The Informal City and the Phenomenon of Slums: the challenges of slum upgrading and slum prevention

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Slum in Rio de Janeiro, Brazil. © Acioly, 2007.

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The Informal City and the Phenomenon of Slums: the challenges of slum upgrading and slum prevention[1] **by Claudio Acioly Jr.**[2]

Introduction

In today's world, one in three urban residents lives in slum conditions. According to the United Nations Human Settlement Programme (UN-Habitat), in 2006 nearly 1 billion people in cities in Latin America, Asia, Africa and even Europe and North America could find housing only in slum settlements. The scale and complexity of the problem of informal settlements are unprecedented and demonstrate clearly that most cities face difficulties in accommodating their residents within the formal, official and enacted plans governing the use of land and urban areas. In Africa, for example, urban growth is synonymous with informal urban development. In Latin America, informal settlements represent the fastest-growing segment of metropolitan populations and informally supplied land has provided large parts of the population with access to land for housing. Despite the existence of housing programmes and settlement upgrading and land regularization policies, informal settlements persist. Informal land development, in the form of illegally and informally developed housing and human settlements, typically accounts for between 20 and 70 per cent of urban growth in cities in the developing world.

The present paper provides a brief overview of the problems associated with slums and informal settlements and provides unequivocal evidence of the scale and scope of the phenomenon of informal urbanization. It argues that a poorly functioning housing sector and a lack of housing options affordable to the various social and economic groups are among the deep-rooted causes of the flourishing informal land and housing markets in cities throughout the developing world. It highlights regional differences in Africa, Asia and Latin America and shows how bottlenecks in land supply and land delivery systems hinder access to serviced land and adversely affect the supply of affordable housing for large swathes of the population, which appears to be the root cause of informal and illegal land development and slum formation.

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1 Paper drawn from Acioly, Claudio. *The Challenge of Slum Formation in the Developing World*, Land Lines, Cambridge: Lincoln Institute of Land Policy. pp. 2–7, 2007 and Acioly Jr., Claudio (2009). *Overcoming the challenge of informal settlements in the developing world: slum upgrading and slum prevention: International Tripartite on Urbanisation Challenges and Poverty Reduction in Afircan, Caribbean and Pacific Countries, Nairobi 8-10 June 2009.*

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Slums and informal settlements must be upgraded, but the present paper also makes a plea for a concomitant slum prevention strategy to be developed. For housing policies and strategies to enable the housing sector to function adequately and play a crucial role in economic development are as important as approaches and policies to improve the existing stock of slums, wherever doing so is technically, financially and environmentally possible.

Scale and scope of the problem of informal settlements

According to UN-Habitat, across the globe nearly 1 billion people live in slums. Target 11 of Goal 7 of the Millennium Development Goals seeks to achieve a significant improvement in the lives of at least 100 million slum-dwellers by 2020. Governments and the international community face an extraordinary challenge: they must not only improve existing settlements, but also slow the growth of new informal settlements. Improvement policies must therefore coexist with slum prevention strategies capable of providing affordable housing opportunities on a scale sufficient to cope with the growing demand for housing and infrastructure.

In addition to typical squatter settlements and encroachments, privately owned land is illegally subdivided in many countries, indicating the emergence of a flourishing informal land market. In cities such as Bogotá, Rio de Janeiro and São Paulo (Brazil), Mumbai (India), Cairo, Lima and Tirana, land is acquired, secured and developed regardless of existing legal and planning frameworks. What are the causes of this massive non-compliance with the formal rules and regulations that govern urban development? Why do so many people end up living in slums and informal settlements?

There is no simple answer, but we know more today than we did 30 years ago, when the first United Nations Conference on Human Settlements identified informal housing processes as one its core concerns. Low incomes and limited household ability to pay for housing are part of the problem, but increasingly it is not only the poor who live in slums and informal settlements. Poverty is therefore not the sole cause of the growth of slums. Growing numbers of people with relatively high incomes are resorting to housing outside the formal and official systems. They find that slums are the only housing alternative outside the formal market, which shows that there are shortcomings in housing markets and in policies that hamper the delivery of affordable housing opportunities. The lack of investment in infrastructure by local government is another obstacle to be considered, as this restricts the supply of housing opportunities and hinders economic activities. It is clear that drawing up city plans and putting in place sanctioned land-use planning systems are not alone sufficient to guide urban development and produce slum-free urban spaces. Research and practical experience

now enable us to understand the various mechanisms and strategies that individuals and organized groups pursue to gain access to land and housing.

The phenomenon of slum formation has grown in scale and has produced a variety of local or regional settlement types with specific local denominations, such as *favelas* in Brazil, *katchi abadis* in Pakistan or *museques* in Angola. Notwithstanding local variations, the phenomenon has many common characteristics: the formal land and housing delivery systems exclude large numbers of people; land and housing prices increase at breakneck pace; individuals trade land and property rights regardless of legal status as a way to gain access to a place to live and legitimize their right to the city; and informal settlements are plagued by overcrowding, inadequate sanitation, poor housing conditions and, in some cities, urban violence. Informal land development processes have become the predominant form of urban development and city growth in many countries, a phenomenon that highlights many attributes of the informal city that develops and flourishes at the margin of the official urban planning and urban management systems.

Informal land and housing markets

A flourishing informal market already provides housing alternatives for poor, middle-class and even some high-income families in many cities where sanctions for informal development and land occupation are lax or access to land is constrained in core urban areas and held privately in fringe areas by individual landowners, customary chiefs or tribal authorities. The increasing density of existing and consolidated settlements in core urban areas and informal and often illegal subdivisions of private land in fringe areas are unequivocal evidence of the privatization of informal land development.[3] This means that individuals can access land only through market transactions controlled by private owners, customary chiefs or individual landholders and that such transactions are subject to speculation.

