In Mexico 2006
Current Housing Situation
in Mexico, 2006

Prepared by:
Centro de Investigación y Documentación de la Casa (CIDOC)
and Sociedad Hipotecaria Federal (SHF)

With support from:
Comisión Nacional de Vivienda and
Harvard University Joint Center for Housing Studies
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Prepared by CIDOC and SHF with the support of CONAVI*, SEDESOL, and the participation of INFONAVIT, HIC and other institutions related to the housing sector.

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CIDOC
Centro de Investigacion y Documentacion de la Casa

SHF
Sociedad Hipotecaria Federal

CONAVI
National Housing Commission

SEDESOL
Secretaría de Desarrollo Social

HIC
Habitat International Coalition

* As of June 27, 2006, with the passing of the New Housing Law, the National Housing Commission changed its name from CONAFOVI (Comision Nacional de Fomento a la Vivienda) to CONAVI (Comision Nacional de Vivienda).
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Presentation

For the third time, through the work of an interinstitutional team, we are presenting our annual study of the housing situation in Mexico to become familiar with it, and thus evaluate the achievements as well as challenges that remain therein, and ensure the correct orientation of the policies derived from the Federal Housing Program that President Vicente Fox Quesada created during his administration.

From its start, the study called “Current Housing Situation in Mexico” was designed as an instrument for all those involved or interested in the sector. The conditions of housing development in our country are revealed through the analysis, evaluation, and synthesis of the markets’ performance, production, and growth, presenting the players in the political sector, as well as developers, promoters, researchers, and academics, with an updated and readily available X-ray of this industry.

The study was prepared through the collaboration and experience of institutions related to the sector, enabling us to review the variables that have a significant effect and contribute to the development of housing production by indicating the findings, achievements, and existing challenges.

The obvious increase in housing production, the changes to mortgage lending made by financial institutions, and the appearance of new instruments creating opportunities for other segments of the population, make it necessary to tackle the remaining challenges which are crucial to enabling the continuity and expansion of the programs.

This year, the “Current Housing Situation in Mexico, 2006” takes an in-depth look at the transcendence of the urban phenomenon—the development of a city and of the public space, which should precede the generation of housing and not the other way around.

Future challenges include a wide range, notably emphasizing the importance of linking housing to the city in order to generate inhabitable spaces for the citizen, create adequate urbanization schemes which offer land for housing at all levels, and a better opportunity for growth and development, in addition to encouraging the use of sustainable technologies.

The transcendence of the social Production of Habitat has led us to devote a section to acknowledging its importance and discover the alternatives which support its incorporation into the urban network, promoting housing construction and improvement through new financing options.

Concerned about homebuyers’ perception and satisfaction, Sociedad Hipotecaria Federal (SHF) carried out a survey among the recipients of its loans in nine cities of the country to learn their opinion of their dwellings and cities. The results will help redirect the actions of urban development and housing, aiming towards greater housing satisfaction.
We are grateful for, and acknowledge the interest and effort of all those involved in the creation of this third edition—particularly, SHF Director Guillermo Babatz Torres, and CONAVI Commissioner Carlos Gutierrez Ruiz—as well as the commitment and contributions of Mayra Lazcano Martinez and Ninel Escobar Montecinos, who participated very actively in the study.

Intense discussions and productive working tables resulted in the integration of highly important topics which we know will lead to actions that will guarantee the continuity and improvement of housing in our country.

Sara Topelson de Grinberg
Coordinator General of Fundacion CIDOC.
Acknowledgements

This edition was made possible through the participation of the following organizations and individuals who contributed with their experience, knowledge, and time to the creation of this diagnose of the Current Housing Situation in Mexico. Without their help and support, this project would not have been possible.

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Executive Summary

Mexico’s successful growth in the housing sector over the last five years has been essential to the country’s economic and social development. Housing has been a priority on the government’s agenda since the beginning of President Vicente Fox’s administration, catering to the needs and demands of the population with fewer resources and making it possible for families to create their own patrimony. The sustained growth in the number and value of housing loans is due to an environment of macroeconomic stability marked by moderate inflation, a flexible, yet stable foreign exchange rate, and a positive evaluation of country risk. The “Current Housing Situation in Mexico, 2006” offers a comprehensive X-ray of the sector, touching upon key aspects of demographic trends, poverty and marginalization, economic growth, and urban development. The main goal is to guide all the players involved in the sector regarding the design and implementation of housing strategies and policies.

