Upgrading “slums” has become one of the most common and effective ways to improve housing conditions in cities in Asia and elsewhere. There is 40 years of experience to draw on. In countries such as Argentina, Brazil and Thailand, upgrading programmes have a scale and scope that has reached a significant proportion of their urban population. As the government of India develops a programme to support upgrading through the Rajiv Awas Yojana, it is worth reflecting on what has been learnt from upgrading initiatives to date. An understanding of what has and has not worked well is critical to any initiative to upgrade massive settlements like Dharavi in Mumbai.

Upgrading is the term given to measures to improve the quality of housing and the provision of housing-related infrastructure and services (including water and sanitation) to settlements that are considered to be (or officially designated as) slums, including those that developed illegally. The scope of the upgrading varies from some minor improvements—for instance, some communal water taps, paved roads and street lighting—to comprehensive improvements to each house, as well as good quality infrastructure (piped waters and sewers to each house) and services (including schools and healthcare centres).

Note, however, that the provision of legal tenure of the land and house to the occupants is by no means a universal feature of upgrading schemes. Grant of tenure may be avoided because of associated costs and legal complications, for instance, the demand for compensation for the landowners. Upgrading is also more difficult when the settlement to be upgraded has a high proportion of tenants and the landlords demand tenure exclusively for themselves.

Nonetheless, the concept of upgrading implies an acceptance by governments that the settlement to be “upgraded” is legitimate and that the inhabitants have a right to live there. This is an important change in that many slums and all informal settlements are illegal—for instance, they are often on land that is occupied illegally and the land-use patterns and buildings do not conform to official norms and regulations.

Upgrading has to be understood in the context of cities in low- and middle-income nations where a large and often growing proportion of the population lives in informal settlements. In many cities, there are also districts (often centrally located) where legal housing has been subdivided, so a house or apartment that previously housed one family has come to house several. Here, the problem is not the illegal occupation but the high level of overcrowding with the inhabitants having to share facilities (for instance, kitchens, baths and toilets) and often, a lack of maintenance.

As city governments ignored these settlements or actually increased the problems by bulldozing them, so it became common for 30-60% of the population to live there. Many cities in India house more than a third of their population in such settlements. Others, including Mumbai, Aligarh and Moradabad, house more than half (Burra 2005; Agarwal et al 2006). In Pune, 39% of the population lived in slums in 2001 and this proportion is growing, despite Pune’s economic success (Bapat 2009). Official statistics may underestimate the proportion of a city’s inhabitants that live in such settlements—for instance, by only counting the population in settlements officially recognised as slums (Agarwal et al 2006). For Delhi, estimates for 2000 suggest that 47% of the population in the national capital territory live in jhuggi-jhopdi (jj) clusters, slum-designated areas and jj resettlement colonies. This still may be an undercount as it misses some kinds of informal settlements and those who sleep on the streets (Government of Delhi 2004; Bhan 2009). Yet, even if they do not bulldoze the settlements, governments view them as illegal and thus with no claim on infrastructure and services.

Governments Accept Upgrading
One factor that encouraged government acceptance of upgrading was when the World Bank began to fund “slum” upgrading

David Satterthwaite (David@iied.org) is at the International Institute for Environment and Development, UK.
programes in the early 1970s. The projects they funded were not the first upgrading programmes, and the World Bank has only funded a small proportion of all upgrading programmes. But the fact that the world’s largest and most influential development assistance agency supported this approach legitimised it among governments. Upgrading became so widely supported – and is now so routinely accepted as an important and relevant approach in many nations – that it is easy to forget what a large change it was.

Upgrading is still not accepted by some governments. It can even be opposed by those with strong pro-poor programmes. For instance, the government of South Africa only recently endorsed upgrading because the first democratic government initially assumed that it would be able to solve the housing problem by supporting enough new housing construction for low-income groups.

