

Access to serviced land for the urban poor: the regularization paradox in Mexico

Alfonso Iracheta Cenecorta*
Martim O. Smolka**

Resumen

La insuficiente oferta de suelo con servicios públicos para los pobres de la ciudad, y la necesidad de regularización de las consecuentes ocupaciones ilegales de las áreas urbanas son dos de los más importantes aspectos de la agenda de políticas de suelo en América Latina.

Considerando una visión estructural/integrada acerca del funcionamiento del mercado de suelo urbano en América Latina, este trabajo discute la relación entre los mercados de suelo formales e informales. Se exponen los perversos efectos de retroalimentación que las políticas curativas de regularización pueden tener sobre el proceso por el cual la irregularización es producida en primera instancia.

El trabajo sugiere que un enfoque más efectivo para la provisión de suelo a pobres no puede ser resuelta con los actuales programas (curativos) de regularización. Estos programas deberían tener la capacidad de movilizar los recursos existentes hacia un programa que vincule regularización y política fiscal, incluyendo la exploración de mecanismos de captación de plusvalía.

Palabras clave: mercados de suelo, políticas públicas de suelo, pobreza, regularización de asentamientos urbanos.

* El Colegio Mexiquense, correo-e: axic@cmq.edu.mx

** Martim O. Smolka. Lincoln Institute of Land Policy.

Abstract

The insufficient supply of serviced land at affordable prices for the urban poor and the need for regularization of the consequent illegal occupations in urban areas are two of the most important issues on the Latin American land policy agenda.

Taking a structural/integrated view on the functioning of the urban land market in Latin America, this paper discusses the nexus between the formal and the informal land markets. It thus exposes the perverse feedback effects that curative regularization policies may have on the process by which irregularity is produced in the first place.

The paper suggests that a more effective approach to the provision of serviced land for the poor cannot be resolved within the prevailing (curative) regularization programs. These programs should have the capacity to mobilize the resources that do exist into a comprehensive program that links regularization with fiscal policy, including the exploration of value capture mechanisms.

Keywords: land market, land policies, poverty, urban land regularization.

1. Informal land market¹

An insufficient supply of serviced land at affordable prices for the urban poor is one of the most important issues on the Latin American land policy agenda. The structural shortage of serviced land and the consequent illegal occupation of urban space are emblematic features of Latin American cities, especially in the urban peripheries and other areas, restricted from the formal property market by topographic and environmental conditions.

Before proceeding to further discussion some clarification should be given with respect to the terminology used in this article.

Firstly, one must note that although the discussion on illegality usually centers on tenure issues, it must be stated that the need for legalisation of tenure is derivative of the broader more critical issue of access to serviced land. In other words, a sufficient supply of serviced land at affordable prices would, in prin-

¹ Originalmente publicado en italiano como: "Acceso a suoli infrastrutturati per la popolazione urbana povera: il paradosso della regolarizzazione in Messico", en *Storia Urbana. Rivista di Studi sulle trasformazioni della città e del territorio in età moderna*, año XXIII, número 88/89, julio-diciembre de 1999, pp. 119-144.

ciple, nullify the need for illegal tenure. In effect, as pointed out by Durand-Lasserve: "...the lack of infrastructure and services as well as the difficulties encountered in overcoming this are, even more than insecure tenure, the main criteria for defining irregular settlements" (Durand-Lasserve, 1996: 2).

The term serviced land should be understood in its broadest sense as land designated for urban use and equipped with basic infrastructure including access (even if not paved) to a city road network, public lightning, a water supply, a sewerage and drainage system as well as electricity and telephone services. Such a degree of urbanization may even border on that of a residential subdivision (Mayo and Angel, 1993).

Given its application to the occupation or sale of both serviced and unserviced land, the term illegality shall refer in this paper to the illegal, irregular, informal or clandestine activities (generally market transactions)² associated with the accessing and occupation of serviced or unserviced land.

Thus, the focus of this paper will be on the observed patterns of informality as but one manifestation of a broader issue, that of the structural incapacity of the urban land markets in Latin America to provide a sufficient supply of serviced land at affordable prices. Herein lies one of the central characteristics of the dynamic of the urban land market in Latin America.

2. The reasons for illegality³

There are many reasons why individuals seek access to urban land through illegal, informal, irregular or clandestine means. From an urban economic perspective, the implicit, if not ubiquitous reasoning is that the lower strata of the urban population is 'pushed' into informality due to low earnings. This penurious situation faced by wide sectors of the urban population is usually considered a factor explicative of the difficulty associated with land acquisition on the formal market: that is to say the land provided either by the market or any other non-market mechanism (e.g. public programmes).

As it is argued in this paper, the lack of low income land supply within the urban formal market is also important. Land

² In fact, nowadays for the majority of the population, urban land is accessed, often through market mechanisms that are not always legal, and even with the collusion of the State.

³ The arguments in the following 4 sections have been extracted from the discussion fully developed in Smolka (1999).

developers have neither incentives nor interests in developing this part of the market. The experience within the Housing Commission of the state of Mexico⁴ regarding this issue in Mexico City metropolitan municipalities, is that developers face the illegal market which is highly organized and capable of offering a product suitable to poor people's income. Finally it is argued that it is easier to get a plot through the illegal market to such a degree that it is considered the 'normal' way for the poor to get a piece of urban land.

It can therefore be said that explanations of this phenomenon might be found not only in economic reasoning but within the political and cultural environment created in most Latin American countries since the demographic and urbanization revolution started in late forties in almost all of them.

2.1. Poverty

In Latin America, there is in fact a sizeable contingent of poor urban families, eking out a living below the survival line,⁵ clearly incapable of placing a positive bid on the land market, let alone meet the minimum price set by landowners and developers. This lamentable situation is aggravated by the fact that over the past few decades poverty has not diminished in the region.

In Mexico, the number of households living below the poverty line increased from 20% to 34% from 1970 to 1990. According to Boltvinik (2000), poverty in Mexico is a growing phenomenon; from his point of view poor households in Mexico at the turn of the century nearly account for 50% of total population (based on 1996 data), though the Mexican government accounts between 30 and 40% according to different methodologies and official sources (PROGRESA program and Public Credit and Finances Secretary, both federal). In Mexico City metropolitan area (MCMA), according to Yeung (1991), around 41% of family

⁴ This Commission created by the state government in 1993 has as permanent members representatives of developers and building industrialists as well as a sort of municipal, state and federal authorities. Through their discussions they have made clear what has been above stated (see 'minutas' and papers of these commission's meetings. Secretaría de Desarrollo Urbano y Obras Públicas del Estado de México, secretary office, 1993-1999).

⁵ According to World Bank (1990) figures about 19% (or 70 millions inhabitants) of the Latin American population was found to be living below the poverty line including 12% surviving under extreme conditions of poverty in 1985. The situation has not improved since!

income was devoted only to food, whereas in Rio de Janeiro was 26% and in Lima 70% in that year.

This situation is also the case in Buenos Aires where the number of households existing below poverty line increased from 16.3% in 1991 to 17.6% in 1995. There are about 115,000 inhabitants whose earnings are insufficient to cover the cost of food needed for survival. More than having Unsatisfied Basic Needs, they are existing below the 'hunger line' (Clichevsky, 1997). In the case of Venezuela, the Venezuelan Ministry of Family estimates that in 1994, 48.89% of the population was classified as poor with 27.26% with their basic needs unsatisfied and 21.63% living under extreme poverty (Lovera, 1996). In Ecuador, 51% of the population is classified as existing below the poverty line. Such a reality is representative of many other Latin American cities (UNDP, 1992).