At first glance, it appears that the phenomenon of informal urbanization is overpowering the capacity of city governments to respond to demographic pressure and increasing demand for housing, land and infrastructure. A closer look reveals that slums and informal settlements are a symptom of a malfunctioning housing sector earmarked by high house price to income ratios, a scarcity of serviced land, lack of transparency and distortions of land, housing and real-estate markets. The inability of city governments to anticipate, articulate and execute well-designed land and housing policies is part of the equation. Many policymakers have not fully understood the complexity of informal land development and the nexus of land markets, housing and slum

3 Acioly, C. ibid. 2007

development in their cities. Their ill-conceived policies continue to stimulate, therefore, rather than slow informal urban development. In addition, government regulations and costly standards and norms hinder rather than facilitate land and housing delivery. Policy decisions and government measures lack the required evidence and baseline information about the logic of slum formation, among other things.

Any attempt to tackle the problem of existing settlements must take into account the deep-rooted causes of the informal urbanization phenomenon so as to design measures that will prevent it from progressing at its present speed and scope. In addition to tackling the lack of basic infrastructure, accessibility and public services together with unclear tenure rights through settlement upgrading, slum improvement and regularization programmes, Governments must therefore look at policies to either halt or decrease the speed of growth of informal urban development in its various dimensions. Bringing the provision of serviced land to scale and providing diversified affordable housing opportunities for various social and economic groups are two fundamental measures for consistent slum prevention. If nothing is done to reverse the current trend, the slum population may reach 1.5 to 2 billion people by 2020 (UN-Habitat, 2003; 2006; UNDP, 2005).

National Governments and the entire international community have acknowledged the myriad problems pertaining to informal settlements and suggested a rewording of target 11 of Goal 7 in 2005 with the aim of improving substantially the lives of at least 100 million slum-dwellers by 2020, proposing text that would read “while providing adequate alternatives to new slum formation” (United Nations Development Programme, 2005, 3). While this target still only responds to a small fraction of the projected nearly 2 billion slum-dwellers, there is now a recognized need to design policies and undertake measures that will offer a wide range of affordable housing alternatives that can compete with those offered by the informal land and housing supply systems.

The translation of this target into action raises a two-fold challenge. Local and national governments and international development agencies must focus on slum upgrading, infrastructure improvement and the regularization of informal settlements coupled with measures that can actually improve living conditions and quality of life in existing settlements and those that are being consolidated. Tackling the existing stock of slums and preventing the formation of new slums should constitute integral parts of a single policy. Governments and agencies must forge preventive policies and measures that offer feasible and affordable alternatives to the informal development model currently in place. Only then will it be possible to overpower what is termed the “industry of informality” that persists and challenges city governments.[4]

4 Acioly, C. ibid, 2007.

Regional variations: urbanisation and slum formation

Regions present not only varying rates of urbanization, but also varying response capacities and peculiarities in the way that slum formation has taken place. Overall urbanisation and slum formation go hand-in-hand in a context of mal-functioning housing sector. In 2007 the world turned a critical crossroad when the urban population outnumbered the rural population and according to UN-HABITAT the 21st century is the century of the city. Cities are likely to continuing growing and 60% of the world's population will be residing in cities by 2030 (UN-HABITAT, 2008). While in the developed world cities are experiencing slow growth (0-1%) or critical decline (40% of cities are actually shrinking), in the developing world half of the cities are either experiencing accelerated (+4%) or rapid (2-4%)[5]. During the period 2003-2030 urbanisation will be a typical phenomenon of the developing countries. It is foreseen an addition of 2 billion new urban residents, with an expected increase of 70 million people or the equivalent of a new city the size of Hanoi, Madrid or Porto Alegre every month, with an estimated annual increment of 35.1 million households.[6] This phenomenon will acquire different facets of migration and intra-migration but will place an unprecedented pressure on governments, policy makers, professionals and organisations working with urban management and housing the poor.

The vitality of unplanned, self-built and self-organised slums and informal settlements creates a myth, viewed as a viable solution for housing and employment opportunities for and engendered by the poor against the incapacity of cities and governments to plan and provide it to them. The conventional wisdom says that people migrate to cities in order to search for better living conditions, basic services, employment and education, etc. but a new urban reality unfolds as a result of research carried out by UN-HABITAT on urban slums and non-slum dwellers and rural residents.

An "urban penalty" unfolds and shows that slum dwellers die earlier, experience more hunger, have less education, have fewer chances of employment and suffer more ill-health than the rest of the urban population. In some countries slum dwellers are far worse off than their brothers and sisters in the rural area. The prevalence of killer diseases in slums is associated with very poor and inadequate living and housing conditions rather than income levels. The situation is critical and preliminary data collected by the Global Urban Observatory of UN-HABITAT for the purpose of monitoring the MDG 7, Target 11, indicates that many countries have succeeded to decrease the

[5] UN-HABITAT (2008). "State of the World Cities 2008-2009".
[6] UN-HABITAT (2005). "Financing Urban Shelter. Global Report on Human Settlements 2005"

percentage of slum dwellers but in numbers they are increasing along with the rapidly growing urban population. There is a need to critically assess the phenomenon and the policy responses that have been designed and implemented and those that are badly needed to address the problems in Africa, Asia and Latin America.