The Kampung Improvement Programme in Indonesia was among the first large-scale upgrading programmes when it started in the poorly serviced, village-like, low-income settlements – the kampungs – in Jakarta and Surabaya in 1969. It evolved through various phases and was extended to many other urban centres. Initially, the programme focused on providing roads, paths, water, drainage, and sanitation. Unit costs were kept low, so as to be able to reach more kampungs, but it was designed by professionals with little involvement by local residents. Later, it came to rely more on community participation (Silas 1992). This did not mean that all informal settlements were able to get support for upgrading or were safe from forced eviction, as the struggle of residents in a low-income riverside settlement in Surabaya to avoid eviction shows (Some et al 2009). But perhaps, it was the long history of upgrading in Surabaya that helped the inhabitants of this settlement negotiate for upgrading.

Upgrading was also supported by the writings of the British architect, John F C Turner, who had worked in Lima. He saw the “squatter settlements” that were developing around Lima as a housing solution, created by low-income households (Turner 1968). This perspective came to be accepted by the Peruvian government in the late 1960s.

Another factor in the increasing acceptance of upgrading was the recognition in the early 1970s that the informal economy (and implicitly informal housing) had great importance for cities’ economies and for the livelihoods of much of the population. There was also the lack of success of government-funded public housing, and of housing finance programmes, in providing low-income households with alternatives to informal settlements. Even where there were large public housing programmes, there were often problems with regard to who received the units. The heavily subsidised units were sometimes not allocated to low-income households – for instance, they went to public employees or to well-connected middle-income households (Hardoy and Satterthwaite 1989). In addition, they were often built on cheap and easily available land on city peripheries, too distant from the places where low-income groups earned their incomes. There were also problems with inadequate or no maintenance and rents and service charges that many low-income groups could not afford.

Another important influence on the growing acceptance of upgrading was a shift to democratic governments – including elected mayors and city politicians – within nations and cities, where previously these had been appointed by higher levels of government. This did not in itself produce upgrading instead of eviction. But in many cities, particularly in Latin America, it did mean more politicians who were prepared to support upgrading, and who rejected the slum bulldozing that had been a feature of the policies of the dictatorships that preceded them. Of course, the sheer scale of the population living in housing adjudged to be slums also encouraged upgrading.

In many cities, government support for upgrading has become the norm. In a sense, it is what any democratic and accountable urban government does because this is the most appropriate, effective and quickest way to improve housing conditions for low-income groups. This does not mean that bulldozing has ceased. It only implies that large proportions of those who live in informal settlements or in deteriorated inner city areas are no longer at risk of eviction and may be supported by official upgrading programmes.

The Thai Case
The Thai government is implementing one of the most ambitious of upgrading initiatives. Managed by the Community Organisations Development Institute (CODI), this project channels government funds, in the form of infrastructure subsidies and housing loans, directly to savings groups formed by low-income inhabitants in informal settlements. It is these savings groups that plan and carry out improvements to their housing, develop new housing stock, and work with local governments or utilities to improve infrastructure and services. From 2003 to early 2008, in the Baan Mankong (secure housing) programme, CODI approved 512 projects in over 200 urban centres covering 53,976 households. It plans a considerable expansion in the programme within the next few years. Overall, CODI (and the organisation out of which it developed – the Urban Community Development Office) has provided loans and grants to community organisations that reached 2.4 million households between 1992 and 2007 (Boonyabancha 2005, 2009).

This initiative holds particular significance in three aspects: its scale; the extent of community involvement; and the extent to which it seeks to institutionalise community-driven solutions within local governments. Its funding is drawn almost entirely from domestic resources – a combination of national government, local government and household/community contributions. CODI also provides support to networks of community organisations formed by the urban poor, allowing them to work with municipal authorities, other local actors and national agencies on city-wide upgrading programmes.

It also demonstrates how to regularise illegal land tenure. Under the programme, those living in illegal settlements can get legal land tenure by a variety of means – for instance, by purchasing the land from the landowner (with a government loan), negotiating a lease, agreeing to move to another location provided by the government agency on whose land they are squatting, or agreeing to move to part of the site they are occupying in return for
tenure (land sharing). Coni also provides loans to community organisations to on-lend to their members to help build or improve their homes.