It is estimated that in 1999, 60% of the residents of MCMA earned no more than three times the minimum wage (around US\$ 270 per month). More specifically, in the Valle de Chalco, one of MCMA's largest illegal, peripheral settlements, the square metre of unserviced land is valued at about US\$ 5; meaning that a 150 square metre plot costs about 10 times the minimum wage in a country where 18% of the active population earns less than one minimum wage (Siembieda, 1994). Similar figures can be quoted for almost any other place in Latin America.⁶

Although poverty accounts for a significant portion of the existing informal arrangements, the observed magnitude and persistence of informality cannot be explained by poverty alone. In fact, in spite of the high correlation found between urban poverty and informal settlements, it is hardly the case that all occupants of informal settlements may be classified as poor. Many empirical studies have repeatedly proven that informal settlements are not limited to the poor (Jiménez, 1995: 34).

To prove that informality is not restricted to the poor, is enough to consult the figures previously provided concerning the proportion of existing illegal occupations (over 70%)⁷ to that of

⁶ In Moreno, Argentina, a lot of 300 m² with no infrastructure costs about 10 to 14 times the minimum wage (of US\$ 80), an amount to be paid cash since, in 1987 no finance was available (Clichevsky, Shapira and Schneider, 1990: p. 66). A typical 100 m² plot of urban land in the periphery of the city of São Paulo (smaller than the 125 m² minimum lot size established by the 6766 Law of 1979, regulating land sub-divisions) costs about 20 times the minimum wage.

⁷ Considering all forms of illegality, São Paulo's Planning Bureau estimated that about 2/3 of the population resides in violation of current land use and building codes.

families below poverty line (27%). The same holds true for the annual increments in the percentages of both groups. In fact, many who could pay some for land (under the unrealistic assumption that families immediately above poverty lines could do so) may yet not be able to afford the minimum price asked for in the formal market, commonly referred to as the 'no alcanza' phenomena. The minimum price of land is determined by a combination of the alternative uses of land, be these for agriculture or infrastructure on the fringe of the city.

Recent evidence suggests that the process of peripherisation has reached an apparent threshold limit in most large Latin American cities. In the case of low-income families, even when the family budget is capable of covering the costs of basic needs, the minimum land price has been found comparatively higher than the opportunity cost of not bidding at all. Increasing transportation costs from 'adjusted' fuel prices (Sabatini, 1997), coupled with extended commuting time,⁸ plus the relatively high cost of living contribute to a reduction in their capacity to 'bid' on land in such distant areas.⁹ It may be interesting to note that in practice higher commuting costs (associated with more distant locations) function in effect as a surrogate strategy in the absence of credit to buy higher valued land in more central locations. The incapacity to bid explains why low-income families are pushed to the urban peripheries, an issue ignored to a large extent by policymakers.¹⁰

(Rolnik et. al., 1990). Similarly in Recife these percentages reach 80% and 70% in the case of Salvador. Even in the 'planners' darling model city of Curitiba, half of the population is classified as illegal (Ultramari and Moura, 1994). In Nicaragua (ref. Morales, N. FLACSO/GIM, 1995) 73% of the houses is considered illegal and in El Salvador about 50% of the housing is deemed informal (FUSADES, 1996 apud Lungo 1996, CB). The so-called clandestine urbanization accounts for about 40% of Bogota's expansion area (re. Jiménez in Jaramillo).

⁸ Commuting time of 4 or more hours in overcrowded buses is not uncommon in the metropolitan area of Rio de Janeiro. More than anecdotal, demographers have forwarded the hypothesis that the fall in fertility rates in such areas is attributable to the effect of exhaustion on the libido. "More sleeping time" appeared as a principal aspiration of residents based in peripheral areas in a survey of attitudes, habits and expectations. In yet another survey, the low productivity of workers due to commuting time was identified as an important factor affecting Rio de Janeiro as an attractive business destination, especially with respect to its industrial attractiveness. Many of the homeless people identified are in fact workers who cannot afford to commute everyday. Average commuting costs absorb typically 30% to 40% of the minimum wage.

⁹ The distribution costs as well as supermarket grocery prices (when they exist) tend to be higher in the peripheries.

¹⁰ A heavier land value tax would also produce a similar effect. Instead of monthly/yearly family budget expenses on mortgages/installments on land finance credits, the budget of low-income families would be spent on the land value tax. The difference, of

Last but not least, many find it advantageous or even profitable to engage in such transactions. As argued before, many lower income families do not choose informal arrangements as the best alternative but instead it is often the only option for them. Contrary to popular belief but nevertheless well documented in the literature (De Soto, 1989), this "option" tends to prove more expensive.¹¹ Furthermore in many instances, the cost of accessing land through legal means is quite high. Moreover, the existing sanctions are not sufficiently stringent to deter the engagement in illegal, irregular, informal, clandestine activities associated with accessing urban land. This argument is particularly applicable to higher income families.

In other words, and looking more broadly to the issue at hand, even if one is not poor, it may still be too costly to purchase lots on the formal market since one may not qualify¹² or even may encounter disincentives.¹³ Alternatively, should serviced land prices be sufficiently low or adequate subsidies be provided, one could be poor, yet afford not to pursue informal arrangements.

Thus, with regard to the (non) affordability aspect of informality, it can be argued that urban land prices in Latin America tend to be relatively high. This results in a paradoxical situation in which "too many (low-income families) pay too much for the little they get and a few (land suppliers) get too much for the little they deliver." This reality justifies the need to gear the discussion to the determinants of land prices, or more specifically to why urban land markets in Latin America do not provide or guarantee a sufficient supply of serviced land at affordable price.

2.2. *Insufficient supply of serviced land*

The chronic insufficiency in the supply of serviced land, is normally attributed firstly, to not enough 'production' of serviced land by the government either directly or indirectly through the 'facilitating' roles adopted by the authority in concert with the

course, is that they would access credit and more importantly on much longer terms. Beyond equity (progressiveness) a case could be made on efficient considerations of such a policy in as much as managing land taxes are easier (and most democratic) than credit lines.

¹¹ Recent investigation on Rio's *favelas* has found that labor costs to build are at least 10% over the formal market. Telephone interview with Pedro Abramo, 1999.

¹² Ref. lack of legal credentials or spillover from other informalities (labor market).

¹³ Ref. impunity, extra-economic factors affecting residential mobility, etc.

private sector. Secondly, the supply of serviced land is also directly determined by its retention from the market (vacant), and thirdly, indirectly through the urban norms and regulations, engendering inefficient use of the available stock of serviced land. Conventional explanations attribute these three components to a lack of public resources (e.g. insufficient tax base), the speculative practices of landowners and developers and, the mis/over regulation of land use.

As shall be shown below there is a high degree of correlation among these three factors. The shortage of services overvalues the land that is selectively serviced, paving the way for rampant speculation. At the same time, the urban norms and regulations are usually enforced in Latin American cities to reserve well-serviced areas to 'highest and best' land uses, which in practice translates into the protection of the rich from the negative externalities accrued from 'undesirable land occupations' in areas where the urban poor could otherwise afford.

2.2.1. Public resources for the production of serviced land

Cutting short a long and well-known 'story', local and central governments apparently do not generate sufficient revenues to satisfy the demand for the provision of urban services to the lower echelons of the society. The contributing capacity of the poor is said to be in disproportion to the immense demand for the urbanization of unserviced urban areas.

The problem however, is more complicated if not perverse. Latin America has a sad history of fiscal inequity (regressive distribution of the tax burden) and of spatial misallocation of public expenses in favour of the high-income areas.

Over and above the proverbial problems of tax evasion and tax collection (maintenance of cadastres, etc.), there are issues related specifically to the (in)adequacy of the available fiscal instruments and most importantly the reluctance to actually implement them. One such problem worthy of mention is that of land value increments accrued from public investments which tends to be disorganized and biased in favour of areas occupied by higher income groups.

