ON THE PATH TO PROGRESS: Improving living conditions in Peru’s slum settlements

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- The percentage of the Peruvian population living in poverty declined from 55% to 31% between 2001 and 2010 and urban poverty fell from 42% to 19%.
- Between 2002 and 2007, the percentage of slum dwellings with piped water rose from 41% to 63%, and those with electricity from 65% to 89%.
- Slum dwellings made of durable materials increased from 51% in 2002 to 62% in 2007.
- At the same time, Peruvian cities continue to grow through the expansion of informal settlements, many of which are in high-risk areas. There was a threefold increase in the number of such settlements between 1993 and 2012, and the slum population almost doubled.

Jessica Rulo Bendezu, resident of Virgen de la Candelaria, Peru. Photo: © Jessica Rulo Bendezu / Desco / ODI / PhotoVoice.

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Why explore the living conditions of slum dwellers in Peru?

Peru has achieved significant economic growth and progress in reducing poverty and income inequality. Between 1990 and 2010 per capita annual income almost tripled from $3,241 to $9,281 (CEPLAN, 2011). Growth in most recent years has been particularly striking as the economy grew at an average of 7% between 2005 and 2011 (Barrantes et al., 2012).

The percentage of the population living in poverty declined from 54.8% in 2001 to 31.3% in 2010, while urban poverty more than halved from 42% to 19.1% (Parodi, 2014). Peru’s Gini index score also decreased from 0.52 in 2001 to 0.46 in 2010 and from 0.48 to 0.42 in urban areas. Inequality in Lima fell faster than the national average, from 0.50 in 2001 to 0.41 in 2010. Progress measured by non-economic indicators, such as life expectancy and years of schooling, was also impressive.

It is against this backdrop that Peru has seen remarkable improvements in the living conditions of ‘slum’ dwellers, settled in the outskirts of the city. Insights from Peru’s experience are compelling for a number of reasons. First, given that slum upgrading is often a routine municipal activity in Latin America, the inclusion of a country from the region was deemed appropriate; moreover, compared to the cases of Brazil and Colombia, Peru’s slum settlements appear relatively understudied. Second, the fact that despite recent improvements in access to utilities and housing, slum settlements continue to expand rapidly, particularly in Lima, means this is a timely issue that deserves further attention. Finally, as a middle-income country with a history of urbanisation, Peru can offer useful lessons to other countries, highlighting the need to support investments in public services and community efforts in slum upgrading and to better plan urban expansion.

This case study explores what has driven progress in the physical living conditions of slum dwellers in Peru – including access to water, sanitation, electricity and housing, as these are among the main constraints that are specific to slum residence.

What progress has been achieved?

1. Access to water, sanitation and electricity

Between 2002 and 2007, access to safe drinking water in slum settlements across Peru saw significant advances: public water connections to homes increased from 41% to 62% between 2002 and 2007. In the case of Lima’s slum settlements, household water connections rose from 29% in 1993 to 37% in 2002 and to 68% in 2007. Access via shared taps/standpipes fell from 21% in 1993 to 9% in 2007, as did the use of tanker trucks – from 36% in 1993 to 9% in 2007.

Interviews with community members provide further evidence of improvements and the knock-on effects on residents’ health, given that official water connections decrease the risk of contaminated water (FOVIDA, 2004).

In the words of one interviewee: ‘Before, we bought water from tanker trucks. Kids would get ill. We did not know if it was drinkable water’ (Key informant interviews: residents of Juan Pablo II settlement, San Juan de Lurigancho, Lima). Access to official water connections has also had an impact on household budgets as water from tanker trucks is much more expensive – 4.6 to 8.8 times more according to some estimates (FOVIDA, 2004: 9; CENCA, 1998: 32).

Slum areas have also seen progress in access to improved sanitation. At the national level, home connections to public sewers rose from 35% in 2002 to 59% in 2007. In Lima’s informal settlements, only 17% had domestic connections to public sewers in 1993 but by 2007 that had risen to 69%.

Electricity provision to informal settlements increased too: nationally from 65% in 2002 to 85% in 2007, and in Lima from 58% in 1993 to 89% in 2007.

2. Housing conditions

Nationally the proportion of dwellings with brick and cement walls increased from 51% to 62% between 2002 and 2007 and those with mud floors fell from 54% to 33%. Lima has seen slower improvements in these two aspects of housing.

Improved housing can have a series of other impacts, such as a better quality of life, better mental and physical health, protection against extreme weather, and improved safety and defence against crime. Upgraded dwellings can also be used for home-based enterprises. Improvements in their housing give slum residents a sense of pride and achievement: ‘Before I only had one room and rudimentary roof, the rain would come in. . . now we are better, I have a small living room, my kitchen’ (Interview with resident from Huascar settlement, cited in Raffo, 2011).

