

MAKING THE CASE

Peru

Case Studies on Inclusive Economic Development



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November 06, 2024

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1.0

Background



1.1 Context

Peru's economy is resource-rich, with a significant amount of its GDP coming from mining, agriculture, and tourism¹. Despite this, economic disparities persist, with wealth concentrated in urban areas while rural areas, especially in the Amazon, remain poor. In these rural regions, small-scale agriculture, subsistence farming, and informal markets are common. This rural-urban gap has hampered equitable growth, as rural communities typically lack the infrastructure, educational opportunities, and job opportunities available in cities.²

To address this gap, the **National Fiber Optic Backbone Network (RNDFO)**, a previous government-led digital infrastructure project, connected much of the coastal region and laid the groundwork for remote connectivity.³ However, due to geographical challenges, four regions—Madre de Dios, Ucayali, Amazonas, and Loreto—did not receive the same level of coverage (Figure 3, Appendix 1).

In response to this lack of coverage, the national telecommunications fund Pronatel with Telespazio Argentina, launched the **“Conecta Selva”** program with a total investment of €22.78 million (PEN 90 million) in 2021.⁴ This initiative provides internet access to over 264,000 people in more than 1,000 rural communities across four regions: Madre de Dios, Ucayali, Amazonas, and Loreto. *Conecta Selva* aims to close the gap between rural and urban areas, improve social cohesion, and integrate excluded areas into the larger economy through fair, digital access.⁵

1.2 Conecta Selva

Conecta Selva established connections in rural areas by installing VSAT antennas in public institutions, of which 97.2 % are schools (1,212) and 2.8% are health centres (104).⁶ These antennas receive signals from regional satellites, which provide coverage for remote Amazon areas.⁷ With this satellite connection, students and healthcare workers now have access to internet speeds of up to 10 Mbps for downloading and 2 Mbps for uploading.⁸ Nearby residents can also access a designated hotspot at specified times.⁹ For people without access to technology, these institutions are equipped with digital terminals consisting of smartphones, tablets, and computers.¹⁰

With government funding and support, the program has made significant progress. By 2023, all infrastructure installations in public institutions were complete.¹¹ By August 2024, *Conecta Selva* reported 1,975,274 internet accesses over the past year, a 19% increase from 1,657,643 accesses in the same period in 2023.¹² Given this

positive trend, continued growth is anticipated, connecting even more people to the internet shortly.

Challenges in Peru

High Inequality:

Rural areas face a glaring digital gap, with fewer healthcare services, low educational attainment, and restricted internet access.

Governmental and Social Stability:

Uncertainties from frequent government shifts and social upheavals deter investment in long-term infrastructure initiatives.

Environmental Concerns:

Deforestation, illicit mining, and a lack of environmental regulations are putting a strain on the Amazon's rich biodiversity.

Opportunities for Conecta Selva

Digital Inclusion via Connectivity:

By concentrating on expanding internet connection, Conecta Selva opens doors for economic development and gives rural areas access to telemedicine, online education, e-commerce, and other services.

Market Expansion:

Conecta Selva's promotion of digital inclusion can improve the economic prospects of regional producers, craftspeople, and business owners in rural regions by giving them access to bigger markets.

Sustainable Development:

In rural and indigenous communities, connectivity may facilitate environmental monitoring and increase their involvement in sustainable practices and preservation initiatives.

2.0

Built For All: Applied



2.1 Pillar One: Equitable Access to Resources and Opportunities

Conecta Selva exemplifies how regional cohesion in digital infrastructure can equalize access to resources and opportunities without extra policy levers. Since the program's launch in June 2021, the digital gap between rural households and the general population decreased from 19% to 13.8% in one year, with 76.6% of all rural communities now having Internet access (see Figure 1, Appendix A).

Strengths of the Approach

The better part of the story involved getting the jungles up to speed with institutional alignment and infrastructural capacity for the betterment of vulnerable populations. With the [National Fiber Optic Backbone Network \(RNDFO\)](#) extending to the Peruvian Amazon, the government was enabled to expand broadband access and eliminate barriers to financial services through incentives already implemented across the country. For example, thanks to *Conecta Selva*, it became possible to execute the Ministry of Education's interactive platforms for remote learning and digital literacy for primary schools—[Appendo en Casa](#) and its successor, [PerúEduca](#)—in the Peruvian Amazon, as part of the [Cierre de Brecha Digital](#) strategy. This initiative and the criteria for schools in need¹³ could not have been realized in the region before.