As for the misallocation of public investments, even the most uninformed observer of the Latin American urban scene, ought to be struck by the uneven spatial allocation of urban infrastructure and services. There exist a juxtaposition of very well

serviced areas side by side areas lacking basic amenities such as street lighting, pavements and public telephones. In some areas there are underground trains and others with no public transportation or even basic services like garbage collection and sewage systems.¹⁴ This pattern, characterised by vertical integration as well as a truncated spatial distribution of public facilities and services, has deep roots in the history of Latin American cities (Smolka, 1983).

This pattern of public allocation of services and facilities revealing a 'preferential option for the rich' can hardly be explained in pure economic terms.¹⁵ At the level of rhetoric, cynical rationalisations can be attributed to the provision of services by the State according to the spatial distribution of 'potential' tax contributors. This pastiche intra-urban version of a Tiebout like allocation, is often reinforced by rationales¹⁶ regarding urban productivity on the grounds that scarce capital must be invested in areas where the direct or indirect returns are higher. Direct returns refer to extracting, through fiscal means, the resulting increments in land value. Indirect returns, on the other hand, are derived from the attraction of other activities that reinforce the tax base. The scarcity of public resources implies an incapacity to service all the land that is needed, let alone that of already irregular settlements. As a result, the spatial allocation of public expenses is made in a highly discriminatory manner, meaning the overvaluation of certain serviced areas. This situation in turn opens the ground for various forms of clientelism and corruption, aggravating the already existing problems by further 'distorting' the equitable and efficient spatial allocation of such services.

As a result, the apparent scarcity of public funds to address the needs for services in the areas occupied by significant segments of the urban population is not only absolute but also quite relative for practical purposes.

¹⁴ One kilometre of underground railway costs about US \$ 2 billion, an amount sufficient to pave 22,330 km of urban streets. The accumulated deficit of paved streets in São Paulo over the last 15 years is about 6,000 km (Campos, 1992: 96).

¹⁵ For an interesting application of Myrdal's circular cumulative process in an institutional context depicting the idea of richer areas being more capable of pressing the local administration for investments, see Vetter and Massena (1982).

¹⁶ As preconized in recent World Bank urban policy reports. The argument is discussed in Doebele (1994) and criticized in Smolka (1994) and Jones and Ward (1991).

2.2.2. *Speculation with serviced land*

Given the limited supply of serviced land, public investment plays an essential role in determining the rate of appreciation of the land value more than other factors such as population growth and income. As is often the case, the simple rumour that a certain area may be eventually singled out for urbanization is sufficient cause for a significant increase in land value.

Owners of sufficiently large areas of land as well as developers often influence the process of land value appreciation.¹⁷ The dynamic is the following: "The land property speculation ... has adopted its own method of parceling up the land in the city. Such a method has worked as follows: a new site for a housing development would never be located immediately next to a previous one, which has already been provided with public services. Instead, an area with vacant land would be left between the new and the old site. Then, when the new site was sold off, the bus route put on to serve it would of course be an extension of the one serving the old site. The same happened with other public services: to reach the new site, they would have to pass through empty areas, which would thus immediately benefit from the new facilities" (Cardoso, 1973).¹⁸

In *The Access to Land by the Urban Poor* (1996), one of the most comprehensive and authoritative overviews of the Latin

¹⁷ There is a very high concentration of land ownership throughout Latin America, with roots deep in the history of colonization. As a result significant land concentration could still be found in the peripheries of many Latin America cities. In a survey valid for the late 60s, reports on more than half (52.25%) of Lima's potential land for urbanization was in the hands of only 11 groups or families, with a single owner (the Banco de Crédito) concentrating 9.65% of that land.

¹⁸ A similar tactic to "calentar el negocio" or "engordar la tierra" (*sic*) is described in Jiménez, Jones and Ward (1991). In many Mexican cities land ownership in the periphery is mostly *ejidal* (non-private but social ownership—that of the *ejidatarios*—as recognized by 1992 Mexican Agrarian Law's reform. This ownership was the product of 1910-1917 Mexican revolution; agricultural land was expropriated and given to peasants which became *ejidatarios*; in most Mexican cities, *ejidos* were reached by city sprawl giving way to land irregular occupations). Nonetheless, this dynamic also tends to be true. As it was deeply analyzed in the urbanization process between late fifties and early eighties within MCMA (Iracheta, 1984), new sites for middle class housing, more than 300, were developed mostly on *ejido* land. Even though it was required state intervention through expropriation of *ejidos* which could have implied a strong urban planning intervention, actually many of location decisions were taken by developers. Most of these housing developments were located along one of the most important metropolitan roads connecting Mexico City centre with state of Mexico municipalities. Having a connecting spine, developers located their housing sites separated ones from others so always was kept vacant land for future development. This also worked for bigger sites where the same rationale was applied dividing it in parts so it was possible to increase prices in each successive stage.

American experience, Trivelli sustains that, "Land speculation is responsible for urban land prices to grow faster in low-income areas in the urban peripheries than their income or even the land prices in high income areas" (Trivelli, 1996).

Independent of whether the retention of land results from an active or passive speculative practice, its effect on higher land prices is evident. As argued by Brennan, "The fundamental issue in most cities is more complex than a limited supply of urban land. The issue is more of one of speculation and inefficient land use, with large vacant areas in the central city held by speculators, forcing workers to live on the periphery and commute long distances to the central city" (Brennan, 1993).

The implied idea is of course that, should all that land be actually offered on the market, overall land prices would certainly be much lower than those presently observed, thus more affordable. But, as seen above, even in the absence of such processes responding to the expansion of the urban fringe, certain active speculative practices, associated with the process through which new land is serviced and incorporated into the market, may also generate higher land prices.

Although speculation is still an active factor it does not account for the significant amount of vacant land found within most Latin American cities. A significant portion of the existing vacant plots may also be attributed to other factors such as statutory restrictions affecting the amount of land owned by non-private/non-speculative agents, law suits among competing land users as well as the prolonged period of time between acquisition and occupation of land by low-income groups. In addition, account must also be taken of the changing base or conditions for speculation to occur as it affects the determination of land prices and of land uses.

In sum, the low-income population is pushed into illegality not only through 'artificially' inflated land prices caused by retention of land from the market but also due to the structure of land ownership.¹⁹ The underlying structure of land ownership (and to that effect some elements of the so-called super-structure like the legal system), and the pattern of economic development

¹⁹ The patrimonial nature of the Latin American states is historically rooted in the *concentration of landownership*. This is said to be responsible for distorting (through associated clientelist, corruptive, traffic of influence, etc. practices) the spatial allocation of the scarce public resources for land servicing and/or the retention (through rampant speculative practices) of serviced land from the market. Both practices lead to higher land prices and consequently push the urban poor into informality.

(inflation, etc.) are themselves major determinants of how land is actually made available for use, even the illegal ones!

2.2.3. Regulations and norms for the use of serviced land

Finally, recent experience has shown that the regulatory environment established by governments tend to be a deterrent to the servicing of land for both market and/or non-governmental initiatives. Moreover, the origin of many informal settlements can be traced directly to public (in)action, for example the lack of coordination of government agencies involved in programmes dedicated to the provision of serviced land to the poor.²⁰

There is a growing corpus of literature indicating that unreasonable urban norms and regulations coupled with complex licensing and approval procedures for land developments play a major role in determining the accessibility and availability of serviced land. They either directly increase the prices of land or indirectly affect the efficiency in the use of the existing stock of serviced land.

