth, women are given the tools needed to engage in economic and political systems, thereby promoting their independence and empowerment (Dhiman, 2023). Individuals with a higher level of education are more likely to be employed, earn a higher income, and be healthier (“Gender Gaps in Peru: An International and Sub-national Comparison,” 2022). One study found that women with graduate degrees earn a median of \$630,000 more in lifetime earnings than high school graduates, allowing women to autonomously provide for themselves and their families breaking cycles of poverty (Social Security Administration, 2015). Overall the education of women enables the improvement of their health and well-being, social and political participation, and labor and economic statuses, creating the conditions for a more equitable society capable of sustainable development (Dhiman, 2023).

IV. Geographic Variations

The availability and concentration of Peru’s higher education systems varies significantly amongst regions. One of the most evident disparities is the gap between rural and urban districts (Mackie & Monroy, 2023). Urban areas are more likely to have better-quality school equipment programs and or technological tools (Apaza et al., 2024). Quality education allows students to have more opportunities to access higher-paying jobs. This dynamic then allows for the already existing gap between geographic regions to widen. Moreover, variations in teacher development between rural and urban schools are another factor that affects the quality of education (Apaza et al., 2024). Figure 3 below demonstrates the differences in the enrollment rates of higher education programs between rural and urban students.

Figure 3.

Data source: Instituto Nacional de Estadística e Informática (INEI)

These disparities are also prominent between rich and poor Peruvians, with indigenous communities facing particularly slow progress (Mackie & Monroy, 2023). According to a recent study, the area of a worker's residence explains 30.45% of their economic outcome (Quispe-Mamani et al., 2022). Moreover, Quispe-Mamani et al. (2022) suggest that most migrations to urban areas and large cities occur due to the desire to obtain more opportunities.

Geographical variations also extend to the availability of formative technological tools that can guide student success. In 2020, only 6% of rural households had access to the internet, as opposed to the 63% of households in Lima- the country's largest and capital city- that did (Mackie & Monroy, 2023). Internet access is an especially important tool, as it allows students to explore information outside the classroom. This outside-the-classroom access to education allows students to be more resilient to change and less susceptible to disruption. The COVID-19

pandemic was an unanticipated tragedy that significantly disrupted the schedules and lives of people. Schools had to shut down, and learning soon became an increasingly difficult endeavor. The government made efforts to address the situation by distributing tablets and digital-based learning programs (Mackie & Monroy, 2023). Although these attempts facilitated the process of teaching and learning, there was still an increase of approximately 7% in the dropout rates for high school and university (Mackie & Monroy, 2023). Moreover, it is anticipated that students coming from rural and poor communities were a significant portion of those who dropped out (Mackie & Monroy, 2023).

V. Policy Shortcomings

In its attempts to address the country's growing educational needs, the Peruvian government has sometimes sacrificed the quality of programs. Until recently, the government offered minimal supervision and intervention, contributing to an environment that allowed low-quality institutions to flourish (Mackie & Monroy, 2023). From 2008-2018, enrollment in higher education programs doubled from 775,000 to 1.6 million. The number of active universities also grew from 74 to 139 (Mackie & Monroy, 2023). Now, the government is implementing more strict quality oversight, and this change has resulted in the closure of institutions attended by almost a quarter of the population (Mackie & Monroy, 2023). While increased tertiary programs enrollment is advantageous, the benefits of the education can not be fully experienced if the institutions do not meet quality standards. Moreover, it is important to monitor standards nationwide to ensure that institutions, irrespective of location, are providing the necessary education and skills necessary for success.

VI. Conclusion

The advantages of higher education are not limited to the individual who obtains the degree. There are overall public benefits of higher education including increased tax revenues from high earners, a reduction in the gender wage and employment gap, and increased innovation. Though significant progress has been made, education gender gaps unfortunately persist in Peru. Women experience significantly lower rates of education attainment, especially in rural and indigenous communities. Moreover, there are vast disparities in the accessibility of resources in urban versus rural areas. Furthermore, past lack of oversight created room for the existence of low quality institutions. While the country has made efforts to rectify the situation, there is still room for development. In addition to government policy, community organizations can offer a means of promoting the benefits of higher education. Notably, higher education comes in different forms and is not limited to conventional bachelor degree programs. By informing students of the different post-secondary options such as technical and vocational schools, students can explore pathways that best work for them. Education is an increasingly important factor of development, and one must ensure that opportunities extend to all communities and not just those that are already in a place of privilege.

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