Africa: the challenge of customary lands and the need to bring programmes to scale

Local governments in most African countries are ill-equipped in terms of well-trained personnel and specific urban management policies and instruments to deal effectively with a problem that gains scale and complexity derived from rapid urbanisation and increasing demographic pressure and demand for housing, land, infrastructure and basic urban services. In addition, they often have a low tax base, poor property tax collection and inefficient land administration systems that lack transparency. Many countries have an intricate institutional framework regulating land use at the local level that involves locally-based town and country planning and land administration units operating alongside a variety of central government agencies, including a ministry of lands and national land administration systems. Local governments are often subordinate to a ministry of local government, which limits municipal autonomy and adversely affects local capacity responses to tackle urbanization challenges. Countries that have nationalized land may create land administration frameworks that are difficult to manage, resulting in inaccurate land records and duality in land allocation systems. The benefits of land leasing to support infrastructure development finance are rarely achieved. Countries like Ethiopia, Malawi, Zambia and Tanzania have all nationalised land.

Furthermore, Africa's post-colonial institutional and organizational structures must coexist with customary rules and systems of land ownership. In some ways, customary landowners (e.g., chiefs, tribal kings and their respective traditional councils) operate much like the pirate land suppliers of Colombia or Pakistan. The latter supply plots by subdividing privately owned land while the former deliver customary lands to individuals and even to developers, all bypassing or disregarding formal rules and official government regulations. Land prices rise dramatically and serviced land becomes scarcer, resulting in large premiums paid for plots where infrastructure is available. Local governments are unable to expand infrastructure and supply serviced land at a scale that might help to lower prices and prevent people from having to pay significant premiums when purchasing housing in locations served by basic infrastructure.

Africa is experiencing the fastest urbanization rates on the planet. The growth rate of slums in sub-Saharan Africa is 4.53 per cent, compared to 2.20 per cent in Southern Asia (UN-Habitat, 2006). There is an urgent need to broaden local knowledge about the ways in which the informal land market functions and policy implications for public intervention. Reforms are needed at all

levels, not only in the regulatory frameworks. Institutional, policy and regulatory reforms in the housing sector will pave the road to both slum upgrading and slum prevention.

Figure 1: Mathare, Nairobi. © Acioly, 2007.

Unlike Latin America and Asia, Africa does not have a long history of citywide slum upgrading programmes nor a tradition of sustained housing policies and programmes apart from in exceptional cases like that of South Africa. The Lusaka upgrading and sites and services programme, the Dakar Dalifort upgrading programme of nearly 40 years ago and more recent national programmes in Kenya and Namibia, for example, have not produced new generations of programmes of scale in other countries. South Africa's housing programme to build more than a million units remains the region's boldest effort to resolve housing shortages at the national scale and, more recently, Ethiopia's condominium housing programme set audacious annual production targets of more than 200,000 units. Both countries, however, like many others in the region, continue to struggle with the problems of housing affordability and growing informal settlements. In countries such as Kenya, Malawi, South Africa and Uganda, growing numbers of urban poor federations and savings groups, supported by non-governmental organizations, are being established as a way to increase financing, but all are confronted with problems of scale. The rise of these federations, mostly supported by the non-governmental organization Shack Dwellers International, is clear evidence of the failure of formal housing finance that plagues most African countries.

Asia: involving private landowners and non-governmental organizations in slum upgrading and slum prevention

Non-governmental organizations in Asia tend to play a much more prominent role than those in other regions in supporting local initiatives to improve access to land by community-based organizations and federations of the urban poor. These federations and savings groups have multiplied in several Asian countries and are an integral part of a national slum upgrading programme in Thailand (Ban Mekong Programme). A private regime of land ownership seems to prevail, and invasions are rarely successful. Landowners tend to reclaim their land relatively easily when making use of court and legal procedures, resulting in forced evictions or negotiated solutions that open avenues for direct purchase of part or all of the settled lands. With support from non-governmental organizations, community-based organizations and poor and homeless people's federations pursue savings schemes to purchase land through the market – either where their settlements are located or on resettlement sites defined by the government. This principle is applied in another national programme in the Philippines (community mortgage programme). The increasing role and participation of non-governmental organizations in settlement and community upgrading schemes throughout Asia helps to explain why land sharing has been a popular policy in some Asian countries where Governments, landowners, community-based organizations and non-governmental organizations work together. Notwithstanding some successes in land sharing initiatives in India and Thailand, local governments are generally not well-equipped with land management and land-use planning instruments.

Figure 2: Dharavi, Mumbai, India. © Banashree Banerjee

Another widely accepted approach to the provision of housing and serviced land for low- and middle-income groups in Asia is through land readjustment schemes, where large tracts of peripheral lands are held privately (Hong and Needham, 2007). Reported difficulties in planning for urban growth in Indian cities are related to the fact that local governments can only use land resources if they involve these large landowners in land development schemes. Previous land ceiling acts and land banking practices seem not to have resolved the challenge of land supply for the poor. Some national programmes, such as the Kampung improvement programme (KIP) in Indonesia and the community mortgage programme (CMP) in the Philippines, combine infrastructure improvement with access to land and security of tenure and provide examples of long-term and sustained government efforts to improve existing settlements. These two programmes are some of the few of their kind for bringing to scale the supply of housing opportunities, land and infrastructure to the poor.