‘You can see that things are being built, a new path, a new road, you can tell. I now have my small house and that makes things better’ – Community representative

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1 Figures for poverty and urban poverty follow nationally determined poverty lines.

2 The Gini index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of 0 represents perfect equality, while an index of 1 represents perfect inequality.
What are the factors driving change?

Three inter-related factors have been identified as underpinning slum improvements:

1. Expansion of water, sanitation and electricity services and housing programmes

In the 1990s, the government embarked on major service provision, housing and titling programmes, which sought to balance the impact of structural adjustment policies and bolster its legitimacy, which had been damaged by the social costs of the austerity programme. Many of these policies continued in the 2000s, often responding to short-term political interests, such as focusing benefits on low-income urban communities in exchange for votes (Raffo, 2011).

Sustained economic growth led to higher public revenues and therefore greater fiscal space for public spending. While many programmes relied on funding from multilateral agencies or bilateral donors, from 2007 onwards, programmes to expand access to utilities have relied more heavily on public money. These interventions help to explain some of the improvements seen in the living conditions of slum dwellers.

Provision of water, sanitation and electricity

In the 1990s, there were various state programmes aimed at providing access to utilities in slum settlements. In 1992, the budgetary allocation to the National Housing Fund (FONAVI, a contribution made towards new housing by formal-sector workers, middle-class salaried employees) increased and was also focused on bringing utilities to slum settlements. Between 1992 and 1996, 50% of FONAVI (approximately $892 million) was used for such purposes. Between 1993 and 1996, a further $107 million was allocated for water and sanitation projects in Lima’s slums (Calderón, 2005: 212). Slum dwellers were required to hold title deeds before any improvements could be made, however, and this delayed implementation until 2006 when the government established the municipal certificate of possession, through which it was possible to obtain access to these services without holding title deeds.

Substantial investments in the provision of drinking water in Lima were also partially funded by donors, particularly multilateral banks. In the 1990s, the Extension Programme to Informal Settlements was developed by the public water company SEDAPAL and part-funded by the World Bank and Japanese bilateral aid. Families received subsidised loans with a monthly interest rate of 1%, well below the market rate, to set up the water connection.

In the late 2000s there was an increase in public contributions to these programmes, which has been possible due to greater fiscal space for public spending given the high rate of economic growth. Between 2004 and 2008, SEDAPAL developed several projects to expand water provision, including the Coverage Expansion Programme and the Water for All Programme, with an important contribution from public resources ($373 million from 2007 to 2010).

In the early 1990s, resources from FONAVI were also used to fund electrification (about $93 million between 1993 and 1996) (Calderón, 2005: 212). In 1994, the government decided to privatise the provision of electricity and over the following two years more than 200,000 connections were established in Lima alone. In addition to the incentives to increase their customer base, two decisions enabled the expansion of the service: first, the privatisation law included an obligation for energy companies to provide universal service; second, faster and cheaper technical options for electrification, such as aerial lines and provisional bulk connection for irregular settlements, were authorised (Criqui, n.d.).

As in the case of water and sanitation, expansion of electricity coverage was slowed in 1996 by the requirement that households have a legal title in order to obtain access to services. In 2006, this barrier was lifted with the introduction of the municipal certificate. In 2009 a decree (‘Luz para Todos’) further encouraged electricity companies to provide services to slum settlements and introduced a temporary subsidy to cover the cost of the connection and help with this objective (Criqui, n.d.). The aim of the initiative was to expand official electricity connections to an additional 400,000 dwellings in slum settlements and $30 million (100 million soles) was allocated to this end.

Housing programmes

House building

There have also been important government efforts to support the construction of durable housing in informal settlements. The Materials Bank (BANMAT), financed by the Ministry of Housing, implemented loans-support programmes at the national level for self-building and in 1998 funded the construction of 48% of new homes in the slums (Calderón, 2001: 85). Weighed down by a portfolio of defaulters and allegations of state corruption and patronage, however, BANMAT was dissolved in August 2012.

‘We [the neighbourhood organisation] have done projects to get electricity, water, walls, roads, to improve conditions for our children’ – Neighbourhood organisation representative

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3 Fujimori’s government transformed a contribution to the National Housing Fund into a tax. Those resources were not necessarily allocated to the contributors to that Fund. After many years, this failure has been recognised by the Peruvian government and a compensation process to those contributors is pending.
Since 2003, housing policies have been based on the model of Savings, Subsidy and Loans promoted by the Inter-American Development Bank. For those who were already living in informal settlements the ‘Construction on Own Site’ programme (CSP) was the most relevant. It provided subsidies to build on land which had undergone feasibility checks for the installation of services and that had title deeds (Calderón, 2013).

**Titling programmes**

In 1996, a large-scale titling programme was introduced. This recognised *de facto* occupations of land in slum areas, granting titles and registering these plots in the land registry. Between 1996 and 2014, 2.3 million title deeds were granted to slum dwellers (see Table 1).

