



## CHAPTER 4

# Experiences with Regularization: The Cases of Peru and Brazil



**Villa El Salvador is one of the most well-known informal settlements in Lima, Peru. Through various public programs and self-organized local initiatives, some houses have titles and services whereas others do not.**

**A**pproaches to regularization efforts vary, reflecting the different country contexts and objectives of policy makers, but there are two main paradigms. The first envisions formal legalization of ownership through issuance of individual freehold titles as a catalyst or trigger that will promote private investment in housing, facilitate access to official credit and markets, and lead to poverty alleviation.

While the Peruvian experience with this approach is best known, Mexico's legalization program is much older. Since 1974, Mexico's CORETT program (and later PROCEDE) promoted the regularization of informal settlements through expropriation and

titling, mostly on *ejido* communal land. Over 30 years, 2.5 million titles have been distributed, but the process has lost momentum in recent years, partly due to changes in 1992 to the *ejido* legislation allowing privatization. The PROCEDE program, implemented from 1992 to 2006, ultimately provided individual land titles to the residents of 26,000 *ejidos* (about 90 percent of the 29,000 *ejidos* in the country).

The second paradigm has a broader scope and consolidates legal security of tenure using a set of sociospatially integrated interventions that link land tenure legalization with upgrading of public services, urban planning, and related socioeconomic policies. This

approach is reflected in Brazilian national legislation that embodies a social right to adequate housing. While there is more evaluative evidence about the approach used in Peru than that in Brazil, summaries of experience with regularization in both countries reveal useful lessons.

### **TITLING AS A TRIGGER FOR DEVELOPMENT: THE PERUVIAN EXPERIENCE**

The dominant approach to land regularization internationally and in Latin America for the last two decades has focused on legalizing tenure of individual plots—also referred to as titling or formalization—as a self-contained program. This has been the focus of Peru’s regularization policy, which has been greatly influenced by the ideas of Peruvian economist Hernando de Soto (box 3). These ideas have dominated the debate on land regularization, and have been translated into large-scale legalization policies.

Many countries, including Peru, El Salvador, Cambodia, and Vietnam, have implemented large-scale titling programs, while others such as Albania are starting to initiate them. All of the programs have promoted changes in the national legal order, created a centralized institutional apparatus, and invested heavily in data, mapping, and cadastres. As a result, millions of individual freehold titles have been given to residents of informal urban settlements.

Peru is a leading practitioner of titling programs. In 1996, then-president Alberto Fujimori created the Commission for the Formalization of Informal Property (COFOPRI), an organization supported by the Urban Building Registry (*Registro Predial Urbano*) and other legal instruments (especially for prescriptive acquisition). The titling program has been financed with national, international, and World Bank funding.

The formalization process has involved

#### **BOX 3**

#### **Hernando de Soto’s Proposition**

**H**ernando de Soto’s international bestselling books—*The Other Path* (1989) and *The Mystery of Capital* (2000)—intertwine several dimensions: the dynamics, innovation, creativity, and entrepreneurship of informal processes; the close links between informal housing and informal businesses; the economic value of informally created assets; and the impediments caused by complex legal and registration systems and by bureaucracy and corruption. However, de Soto’s key point is his proposal that formalizing property rights triggers economic development in low-income and transitional countries.

His proposition is that poverty and economic underdevelopment will be reduced by removing legal and institutional barriers to the ownership and transfer of economic assets produced informally. Providing legal tenure security in the form of land titling and registration would enable occupants of informal settlements to access official credit and finance their housing and business investment.

de Soto’s ideas are appealing because they are simple and his estimates of their benefits are very large. He projected that land titling would mobilize US\$9.34 trillion of “dead capital” (US\$6.74 trillion in informal housing alone) resulting from informal development. This would integrate the urban poor into the market and eradicate poverty.

As a result, large-scale legalization policies have been proposed widely as the antidote against urban poverty, and de Soto’s proposition has been supported by both multilateral and bilateral development agencies. In 2006—with support from de Soto, former U.S. Secretary of State Madeleine Albright, and the United Nations Development Programme (UNDP)—the High Level Commission on Legal Empowerment of the Poor was created with an original mandate that emphasized property rights and land titling.

three stages: (1) the production of information on land and on existing obstacles to formalization of settlements; (2) identification, demarcation, and registration of plots and buildings; and (3) identification of entitled occupiers. Nearly 1,600,000 freehold titles were distributed in Peru between 1996 and 2006 (table 2).