This study is divided into five sections. The first section takes a look at the world’s demographic trends, emphasizing urban growth. It presents the main indicators of urban marginalization, extreme poverty, and access to services and infrastructure—factors which make it easier to understand the magnitude of the world’s needs (and particularly those of Latin America), with regard to housing and urban planning. For this section, we used the annual reports of the United Nations’ Program for Urban Settlements: “The State of the World’s Cities 2004/2005: Globalization and Urban Culture” and “Report on Human Settlements 2005: Financing Urban Shelter”. The population increase and the rising urbanization that the world has and will continue to undergo over the next twenty years of the XXIst century, undoubtedly present governments with one of the most significant challenges in their ability to encourage economic development. The ordeal in coming years will be designing and implementing comprehensive schemes of employment, poverty reduction, and education—in order to include the marginalized population—as well as the development of infrastructure and urban planning programs, particularly in peripheral areas. Housing policy must focus on encouraging comprehensive solutions that consider the size of the problem and undertake the challenge of urban growth sustainability. At the end of this first section, we review the best international practices in order to present those projects and programs that have managed to exceed expectations and propose innovative schemes.

The second section reviews the economic outlook—both on a national and international level—and describes in detail the situation within Mexico’s formal and informal housing markets. On the economic front, the country’s macroeconomic stability is noteworthy, marked especially by low inflation which closed 2005 at an annualized rate of 3.3%. The challenge for this and coming years is not only to sustain economic stability, but also to generate further opportunities for economic growth and the strengthening of capital markets, as in 2005 our economy expanded at a moderate rate of 2.8%—well below the 4.2% seen in 2004. With regard to housing policy, it focused on further encouraging access to financing, increasing productivity, and supplying land for housing. In this sense, it is possible to see that the formal housing market has grown through greater developer participation in the production of social housing, and the promotion of lending programs that target unserved sectors. As for demand, it is worth noting that the annual
population growth rate was 1%, whereas the rate of household formation was 1.9%. This stresses the huge challenge that the country faces in order to be able to serve the increase in demand over the next 25 years.

The third section focuses on evaluating the progress made in housing finance. The achievements over the last five years have been significant, making it possible to transform the sector’s dynamics and move towards the creation of adequate technical and administrative conditions so that any given person will be able to buy, build, remodel, or rent a home, in accordance with their financial possibilities and preferences. From 2001 to 2005, close to 3.4 million loans for acquisition and home improvement were placed, whereas 750 thousand more loans are programmed for 2006 (up to June this year, close to 3 million 770 thousand loans in their various modalities had been placed). In order to achieve this goal, the private sector’s decided participation is undoubtedly necessary. By 2005, banks and SOFOLS (non-bank banks) together placed 25% of the total loans for financed homes. Among the areas which need strengthening in the future, there is a plan to offer housing micro-financing. Currently, there are only three institutions in this field: FinComun, FUNHAVI and SHF.

The fourth section under the heading “City Building” emphasizes the importance of urban development policies for sustainable city growth. The estimated requirements of land for housing from 2006 to 2012 indicate that there is a need for 137 thousand hectares of urbanized land, which must include the necessary equipping and infrastructure. Thus, urban plans must meet this challenge, as cities’ urban growth over the last decade has been determined almost exclusively by the real estate market’s criteria, leaving lower-cost housing outside the formal channels of the market. A wide scope of subject matter including infrastructure, land, and the transcendence of urban planning has been put forth. Based on the study by urban ecologist Salvador Rueda, two city models are analyzed in order to compare their benefits and deficiencies, all along keeping in mind that the densification model offers greater resource economy and better urban living opportunities for the population. The last part of this section presents the overall results of a survey on housing satisfaction prepared by SHF and taken in nine cities throughout the country, in order to become acquainted with these cities’ inhabitants’ perception of their dwellings, the city, and the surroundings. The survey proposes steps to achieve greater user satisfaction and thus, improve the communication between the client and the promoter. Regarding the topic of sustainability, the use of techniques and methods to save and optimize resources is stressed. It is necessary to encourage sustainability so it will go from being an alternative to becoming a regulated application as a basic model in the construction and development of housing projects.