The impact of titling programmes in Peru has been the subject of much debate. The premise underpinning the programme, as proposed by Hernando de Soto and the World Bank, was that gaining property rights would enable poor people to obtain mortgages and facilitate the development of popular capitalism. Several studies show that this did not materialise (Calderón, 2013; Field and Torero, 2004; Caria, 2008). Nevertheless, the policy has reinforced the ownership aspirations of poor urban people and has raised their self-esteem. In a 2011 survey, 60% of those who purchased lots claimed that they would not have done so if they did not have a title, recognising that titled plots have a higher economic value, and that this provides psychological security and social status (Calderón, 2013: 138).

**2. Pressure from slum neighbourhood organisations**

Improvements in access to services and housing conditions would not have been possible without the pressure exerted by neighbourhood organisations (‘Junta Vecinales’) in various settlements. These have a leadership committee (‘Junta Directiva’), which negotiates with the authorities on behalf of the community and calls for discussions on issues of general interest to the settlement.

Neighbourhood organisations have expressed their demands through negotiations, marches, road blocks, and clashes with the authorities (Calderón, 2005; Raffo, 2011) to call for services such as water and sanitation or to demand title deeds from central authorities or certificates of possession from the municipality. These have put pressure on governments, which, motivated by clientelism, have often fulfilled these demands.

In the words of a neighbourhood organisation leader interviewed for this study: ‘When we arrived in 2000, there were no roads, no electricity. We worked with the residents of the settlement and it is up to the leader to have meetings, present projects at the Ministry of Housing, the municipality, then you make progress on these projects. If you don’t have good neighbourhood leaders, works do not progress’ (Key informant interview: Neighbourhood organisation leader).

**3. Household investments in housing improvements**

In Peru, 80% of housing is self-built, and poor families adopt a number of household-level strategies to improve their living conditions (Anderson, 2007; Raffo, 2011; Ypeij, 2006).

The construction of a home with ‘all mod cons’ is, together with improving children’s education, one of the key aspirations among slum households. The home provides shelter but at the same time symbolises a goal attained, an achievement. A two- or three-storey home is an attainment that separates the ‘poor’ from the ‘non-poor’. Residents of informal settlements, alluding to the new land invasions, say ‘the poor are those on [garbage] mountains… on mats… who don’t have built homes’ (Raffo, 2011: 33-34).

Households use a wide range of strategies and assets to improve their housing. For instance, families often work as a domestic unit with the parents and children carrying out a variety of economic activities simultaneously. Households also rely on the immediate family, relatives and extended family networks to contribute to house-building activities. ‘Cousins, my husband’s family, all helped to prepare the land’ (Key informant interview; resident of settlement in San Juan de Lurigancho). These networks can also help by providing informal credit, for example, to buy building materials.

These strategies are influenced by external factors. In recent years, a positive macro-economic environment has meant that households can obtain work and set up micro- enterprises, mostly in the informal economy. Savings from these activities can then be invested in housing improvements.

**What are the challenges?**

Despite progress in improving the physical living conditions of residents in slum settlements in Peru, there remain a number of challenges.

**1. Persistence of urban informality**

Peruvian cities continue to grow through the expansion of informal settlements, and these raise a number of new concerns: land trafficking, exhaustion of public lands in prime areas and the location of poor communities in peripheral and high-risk areas. Between 1993 and 2012, informal settlements in Peru multiplied by three times and the slum population almost doubled.

Improvements in housing conditions and access to utilities in slum areas, observed as an ‘*after the fact*’ process to the disorderly occupation, is highly costly to the state and to the residents of informal settlements. New generations of...
poor (and not so poor) urban residents will have to start the process of improving their physical living conditions from scratch – which can take up to 20 to 30 years. Worse still, more recently settled plots are, by virtue of their location, ecologically unsuited to development, unlike the previous generations of slums.

There is a need to strengthen public efforts to provide incentives for developers to provide social housing ownership and rental options (Calderón, 2014). The challenge is to promote formal alternatives to informal urbanisation.

2. Overcoming the clientelist behaviour of the state
The weaknesses of public and social policies are associated with clientelist behaviour promoted by the state. Using poor urban people for support in demonstrations, votes in elections and ‘legitimacy’ has been the norm rather than the exception in Peru’s history, and hinders the development of political voice and human development more generally. Sometimes such interactions are the only form of state presence in poor neighbourhoods.

In 2000, this behaviour reached a high point with Alberto Fujimori’s re-election strategy: provision of food, title deeds, housing loans (BANMAT), water connections and promotion of squatting incidents were all used for political purposes. Similar developments took place afterwards as loans extended by BANMAT were written off (2006–2011), amnesties were given to informal settlers, and new legal concepts were created to support urban informality (2002–2006).