### ***Critiques of Titling***

While praising the scale of the Peruvian program, academics and policy makers have debated the nature and validity of its underpinnings and evaluated the results of its implementation. Some critics believe that the narrow focus on the formalization of settlements broke with the earlier tradition of regularization policy in Peru, which included upgrading policies and other socioeconomic programs to promote the sociospatial integration of the informal areas and communities (Riofrio 2008).

Rather than discussing settlements, neighborhoods, and communities, formal titling focuses on individual units, property rights, and free market transactions regardless of the social context and consequences. Titling is implemented without mention of social safety nets and welfare, or cooperatives and public goods. Moreover, Peru's titling approach utilized old-fashioned universal registration, when other models, such as land recording, would likely be more suitable to the realities of informal settlements (Arruñada 2009).

A central feature underlying the use of titling as a singular intervention regards de Soto's (2000) evocative notion of "dead capital." Besides embodying the value of informal property that could be used as collateral, this notion implies that the economic resources amassed by the urban poor through informal housing and business processes are outside the boundaries of national accounts and finances.

However, this notion that the capital generated through informal processes is "dead" is misleading. In developing countries, indirect taxation on services and consumption often produces more revenue than direct taxes on land, property, and capital. Recent official data from Brazil, for example, indicate that the poor pay a larger share of their income in taxes than the rich because most taxation is indirect (IPEA 2009). Although a recurrent argument holds that regularization policies benefit people who do not pay taxes, most citizens living in informal areas decisively contribute to the national economy.

A Georgist critique stresses that the focus on freehold titles to land (in order to provide

TABLE 2  
Titles Granted Annually in Peru, 1996–2006

Year	# Total Registered Titles	# Titles in Lima	% Titles in Lima to Total
1996	33,742	32,750	97
1997	129,392	125,768	97
1998	149,574	107,490	72
1999	322,053	110,986	34
2000	419,846	170,250	41
2001	115,599	29,457	25
2002	123,827	38,450	31
2003	70,401	16,696	24
2004	65,598	12,002	18
2005	71,300	8,866	12
2006	68,468	8,194	12
1996–2006	1,596,800	660,909	

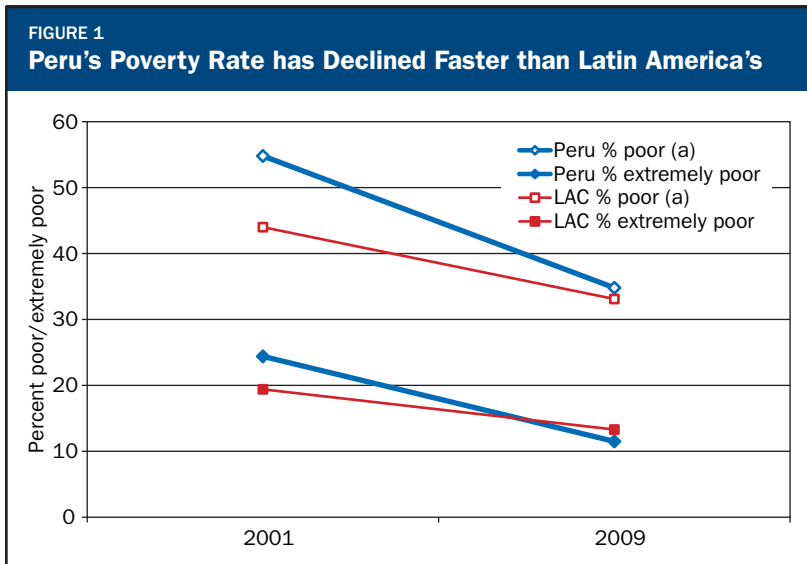
Source: Calderon (2007a).





TABLE 3 Lending for Building Materials Increased in Peru, 2003–2006				
Year	Number of Titles	Titles with Mortgages	% of Total	Average Credit
2003	1,332,481	52,000	3.9	US\$5,596
2006	1,549,340	306,000	19.7	US\$2,075

Source: Riofrio (2008).



Source: CEPAL (2010).

Note: (a) includes the extremely poor.

of property titles. Access to credit has also been linked to other factors such as contacts, language, and education (Smets 2003).

Despite the existence of land titles and the increase in property values averaging 25 percent after titles were issued (Angel et al. 2006), most banks still have difficulties lending to the poor, require collateral valued higher than loans (especially in peripheral areas where properties have low market value), and do not trust the repossession system (Calderon 2006). The financial and technical criteria used by the commercial banks, the associated bureaucracy, and the required proof of income all create high transactions costs for the poor to borrow.