Latin America: increasing density of settlements and illegal land subdivisions

In Latin America, the most urbanized continent in the developing world, population growth rates in the largest metropolitan areas are falling, although informal settlements continue to grow rapidly. According to UN-Habitat (UN-Habitat, 2006), the physical growth rates of the total urban area and of slum areas in Latin America are 2.21 per cent and 1.28 per cent, respectively, suggesting relatively low levels of expansion on to undeveloped land. Data from the municipality of Rio de Janeiro show that during the 1990s the population growth rate in the favelas and in illegal land subdivisions were five and three times higher, respectively, than the population growth rate for the city as a whole (Cavalieri 2005; Municipality of Rio de Janeiro,2005). This sizeable disparity in population growth, compared to the UN-Habitat data for the rest of the region, suggests that a process of increasing density and crowding of the population may exist without associated expansion of the physical boundaries of informal settlements. It may suggest that existing settlements are growing vertical. Observations in Caracas, Lima, Rio de Janeiro, Bogota and Medellin reinforce this statement where residents commonly expand vertically their units either to accommodate growth in the household and/or create rental housing opportunities.

Figure 3: Barrios of Caracas. © C. Acioly, 2007.

More than a dozen cities in Latin American countries have undertaken large-scale citywide slum upgrading programmes in addition to regularization, formalization and legalization of informal settlements and continue to do so. These operations, such as the Favela-Bairro programme (Rio de Janeiro), Habitat Rosario programme (Rosario, Argentina), the Committee to Formalize Informal Property (Comisión de formalización de la propiedad informal – COFOPRI) (Peru) and Morar Legal (Rio de Janeiro), have all been supported by significant financial resources from the Inter-American Development Bank (IADB) and the World Bank and are on-going and continuous operations for the last decade. Medellin's Integrated Programme of Improvement of Poor Barrios (PRIMED) partly funded by the German Development Bank (KFW) and later replaced by the Integrated Urban Programme (PUI) and Montevideo's Integration of Informal Settlements Programme partly funded by the IADB are also part of this generation of programmes that highlight the strong intention of municipal governments to integrate the informal city into the physical, social, economic and juridical systems that govern the formal city. The package of public investments are significant when compared to other regions but the results in terms of formalisation and legalisation of tenure are still falling short given the amounts invested, with the exception of the COFOPRI and Morar Legal.

What makes Latin America differ from other regions is that local governments in many of its countries enjoy constitutionally protected autonomy that enables them to excel in designing and executing innovative programmes. Some policy innovations and government programmes have had the time to develop better capacity and more experience in dealing with informal urbanization over

the past 50 years. The phenomenon of *barriadas* in Peru dates from the 1960s and many favelas in Rio de Janeiro have existed for over 100 years. Pioneering upgrading initiatives there date from the 1960s, when evictions and resettlement policies were more common.

Tackling the global challenge at the city level

How can we respond to this global challenge and tackle informal land development and slum formation? There is no simple answer, but competencies, skills and knowledge must be strengthened at the local government level and at the levels where legislation is drafted and policy decisions taken. In addition, institutions and local capacities must be strengthened so that citywide programmes can be designed, prepared, executed and managed in a way that permits multiple interventions in the existing stock of slums and informal settlements in a sustained and long-term manner. Capacity-building and training to support these efforts is essential.

There is a need to develop knowledge about actions within the limitations of existing institutional and regulatory frameworks. It is surprising how little is generally known about the underlying causes of informal land development processes and the market mechanisms fuelling the current scale and scope of informal settlements. Evidence-based policies and practices must be developed and applied.

Housing policy interventions and the role of UN-Habitat

UN-Habitat is committed to supporting national and local governments and Habitat Agenda partners to improve access to land and housing. The organization is further committed to the following three outcomes (UN-Habitat, 2009):

1. Supporting enabling land and housing reforms that can generate diversified and affordable housing opportunities at scale and are accessible to various sectors of the population. In that respect, the UN-Habitat approach is focused on the generation of housing opportunities rather than houses, meaning that the focus is on measures that enable individuals, households and different social groups to access different housing inputs resulting in a dwelling that suits their needs, demands and ability to pay;
2. Ensuring increased security of tenure to provide individuals, households and firms with the opportunity to acquire secure assets, to boost equal access to infrastructure and services and to achieve poverty reduction with spin-off effects on property markets. The UN-Habitat approach is based on the axiom that secure rights to land encourage people to invest in improved dwellings and land itself (UN-Habitat, 2008);

3. Promoting slum improvement and slum prevention so that a consistent and persistent citywide approach can be established to respond to the needs and demands of those already living in informal areas, but also to provide an alternative to informal settlements. The UN-Habitat approach is coupled with participatory planning and urban governance, capacity-building, institutional development and policy reforms.

The UN-Habitat approach is guided by the recognition that access to a range of affordable land and housing options at scale are essential conditions for slum prevention. A well-functioning housing sector, for example, requires a variety of inputs, including land, infrastructure and services, finance, building materials supply and skilled labour (see figure 4) to enable individuals and social groups to access shelter options that suit their needs and capacities. The institutional, legal and regulatory frameworks that govern the sector are essential for maximizing its impact on slum formation (UN-Habitat, 2009). Each of the inputs is regulated by specific normative frameworks and government interventions should focus on inputs that affect either the demand or the supply side, or both. Policies, actions and strategies should be geared to making these fundamental inputs work differently, purposefully and in connection with one other to increase delivery and decrease costs. The present global financial turmoil has clarified the linkages between the housing sector and the economy and also with the regulatory framework in the financial sector. Putting the UN-Habitat approach into practice means maximizing the backward and forward linkages with other sectors of the economy to accomplish poverty reduction and economic development.

Making formal housing finance work for the poor implies a totally dissimilar approach to those employed to date. Poor households develop their housing over time depending on the availability of resources, building materials and land. Housing policies should be adjusted accordingly and financial services tailored to the practices of savings groups and urban poor federations worldwide that have demonstrated that poor people are capable of saving and leveraging resources.