**Kinds of Upgrading**

Upgrading initiatives are important in addressing some aspects of deprivation faced by large sections of the low-income population. But it is when they become an integral part of local governments’ ongoing investment programmes, with strong partnerships with the inhabitants of the settlements being upgraded, that they are most large-scale and effective.

It is worth distinguishing between upgrading driven by household or by community-neighbourhood investment and by external programmes, which may or may not support household and community investment. In many informal settlements, households improve the quality and size of their housing, if they are confident they will not be evicted, and this often happens before any formal provision of tenure. In some instances, improving housing is a strategy to show that a settlement is no longer a slum and thus avoid eviction. In informal settlements where much of the housing is rented to tenants, there may be less upgrading, although landlords in better-located informal settlements may be improving and extending the housing to increase the returns they get from renting. One sign of this is the appearance of two or three-storey housing within informal settlements; this may also indicate a more active role from commercial builders and developers. But upgrading driven by household investment does not address the need for settlement-wide infrastructure – water pipes, sewers and drains, paved roads and paths, electricity, schools, healthcare facilities and more public space.

There are examples of neighbourhood infrastructure upgrading driven by resident organisations. But this comes up against the need for city-wide systems into which to integrate. For instance, community-installed water pipes usually need water mains from which to draw; community-sewers and drains need larger systems for their waste water; and community-managed solid waste collection need depots to deposit the collected waste.

One of the largest and most successful programmes bringing household, community and government investment together was initiated by a Pakistani non-governmental organisation (ngo) in Orangi, an informal settlement in Karachi with over one million inhabitants. The Orangi Pilot Project Research and Training Institute began by supporting households in each lane, to work together to plan, finance and implement sanitary toilets in the houses, underground sewers in the lanes and neighbourhood collector sewers. The project also showed how the cost of building and financing sewers in this way could be cut by enough that it could become affordable to low-income households. This allowed resident-managed sanitation to be installed in hundreds of low-income areas in many urban centres. Local governments could plan, finance and implement the external systems – the big pipes – as they...
no longer had to fund and manage the small pipes that were now installed by resident organisations. The NGO helped them develop lower-cost methods for planning and building trunk sewers (Hasan 2010).

**Upgrading Driven by Slum-Dwellers**

Over the last 20 years, a growing number of upgrading programmes have been driven by organisations formed by slum residents. These include many upgrading programmes and new house development projects, implemented by slum-dweller federations, which provide low-income households alternatives to slums. In many nations, these receive local government and sometimes central government support – for instance, in South Africa, Thailand, Kenya, Malawi and the Philippines (d’Cruz and Satterthwaite 2009). They also include the very large programme of community-designed, built and managed toilet blocks in cities in India, developed by savings groups of women slum and pavement dwellers (Mahila Milan), the National Slum-Dwellers Federation and the NGO SPARC, supported by local authorities. These groups have also developed many housing initiatives – for instance, to re-house pavement dwellers and households that lived beside the railway tracks in Mumbai. All these initiatives have greatly improved conditions for hundreds of thousands of slum-dwellers. The tools and methods developed by the Indian slum-dweller organisation are also widely used by slum or shack-dweller federations in other nations (Burra, Patel and Kerr 2003; Patel 2004 and Arputham 2008).

All these federations help slum residents organise themselves through savings schemes. These schemes draw members together through daily savings and loan provision. Savings groups also consider how to upgrade through tenure security and access to basic services, or whether to obtain land on which they can build. Different savings schemes affiliate within and across cities to form federations. These then identify resources, such as available land and funding, and negotiate with politicians, political parties and civil servants. They also undertake city-wide slum surveys and detailed slum enumerations that provide the information and maps needed for upgrading.

These national federations, now active in more than 15 nations, have become increasingly successful at securing tenure for their settlements. About 1,50,000 families within these federations secured tenure between 1993 and 2008. Upgrading in the form of housing and infrastructure improvements have taken place in most such settlements. In several nations, the scale and scope of what these grass roots-driven initiatives can achieve has increased greatly as they came to be supported by local governments and/or national governments.