Conecta Selva made substantial progress in advancing financial inclusion by aligning with national commitments. It provided the infrastructure to bring the [Billetera Móvil digital](#) wallet and the Central Reserve Bank of Peru's digital currency—designed partially for remote regions¹⁴—to the rainforests.

Moreover, *Conecta Selva* added credibility to Peru's commitment to equity, signalling shared value opportunities and magnetizing stakeholders across sectors. Since June 2021, the campaign, as part of the state-funded [Todos Conectados](#) program and [Internet para Todos](#)—a large-scale public-private partnership involving Telefónica, Facebook, the Inter-American Development Bank (IDB), and the Development Bank of Latin America (DBLA)—expanded the coalition and attracted additional capital.

In March 2024, the IDB and the Swiss Government established a separate partnership to pilot universal digital wallets based on blockchain in Peru's jungles.¹⁵ As a crowding-in effect, the campaign attracted Nokia and Global Fiber Perú to

cooperate, deploying flagship fibre networks in remote parts of the Peruvian Amazon in May 2024. Over 500,000 individuals from 400 communities in the tri-border region—spanning Peru, Colombia, and Brazil—now benefit from high-speed Internet.¹⁶

Opportunities for Enhancing Inclusion

The legacy of *Conecta Selva* positively reinforces the earlier bottom-up approaches to equitable access to resources and opportunities. Since February 2023, the international NGO Fund the Planet started testing blockchain in its purchased at-risk lands in the Peruvian rainforests.¹⁷ Data-driven workplace safety initiatives like *Recolectores Orgánicos de la Nuez Amazónica del Perú*¹⁸ benefit from a connected Amazon, as broadband access allows better monitoring of plantations and responses to emergencies. The digitization of the fruits and nuts industry is vital: it accounts for \$5.44 billion in exports and 19.53% of export growth.¹⁹ A favourable climate is fostered for Indigenous entrepreneurs.

Relevant Lesson for Action

Conecta Selva illustrates how regional cohesion in policies and infrastructure snowballs the crowding-in effect of public-private partnerships, enhancing access to resources and opportunities without additional levers.

2.2 Pillar Two: A Level Playing Field for Work and Competition

Strengths of the Approach

The *Conecta Selva* project levels the playing field for work by bringing internet access to some of the most remote and low-income regions of Peru, removing barriers for marginalized communities in finding and keeping work.²⁰ With internet access now available at healthcare centres and nearby communities, healthcare workers can participate in online training programs to better serve their communities.²¹ Additionally, the accessible internet hotspots can also help residents explore and access work opportunities online.²² *Conecta Selva* also helped reduce barriers for workers to participate in formal labour markets, with informal labour declining annually by 1% in Amazonas, 1.7% in Madre de Dios, and 2.2% in Ucayali and

Loreto (see Figure 2). These regions have experienced the greatest shift away from informal labour over the past 15 years within any three-year period before *Conecta Selva* (see Table 1, Appendix A).

This initiative also helped to ensure that more capital is circulating throughout the economy and is used productively²³. Some partnerships and initiatives were revived and strengthened due to the *Conecta Selva* campaign. After a 15-year break, a new \$20 million debt-for-nature swap was signed between the U.S. and Peru in September 2023.²⁴ The new deal supports businesses of all sizes in a dynamic market, with funds allocated to Profonampe's project for training locals and reactivating ecotourism in the Peruvian Amazon.²⁵ Following this, the Rainforest Foundation U.S. sponsored Indigenous Tech Camps in November 2023 to incubate local entrepreneurs creating digital solutions for rainforest protection.²⁶ With satellite connectivity and the breakthrough partnerships that come with it, this new generation gains more exposure to the same wealth of knowledge and opportunities as the rest of the country, empowering them with equal opportunities for growth and success.

Opportunities for Enhancing Inclusion

Concerns persist in the region about whether the quality of service implemented by *Conecta Selva* truly supports equal opportunities for work. With download speeds of up to 10 Mbps and upload speeds of 2 Mbps, the current connection allows basic access for a limited number of users²⁷. While companies like Nokia and Global Fiber Perú have brought high-speed internet to nearly 400 communities, *Conecta Selva*'s expansion to 1,034 communities highlights that many areas still need significant upgrades to ensure equitable, high-speed access essential for online work and finding job opportunities online.

Relevant Lessons for Action

The *Conecta Selva* project empowers marginalized communities in Peru by expanding job training, enhancing employment accessibility, promoting formal workforce participation, and increasing capital inflow through strengthened partnerships and local development initiatives.