Functional infrastructure and a service sector capable of delivering and expanding coverage of and accessibility to water and sanitation would enable the supply of serviced land at scale. Coupled with flexible and tailored housing finance services and incentives to boost building materials supply, affordable housing solutions for various groups of society would be increased significantly. The focus should be on interventions that can leverage optimal enabling environments and on a holistic view of housing rather than on houses. Variations should be expected by city and country. In Africa, for example, bottlenecks in land supply systems and particularly the customary land delivery system will have to be tackled with audacious measures to ensure that additional housing opportunities can be generated in African cities.

Increased knowledge of urban economics will have to be generated among policymakers to increase understanding of the logics of the market and the strong correlations that exist between land prices, scarcity of serviced land, regulations and buoyant informal land and housing markets. Serviced land is one of the fundamental inputs to housing and its supply and its availability influences housing prices and consequently housing affordability. If housing policies and government interventions are unable to reduce prices to affordable levels, a never-ending cycle of informal settlements and slum formation may continue to plague cities in the developing world.

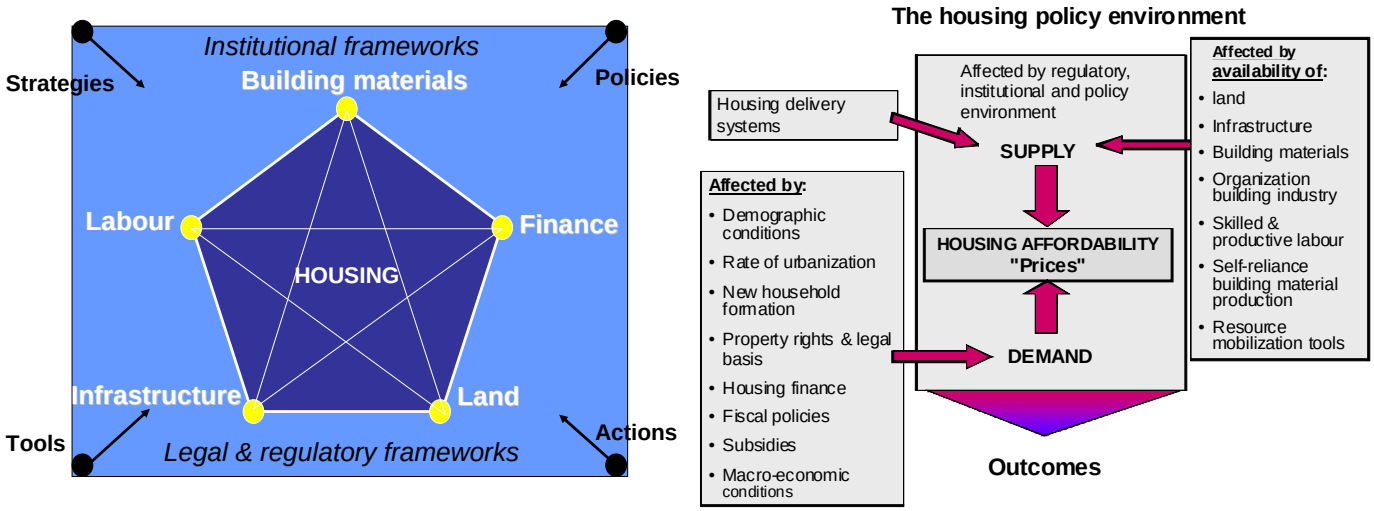

Figure 4: Normative view of the housing sector and the policy environment to deliver affordable housing. © Acioly, 1994; 2003; World Bank, 1993.

A well-functioning housing sector with active government policies certainly helps to boost the delivery of affordable housing opportunities, which is pivotal for slum prevention. Many countries have come to understand that housing policies and active government engagement are crucial if the housing sector is to fulfil its fundamental role in economic development, poverty reduction and employment generation in addition to improving living conditions and residential quality in cities.

Informal Housing Development: lessons for public policy adaptation

There is little doubt that rapid urbanisation will place an astounding pressure on cities to plan before development in order to be able to anticipate growth and guide occupation by providing serviced land at scale to accommodate the growing population and other related urban activities. This underscores the need to design and implement adequate strategies to enable equal access to housing opportunities that meet the needs and resources of the urban population, while guiding urban development and the overall land use and occupation. The current development model has proven to be totally inappropriate. Baross pioneered in identifying the failures of the orthodox land development model to cope with this huge task (Baross, 1987). According to him, the planning, servicing, building and subsequent occupation (PSBO model) was an inadequate tool to cope with rapid urbanisation. He suggested an alternative planning model (OBSP model) which adopts the logic of the informally self-built settlements: occupation, building, servicing and planning (see Figure 5) which in fact, as stated earlier in this article, it is the predominant model of urban development in the majority of cities in the developing world.