It is interesting to note that this argument is raised by representatives on both sides of the ideological spectrum be they anti-market skeptics or critics or pro-market supporters or apologists. The former argue that historically 'elitist' norms and regulations, with which the majority of the population cannot be reasonably expected to comply, have in fact been introduced to protect the privileges of the rich (Rolnik, 1997). The view of the apologists, epitomised in Chile's land reform deregulation, advocates that government intervention ultimately imposes higher transaction costs precluding market efficiency. It is easy to infer that both these arguments contribute to the explanation of the formation of illegal settlements (Sabatini, 1983).

Although both groups share the idea that the government regulations themselves are in the final analysis an important cause of informality, they differ when it comes to their perspective and most of all on policy prescription.

Market critics, short of giving way to government intervention, suggest instead a switch in favour of norms and regula-

²⁰ The reader may refer to the argument *vis à vis* the responsibility of governments in Ríofrio's (1991, p.30) criticism of the spontaneous character on the formation of informal settlements. The author points out that the origin of many of the *barriadas* can be traced back directly to the lack of coordination within the government: one public agency's initiative to designate land for a popular settlements not being in coordination with the agency responsible for the provision of public services.

tions with a protective character towards the poor, and also the need (through adequate legislation) to 'curb' the excesses and/or 'democratise' the market. An illustration to a more popular legislation is given by 'reverse' zoning²¹ implemented with relative success in many Brazilian cities to both, regularise or formalise existing informal settlements, as well as to designate land, facilitating low-income occupation, through less restrictive standards. Over and above its convenience for negotiations regarding public-private land use, providing increased bargaining power of the public interest impacts positively on prices by changing the market expectations of the land supply for low-income residential use.

Market apologists, taking a favourable view of the virtues of the 'one size fits all rule' prefer, in turn, measures that facilitate the free functioning of the market. The underlying idea is that unless required to correct eventual market 'distortions', or imperfections, government intervention should be kept to a minimum or better yet be restricted to facilitating market operations. This means in practice that, *ceteris paribus*, the less regulated it is, the more stakeholders (low-income urbanites included!) get for their money.

Finally, they also constitute aspects of an urban planning system that has provided no adequate solution to the demands of the urban poor for housing land.

Even though most land requirements for housing in Mexican cities are for the low-income segment of the population, urban plans tend not to designate enough areas to meet the needs of these social groups. They also tend to fail in defining adequate densities and infrastructure for this particular section of the population.

This sheds some light as to why around 60% of urban housing in Mexico is located on lands with some legal tenure problem, such as those produced outside the planning system and built by the people themselves. Within the metropolitan municipalities of MCMA, self-built low-income housing accounts for nearly 70% of total housing production.

It must also be considered that a huge area of the urban fringe of Mexico City subject to urbanization in the future is located on *ejido*²² land. Cruz (2000) has shown that 55.3% of the surface of the Federal District plus 35 of Mexico state's connur-

²¹ Urban division known as ZEIS or AEIS is a zone or area of special social interest.

²² For a description of *ejido* land, see footnote number 18.

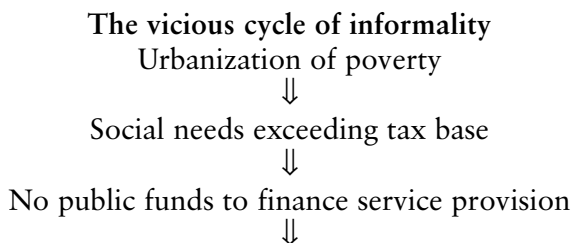
ban municipalities (totalling 5,100 km²) was ejido land (2,824.8 km²) at the time of the agrarian reform, falling because of expropriation to 41.6% in the middle nineties (2,119.6 km²).

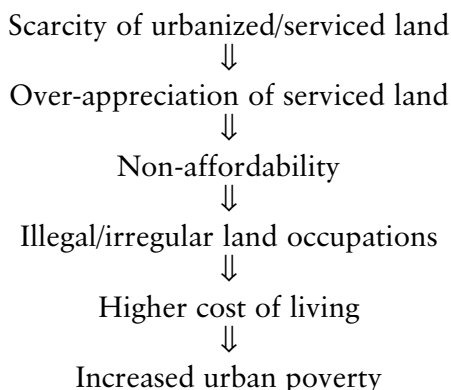
Surprisingly enough, although most urban plans consider that the bulk of urban growth will occur precisely in ejido land, they do not include specific strategies and instruments or procedures guaranteeing the shift of ejido land to private tenure. This creates the risk of an increasing number of irregular or even illegal settlements in the future and the incapacity of the urban plans to enforce norms contained therein.

3. Regularization: an adequate option?

Accelerated urban growth with a preponderance of lower-income groups compromises the tax base, with serious shortfalls in the budget allocated to the servicing of land occupied by these segments. A shortage of serviced land foments the speculative process, resulting in more retention of land from the market, which in turn implies higher land prices and inevitably the unaffordability of land. Excluded from (or unable to face) the formal market due to some extent to prevailing urban norms or land conditions, the poor continue to demand serviced land.

The need to regularise (provide services to) established illegal settlements in a post-facto condition reduces the capacity to promote a more efficient allocation of public investments. Furthermore, regularization places onerous demands on the already scarce resources available. The higher the prospects for the future regularization of illegal settlements, the higher the premium landowners may charge for unserviced land, contributing to the exclusion of the poorest of the poor. The resulting hierarchy in the spatial distribution of services with its steep land price substructure adds a spatial component to urban poverty and social inequities. This process is described in the diagram below.





From the perspective of most poor urban social groups of Mexico, illegal settlements on both *ejido* and privately owned land may be seen as products of massive processes of uncontrolled urbanization. In order to satisfy the basic human need for a shelter these groups have recourse to whatever means at hand (thus configuring another set of rules and a different logical standpoint) to compensate for what neither the State nor the market could provide; an adequate answer to this problem.

There is another vicious circle which appears as a result of traditional regularization policies in MCMA. It has been noted since the early eighties, that once the state regularise land tenure and introduces basic services, land prices increase as well as all sorts of maintenance costs (from land taxes to water supply or local 'cooperations' for public works) leading to both, the site's consolidation and new urban pressures for increasing densities or land use changes in favour of higher urban standards. As a result, it also emerges pressure for social classes changes in favour of the better off, provoking out migration of the poorest population which tend to 'invade' or acquire an illegal plot in new sites giving way to the circular cumulative process of social segregation (Iracheta, 1984).

4. The need for regularization initiatives

The Mexico City metropolitan area has a current population of around 19 million settled in some 180 thousand hectares, implying a rough density of 105 inhabitants per hectare. Around 50 percent of population is located within the boundaries of the Federal District, and the remaining half within the municipalities of the state of Mexico.

Demographic scenarios projected for 2020 envision a population between 22 and 26 million inhabitants. Almost all of the new population will settle within the municipalities of the state of Mexico, which have been facing a very strong pressure of urbanization since the late forties.

Historically, the financial resources required to face such a process have been unevenly distributed, favouring the Federal District over the state of Mexico. With all indicators suggesting that these tendencies will continue, the main consequence will be the increasing peripheral character of the latter, which implies greater concentration of the urban poor and a greater incidence of problems *vis-à-vis* land tenure, transport, employment and environmental deterioration within this part of the metropolis.