**Final Comments**

City politicians and civil servants in Asia, and elsewhere, usually pushed by prominent local business interests, are concerned about how to make their city “world class”. In an ever-more interconnected global economy, all major cities depend in part on the success of their enterprises within international markets. Mayors and senior civil servants often look to successful cities that they have read about or seen – for instance, Singapore, Shanghai or despite its current financial difficulties, Dubai. Mayors often want to support large projects that will be their legacy and, they hope, get them re-elected or shifted to other prominent political positions.

Perhaps more worryingly, the examples of Singapore, Shanghai and Dubai are used to justify projects and private sector partnerships that do nothing to address very poor housing conditions. Instead, they may involve large-scale evictions. So one important influence on any city’s future is how politicians and civil servants view low-income populations and the slums in which they reside. It is difficult to envisage any successful city in a democracy that does not see them as citizens with legitimate rights to public services. Democratic cities should be accountable to the urban poor, and this implies that upgrading must become a central part of housing policies.

The Dharavi Redevelopment Project (DRP) in Mumbai goes against what we have learnt on good practice in upgrading. The project seeks to fund Dharavi’s redevelopment by allowing commercial developers to take part of the land. But the purpose of upgrading is to improve conditions for the inhabitants, not to free up land for commercial development. As a group of Concerned Citizens for Dharavi have pointed out, the project does not engage the population in how the upgrading is planned, financed and managed; indeed the needs and priorities of Dharavi’s population are secondary to the desire to free up land for commercial uses (Patel, Arputham, Burra and Savchuk 2009). But this very land is needed to improve housing conditions, to re-block Dharavi so roads and infrastructure can be installed and to increase provision for schools and public space.

There are precedents to show that housing can be improved incrementally, infrastructure much strengthened and densities reduced by building more storeys with more space per person, without displacing the population and disrupting the economy. Much housing could be upgraded in situ. Where this is not possible, it can be rebuilt to higher densities – for instance ground plus four – but with no change in location for the inhabitants and businesses. This kind of on-site upgrading can be inconvenient for people and businesses while it is being implemented but it is far less disruptive than site clearance and rebuilding. Experiences from other cities on this kind of incremental upgrading in high density settlements can also be drawn on.

By doing this, the government demonstrates its commitment to improving the lives of several hundred thousand Mumbai residents and sets a precedent from which all cities can learn. With upgrading, Dharavi can continue to be a hub of innovation and enterprise, but without the appalling conditions that have long been one of its defining characteristics.

**Notes**

1 “Slum” carries a range of problematic connotations. However, for ease of reading, all future occurrences of the word will not be placed within quotes.

2 Upgrading should include the provision of legal tenure of the land and house to the occupants. In some kinds of minimalist upgrading, however, the improvements in services are seen as only a temporary measure, with the long-term goal still being to evict the inhabitants.

**References**


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Figure 1: Per Capita Production Index of Major Agricultural Products

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Hence, it is difficult to attribute the present increase only because of the financial crisis. While food prices in India rose in line with global trends, they did not follow the resultant drop in global prices because global stocks are not. There will be a stocks are adequate but rice future can be controlled only by the to become generalised. This may be the best option since this will not be above 1 per cent of fiscal cost because global prices have been much sharper in the recent past. The price rise has been largely because of the unprecedented monetary liquidity and crop failures in several major food producing countries combined with a substantial diversion of foodgrains for ethanol production whose output increased by 41% over the previous year due to droughts and more sustained as compared with the last episode of drought-induced supply shock in 2002-03. Foodgrain prices in the country during the period 2002-03 to 2008-09 have increased only by 3-4% in 2002-03 as compared with the previous year. This has been partly because of the global food price increases even more after the post-Lehman default and production. However, food prices vis-à-vis global trends and domestic consumption patterns will vary widely depending on the nature of the shocks in global and domestic markets.