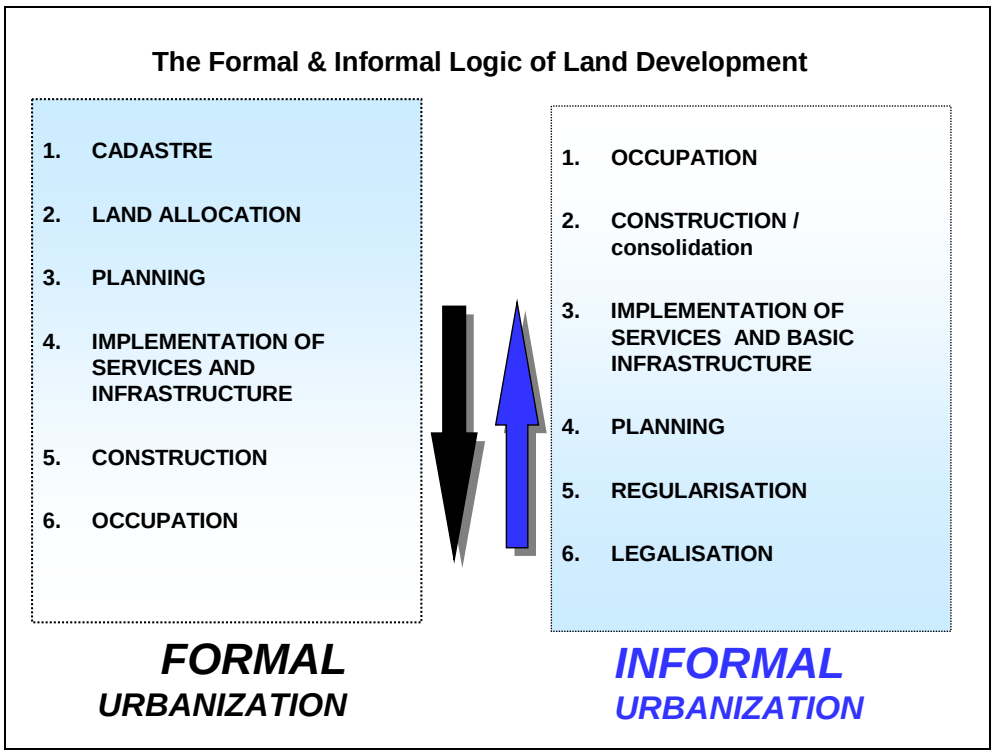

Figure 5: Different Models of Planning (based on Baross, 1987)

It is our capacity to study and understand the logic of informal urbanisation that will lead to successful responses. Our ability to transform, re-invent and/or adjust its logic into government policies will determine the success of strategies to cope with the challenges of rapid of urbanisation and guide cities throughout the 21st century. As shown in Figure 5, access to land, securing its occupation and consolidation, is the first step in the informal urbanisation model. If there is

government's tolerance, the process continues and residents through negotiations and/or political and social pressure manage to access infrastructure in various forms. Planning and subsequent regularisation (of land and building) and eventual legalisation takes place at the end of the process. The process is much more complex and includes negotiations and conflict resolutions to deal with possible threat of evictions, involving different and conflicting interests, actors and resources. Seldom settlements reach full formalisation and legalisation. Although it reveals the dynamics and creativity of people's housing processes the outcomes are not always positive since settlements are often located in unsuitable land in adverse locations, poorly serviced and frequently subject to different kinds of adversities.

Observations made in the various cities I have worked in the developing world show unequivocally that the process is evolutionary, see illustration in Figure 6. There is a clear evolutionary process of housing production that reveals an incremental consolidation of the right to land. The process is time-bound, depends on availability of land and financial resources. Mutual aid, self-help, self-management processes but also outsourcing are common ways of organising construction. Similar patterns are observed in public housing estates when residents engage in transformation of the existing housing. There is also an incremental building process to make housing suitable to the family's spatial needs. It reveals a continuous transformation and expansion of the built-up space through which individuals apply their own norms and standards as long as there is lax building inspection. Rooms, walls, set-backs, etc. are frequently in discord with official building codes. The process depends on the availability of building materials, security of tenure and financial resources. Household savings and formal & informal small-scale loans support this process.

Summing up, the people's incremental and evolutionary housing process is dependent on time, building materials and technology, land and security of tenure and financial resources. Any policy response should address these essential variables in order to enable and strengthen poor household's abilities to build houses for themselves. The challenge is to bring this logic and process to scale within a policy framework. That means one must consider various options to support and strengthen people building for themselves such as affordable and flexible building materials loans and credit schemes; establishing flexible building norms and variety in infrastructure standards and provision to allow different outcomes and a range of options that fit the time-resource equation of poor households. Another fundamental shift that needs to be considered is in the housing finance industry. There is a need to offer flexible finance and micro-financing schemes with different terms and maturity that are bound to the resource-time-housing step equation. Loans should not be based on the total final product but totally adapted to the evolutionary and incremental housing development process as described above. Only then a logic and effective slum prevention strategy can work in curbing the speed of slum formation in the developing world.