Ironically, research also shows that most people living in informal settlements do not

want official credit from commercial banks, preferring other informal, more flexible sources of credit through their social networks. Moreover, they fear the risks involved in pledging their sole property (usually the family home) as collateral to obtain the rather limited financing offered by the commercial banks (Field and Torero 2006).

**2. Investment in housing.** Titling helps, but is not a *sine qua non* to promote investment in housing consolidation. Most Latin American cities demonstrate that titles are not needed for people to invest systematically in their informal houses and businesses. Once residents feel secure and do not fear eviction, they routinely increase their housing investment activities (Payne and Fernandes 2001).

**3. Poverty alleviation.** There is more to poverty than the lack of property titles, and more to informality than poverty, but titling per se may have some association with poverty alleviation. For example, figure 1 shows that while Peru was implementing large-scale titling programs over the 2000s decade, its poverty rate declined compared to the rate for Latin America as a whole.

Of course, effective poverty eradication requires consistent and significant investments in public goods such as infrastructure, education, and social policy, as well as in employment and income generation strategies. Research does indicate an association between formalization policies and increases in children's nutrition rates, improved education, and reduced number of days missed at school (Galiani and Schargrotsky 2004); increased labor force participation (Field 2007); or lower teenage pregnancy rates (Field 2006). However, the causal linkages remain obscure, and it is difficult to attribute these changes to land titling.

TENURE SECURITY AS  
AN INTEGRATED PROGRAM:  
THE BRAZILIAN EXPERIENCE

While it is in the interest of all urban dwellers to have all consolidated settlements properly regularized, the challenge for policy makers has been to reconcile the individual interests and rights of the residents in informal settlements with the public interests and obligations of all. The sociospatially integrated approach to regularization tries to ensure individual tenure security while maintaining communities in their original locations in order to ensure that the main beneficiaries will indeed be the urban poor. Of course, the full recognition of legal tenure security remains a goal, as it guarantees that residents are not evicted or pressured by public authorities or landowners.

However, achieving sociospatial integration requires a broader set of strategies and measures, ranging from promoting urban and environmental sustainability to strengthening local communities and empowering women.

Motivating this integrated approach in Brazil is the social right to adequate housing, promoted by the UN Housing Rights Programme (UNHRP) among other organizations, which includes the right of all to live in dignified conditions and to participate fairly in the opportunities and benefits created by urban development.

The question is how to achieve both tenure security and sociospatially integrated regularization. Some regularization policies have combined tenure legalization (also formalization or titling) with upgrading of informal areas, and others have also had a socio-economic dimension (to generate income and job opportunities) or a cultural dimension (to overcome the stigma attached to residing in informal areas).

Legalization has not necessarily followed upgrading easily, and vice-versa. Providing tenure security without considering other issues has sometimes created new urban, environmental, and financial problems. For example, legalizing some plots complicates



**The Rio das Pedras favela in Rio de Janeiro, Brazil, spreads out next to a newer public housing complex.**

TABLE 4 Regularization and Titling Results in Brazil, 2009			
	Households		
	Regularization Initiated	Titles Issued	Titles Completed
Number	1,706,573	369,715	136,974
Percent	100%	21.7%	8.0%

Source: SNPU/Mcidades (n.d.).

the widening of streets or other infrastructure investment and raises the cost of necessary expropriation related to upgrading.

### **Successes and Failures**

Brazilian municipalities have been far more successful in upgrading informal settlements than in legalizing them, although the majority of the upgrading programs did not lead to titling. The internationally acclaimed *Favela-Bairro* program in Rio de Janeiro resulted in only 2,333 titles in a universe of more than 50,000 families, but only 145 actually completed the registration process (Larangeira 2002). One reason for this low titling rate is that occupants have to work through a complex bureaucracy on their own to complete the process. A review of regularization programs in 385 municipalities in 27 states involving 2,592 settlements indicates that the issuance and registration of titles is making some progress, but the completion rate is low (table 4).

The *Favela-Bairro* program, recently replaced by the *Morar Carioca* program, involves a large public investment in infrastructure, services, public spaces, and community facilities, combined with continuous housing consolidation by the residents. It has improved living conditions even without full legal tenure security, but has also led to higher land and property prices and rents accompanied by significant changes in the socioeconomic composition of the local community (Abramo 2009).