2.3 Pillar Three: Collective Stewardship of Shared Resources for Future Generations

Strengths of the Approach

Conecta Selva's focus on creating shared resources for rural communities by expanding digital literacy and internet access plays a critical role in breaking intergenerational poverty traps and establishing tools for long-term resilience and economic mobility. By equipping schools and healthcare facilities with satellite internet connections, *Conecta Selva* has established a pathway for residents to access the internet, whether through personal connections or shared digital devices like phones, tablets, and computers,²⁸ connecting the poorest individuals and establishing shared technological resources for current and future generations. By investing in rural community spaces that connect all to the broader digital economy, *Conecta Selva* drives rural economic prospects and equitable development across generations. Digital environmental monitoring, e-commerce, e-learning platforms, and other positive outcomes from increased connectivity ensure that future citizens harness opportunities that promote long-term community wealth, environmental stewardship, and social inclusion across the country.

Opportunities for Enhancing Inclusion

While Pronatel currently leads the program's expansion, broader private sector participation from telecommunications companies would significantly extend *Conecta Selva's* reach and ability to align long-term R&D efforts in Peru across sectors. Additionally, there is an opportunity to integrate renewable energy solutions into the telecommunications infrastructure.

- ➔ **Investing** in renewable energy sources would allow *Conecta Selva* to meet the digital demand of rural and remote communities without intensifying the effects of climate change.
- ➔ **Reducing** bureaucratic obstacles that currently impede the installation of telecommunications infrastructure is equally essential.
- ➔ **Streamlining** regulatory processes would support this objective by simplifying entry and expansion efforts for operating companies.

A unified regulation would make it easier for telecommunications companies to navigate the process, thereby encouraging further investment and ultimately broadening *Conecta Selva's* long-term impact, creating a better future for generations to come.

Relevant Lessons for Action

By prioritizing digital literacy, infrastructure, and partnerships, *Conecta Selva* demonstrates how shared digital resources can drive long-term equitable development, foster resilience, and support environmental stewardship across generations.



3.0

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3.3 Appendix

Figure 1. The shrinking internet access gap between rural Peru and the rest of the population (grey area). Source: own visualization based on Statista, "Peru: household internet access 2022."; Statista, "Peru: household internet access by urbanity 2022."