3. Inequality in access to opportunities
Sustainability of economic growth and access to decent jobs for poor urban people
Peru’s model of economic growth is a point of concern. Some think it is sustainable provided there is sound economic management (Parodi, 2014: 29), and the redistributive effects of social programmes and public services provision continue (Yamada, 2012). Others consider that the model is too dependent on resource-intensive industries, leaving Peru vulnerable to fluctuations in commodity prices and to demand from a few countries (Gonzales de Olarte et al., 2011).

Schuldt (2005) stresses that despite strong economic growth, Peru’s informal economy continues to be a crucial source of employment, contributing an estimated 37.5% to GDP (IPE, 2013). A considerable proportion of slum dwellers work in the informal economy and half of the entire country’s population lacks any social security or a stable source of income (Gamero, 2013), pension or severance indemnity. Further, access to decent job opportunities often depends on a good education that is beyond the means of many urban poor households.

Access to good quality education
Education as a policy supporting social equality constitutes a major challenge, especially in relation to the quality of education on offer (Barrantes et al., 2012). Youngsters in Peru who are unable to complete secondary education are more likely to end up in low-skilled jobs and low income, face social problems and become part of the group of new squatters or buyers of land on disaster-prone areas that are exposed to greater risk.

The promotion of education and the discourse of developing human capital has usually been more a subject of electoral promises than effective policy. Even if efforts are genuine, the effects of such policies will take decades to yield results. Many of the interviewees for this study identify difficulties in obtaining access to technical education and this could be countered by providing incentives to support the most disadvantaged social groups.

‘There are new neighbourhoods; urban expansion continues in disaster-prone areas and where it is difficult to provide basic services’ – Policy-maker

<table>
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<th>Period of government</th>
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Source: COFOPRI - Ministerio de Vivienda, Construcción y Saneamiento.
Compiled by: Julio Calderón. Note: this data is for reference only since the official information is subject to minor alterations and updates over the years.

On the path to progress – Improving living conditions in Peru’s slum settlements
4. Addressing weaknesses of existing information
The limitations of up-to-date information on urban poverty pose a challenge to policy design. Existing information on urban poverty is limited to a few economic indicators, particularly income poverty, at an aggregate level. It would be useful to have an open debate about the need to use more detailed disaggregated information that takes into account spatial, group and intra-household inequalities (e.g. slum versus non-slum areas, and ethnic and gender-based inequalities).

At present, limited disaggregated information about slum settlements makes it difficult to understand the characteristics of slum dwellers’ deprivations, particularly outside Lima and Callao. For instance, data on tenure, living space, health and education outcomes in informal settlements is extremely limited. In addition, the existing data is fairly out of date (the most recent being 2007). Better data could help to better assess the different needs of slum settlements and plan interventions accordingly.
Public policies aimed at improving slum conditions should work to strengthen community participation in slum-upgrading activities. Pressure applied by community and neighbourhood organisations has played a key role in driving the provision of and improvements in access to water, sanitation and electricity and housing conditions. Further, the potential contribution of families and community organisations should be considered in the production of housing – from its design, to financing and assisted (self) construction.

Political commitment can push rapid expansion of access to utilities and housing in informal settlements. Arguably motivated by short-term electoral aims, successive governments have committed to the provision of water, sanitation and electricity in slum areas. Even in the case of privatisation of electricity, the government included commitments to universal coverage and introduced subsidies to this end. Other policies, such as granting households exemptions so they could obtain access to utilities and providing subsidies for self-built housing, also contributed to improved living conditions in slum settlements.

Public policies must take a preventive approach to informal settlements and actively promote access to land and housing before slums become established. Planning agencies, as well as public–private enterprises, should leverage existing advantages such as the availability of public land, savings, subsidies and loans for residential housing, and existing community organisational capacity. At the same time, housing policies must acknowledge various forms of housing developments (state, private and social) and not be restricted to the model of ‘facilitating’ private investment. These policies also need to take into account both ownership and rental options, as an important share of the urban poor still rent or share accommodation. Further, there is far less need for large public investments to consolidate existing and new settlements if preventive actions have been taken from the outset.

Administrative structures should facilitate an integrated and strategic approach to urban development and be attuned to local conditions. In Peru and other developing countries, different aspects of urban planning are often dealt with at national or local levels, depending on the extent of decentralisation. Recent economic growth in Peru has enabled the allocation of financial resources to regional and local government, but the pace of devolution has been slow. Local governments still face a number of limitations in their administrative, legal and financial powers, many of which remain with central government. Strong urban planning capacities, particularly at the local level, are needed to deal effectively with the expansion of urban, economic and labour informality.

Lessons learned

‘It is important to plan strategically, create a common agenda between different actors and break incentives leading to clientelistic practices’ – Local policy-maker
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**References**