Introduced in 1994, the first two phases of the *Favela-Bairro* program involved 253,000

residents in 73 settlements and expenditures of about \$4,000 per family. The program and its successor aim to promote their inclusion in the formal sector of the city, after an initial physical and urban planning upgrade that involved residents and local NGOs. Only recently was legalization introduced in some of the occupied areas, through both adverse possession claims and leasehold titles. The program had lost momentum in recent years after changes in the local political administration, but recently it has been repackaged and renamed.

One particular problem has been the failure to scale up interventions (Rojas 2010). Most existing regularization policies have addressed only a small number of informal settlements. For example, of the 1,200 *favelas* in Rio de Janeiro, the costly *Favela-Bairro* program has covered fewer than 100 in number, although they are among the largest settlements. Over the years even as some regularization policies have become more technically sophisticated, more environmentally sensitive, and more participatory, they continue to benefit a small number of people mainly because of their high financial costs.

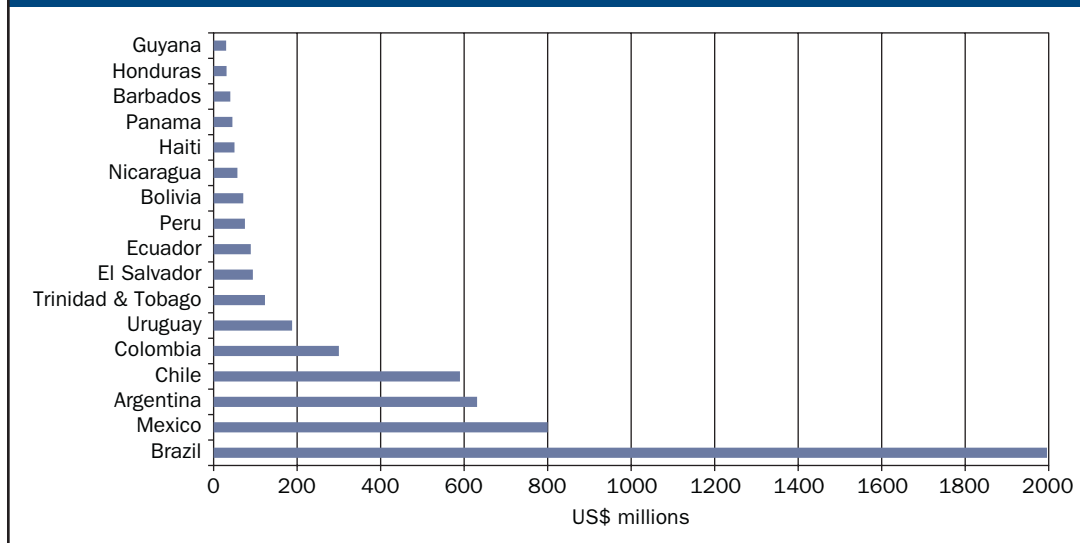
Porto Alegre's regularization program is limited in scale, but is among the most comprehensive because it integrates socioeconomic, financial, and urban-environmental sustainability through physical upgrading; introduces legalization; and provides socioeconomic and cultural programs aimed at generating income and jobs (Smolka and Damasio 2005). Moreover, spatially limited regularization programs do affect population mobility and increase land and property prices. Such impacts might be much smaller if policies were applied more widely.

### **Costs and Benefits**

Regularization programs are costly. While upgrading expenditures by country are not available, total expenditures on projects



**FIGURE 2**  
**Total Expenditure on IDB Funded Upgrading Programs, 1986–2008**



Source: Rojas (2010, 142).

sponsored by the Inter-American Development Bank (IDB) indicate that Brazil has spent much more than other countries on such programs (figure 2). In contrast, the IDB-related expenditures by Peru, with less emphasis on urban upgrading, have been about 4 percent of those by Brazil.

Upgrading costs per dwelling vary a great deal depending on the specific geography of the neighborhood, its distance from existing infrastructure, and the extent to which households need to be relocated to provide infrastructure. However, examination of several projects does produce meaningful averages, and the results substantiate that retrofitting services in established neighborhoods is two to three times as costly as service installation at the time of original construction.

Upgrading costs in the *Favela-Bairro* program in Rio de Janeiro were around \$4,000 per household. Comparably calculated upgrading costs for the Guarapiranga project in São Paulo were \$5,000 per household, and those for the Ribeira Azul project in

Salvador were about \$3,600 per household. Paving, sewerage, and drainage costs in all projects comprised 50 to 60 percent of expenditures (Abiko et al. 2007). One driver of costs has been the increasing complexity of upgrading projects over time—for example, by adding components related to health, income generation, and community development.