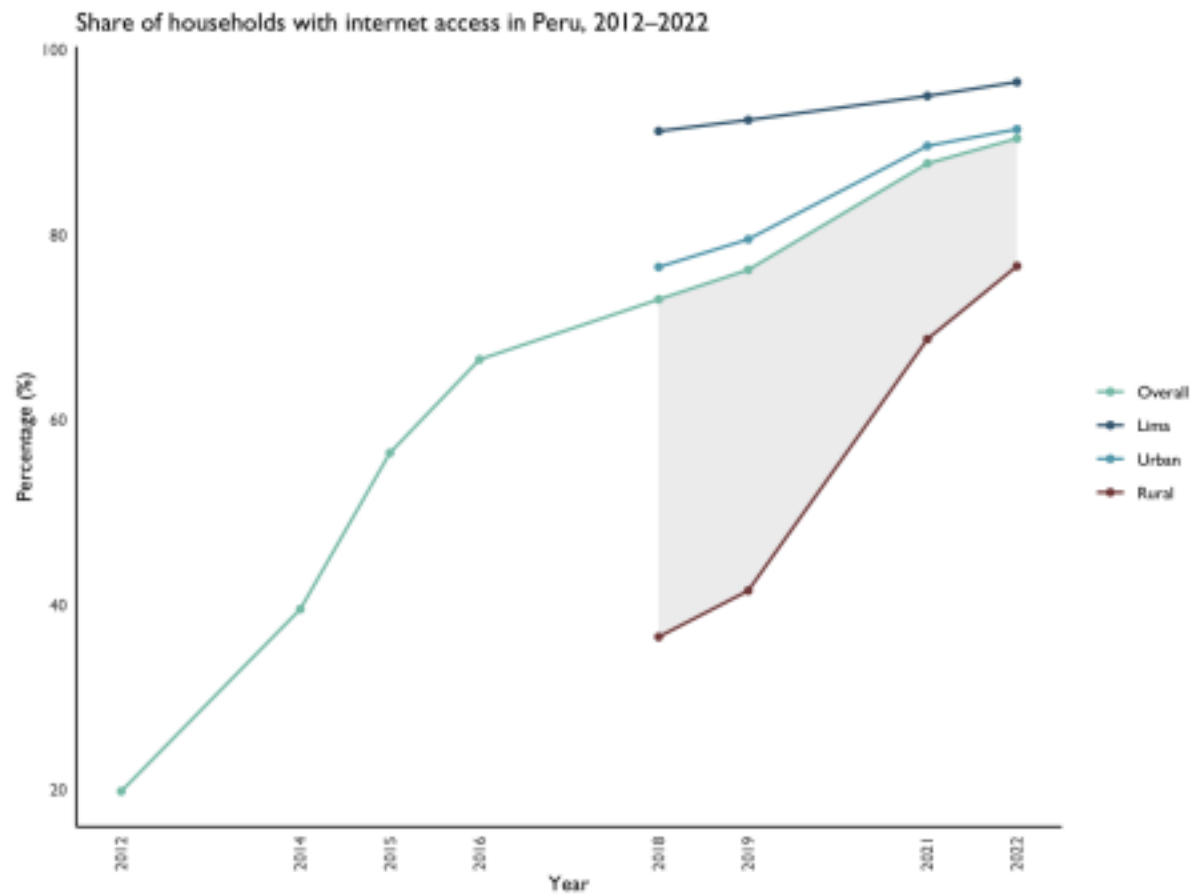


Figure 2. Annual decreases in informal employment distributed by Peruvian regions. Source: own calculations and visualization, Instituto Nacional de Estadística e Informática, "Indicadores por tema."

