

Briefing Paper 4

October 2013

Global Urban Research Centre

A multidisciplinary centre focusing on global urbanization, poverty, inequality and exclusion

Affordable Housing and Urban Sprawl in Mexico: The Need for a Paradigm Shift

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Key points:

• **Since the 1990s, social housing supply in Mexico - under a market-oriented scheme - has helped to reduce the quantitative deficit substantially. However, it has also persistently neglected important qualitative dimensions of this deficit and has caused unnecessary urban sprawl with serious consequences for municipalities.**

*The figures, tables and ideas expressed in this brief are based on Oyan's PhD research conducted at The University of Manchester from 2009 to 2013 and funded by CONACYT. The researcher can be contacted at oyan.solana@postgrad.manchester.ac.uk

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Developing countries, often triggered by their economic buoyancy and large housing deficits, are a breeding ground for urban sprawl. Defined as 'the process in which the spread of development across the landscape far outpaces population growth' (Ewing *et al.*, 2002; p.3), urban sprawl has been a constant challenge for local authorities worldwide and has also been at the centre of academic debates. While some authors advocate compactness as the most optimal urban pattern for developing countries (Jenks and Burgess, 2000), others suggest that containment and self-imposed restrictions on urban development cannot be recommended in the developing world (Angel *et al.*, 2005).

This dichotomy is relevant for governments of emerging economies given the increasing public pressure to address their housing deficits. In the last decades Mexico has focused its housing policy on solving the quantitative deficit as a way to deal with its large informal housing segment. The positive outcome of millions of social housing credits supplied has, however, generated unforeseen consequences for municipalities and residents alike. This briefing paper explores the urban development and typological outcomes of the housing boom experienced in Mexico, especially, after the liberalisation of the sector. It identifies the impacts for social housing residents and their policy implications for private developers and the national and local governments.

Contextual background

The housing deficit for lower-income households in Mexico represents a serious challenge as the informal sector



Photos: Solana Oses

has been estimated to comprise half of the total stock (CIDOC and SHF, 2012). Seeking to expand its social housing programmes and following the recommendations of the so-called Washington Consensus, the Mexican government liberalised this emerging housing sector in the 1990s. The provision of low-interest-rate housing credits was based upon the periodic contributions of Mexico's workforce, channelled by two main public housing funds, and the construction of low-cost housing by the private sector.

The market-oriented formula in social housing is not exclusive of Mexico; it has also been applied in transitional countries in Eastern Europe and South America. In the Mexican case, it yielded a successful story in terms of millions of households that have stepped onto the property ladder; many of them from informal housing or deprived conditions. Yet, the outcome of this massive construction has

also resulted in an unnecessary extension of urban footprints based on low residential densities and poor housing types' diversity (Solana-Oses, 2011).

Findings of the PhD research

Based on surveys and typo-morphological analysis, this research addressed the perceptions of the main actors involved in the social housing segment and the spatial attributes of three generic types (i.e. single-, multi-family and mixed housing developments). It revealed that the appeal to potential buyers of single-family types is based on four main factors: "Greater privacy" (compared to the common medium-rise buildings built in former decades); the exclusive possibility of carrying out "extensions" to house-types; the higher sense of ownership of the land and dwelling; and the less conflict with neighbours in such developments.

Residents and potential buyers expressed vast preference for single-family developments; yet, they also disapproved their distant location from city centres/workplaces, their lack of basic services and the long period they require to become consolidated into the urban tissue. These findings led to an exploration of the factors that influenced the current physical outcome. The results showed that historical inertia, the biased perception of private developers and potential buyers, along with the assumptions of officials and municipal governments (which transformed into

density-restricting regulations) composed a vicious circle favouring the current situation (see Figure 1). The outcome are the common monotonous social housing developments of row and semidetached types built using industrialised systems on the periphery of cities where land plots are cheaper and planning regulations weaker.