From an economic point of view, the disperse pattern of settlement along the metropolitan fringe specially the illegal ones mostly in inadequate locations, and the deficit in infrastructure, multiply costs of urbanization *vis-à-vis* a planned development, with the consequence of an inefficient allocation of social resources for urban development. A clear example of the latter is Valle de Chalco within MCMA. Introduction of basic services represented several times the regular investments needed for normal sites, because this immense illegal settlement is located in land with almost no mechanical capacity for building. Valle de Chalco has grown from 360,000 inhabitants in 1980 to 1'312,000 in 1995 and to 1'679,000 in 2000. In 1995 it covered around 9,240 hectares with densities of 142 inhabitants per hectare (Iracheta, 1999). It has been needed special public works to avoid flooding or to support water supply and sewerage pipes. (See Hiernaux, 1995.) The same could be said regarding Nezahualcoyotl, the first huge illegal settlement of MCMA which developed from late fifties on land of the former Texcoco lake reaching around 1.5 million population.

From a social point of view, urban disorder generates growing costs, which the urban poor can ill afford affecting their standard of living. Upon becoming owners in irregular settlements, they lose an important part of their income. This happens through payments for the illegal acquisition of a plot of land, additional costs for its subsequent regularization, the payment of higher costs of urban services and their involvement as labourers in participatory public works as the only way to access to basic infrastructure, whereas middle and upper class individuals pay for serviced

land under competitive schemes of pricing, technology and quality.

From a political standpoint this settlement pattern provokes a number of negative effects which have led to an increasing number of urban protests, not only by the community lacking basic services or suffering of poor housing, but by many social organizations and political parties which increasingly confront authorities because of urban settlement issues. The average number of street protests that occur daily in the Federal District increased from 1.7 during 1993 to 6.9 in 1995 (Iracheta, 1997) to 8.1 during 1998, involving the participation of more than 1 million irate citizens. This process explains, at least partially, the adverse electoral results of the Institutional Revolutionary Party (PRI) in local elections in many municipalities both in the state of Mexico and the Federal District in 1996.

The persistence and magnitude of urban disordered processes within MCMA constitute the culmination of years of a lack of political will of successive governments to promote innovative initiatives and preventative policies with a more integrated vision. It is valid to state that policies have not evolved adequately to keep up with the growth of social problems and demands. This has been as much the case of legal regularization of land tenure as of the provision of serviced land to the poor.

The policy of regularization has gained acceptance in the face of urban population explosion, urban poverty, lack of public resources and ingrained speculative practices. This has been associated with the analogy of the eggs and the omelette, meaning that once the eggs have been broken (the consequent inexorability of illegal, irregular, informal, clandestine activities to access and occupy urban land), one should try to make an omelette (recognising the creative energy embedded in such practices to access and occupy urban land).

In support of these ideas, it is often argued that the cost of regularizing the existing settlements (from titling, redistricting and service provision), ranging from US \$1,000 to US \$2,000 per family (in the case of Favela Bairro in Rio de Janeiro, from \$2,000 to \$4,000), is much lower than that of providing new housing on serviced land. Such a cost varies between \$10,000 to \$20,000 per house.²³

²³ Calderón (1997) refers to Recife's regularization programs in which the cost of adapting land was a multiple of 3.2, 4.4 or even up to 10 as much as the cost of provision of housing.

In Mexico, these policies are also supported in three main facts: first, there is almost no long term credit for poor families; second, it prevails a salary increment control policy which already last for almost 20 years. Finally, inflation has been greater in a long term basis (two decades) compared with poor families income growth. Consequently, lower income families have not much opportunity of buying new housing.

The cost-effectiveness of such regularization programmes results from three factors:

1. The pre-existence of houses. The latter are often considered as being built faster, cheaper and of better quality than those produced in public programs;
2. The densities are higher in such settlements. These land use patterns are treated as acceptable in light of the fact that they already exist, *a fait accompli*.²⁴
3. The provision of services to land under regularization schemes often falls short of the usually high minimum standards established for new land developments since the services provided are either incomplete or dependent on the application to alternative 'solutions' or technologies considered unacceptable for new middle and upper class formal settlements.

Tenure regularization policies in Mexico have been practically the same over the last two decades, rendering poor results. They have faded over time to such an extent that in MCMA, there is almost no public land left. As a result of this shortage of public land, the State and local governments are being forced to acquire them at market prices.

5. Metropolitan illegal/irregular urbanization.

An approach on the size of the problem

The amount of irregular/illegal land tenure within MCMA has been an important question mark during the last two decades. As has been stated in several research works (Iracheta, 1984, 1987, 1997) the only truth is that no one knows the truth, being the available data at the best an approximation on the size of the problem.

²⁴ Land densities in informal settlements are higher than those in formal areas (Angel, 1982: 16). The poor constitute 40 to 50% of the urban population but consume 10 to 20% of the land. An argument however could be raised regarding the elitist or unreasonable densities prescribed in most urban regulations (Dowall, Bertaud).

Some facts are against a more precise account of this phenomenon: first, there is not a clear concept of what actually is accountable as irregular/illegal land tenure, taking into account that any, even the smallest land planning statutory fault will put a plot as irregular. On the other hand, the invasion or illegal purchase of a piece of land and/or its occupation constitute also and irregular/illegal act. Secondly, there is a problem of dynamics; the velocity of irregular/illegal land occupation in most Latin American cities and clear within MCMA is so high that there is no chance for government to follow the pace of this phenomena. Third, there is a question of who is accountable for regularization purposes bearing in mind that it is a policy directed to attend the urban poor leaving aside a lot of other land tenure irregularities/illegalities. Finally, there is a political side of this problem related to government's "do nothing strategy" because of political gains or because lack of alternative policies to deal with low income urban land demands.

What is clear is that government data and information about urban land tenure irregularity/illegality is partial, unclear and comparatively inconsistent; therefore there are assumptions about the size of the phenomena but no confident and actualized data.

Because of the latter and bearing in mind that pressure of urbanization within MCMA is greater in the municipalities of the state of Mexico, the state government conducted some studies in order to identify low income land tenure trouble spots; that is, new squatting or would-be squatting areas as well as those irregular settlements where the community is pressing for regularization.

As of late 1998, there were 127 spots or areas with major squatting or in risk of irregular occupation, comprising around 8,550 hectares for a population of approximately 4.2 million. Apparently, between 40% and 50% occurs on *ejido* land, whereas the rest were privately owned.

Settlements pressing for regularization totaled 71, with a total area of 1,300 hectares for a potential population of around 650,000. These places had different degrees of occupation but all were afflicted by problems regarding land tenure as well as a lack of most urban services. More than 80% of this settlements

were located on private property, the rest being evenly divided between *ejido* and government-owned land.²⁵

In summary, there was a demand for regularization of land tenure in areas where there was a threat of illegal occupation or in already illegally occupied land. The government detected around 9,868 hectares as 'red spots' within the municipalities of the state of Mexico. This leads us to some conclusions:

- Firstly, there is more land under pressure of illegal urbanization than detected by the government of the state of Mexico since the research of the state government do not consider to be 'red spots' places with potential for illegal occupation in the near future, neither 'ant' invasions, nor illegal occupation in very small settlements. There is also irregular/illegal land occupation within Federal District, although to a lesser degree, which were not included in the research. Finally, the state government is only responsible for the regularization of privately owned land. The regularization of *ejido* land on the other hand is a federal responsibility.
- Secondly, it is evident that the supply of serviced land to the urban poor has been mostly neglected by the formal market and by the government within MCMA, since almost all demand has been attended by the illegal market.
- Thirdly, urban squatting has become 'institutionalized' to such a degree that invasion and illegal land purchase are normal means for city growth. These settlements have been cropping up throughout the whole metropolis, especially in the peripheral municipalities.
- Irregularity and illegality of land tenure as well as urban squatting, are the products of the so called 'illegal', 'irregular', 'informal' or 'parallel' land markets, which sprang up in response to massive demands for low-income land for housing.
- Finally, from an economic standpoint, this 'illegal market' offers a product suited to the particular needs of the population involved, albeit outside of most legal and planning rules. In order to meet with people's income level it offers housing plots with no facilities (water supply, sewerage, drainage, pavement, energy, etc.), lacking permits and licenses for land use and buildings and are quite often located in poor environmental sites or worse under conditions which violate elemen-

²⁵ This government analysis is consistent with some scholars research; see for instance Cruz (1999).

tary environmental requirements. Nevertheless, this is a lower price market that satisfies the massive demand for space by the urban poor.