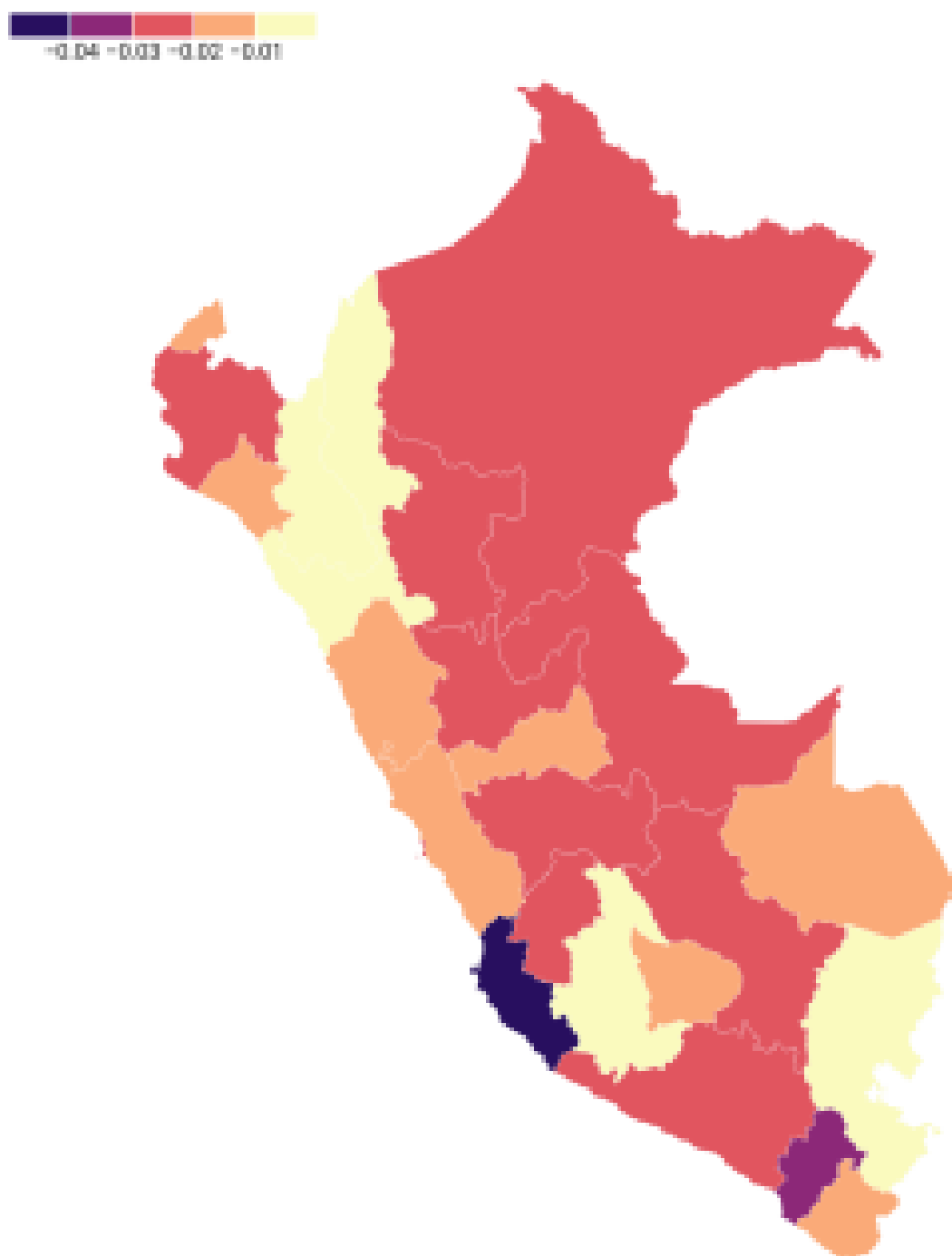


Figure 3. RNDFO coverage map. Source: Ministry of Transport and Communications, *Impact of Internet Access on Peru's Economic Growth: An ARDL Approach*, 14.



Table 1. Regional changes in informal employment share: Conecta Selva (2021-2023) and 2008-2020. Source: own calculations, Instituto Nacional de Estadística e Informática, "Indicadores por tema."

Region	Conecta Selva	2020-2018	2018-2016	2016-2014	2014-2012	2012-2010	2010-2008
Amazonas	-0.009538	0.010569417	-0.004771869	-0.003929487	0.001420691	-0.009907747	-0.001933293
Áncash	-0.0207624	0.006506477	-0.001591168	0.004272549	-0.001783395	-0.008779411	-0.012989916
Apurímac	-0.014482	0.002694264	-0.008640834	0.012295517	-0.025755854	0.015733708	-0.001953309
Arequipa	-0.0275902	0.003343545	-0.010542533	-0.000648648	0.00265065	-0.006361002	-0.018734213
Ayacucho	-0.0103612	0.00138719	-0.001885749	-0.006228483	0.004083878	-0.007007705	-0.007424808
Cajamarca	-0.0103033	0.005586784	0.004328757	0.000813808	0.002046519	-0.005563678	-0.010539762
Callao	-0.0297263	0.020835581	-0.002229145	0.013390619	-0.029037153	-0.007687021	-0.025138753
Cusco	-0.0277412	0.031483799	-0.002987395	0.002976204	-0.002472294	-0.016304965	-0.002676427
Huancavelica	-0.0303812	0.005491928	0.001930399	-0.001810517	-0.000687644	0.00316265	-0.00898561
Huánuco	-0.0255545	0.003401238	0.001009457	0.002853688	-0.000287031	-0.013075298	-0.006524984
Ica	-0.0502013	0.01734338	-0.010121853	-0.003041415	-0.016549653	-0.005781124	-0.012756109
Junín	-0.0266494	0.000594385	0.006654343	-0.004108753	-0.001496409	-0.009410991	0.008703469
La Libertad	-0.002004	-0.002639161	0.000519162	-0.010539839	-0.007570196	-0.014921165	-0.009226928
Lambayeque	-0.0151099	-0.007657958	-0.005836685	-0.01574113	-0.004724464	-0.018264015	0.002787221
Lima	-0.0162414	0.007735325	0.015819575	-0.006942076	-0.023042901	-0.020383395	-0.013147766
Loreto	-0.022295	0.007050599	-0.006028353	0.005585142	-0.002599593	-0.00147771	0.001445477
Madre de Dios	-0.0171045	0.023773298	-0.008826532	0.010836363	0.004694353	-0.018931657	-0.003375118
Moquegua	-0.0350101	0.020253093	-0.006003996	-0.007110494	0.016153576	0.00242932	-0.021956008
Pasco	-0.0173307	0.02434211	0.001968847	0.002998352	0.001029061	0.006613767	-0.003214462
Piura	-0.0276432	0.013629922	-0.011917191	-0.004236056	0.005309977	-0.017126631	-0.002907678
Puno	-0.003766	0.007585875	0.008787355	-0.013258887	-0.005688026	0.001792316	-0.003568932
San Martín	-0.0273406	0.019685977	-0.002251627	-0.001024125	0.014210234	-0.010895729	-0.007306556
Tacna	-0.0146122	-0.018449712	0.001149542	0.012988784	0.011169807	0.013739911	-0.02981127
Tumbes	-0.0210641	0.026054621	-0.020628935	0.01417377	-0.002957168	-0.013233815	-0.010790484
Ucayali	-0.0218557	0.019538453	-0.005993609	-0.007623356	0.000940795	-0.014048759	-0.006272775