Last, the fifth and final section closes with the remaining challenges and actions for future years, with a view to show all those involved in the matter the areas that need work.
SECTION 1. INTERNATIONAL SITUATION

1.1 Diagnose of urban growth and the housing situation around the world

According to the United Nations Organization, world population in 2005 reached 6.5 billion people, 3.177 million (49%) of which live in urban areas. In the most developed areas, urban population represented close to 75% of total population, whereas in less developed areas, this reading dropped to 42\%\textsuperscript{1}.

Latin America and the Caribbean were ranked as the second most urbanized region in the world, with around 77% of their population currently living in cities (please refer to table 1).

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|}
\hline
Regions & Population (millions of inhabitants) & \\
& Total Population & Urban Population & Urban Share \\
\hline
Most developed regions & 1,211.3 & 908.5 & 75\% \\
\hline
Least developed regions & 5,253.5 & 2,206.5 & 42\% \\
\hline
Africa & 905.9 & 353.3 & 39\% \\
\hline
Asia & 3,905.4 & 1,523.1 & 39\% \\
\hline
Europe & 728.4 & 531.7 & 73\% \\
\hline
Latin America and Caribbean & 561.3 & 432.2 & 77\% \\
\hline
North America & 330.6 & 264.5 & 80\% \\
\hline
Oceania & 33.1 & 24.2 & 73\% \\
\hline
WORLD TOTAL & 6,464.7 & 3,103.1 & 48\% \\
\hline
\end{tabular}
\caption{Total and urban population by regions, 2005}
\end{table}


Should these trends continue, it is estimated that by the year 2030, world population will reach over 8 billion inhabitants, which translates into an increase of practically 25\% (68 million more people each year). 95\% of this growth will take place in developing countries.

Likewise, it is expected that urban population will be close to 5 billion by 2030, which would mean that, in 25 years, 60\% of world population will live in cities. While the compounded annual growth rate for total population is 0.9\%, the growth rate for urban population is 1.8\% (please refer to graph 1).

\textsuperscript{1} The classification used by the UN considers all the countries in Europe and North America, as well as Australia, Japan and New Zealand, as the most developed. By less developed regions it means the countries in Africa, Latin America, Asia (excluding Japan) and Oceania (excluding Australia and New Zealand).
There is no doubt that population growth and the increasing urbanization the world has and will continue to experience over the next few years, represent a huge challenge for the governments of all countries in the matter of housing, infrastructure, and access to services. Particularly in less developed countries, the situation is a cause for concern, as most of the population growth comes from the lower income brackets. The fact that poverty is becoming “urbanized” carries additional problems of marginalization and inequality which cannot be ignored.

In its annual report for 2005, the United Nations’ Program for Urban Settlements (UN-HABITAT) reported that close to 15.7% of world population (1.015 billion people) currently lives in urban marginalized areas\(^2\); 13.2% live in Latin America and the Caribbean (please refer to table 2). Should this trend continue, by 2020, the urban marginalized population will rise significantly till it totals 1.5 billion inhabitants—19% of world population estimates for that year.

**Table 2. Population in marginalized urban areas by region, 2005-2020\(^3\)**

<table>
<thead>
<tr>
<th>Regions</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
</tr>
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<tbody>
<tr>
<td><strong>Developed regions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>33.4</td>
<td>33.8</td>
<td>34.1</td>
<td>34.5</td>
</tr>
<tr>
<td>Others</td>
<td>21.9</td>
<td>23.1</td>
<td>24.3</td>
<td>25.6</td>
</tr>
<tr>
<td><strong>Developing regions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North of Africa</td>
<td>21.2</td>
<td>21.1</td>
<td>20.9</td>
<td>20.7</td>
</tr>
<tr>
<td>Subsaharan Africa</td>
<td>199.2</td>
<td>249.9</td>
<td>313.4</td>
<td>393.1</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>134.3</td>
<td>143.1</td>
<td>152.6</td>
<td>162.6</td>
</tr>
<tr>
<td>Eastern Asia</td>
<td>212.4</td>
<td>238.1</td>
<td>266.9</td>
<td>299.2</td>
</tr>
<tr>
<td>Central Asia</td>
<td>285.7</td>
<td>317.9</td>
<td>353.6</td>
<td>393.4</td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>59.9</td>
<td>64.1</td>
<td>68.5</td>
<td>73.3</td>
</tr>
<tr>
<td>Western Asia</td>
<td>48.7</td>
<td>54.4</td>
<td>63.4</td>
<td>73.9</td>
</tr>
<tr>
<td>Oceania</td>
<td>0.6</td>
<td>0.7</td>
<td>0.8</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1,015.3</td>
<td>1,146.0</td>
<td>1,296.6</td>
<td>1,477.3</td>
</tr>
</tbody>
</table>


\(^2\) The term “urban marginalized area” is used in a general context to describe a broad range of human settlements that inhabit densely populated urban areas, characterized by high levels of poverty and low quality standards in terms of infrastructure and access to services.