Only a few analyses have calculated benefit-cost results for upgrading projects. A report by the IDB for the *Favela-Bairro* program used increases in property values to measure benefits (Rojas 2010). For example, Cuenin (2010, 206–207) reports that calculations for property valorization resulting from improvement programs in Pando Norte in interior Uruguay and the northern area of Montevideo produced internal rates of return of 28 and 25 percent respectively—much higher than the reference rate of 12 percent. In the *Favela-Bairro* program, the rate of return was found to range from 13 to 71 percent with an average return of 42 percent (Cuenin 2010, 207).





**The Favela-Bairro program provided a community center for a neighborhood in northern Rio de Janeiro.**

Even with their existing shortcomings, sociospatially integrated regularization policies can have enormous social and economic importance. They can promote the socio-economic development of the communities, their political stability, the rationality and efficiency of urban management, and the minimization of social and environmental impacts. They certainly will not end urban poverty, but they can improve the housing and living conditions of millions of people.

### **ASSESSMENT OF REGULARIZATION EXPERIENCES**

Large-scale titling programs in Peru have increased tenure security within informal settlements—a major accomplishment. They have also increased the value of the properties of the affected residents at relatively low cost. However, those programs have also created many problems that could be solved by implementing more sustainable processes. Given their low cost, it is ironic that one issue with titling programs is financial sustainability. The immediate financial cost of the first phase of COFOPRI's operation

(1996–2004) was US\$66.3 million, co-financed by a 1998 World Bank loan and the Government of Peru. During this period, 1,481,000 property titles were issued, benefiting some 5.7 million urban dwellers. No substantial user fees were charged to the beneficiaries for titling or registration (Angel et al. 2006).

The apparent low cost (averaging \$64 per title) seems to contradict the argument that large-scale titling policies are not financially self-sustainable. Indeed, many of the beneficiary households could have paid for the titles in Peru, especially considering that their property values increased. Moreover, they could also pay property taxes, although many legalized areas have not been integrated into the property tax system.

Where land regularization has been reduced to its titling dimension alone, little attention has been paid to the need to promote sociospatially integrated urban development, which is very costly. This approach has not addressed the underlying causes of informal development or of poverty. Moreover, such titling programs have created the expectation that all informal settlements will eventually be legalized. This expectation has stimulated further informal development, especially on public land, where the vast majority of titles in Peru have been issued. Unfortunately, some settlements that have been regularized are not sustainable from an urban and environmental perspective.

Most formalization programs have failed to reform the obsolete registration system for land and property rights, and they sometimes generate parallel and conflicting systems. Only recently have efforts been made in Peru to reconcile the public registry system with the parallel urban land cadastre created by COFOPRI. This is an important matter because in many Latin American countries the registration of the land title at the public registry is what constitutes ownership.

The Brazilian approach to informal settlements has emphasized that security of tenure and sociospatial integration should be pursued jointly to guarantee the permanence of communities, with better living and housing conditions on the land they have long occupied. Brazilian regularization policies have linked legalization with upgrading policies—and sometimes socioeconomic programs—and also emphasized effective popular participation in all stages of the process.

The Brazilian experience applies different legal solutions to different situations, uses different legal instruments to address informal settlements on public land versus private land, entails much higher costs per household given the costs of urban upgrading, and has covered many fewer households. Nevertheless, Brazil now has approximately 1 million titles in process, albeit through a fragmented system led by local administrations, unlike the centralized process in Peru.

It is not sufficient to “legalize the illegal” without provoking changes in the legal-urban system that led to the illegality in the first place—especially in the name of fighting poverty. Titling per se provides legal security of tenure to the residents, a necessary step, but it is not sufficient to promote sociospatial integration and may undermine the permanence of the legalized communities.

### **UNANTICIPATED CONSEQUENCES**

By failing to confront the nature and causes of the phenomenon of informal development directly, regularization policies often generate unanticipated consequences. When conceived in isolation from the broader set of land development, urban, housing, and fiscal policies, regularization policies have borne little relation to other issues such as vacant land, underutilized properties, and available public land. Typically they have not addressed



he prevention of new informal development, although the PRIMED program in Colombia is an exception.

While several expected objectives of large-scale titling programs such as those in Peru have not materialized fully, research has revealed unintended consequences related to the impacts on informal land markets; the formalization of unsustainable settlements; gentrification; political manipulation of regularization policies; and problems with the registration of new land titles.