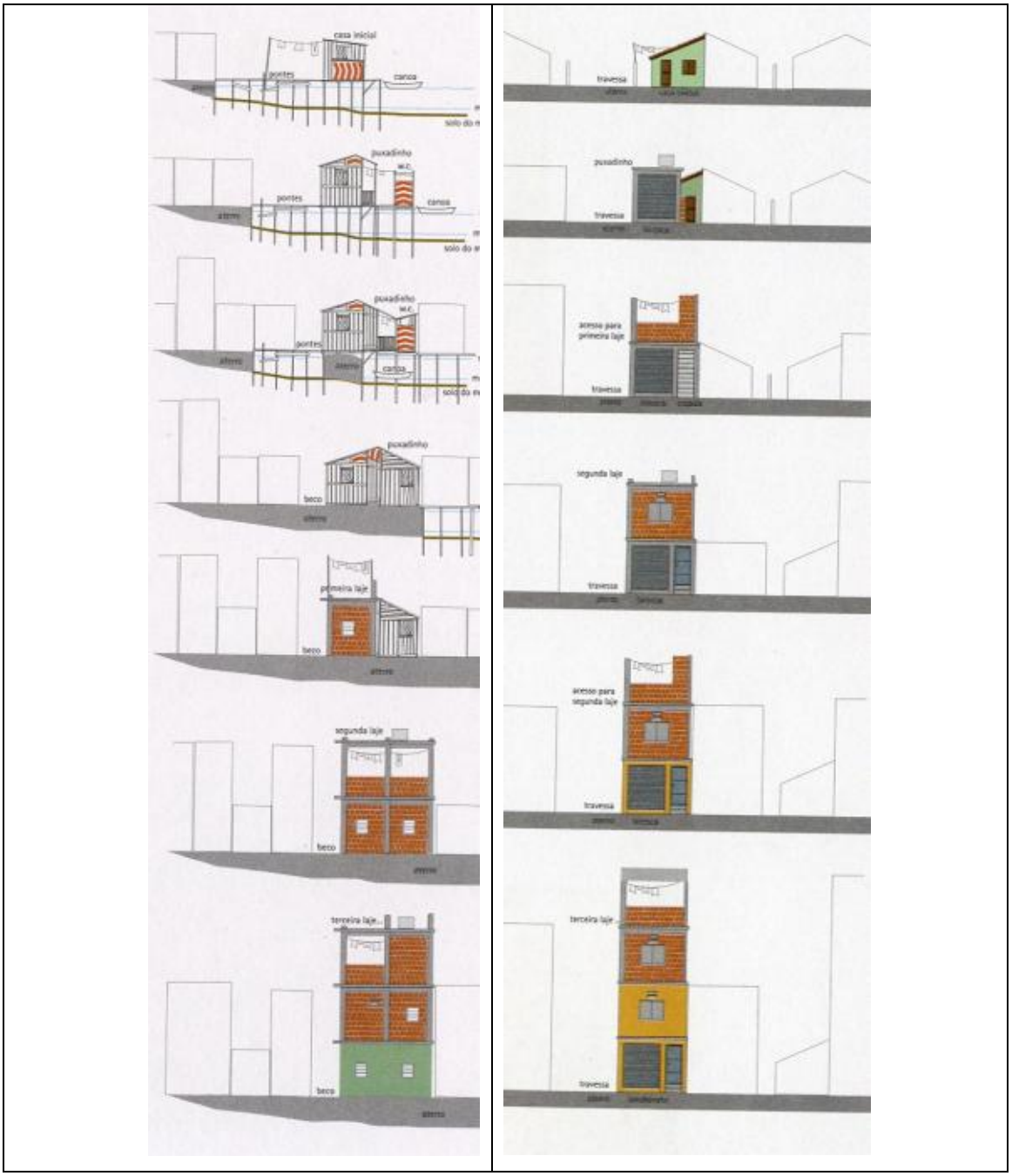

Figure 6: Evolutionary & Incremental Housing Process in Favela da Maré, Rio de Janeiro: from shack to permanent housing & from public housing unit to expanded self-help housing product. Source: Varella, Bertazzo and Jacques (2002).

Slum upgrading: from projects to citywide programmes

At the other end of the policy ladder, large-scale citywide informal settlement upgrading programmes, such as those carried out in Rio de Janeiro, Medellín, Indore, Ahmadabad, Lusaka and Cape Town, require significant institutional effort and sufficient skills to manage multi-year, multi-stakeholder and technically complex urban operations in extremely volatile environments. Designing, managing and implementing large-scale operations that deal with existing settlements while keeping abreast of preventive policies and measures within the realm of city governments remains one of the greatest challenges for local governments in all regions.

As an urban intervention strategy, informal settlement upgrading – more commonly known as slum upgrading – is a perennial theme that has been in existence for almost 50 years. Experience shows that slum upgrading requires political will and the firm commitment of local governments to sustain long-term programming and implementation. In operational terms, it requires the establishment of an institutional and organizational setting through which:

(a) Participation of target groups can be facilitated;

(b) Partnerships between public, private and community stakeholders can be realized;

(c) Financial resources can be mobilized and allocated on a sustained basis;

(d) Local implementation capacities can be strengthened;

(e) Coordination, planning and management of programmes and projects can be organized (Acioly, 2002; 2007).

The design and implementation of citywide slum upgrading programmes follows a general pattern and rationale, which can be observed in most experiences of this kind in cities in Latin America, Asia and Africa (see figure 5). Once a city government has taken stock of the problem and properly defined it within a policy framework (step 1), the establishment of a programme management framework and a coordinating team usually follows. Some of the fundamental phases and steps are often undertaken simultaneously. Cities often carry out a review of their aerial photographs or satellite images to identify, locate and define patterns of informal development, either at step 1 or step 4 of the cycle described in figure 6.

Community mapping, enumeration and settlement profiles (step 4) enable Governments to assess whether upgrading is the best option. Established criteria providing transparent information to the public on the reasons that one community is resettled while another is upgraded on site are crucial.

The Kampung Improvement Programme of Indonesia and the Favela-Bairro citywide upgrading programme have established clear criteria to support decision-making on this matter.