\(^3\) Projections are based on the average annual population growth rate in urban marginalized areas as seen from 1990 to 2001.
Diagnose of urban growth and the housing situation around the world

As for access to services, the situation is also distressing. While in the more developed regions of the world the needs for drinking water, plumbing, and housing connections are practically all covered, in the more backward regions, they are clearly not adequately served (please refer to graph 2).

Graph 2. Access to urban services by regions, 2004 (Percentages)

<table>
<thead>
<tr>
<th>Region</th>
<th>Water (%)</th>
<th>Plumbing (%)</th>
<th>Housing connections (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most developed regions</td>
<td>95.4</td>
<td>93.0</td>
<td>99.9</td>
</tr>
<tr>
<td>Least developed regions</td>
<td>62.0</td>
<td>75.4</td>
<td>89.9</td>
</tr>
<tr>
<td>Eastern Europe and other States</td>
<td>90.6</td>
<td>99.7</td>
<td>95.5</td>
</tr>
<tr>
<td>States in Eastern Europe</td>
<td>88.9</td>
<td>93.3</td>
<td>97.7</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>83.8</td>
<td>96.4</td>
<td>96.3</td>
</tr>
<tr>
<td>Asia</td>
<td>70.3</td>
<td>81.5</td>
<td>99.8</td>
</tr>
<tr>
<td>Africa</td>
<td>42.3</td>
<td>57.8</td>
<td>83.4</td>
</tr>
</tbody>
</table>

Source: UN-HABITAT 2005.

The current situation encompassing urban marginalization and lack of access to services in many regions of the world reflects a greater problem which is the result of the extreme poverty in which a large part of the population lives. The latest global information available shows that 50% of the population lives on less than two dollars a day. In Latin America and the Caribbean, the proportion is nearly 20%. Although the situation of extreme poverty in the world has improved in the last decade in almost every region, the number of people who still live thus remains high; thereby, there is yet a lot to be done in this field (please refer to graph 3).

Refers to the presence of sewer, electricity, and telephone systems.
It is unlikely that the problems of poverty, marginalization, and the resulting need for housing and services can be solved exclusively through local assistance programs. The only way to sustain the containment of poverty, the supply of infrastructure and services, and the financing of affordable housing in the long run is through continued economic growth, together with robust, stable financial markets. On this last, the 2006 report on global economic perspectives issued by the World Bank states that, in the last five years, the economies of developing countries have shown favorable performance with an average real GDP per capita growth rate of 3.7%. In the next decade, it is expected that the growth rate for these economies will reach 3.5%. In Latin America and the Caribbean, average annual growth is 1.2%, and it is estimated that it will rise to 2.3% (please refer to graph 4).
A large part of the growth, and the favorable medium-term expectations are due to economic reforms set in motion in past years. The improvement in macroeconomic policies—reflected in low inflation levels, greater liberalization of trade, more flexible foreign exchange regimes, and lower fiscal deficits—has contributed to reduce uncertainty, and encouraged a favorable environment for investments, particularly within the housing sector. The challenge in coming years is not only to significantly increase and also sustain economic growth, but to simultaneously generate comprehensive schemes of education and job creation which include the marginalized population, as well as infrastructure and urban development programs in the areas with higher marginalization.

In this sense, politicians and government officials, as well as developers, must be aware that urban progress and the service to housing needs are highly dynamic and must be tackled from a comprehensive point of view. This is not only a matter of local improvement programs; rather, it is about development policies on national, regional, and global levels. These are issues which depend on and are closely linked to economic development, the containment of poverty, and the reduction of inequality in every country worldwide.

1.2 International trends on public policy

Serving housing needs is an essential point in any public policy scheme. In recent years, it has become a priority on the international agenda. Many of the developing countries which have taken steps in this matter have focused mainly on implementing social housing programs. However, mass housing demand and the limited availability of public resources have curtailed the scope of these programs, even within favorable economic and institutional environments.