6. The apparent higher relative price of illegal to legal land

It seems to be general knowledge that prices of legal urban land are higher than illegal, hence the dramatic growth of irregular/illegal urban settlements. There is however information contradicting the latter prompting the need for further explanation.²⁶ The municipalities of the state of Mexico provide a clear example of this.

The main features of the analysed cases by the government of the state of Mexico²⁷ are:

They are located within metropolitan municipalities of the state of Mexico with a strong presence of irregular settlements. None of the family plots had public facilities nor were there social expectations for the provision of these facilities by the government in the near future. These places are irregular/illegal, privately owned, and are located in 12 different metropolitan municipalities, along the periphery of the MCMA.

Land market prices were based on square metres and family plots. Cash payments made by colonos averaged 174 pesos (US\$ 20.5) for one square metre, with extremes of 38 and 312 pesos. Vendors usually offered terms requiring 30% in advance and the rest in around 16 monthly installments. This implies that for an average 120 m² plot without legal tenure, outside of the planning system and lacking basic services, a family had to pay at that time (1998) around 21,000 pesos (US\$ 2,460), equivalent to approximately 700 days of minimum wage.

At the same time, a similar investigation was carried out in 9 *ejidos* located within 4 municipalities having the state government the intention of promoting projects called 'plots with services'. These *ejidos* share similar features with those mentioned above; that is to say, they are irregular/illegal sites, are located on bare land and are surrounded by informal settlements.

It was detected that prices set by *ejidatarios* (stakeholders in the *ejidos*) for the sub-dividers were around 66 pesos (US\$

²⁶ Recent investigation on Rio's *favelas* has found that labor costs to build are at least 10% over the formal market. Telephone interview with Pedro Abramo, 1999.

²⁷ The study was carried out by the Secretary of Urban Development and Public Works of the State of Mexico government in late 1998.

7.8) for one square metre, with extreme prices of 20 and 120 pesos for large plots before subdivision for housing purposes. If we subtract 20% of the total area allocated to the establishment of roads and common areas, prices will move upwards to an average of 79 pesos (US\$ 9.3) per square metre with extremes of 24 and 144 pesos.

Consequently because of location specific features, there is an important difference between the analysed cases (between US\$ 20.5 and 9.3 per square metre. US\$ 2,460 and 1,116 for one 120 square metre plot respectively) being both irregular/illegal sites. Whereas the first represents around 700 minimum salary days in order to get a 120 square metre plot, the second represents approximately 316 days of minimum wage which is actually paid by the low-income population within the state of Mexico municipalities belonging to MCMA. If an average of 25% of yearly income is devoted to housing (US\$ 320), under the above prices one individual will need around 8 or 3.5 years to pay a plot of irregular/illegal land.

Typically in most Latin American cities, when unserviced land located in fringe areas is designated as urban, it is valued at US\$ 5 to 20 per square metre. The provision of all services costs about US\$ 20 to \$30 per square metre, but the market price, depending on location, is usually between US\$ 30 and \$100 per square metre. At the average price (US\$ 65), a 120 square metre lot of serviced land is equivalent to around 2,210 days of minimum wage in Mexico (1998), representing six times the annual income of an individual with minimum salary. In most Latin American cities it represents at least three times the annual income of two-thirds of poor urban families. In these cities where at least 25 percent of the population lives below poverty line, they can barely meet the cost of survival, let alone pay for land.

In order to analyse the possibility to carry out the "plot with services" project as joint venture between the state of Mexico government and developers, it was asked them to analyse basic costs including land and the provision of water, sewerage and road tracing, under similar location and *hinterland* conditions of irregular sites. As a conclusion they offer the government prices closer to those charged in the illegal private sites above analysed (the highest in comparison with *ejido* cases), considering that administrative costs (permits and licenses) were assumed by the government and that projects were located in sites similar to those analysed before.

That is to say, with the promotion of the state government, private developers have shown that there is possible to hit illegal land market by substituting it. Of course, it is clear that prices in specific locations are driven by specific conditions, so it can not be generalized the idea that illegal land market prices are higher than those prevailing within the legal market.

Nevertheless it is worthy to analyse why is it possible that an illegal plot of land price could be higher than a legal one?

Firstly, the shortage in the supply of low cost land has as the immediate consequence the overpricing of serviced land. In fact, the provision of services usually increases the price of land by a multiple of the cost of the services. The same occurs within non-serviced land market in the sense that greater shortages push prices up.

Secondly, it could be assumed that there is an extraordinary profit collected by illegal vendors derived from the difference between the original cost of bare land and the final price imposed upon colonos. Such a difference is a direct consequence of the shortage of low-income land, resulting in the overvalue of the available land. As was stated before, the supply of land for low-income housing is practically non-existent, enabling illegal developers to 'plan' the supply and segregate land according to their own interests. It seems therefore that the informal land market in MCMA is much more organized than the state government is willing to admit.

Thirdly, it can also be assumed that the poorer segments of the population seeking a plot of land are to a large extent, uninformed of the alternatives regarding land supply for housing throughout the metropolis. This lack of information drives those seeking land to the local supply, which is monopolistic in nature. This view is based on the low levels of literacy and limited mobility of low-income social groups, which tend to reduce their *hinterland* since not much consideration is given to more distant locations.

Finally, there is a 'security effect' for colonos looking for a housing plot in settlements where they have relations with family or friends. This could imply their willingness to pay a sort of differential rent in the interest of the security enjoyed due to the proximity of these close relations.

This could also hint to the existence of a culture of land tenure irregularity. In short, low-income groups view irregularity

as not only 'normal', but also as the most common way of getting a plot of land for the family.

The message transmitted to younger generations and others who seek housing has been clear: settle wherever you can and don't worry, because some day the State will regularise your lot. This prevalent cultural attitude reinforces the perverse nature of the vicious cycle of land value increments: the higher the expectation regarding the eventual regularization of irregular settlements, the higher the price that land sub-dividers may charge to sell unserviced or partially serviced land. Thus, the poor end up paying relatively high prices for land.

There seems to be a widely accepted view that legal land prices for the poor cannot be competitive with those of illegal land markets. However, it is also likely that in many cases, as above analysed, poor families pay more for an illegal plot of land than for a legal one with similar conditions due to the monopolistic character of irregular/illegal land markets and the absence of state land supply.

7. Some policy implications

Some important policy corollaries relate to this anticipation of land appreciation resulting from expected future regularization and generally from state (in)action and the urban land formal market failure to offer serviced land for the urban poor.

7.1. *General implications*

1. Public actions to regularise land have not solved the problem of land access for the urban poor; instead, they are really a part of the problem. Greater regularization feeds into the "industry of irregularization" to the point that one must seriously consider a deep restructuring or even the termination of this policy and the creation of others that can offer serviced land to those who need it.
2. This process also exposes a fallacy regarding the (in)capacity of the poor to pay for some urban services since they are already paying for at least a part of these services, albeit to the landowner/sub-divider as a private land tax that could otherwise be collected publicly. The focus of the discussion is therefore askew. The issue is not so much whether (or not) the poor should pay, but rather how they should pay and the lim-

its of such payments. For example, should low-income families benefiting from regularization programs pay for services directly, or should the land value increment generated by the improvements be extracted from the landowners through taxation and other fiscal policies. The latter point sheds new light on the limits and even the perversity of some conventional subsidy schemes as well as on the difficulties of financing services.