Despite the negative perception of the medium-rise social housing of former decades, some positive features were identified. First, the dwelling areas were consistently larger in multifamily developments than in single-family ones (78m² versus 58m² on average). This feature was raised in the surveys as a key positive value (see Table 1), although at the moment of dwelling selection it played a secondary role. Second, the availability of services and infrastructure was achieved earlier in multifamily developments influenced by their better location; consequently, the time taken to achieve integration to the city compared to other types was shorter.

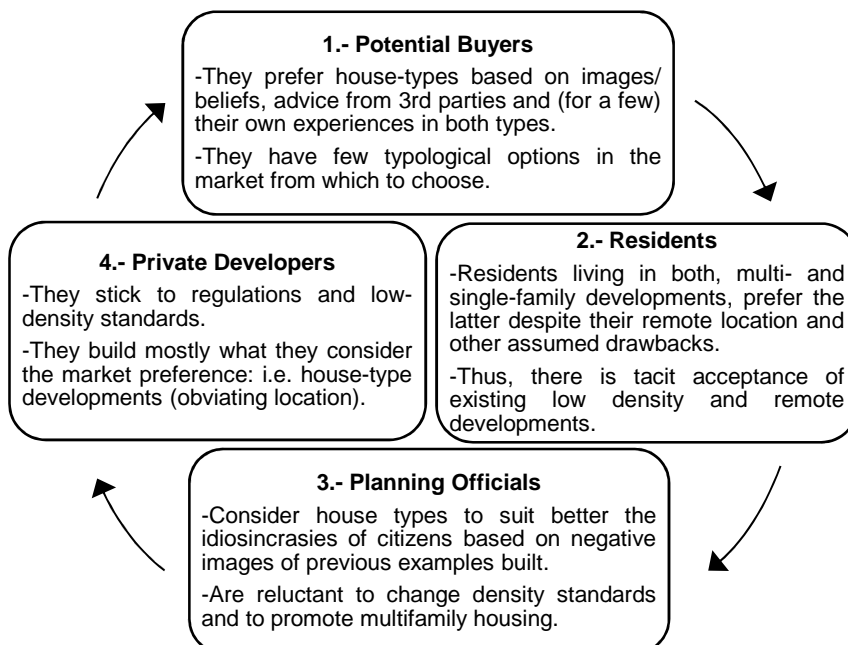
Regarding the potential use of these two generic types for urban development (see some of the examples analysed in Figures 2 and 3), it was shown that multifamily developments offer better spatial attributes to address the high deficits of affordable housing and urban growth itself. That is, beyond the evident greater residential density and greater plot ratios of multifamily developments (i.e. the relation between the total area of a building and the area of the plot on which it is erected) their urban integration measured by a 'discontinuity index' (created for this research) also scored largely better scores in the first group.

Additionally, from the developments studied, a startling 52% of the single-family housing stock was unoccupied; compared to 24% for multifamily developments. Fact is in tune with a national study on social housing that estimated the unoccupied stock (largely comprising house-types) at 31.8% (INFONAVIT, 2011). Therefore, although the overwhelming (apparent) preference for low-density types, which has been persistently fuelled by local regulations, by the housing stock of private developers and by the negative images of citizens, this growth pattern has failed to contribute to the development of Mexican cities and also to satisfy social housing residents.

Implications for policy

Local governments have a difficult challenge to facilitate the required private construction of social housing in parallel to addressing the expansive growth of cities.

Figure 1. Factors fuelling urban sprawl



Ideally, the federal government should provide guidelines on planning, land-use and housing construction that would be followed by Mexico's 2,456 municipalities. This, however, is not realistic. The Mexican government has made efforts to provide guidelines to local governments on some of the concerns raised in this paper brief; it has also offered incentives to implement them. However, the rapid and drastic transformation of Mexican cities triggered by the social housing boom, evidences that the national government needs to extend further its regulatory role.

Some policy implications can pave the way for better local governance. Transparency and accountability, among them, are key starting points (Kenny, 2007). Additionally, seven points are suggested: (1) from a social and morphological standpoint, urban sprawl is far too complex to be tackled by municipalities alone. Given the multiple local governments comprising many of these agglomerations, an agreement between the federal government and all states is essential. (2) The number of social housing credits supplied and the dwellings built by the private sector should be balanced with the available number of jobs locally. Failing to identify such imbalances will fuel the already high unoccupied stock. (3) The range of credits and the location of the dwellings have to match the features of the applicant's household as well as the number of individuals and their workplace; this would optimise the available stock.