In 2005, the UN-HABITAT program issued its global report on human settlements under the title “Financing Urban Shelter” which identifies the main challenges for housing finance on the international front, and analyzes and discusses the policies implemented in the last few years. Below, are the key findings of this study, taking an in-depth look at the recommendations to improve and expand the programs to serve housing, especially for the very poor.

The challenge of housing finance for the very poor

Up until a few years ago, in most of the developed and developing countries, the cliché response to the problems of housing finance for the very poor in urban settings was the implementation of social housing programs. Saving a few remarkable exceptions such as Singapore, which was very successful in offering affordable housing to nearly all the most needy population, many countries discarded the social housing model. Some of the alternatives chosen have been programs offering serviced lots, or the reduction of financing standards, to name a few. Unfortunately, none of these worked on the required scale. In view of the lack of adequate solutions and authorities’ inability to prevent the uncontrolled growth of cities, providing housing for the very poor was left to the informal mechanisms. Housing was viewed as another product to be traded on the market, and the problem of accessibility was confronted from the point of view that “the poor” will

---

always be around and they will always require special solutions. The situation is even more complex in countries where most of the population lives in poverty.

To this effect, the study created by UN-HABITAT is based on the principle that special assistance programs and ad hoc solutions, although good at helping to improve the situation, do not solve the problems on the scale required. This thesis is based on three main arguments:

- The percentage of urban population living in poverty in developing countries is too large to be considered a residual matter.
- The demand for affordable housing, land, infrastructure, and services in general is rising at a fast pace, particularly in the main metropolis of developing regions.
- The standards and costs of providing various goods and services in the urban environment are very high and complex, and go beyond tending to the basic human needs.

Thus, the main goal of any housing policy must be to encourage comprehensive solutions that take into account the size of the problems and seek to sustain urban growth. The concept of “accessibility” must be understood in a broad context that considers not only the ability to supply some form of home ownership, but also the ability to hold onto it through a regular income source, tax and fee payments, and absorbing maintenance costs. The idea is not only to finance housing for the poor, but to build them adequate and accessible housing. Two goals are required for the fulfillment of this premise: the reduction of housing production and supply costs; and the increase of income levels.

Reduction of housing costs

According to a recent survey taken in several countries between 1997 and 2005, average housing prices rose 131% in Spain, 147% in the United Kingdom, 179% in Ireland, 113% in Australia, 90% in France, and 65% in the US. The only developing country included in the survey was South Africa, with the highest increase at 195%. Although in many cases this increase is due to speculative phenomena, there is a chance that the implementation of certain policies could revert this fact as, to a certain extent, the price hike—particularly in developing countries—is due to increases in the costs of land and construction materials, among others.

Land

As one of their priorities, authorities in cities must evaluate their land reserves and identify the most adequate for sustainable urban development. Unused land is capital that offers no returns, either public or private, and keeping land reserves when a large part of the population lives in informal settlements under terrible living conditions is simply irresponsible. Identified territories can be used as platforms for low-cost solutions, developed in accordance with the principals of self-built housing through the support and supervision of local governments.

The supply of infrastructure and services in the area must comply with environmental criteria, thus excluding, for instance, ecological reserves used for water collection. Likewise, an efficient use of land in the type and layout of the dwellings and urban services must be encouraged. Public property territories can continue to be public while the users become capable of guaranteeing the production and maintenance of their
International trends on public policy

dwellings. Private land can be subjected to incentives to promote homeownership; tax exemptions on the property for the lower segments, negotiable building rights, transferable rights, and subsidized rents (upfront, not through rates) by municipalities, governments, donors, or foundations.

Infrastructure and land use planning

With an adequate allocation of areas to be inhabited by low-income families, the planning and infrastructure of commercial and industrial areas can be extended to these spaces at a minimal extra cost. There is nothing more economically, socially, and environmentally coherent than establishing the new settlements in the vicinity of industrial and commercial areas, as this generates several positive synergies such as saving on transportation, reducing traffic, and thus, creating a better quality of life.

Construction materials

Self-built housing with support and supervision is the most accessible way of serving the needs of the very poor. It is the cheapest option because it is based on minimum construction standards, and it is the most useful because it offers households the flexibility to build a dwelling based on their needs, and to determine the rate of expansion, according to their possibilities. Therefore, all the efforts to reduce the costs of construction materials to low-income families will have a positive effect on the building of a house.