3. The traditional framework within which the phenomenon of irregularity-regularization of land tenure has been studied in low-income urban districts in Mexico (as for the rest of Latin America) needs to be re-evaluated.

7.2. Implications for Mexico City metropolitan area

1. The supply of serviced land to the urban poor has to be dramatically increased. The key question is: if Mexican cities, especially MCMA, are surrounded by *ejidal* land, also subject to strong urbanization pressure, would it not be more convenient to increase supply by privatising this land with the participation of the *ejidatarios*. This would reduce the monopolistic character of the private land in the urban periphery where prices are not affordable for poor population. In accordance with market mechanisms, a substantial and regulated supply of land to these social groups could push average land prices down, also reducing the irregularity of land tenure.
2. The legal framework of urban planning should be revised in order to make it more practical and operative. This implies the need for an effective planning system regarding land, in the sense that urbanization should only take place where established in the relevant urban plans. If the land supply for the poor is augmented through the legal opening of the *ejidal* land market in planned areas, prices will tend to conform to the buying power of these low-income segments of the population.

Finally, within these policies, the value added associated with the *ejidal* land distribution will become a major issue. One should avoid repeating past experiences in which developers and the State became actual beneficiaries of the expropriation of *ejidal* land, at the expense of the *ejidatarios* and *colonos*, in spite of the

fact that they were supposed to be the main beneficiaries (Iracheta, 1984).

8. Conclusions

Not denying that the available degrees of freedom are slimmer than would be desired, and that the realities of urban poverty,²⁸ the lack of public resources and the presence of self-interested landowners can hardly be overcome in the short or even medium run, this paper argues that:

1. Although the problems imposed by absolute poverty can hardly be met by policies other than those of direct or indirect subsidy, it is no longer the main reason why serviced land is not affordable. The price of serviced land, affected by the 'mode' in which the urban land market is structured, enhances the non-affordability issue. In other words, it is not absolute but relative urban poverty, which impedes land access that lies at the heart of the problem.
2. The lack of public resources to service land is also relative; the main bottleneck seems to be more in the distribution of existing resources and most importantly in the managerial and operational capacity of the public agencies or providers of services to mobilize the necessary resources.
3. Finally, with respect to the retention of serviced land from the market, the problem seems to reside less on the speculative predatory behaviour of some large landowners and more on the institutional and juridical or legal environment dictating land use.²⁹ Even in the absence of land speculation, or the monopolistic behaviour of large landowners for that matter, the combination of urban poverty with lack of public resources would be sufficient to account for the phenomenon of informality because poor people would have no means to service land on their own.

The problem of how to supply land to the poor in Latin American countries cannot be resolved within the parametres of the prevailing regularization programs. It is the understanding of the

²⁸ Actually, there is a substantial contingent of urban poor, many with no means to buy land even at zero cost!

²⁹ Under certain conditions, less than predatory speculation may play a positive role in the regulation of the volatile land markets.

authors that this line of reasoning is fallacious because it does not account for many other generalized costs such as:

1. Many of the settlements carded for regularization are located in areas originally unfit or too costly for urban occupation *et pour cause* of no interest to the private market. In São Paulo, 49.3% of the *favelas* are located on the margins of rivers, 32.2% are subjected to periodic flooding, 29.3% on steep hill-slopes, 24.2% on over eroded land, and 0.9% in garbage dumps or sanitary land fills. This data is valid for 1987 when the population in *favelas* represented 8% of the total population, in 1993 the population of those living in these shantytowns reached 19.8%. Sometimes, as in the case of many *favelas* located on the hill slopes of Rio, regularization costs exceed by far the "break-even" cost. In Jacarezinho, regularization costs more than \$10,000 per family (Maricato, 1996).

"Although squatters' ingenuity and imagination in solving their own shelter problem under unfavorable conditions have frequently been praised, the majority of their dwellings are unfit for human habitation"(Brennan, 1993, referring to Mayo and Dowall).

2. Many times no real titles are effectively provided but only a *titulo supletorio* or *concessão de direito real de uso*, which are not of the same value (Bolívar). These titles are liable to 'red linings' or prejudices from financial agencies. In addition, given the amount of irregular/illegal plots of land and the absence of fresh ideas to multiply the provision of titles, decades would be needed only to solve present problems.
3. The services provided in these areas are too costly or of low quality, unreliable and difficult to implement, an example of this is garbage collection in narrow streets or the pavement and building of infrastructure on sites with ill mechanical conditions or particular location risks (e.g. flooding).
4. Finally such curative policies feed into the industry of informality or *la industria del precarismo* (PRORIENTE, 1998). That is to say, they do not take into account the comparable cost to society, particularly if intergenerational considerations and social well being are included. The truth of the matter however, is that public officials in fact do not have much of a choice. Even if there were cost-effective preventive policies, the political pressure to regularise existing settlements is hard to avoid.

5. Besides the adverse feedback of these programmes, which reinforces the cycle of irregularity, there are also serious questions regarding their financial feasibility. In Mexico, as in most other places in Latin America, regularization programmes tend to be more curative than preventive, and depend as a rule on extra-budgetary allocations and even on the participation of multilateral agencies. Both CORETT (the Federal Commission for Regularization of Land Tenure) and CRESEM (the state of Mexico's Commission for the Regularization of Land Tenure) have been working more on the legal side of the problem, and not on the prevention of illegality, the provision of serviced land to the poor or on the creation of land reserves. CORETT is responsible for the regularization of *ejidal* land, whereas CRESEM is responsible for the regularization of private land. Neither of the two has achieved its objectives enshrined in its respective programme. Instead, these two bodies have become part of the irregular land problem, not only due to their limited actions, but because they have focused on but one of its manifestations or consequences, that is to say, illegal tenure. Worthy of mention is the apparent involvement of some of their officials in unclear land transactions.
6. This problem exposes the lack of coordination and an effective fiscal policy, particularly property taxation, with its obvious implications for a suitable land market. Successful urban land management cannot be achieved solely through regulatory means. Greater fiscal control of land markets is needed, principally at the local level. This is a pre-condition for an effective mobilization of land value increments with the intention of generating urbanized land, instead of acting as a surrogate for a more comprehensive taxation of land values.
7. Existing fiscal instruments governing land in Mexico, although quite diverse and rigorous, are politically sensitive issues. They face great practical limitations in their capacity to draw on land value increments. That is the case of land property taxes (mainly *impuesto predial*) which in general were not designated as a means to capture land value increments or as instruments for the organization of land use. This explains why Mexico is considered as one of the less advanced countries in the collection of property taxes. With the proper institutions and regulatory environment the servicing of land could, at least in principle, be financed indirectly or directly by private agents. Illustrations to that effect can be provided by the con-

cessions given to private utility companies in most Latin American countries at the turn of the century and value capture schemes like the *Contribución de Valorización* as in the case of Colombia.

8. Over and above these technical and political constraints, we must consider the importance of cultural and managerial obstacles. One of the assumptions behind the phenomenon of irregularity is the scarcity of resources. Besides the obvious question of unfair and inefficient distribution of the tax burden as well as the spatial allocation of existing resources, the problem is not so much of lack of resources but more of managerial capacity and political will. Many important services such as water, electricity, telephone and public transport are in effect provided on a user-charge basis, thus, the issue is why providers of public utilities, be they public or private, are not able or willing to extend quality³⁰ of services to all land. Furthermore, the lack of public resources *per se* is not sufficient justification since a resource-poor public agent could still hold sufficient clout to force affluent private landowners to service the land prior to or as a pre-condition for its disposal on the market. This is evidenced nowadays by new alternatives involving private partnerships as in the case of land-readjustments derived from state of Mexico's government *PRORIENTE* program.³¹
9. Planners must work with the fiscal administrators to overcome the lack of communication that has long separated these two groups. Some promising steps have already been taken, as many public employees are aware of the urgent need to integrate fiscal policies and urban planning within the framework of an integrated strategy.
10. Finally, the issue must be considered in a broader context. Both the government and the private sector must understand that land has become a strategic issue within the dynamic process of urbanization-metropolization. The main question pertains to the need on one hand, to regulate land markets and on the other, to face the huge demand for serviced land with novel approaches. It is also necessary to prioritize this issue which has had until now been considered anathema in political and urban policies.