Some studies indicate that regularization policies have increased land prices in informal markets. Physical improvements have attracted more people to live in these areas and to exhaust the remaining capacity of newly implemented infrastructure, equipment, and services. Distortions and abuses of titling also have occurred, such as so-called “tourist plots” in Peru, where people who do not live in a neighborhood demarcate plots there in expectation of being given land titles (Riofrio 2008).

New informal settlements have been formed in the expectation that they will be legalized, and titling has been viewed as

**Speculators improvised possession of open land in anticipation of future public improvements and titling in Chincha, a coastal area of Peru.**

a kind of license to invade. While approximately half a million title deeds were distributed in Lima between 1996 and 2000, for example, land invasions also multiplied during those years at an unprecedented rate (Calderon 2007b). An increased likelihood of land regularization thus has had the ironic effect of stimulating the process of informal development (Smolka 2003; Smolka and Larangeira 2008).

While regularization programs provide individual security of tenure and protection against legal eviction, they can also cause gentrification, especially in centrally located and valuable areas where land developers and promoters may pressure residents to sell their parcels (Durand-Lasserve 2006). Many traditional communities in São Paulo, for example, have been converted from informal settlements to middle- and upper-class developments.

Legalization policies have also led to growing expectations for gentrification in Vidigal, an old and well-located favela in

Rio de Janeiro. A newspaper article reported that a developer had been gradually buying parcels in the informal market (prices have been around R\$35,000 or US\$20,000), in the expectation that the area will be legalized. He planned to construct a hotel but was denied a license to operate one there (Azevedo 2010).

Some regularized areas were, and remain, unsustainable in urban-environmental terms, such as precariously constructed buildings. Many legalized settlements still lack sanitation, water, utility services, infrastructure, and public spaces—in some cases 10 years after their regularization. Few measures address the mitigation of existing environmental problems, and only recently have systematic efforts been made in Peru to provide infrastructure and services.

Regularization policies have sometimes been used as vehicles for political patronage in “titles for votes” schemes. In other cases, the political process fails to redress historical gender imbalances. Many women in infor-

**Modern commercial buildings tower over the remnants of Favela Coliseu near Faria Lima Avenue in São Paulo, Brazil.**





mal settlements still lack full legal control over their assets. In Peru, however, 56 percent of COFOPRI titles have been granted to women, which is also related to increasing female participation in the labor market.

Given this mixed record, has titling failed, and would the residents in consolidated informal settlements be better off if left to their own devices? The answer is no. Such titling programs are partial housing policies, and to be fully successful they need to be reconceived within the broader context of preventive land, urban, housing, and fiscal policies that effectively widen the conditions of access to serviced land and housing. From this perspective, the question of legalizing informal settlements becomes even more relevant, and more complex.

Titling policies are very important to:

- promote tenure security and offer protection against forced eviction;
- help governments to fulfill their obligation to ensure the social right to housing;
- ensure that proper compensation is paid to residents in cases of relocation;
- minimize future family and neighborhood legal conflicts by clarifying property rights;
- define land and property regimes to secure future investments by residents and others, within the conditions imposed by regularization policies;
- make it easier for residents to offer their properties as collateral, or to gain access to other types of formal housing or consumer credit;
- strengthen communities, recognize basic citizenship rights, and promote sociopolitical stability;
- redress gender imbalances; and
- generate data on plot boundaries and existing buildings for the local property tax system.

## SUMMARY

Regularization has employed two primary approaches that have been explored in two case studies: legalizing tenure through titling in the expectation that it will trigger development, as applied in Peru; and upgrading services more broadly while legalizing tenure, as applied in Brazil.

Peru's legalization was implemented at a large scale, covering nearly 1.6 million households over ten years and at the relatively low cost of \$64 per household. No fees were charged to households, and property values increased an average of 25 percent—an increment greater than program costs. Of the expected accompanying effects, there were some dwelling improvements and some reduction in poverty, but little evidence of improved access to credit.

Brazil's broader upgrading program has been much more limited in scale and had per household costs of \$3,500 to \$5,000—from 50 to 80 times higher than those in Peru. Though there are few benefit-cost studies of Brazil's program, those that exist find that property value increments exceed upgrading costs, yet at a rate below the increment resulting from new urbanization.

Both programs have experienced countervailing or unanticipated effects. A main issue, as in most amnesty programs generally, is that they stimulated more of the negative behavior—in this case, informal settlements—that the programs were trying to remedy. Other effects included gentrification, mainly in centrally located neighborhoods. Overall, both programs have been successful in providing more secure tenure and producing benefits that exceed program costs, although neither one met all of its objectives.