Figure 2. Single-family dwelling types



Figure 3. Multifamily dwelling types

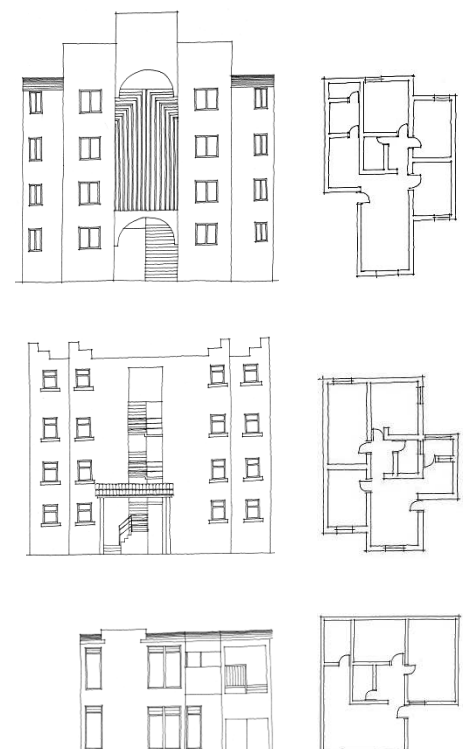


Table 1: Positive values attributed to housing developments per type

Type	Value
<i>Multi-family housing:</i>	<ul style="list-style-type: none"> • Larger areas of dwellings (more m²). • Good location (served by infrastructure, shops and near to CBD).
<i>Single-family housing:</i>	<ul style="list-style-type: none"> • More privacy (acoustically and visually). • Flexibility to make extensions. • Higher sense of ownership of land and dwelling. • Less conflict with neighbours (e.g. no need to deal with neighbours on management).

Source: Solana-Oses (2013)



Incentives could be granted to developers who reach further segments of the population and who consider the availability of jobs when selecting the locations of their developments. (4) Although there is no specific data on the social dwellings acquired as an extra source of income (e.g. for renting purposes), the national unoccupied stock suggests a strong presence and therefore it requires an equivalent intervention at the provision stage. The urgency of acquiring a dwelling or the lack of a property when applying for credit should count as potential bonuses. (5) The lack of commercial areas in the developments analysed influenced the rise of informal extensions and retail. The design of social housing requires a mixed use of land to meet the most basic needs of residents. (6) Besides its role of connecting distant communities, public transport should be implemented for increasing spatial cohesiveness. Investments in mass transit systems require integrated plans. As land prices tend to increase around transport nodes, it provides chances to capture some of the added value, which in turn can be reinvested in denser housing forms and their required services. (7) The perceptions of private developers, officials, residents and buyers are essential in terms of housing choice and density standards. All the actors have a negative image of multi-storey housing. If more intense construction is to be part of the solution to sprawl, the perceptions

require the government to address the negative images by promoting, supervising and publicising the changes. This has been the case in other countries (e.g. Australia and the United Kingdom).

Lessons from the Mexican case

The experience in Mexico shows that urban sprawl should not be underrated in developing countries where market-oriented social housing sectors are in place. This is especially evident at a local level, where the drawbacks of this phenomenon are shaped by the attitudes and perceptions of officials, private developers and residents.

The assertion of Carmona (2000) on the negative consequences of massive housing development in Latin America proves to be alive and kicking in Mexico more than a decade later. The high-density and high-rise surge of social housing built worldwide in the twentieth century was interrupted and stigmatised widely. Having experienced this stigmatisation, Mexico moved to the opposite direction in terms of low-density housing with evident negative consequences.

South Africa and New Zealand are examples where their low-income housing supply schemes led to an extensive urban sprawl several decades ago. The experience of these two countries in internalising the potential benefits of using higher densities (Regional Growth Forum, 2003; DAG 2008) is especially enlightening in the Mexican case.

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