Standards

For many years, UN-HABITAT has suggested that construction codes and standards be reformed in order to make housing construction more accessible to the poor. These reforms won’t only reduce self-building costs, but they will also make it possible to legalize a large volume of homes which are currently informal. At the same time, neighborhood improvement programs must be implemented, both for building quality and the promotion of social activities that significantly improve living conditions and neighborhoods’ social fabric.

Design

Governments, housing finance institutions, and developers have not given housing and urban design the importance they deserve. At one end of the spectrum, are the large, massive, affordable entry-level housing developments with a single prototype that is not easily adaptable to the needs of each family, and whose construction is usually an easy target for unclear transactions due to the large scale of the projects and the investments required.

At the other end, is non-assisted self-building which can be cheaper in the long run and more flexible to families’ preferences, but often leads to a low structural quality dwelling, and almost always to an informal one. The development of best practices in low-cost, practical, creative, flexible and above all, sustainable housing designs, could be a determining factor in finding a happy medium between both ends of the spectrum.
Location

It is vitally important for low-income housing to be as close as possible to economic activity centers where inhabitants can find job opportunities. While it is true that land costs less the farther it is from the city, there are other additional costs implied by the distance of the dwelling, such as transportation, time, and quality of life, which often turn out to be higher than the greater affordability of the land, and affect all the city’s inhabitants. Thus, the location of low-income housing must be consistent with the economic activities in the urban setting. No doubt, city densification policies can be highly effective in this aspect. Not only is a more efficient use of the land and supply of urban services achieved, but also, it is possible to significantly reduce the costs which are not directly linked to housing production.

Housing production and supply

Due to their nature, there are certain forms of production that imply low construction and supply costs for the buyer or user. Self-built housing is one of them as it substitutes the cost of labor with the work done by the future occupants of the house. In many countries, supervised self-built housing has been successful as it reduces the costs of housing production, as well as solving the problem of quality and legal security of the land. In addition, this housing scheme can be supported through government and donor resources. Therefore, assisted self-building is one of the schemes that the UN most recommends for housing construction in urban marginalized areas.

Another method of production that has been successful in many countries is the cooperative scheme which, despite not being focused on the poorest segment of the population, does significantly improve affordability through the elimination of profits as a part of financing. Furthermore, these schemes are based on and promote the social capital of the communities surrounding the dwelling—an uncommon trend in traditional housing programs.

Last, we should highlight the importance of rental housing as a housing solution, particularly for families in urban areas who do not have the startup capital or permanent income to opt for self-building. The proposal on this topic is to cut down rental housing costs via programs that encourage the construction of rental units through public bidding processes.

Increasing purchasing power

In developed countries, most households have several income sources that give them access to a certain level of life, regardless of how small this income might be. This is virtually impossible in the case of developing countries, and especially, for the inhabitants of urban marginalized areas.

Although the ratio of unemployed population in these areas is quite high, most of them work to survive, even though their income does not allow them to cover the basic needs that are guaranteed in other more advanced countries. As a result, a large part of the problem is not only high housing production costs, but also the low wages of the most needy population, both in the formal and informal sectors of the economy. It is therefore clear that as poverty is beaten back and families’ income rises, many of the current deficiencies in
International trends on public policy

affordable housing could be solved. The increment in households’ income will enable more families to access microfinance schemes and the overall mortgage market.

1.3 Best practices and recommendations

Mexico is one of the most urbanized countries in Latin America with 76% of its population living in cities. SEDESOL estimates that 41% of this urban population lives in poverty and 24% in urban marginalized areas. Thus, it is essential to develop public policies that will tackle this problem and afford better growth and integration opportunities to this population. Below, are described some of the best practices implemented in urban development and housing in various countries, to be used as reference in the design or restatement of programs in Mexico.

Argentina: Rosario Habitat, the participatory city

The city of Rosario, second in Argentina’s national urban system, faced a serious problem: the presence of 91 informal settlements covering 10% of the city’s urban area, and concentrating 13% of the population, that is, roughly 110 thousand inhabitants. This situation bore a serious breakup of the urban network and the appearance of barriers that hindered traffic and access to public services.

The HABITAT Program was set in motion in January, 2001 for the city of Rosario with support from the Inter-American Development Bank (IDB), through this organization’s first direct financing to an Argentine city. The total resources available for the Program were US$71.7 million, 60% of which was financed through a loan from the IDB and the remaining 40%, supplied by the Rosario city council.