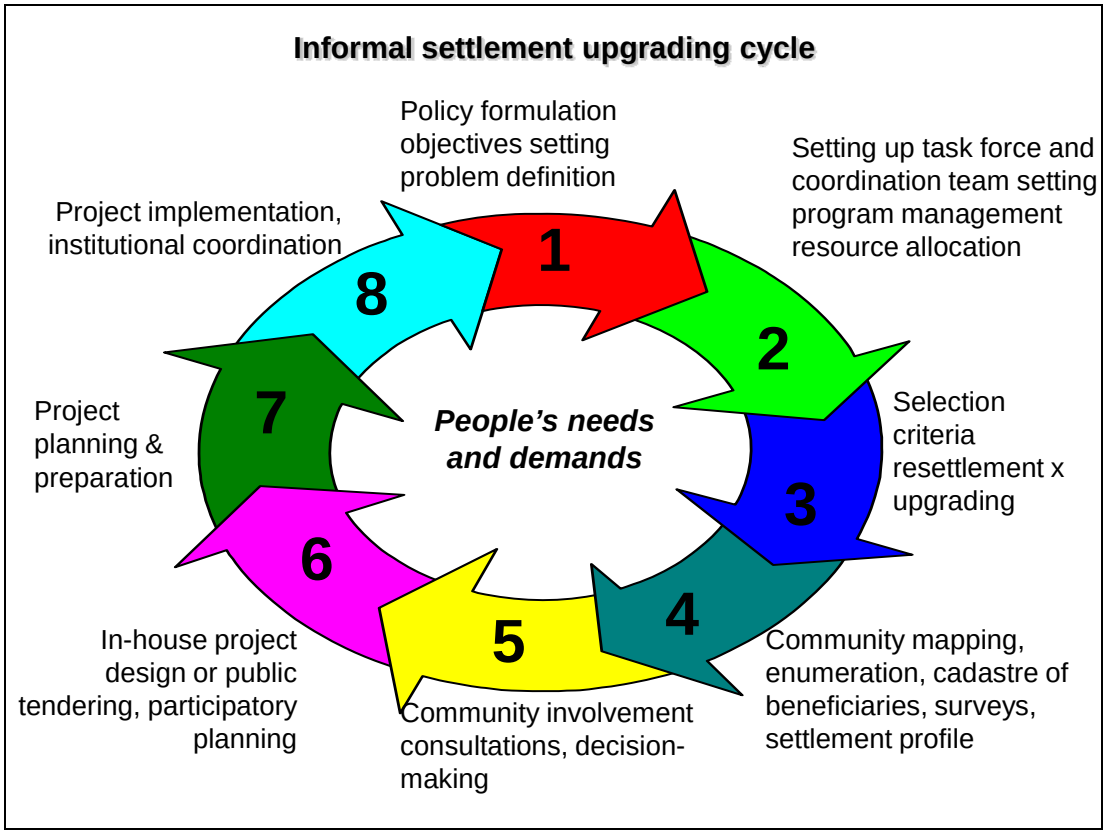

Figure 7: Slum upgrading programme cycle. (Acioly, C. The Rationale of Slum Upgrading. IHS, 2006).

Community mapping, enumeration and settlement profiles (step 4) enable Governments to assess whether upgrading is the best option. Established criteria providing transparent information to the public on the reasons that one community is resettled while another is upgraded on site are crucial. The Kampung Improvement Programme of Indonesia and the Favela-Bairro citywide upgrading programme have established clear criteria to support decision-making on this matter.

Experience in several countries has shown that these steps and phases are essential conditions to ensuring that upgrading programmes are successfully and efficiently brought to scale. Previous generations of slum upgrading activities worldwide provide clear evidence about the move from project to programme scale and from a sole focus on basic infrastructure improvement towards an integrated package that incorporates, but is not limited to, security of tenure, land regularization and home improvement loans and local economic development. Housing and real estate markets are additional driving forces behind the full integration of these settlements into the formal and official

planning systems. Upgrading has evolved over many years and today we know what works and what does not. Figure 6 sets out some of this conventional wisdom.

DO	DON'T
Promote good urban governance systems.	Assume that slums will disappear automatically with economic growth.
Establish enabling institutional frameworks involving all partners.	Underestimate the role of local authorities, landowners, community leaders and residents.
Implement and monitor pro-poor city development strategies.	Separate upgrading from investment planning and urban management.
Encourage initiatives of slum-dwellers and recognise the role of women.	Ignore the specific needs and contributions of women and vulnerable groups.
Ensure secure tenure, consolidate occupancy rights and regularise informal settlements.	Carry out unlawful forced evictions.
Involve tenants and owners in finding solutions prioritizing collective interests.	Discriminate against rental housing or promote a single tenure option.
Adopt an incremental approach to upgrading.	Impose unrealistic standards and regulations.
Associate municipal finance, cross-subsidies and beneficiary contributions to ensure financial viability.	Rely on governmental subsidies or on full-cost recovery from slum-dwellers.
Design and negotiate relocation plans only when absolutely necessary.	Invest public resources in massive social housing schemes.
Combine slum upgrading with employment generation and local economic development.	Consider slum upgrading solely as a social issue.
Develop new urban areas by making land and trunk infrastructure available.	Provide unaffordable infrastructure and services.

Figure 8: *The do's and dont's of slum upgrading. © UN-Habitat, 2003.*

Several evaluations have been carried out over the past 40 years. These exercises reveal that public investments have induced significant improvements in housing stock, both in terms of quality and quantity, causing property values to increase. The detractors of upgrading – who argue that people will sell their houses or plots to economically stronger groups and move back to another slum once their own slum is improved and their property value increased – need to accept that gentrification has been an exception rather than the rule. Public investments are commonly realized in the form of an upgrading package, such as infrastructure improvements, regularization of tenure, establishment of social infrastructure, community development programmes, urban poverty alleviation programmes, which in practice helps to establish the rights, duties and obligations of beneficiaries, public and private actors involved in upgrading efforts. This means that the public sector invests in the provision of basic infrastructure thereby creating an enabling environment for local development, but it expects beneficiaries and consumers to pay for the services through users' taxes and tariffs. Land and property regulation strategies are then required, comprising the single most

difficult challenge of slum upgrading programmes given the complexity of land registration, legal procedures and lengthy and costly institutional processes to regularize land.

Lastly, to succeed, slum upgrading must be part of a policy response that recognizes the various dimensions of housing problems, varying housing needs and demands that necessitate the design of various programmes, of which upgrading is only one. Only then will Governments be able to ensure that public investment is distributed equally in cities.

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