³⁰ Many services may be available but not with the adequate quality.

³¹ This program has been designated to order and develop the state of Mexico's east region which comprises around 5.5 million population (1997) being the most pressured area within MCMA.

In sum, the analysis of urban land in Mexico as in most Latin American cities, has to expose the multifaceted requirements for the formulation of a more effective policy to provide serviced land to the poor. Such an effort requires an improved level of co-ordination of existing policies related to finance, territorial reserves, regularization and land market dynamics.

Many fiscal and regulatory instruments are sufficient in theory but not in practice. The problem is not so much a lack of resources as much as it is the incapacity to mobilize the existing resources into a comprehensive program, linking regularization with fiscal policy. One key question is: if servicing the land adds so much value, why is it so hard to find private agents or developers in the formal market who are willing to invest in the low income land market? Why is it deemed unprofitable in spite of such handsome 'mark-ups'? There is no easy answer, other than vague indications regarding risks in the process due to complicated judicial and legal problems, unclear rules of the game, the high cost of approval licenses, lack of information about procedures, and concerns about low profitability over time.

Bibliography

Angel, Shlomo, et al. ed. (1982), *Land for Housing the Poor*, Singapore, Select Books

Boltvinik, Julio (2000), "El error de Levy", in *La Jornada*, february 24th.

Brennan, Ellen M. (1993), "Urban Land and Housing Issues Facing the Third World", in John D. Kasarda and Allan M. Parnell (eds), *Third World Cities: Problems, Policies and Prospects*, Newbury Park, CA, Sage Publications.

Calderón, Julio (1997), *Políticas de regularización y mercado de tierras en América Latina*, Mimeo.

Campos, Cândido Malta (1992), *Cidades brasileiras: Seu controle ou o caos*, São Paulo, Nobel.

Cardoso, Fernando Henrique (1975), "The City and Politics", in Jorge E. Hardoy, ed., *Urbanization in Latin America*:

Approaches and Issues, New York, Anchor Books/Doubleday.

Clichevsky, Nora (1997), *Cambios recientes en las políticas del estado sobre el mercado de tierras urbano*, Mimeo.

Cruz, Maria Soledad (1999), *Propiedad, poblamiento y la periferia rural en la Zona Metropolitana de la Ciudad de México*, UAM-A, mimeo.

De Soto, Hernando (1989), *The Other Path*, New York, Harper and Row.

Doebele, William A (1994), "Urban Land and Macroeconomic Development: Moving from 'Access for the Poor' to Urban Productivity", in Gareth Jones and Peter M. Ward, *Methodology for Land and Housing Market Analysis*, Cambridge, Lincoln Institute of Land Policy.

Durand-Lasserve, Alain with Valerie Clerc (1996), "Regularization and Integration of Irregular Settlements: Lessons from Experience", *Urban Management Programme Working Paper Series 6*, May, Kenya, UNDP/UNCHS/World Bank.

Gobierno del Estado de México, Coordinación Ejecutiva del PRO-RIENTE, Secretariado Técnico (1998), *Problemática, objetivos, políticas e instrumentos de suelo del PRORIENTE*, enero, Toluca, México.

Hiernaux, Daniel (1995), *Nueva periferia. Vieja metrópoli: El Valle de Chalco*, Ciudad de México, México, UAM-X.

Iracheta, Alfonso (1984), *El suelo, recurso estratégico para el desarrollo urbano*, Toluca, México, GEM-UAEM.

Iracheta, Alfonso (1987), "Algunas reflexiones en relación al problema del suelo para vivienda en la ZMCM", *Metropolis 87*, Mexico, SEDUE.

Iracheta, Alfonso (1997), *Planeación y desarrollo, una visión del futuro*, México, Plaza y Valdés Editores.

- Iracheta Alfonso (1999), *La urbanización metropolitana descapitalizada: El Valle de Chalco*, Zinacantepec, El Colegio Mexiquense, mimeo.
- Jiménez Huerta, Edith (1995), "Mercado informal del suelo para vivienda en Aguascalientes", in *Cuadernos de Trabajo: Desarrollo Social*, Gobierno del Estado de Aguascalientes, noviembre-diciembre, Oficina de Coordinación de Asesores.
- Jones, Gareth, Edith Jiménez and Peter Ward (1991), *The Price of Uncertainty: The Evidence for Land Valorizations in Mexican Cities and Implications for Land Policy*, Cambridge, Fitzwilliam College.
- Lovera, Alberto (1996), *Mercados de tierra y vivienda para los sectores de bajos ingresos*, Mimeo.
- Maricato, Erminia (1996), *Metrópole na periferia do capitalismo: Ilegalidade, desigualdade e violência*, São Paulo, Editora HUCITEC.
- Mayo, Stephen and Shlomo Angel (1993), *Housing: Enabling Markets to Work with Technical Supplements*, World Bank.
- Moura, Alexandrina (1990), *Terra do Mangue*, Massangana, Recife.
- Ríofrío, Gustavo (1991), *Producir la ciudad (popular) de los 90: Entre el mercado y el Estado*, Lima: DESCO.
- Rolnik, Raquel (1997), *A cidade e a lei: Legislação, política urbana e territórios na cidade de São Paulo*, São Paulo, Nobel.
- Rolnik, Raquel et al. (1990), *São Paulo: Crise e mudança*, Prefeitura de São Paulo.
- Sabatini, Francisco (1983), "Precios de suelo y tendencias de la economía: El caso de Santiago", en *Revista Vivienda* 8(3), México.

- Sabatini, Francisco (1997), *Liberalización de los mercados de suelo y segregación social en las ciudades latinoamericanas: El caso de Santiago*, Chile, Mimeo.
- Siembieda, W.J. and E.L. Moreno (1996), *Expanding Housing Choices for the Sector Popular: Strategies for Mexico*, July, Mimeo.
- Smolka, Martim O (1994), "Velhas Novidades na Agenda do Banco Mundial para a Política Urbana nos anos 1990s", in M. F. Gonçalves, *O Novo Brasil Urbano: Impasses, Dilemas, Perspectivas*, Editora Mercado Aberto.
- Smolka, Martim O (1983), *Estruturas Intra-Urbanas e Segregação Social no espaço: Elementos para uma Discussão da Cidade na Teoria Econômica*, IPEA/PNPE - Série Fac-símile, novembro, núm. 13.
- Trivelli, Pablo (1996), "Access to Land by the Urban Poor: an Overview of the Latin American Experience", *Land Use Policy*, 3: 100-121.
- United Nations Development Program (1992), *Cities, People and Poverty: Urban Development Cooperation for the 1990s*, New York, UNDP.
- Vetter, D. and R. Massena (1982), "Quem se apropria dos benefícios líquidos dos investimentos do Estado em infra-estrutura urbana? Uma teoria de causação circular", in L. Machado da Silva, org., *Tópicos sobre o uso da Terra*, Rio de Janeiro, Zahar.
- Yeung, Yue-man (1991), "La geografía en la era de las megaciudades", <<http://www.unesco.org/issj/rics151/ymyeung.htm>>

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