The program’s main goal was to deal with the problem of informal settlements, reducing exclusion and encouraging the physical and social integration of its inhabitants. In order to achieve all this, the following steps regarding the organization of the urban map were proposed:

- Infrastructure
- Equipping
- New thoroughfares
- Land ownership
- Home improvement
- Housing construction (reorganizing up to no more than 30% of the total families)

By the end of its first stage, Rosario HABITAT had already benefited 7 thousand families, which translates into close to 42 thousand individuals. Among the steps taken, the following are noteworthy:

- 255 families (1,400 individuals) were relocated, receiving a dwelling and the same services and infrastructure as the original renewed settlement, through direct financing from the IDB and the contributions made by the city council.
- Legal security on land ownership was given to the residents of the area which, in social and economic terms, increases employment opportunities and enables access to lending.
Works including sanitation, electricity, natural gas, and access to running water were performed in four different neighborhoods, benefiting close to 980 families (5,390 individuals). These works have given the area greater added value, thereby encouraging economic activity and social integration.

As this program requires a great deal of support from local governments and the civilian population, the success of Rosario HABITAT has proven that local authorities are capable of offering solutions to the problems of mass housing. In this case, the local government’s proposal enabled the attention to or integration of Informal Settlements into the city’s urban tissue; this prevented the islands of exclusion of the population and encouraged physical and social integration with the rest of the city, as well as simplifying access to employment and development opportunities. The Argentine government is aware of the benefits of this program and is proposing it as a model to be emulated in other cities throughout the country, as well as worldwide.

**Thailand: Urban Community Development Office**

Thailand’s Urban Community Development Office (UCDO) was established in 1992 in response to the growing inequality in the country (soon, this organization will sign a collaboration agreement with SHF so UCDO can gather SHF’s experiences in various aspects of housing finance such as microcredits, guarantees and securitization, to name a few). The purpose was to increase the capacity of the urban poor to have greater and surer incomes and thus, enable access to a legally established dwelling that would meet their needs. The settlers were the main players in the creation of this program.

UCDO’s work focused on the following aspects:

- Supporting the establishment of savings cooperatives.
- Promoting the relationship between groups.
- Encouraging the increase of peoples’ capabilities and incomes.
- Supply lending.

The community lending programs began with a savings group, which must be in operation for at least six months before receiving a loan. Once the loan is granted, they are allowed to charge an interest rate between 2% and 10% to cover their costs of operation. This is a flexible system that makes it possible to give credit to any sort of community initiative; groups start out with a loan to build a small revolving fund for individual emergencies, and later, prepare to gain access to more complex loans, such as housing finance or productive investment.

With regard to housing loans, there are two categories: i) loans for individual improvement of existing dwellings, and ii) collective loans for land acquisitions.

In general terms, the results have been very favorable; three years after its creation, UCDO has spread its activities to 50 organizations, including 105 projects in 111 communities with a total of 7,900 families benefited.
Best practices and recommendations

Singapore: Housing Development Board

Singapore has stood out since the 60’s for a series of continuous actions whose purpose has been to solve the entire population’s housing needs. The Housing Development Board—the entity in charge of this matter—established the construction of the greatest number possible of low-cost housing as a five-year priority from 1960 to 1965. The result was the construction of 54,430 dwellings. Due to land limitations, housing solutions focused on high-density, vertical construction. The urban renovation program substituted irregular settlements with modern housing units. Nowadays, over 90% of the population lives in housing districts built by the Board, and nearly half the population uses public transportation.

In addition, all industrial activities were relocated to Jurong Island as part of an initiative from the ministry of the environment and transportation, to remove pollution from residential areas. In the nineties, the Board finally took on the renovation of old apartments, setting up new services such as elevators and studio-type apartments to meet the needs of older people—although these units were quickly occupied by young workers. Thus, Singapore has managed to offer a massive solution to the housing problem through self-sufficient housing nuclei.

This is a highly technocratic and authoritarian housing policy, as a policy of racial integration is imposed in the housing complexes, in addition to homogenizing settlement processes, thus affecting the minority Malayan population.

Sonora: Economic housing program

In 2004, the municipal government of Hermosillo, Sonora began an economic housing program that proposed the construction of affordable entry level developments for families who didn’t have access to a loan, as their incomes were in the range of one to three minimum wages per month. The program was co-managed by federal authorities such as FONHAPO, INFONAVIT and TU CASA, state authorities through the State’s housing institute, and the municipal authority represented by Promotora Inmobiliaria de Vivienda and 12 private construction companies.

The requests for assistance were thoroughly studied in order to benefit those who truly needed it. A subsidy scheme was designed where the surplus from middle-class housing construction was used in the construction of basic incremental housing for families who had no type of property or dwelling.

Moreover, the municipal government began the purchase of land reserves and delivered the lots to a trust fund for development projects, access and public works, drinking water, drains and electricity, paperwork and subsidies for urbanization and construction. INFONAVIT and FONHAPO also offered support in the process of qualifying potential recipients, certifying the quality control of the dwellings, dealing with the formalities, and supplying the subsidies. Last, the building companies developed the project and saw to its completion.

The economic housing program was remarkable due to three significant achievements: i) the visible reduction of new shantytowns, thus offering greater security in private property; ii) the construction of 730
dwellings—a result that led building companies to develop more economic housing; and iii) the creation of jobs, as a great deal of labor was needed in the construction of the project.

For these reasons, the “Programa de Vivienda Economica” (Economic Housing Program) was awarded the Premio Gobierno y Gestion Local by CIDE and the Ford Foundation in 2004.

Currently, the program has 6,739 homes at various stages of construction. Thanks to projects like this one, Hermosillo is ranked third in housing construction nationwide. This experience makes it possible to appreciate all the benefits that can be reaped through the cooperation of all three levels of government, the housing institutes, and the private sector, in order to help the needy.
Economic situation and housing policy

SECTION 2. NATIONAL SITUATION

2.1 Economic situation and housing policy

2.1.1 Economic indicators

International outlook

In 2005, inflationary pressures, resulting from price increases in commodities, and particularly in crude oil, slowed the expansion of the world economy. In the same year, growth settled at 3.5%, below 2004's 4.2%. The countries in Southeast Asia were the least affected and headed world growth, with significant increments: the Chinese economy grew 9.9%; India’s, 7.7%; and Japan's, 2.8%.

In contrast, western nations suffered the most. The European economies grew 1.4%, below 2004's 1.8%. Likewise, dynamism in the US slowed considerably to 3.5%, after having grown 4.2% in 2004 (please refer to table 3).

<table>
<thead>
<tr>
<th>Country / Year</th>
<th>2004</th>
<th>2005</th>
<th>Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>4.2</td>
<td>3.5</td>
<td>-0.7</td>
</tr>
<tr>
<td>Mexico</td>
<td>4.2</td>
<td>3.5</td>
<td>-1.2</td>
</tr>
<tr>
<td>Japan</td>
<td>2.3</td>
<td>2.8</td>
<td>0.5</td>
</tr>
<tr>
<td>India</td>
<td>7.5</td>
<td>7.7</td>
<td>0.2</td>
</tr>
<tr>
<td>China</td>
<td>10.1</td>
<td>9.9</td>
<td>-0.2</td>
</tr>
<tr>
<td>Brazil</td>
<td>4.9</td>
<td>2.3</td>
<td>-2.6</td>
</tr>
<tr>
<td>Argentina</td>
<td>9</td>
<td>9.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Euro11¹</td>
<td>1.8</td>
<td>1.4</td>
<td>-0.4</td>
</tr>
<tr>
<td>World</td>
<td>4.1</td>
<td>3.6</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

¹Germany, Austria, Belgium, Spain, Finland, France, Greece, Netherlands, Ireland, Italy and Luxembourg.


Among the factors explaining the reduction in the US are:

- Higher interest rates which, from June 2004 to December 2005, rose 13 times, from 1.0% to 4.3%, affecting mortgage rates.
- The decreased industrial dynamism which showed growth of 3.1%, 1 percentage point below 2004’s figure.
- The increase of only 1.8% in public spending, as compared to 2.2% in 2004.
- The hurricanes, which affected the supply of energy products in trade and tourism.
The tight monetary policy used to deal with inflationary pressures has finally started to bear fruit: after reaching 4.7% in October 2005, inflation ended that year at 3.4%. These steps managed to isolate, if only partially, the impact of energy prices on the rest of the economy.

US economic growth was due to the internal market and consumption. Foreign trade grew at a slower pace, affecting imports from its main trade partners, which showed signs of slowing since the end of 2004:

- China’s industrial production rose 15.9% vs. the 16.3% in 2004.
- Japan’s industrial production rose 1.7%, well below the 5.2% seen in 2004.
- Canada’s rose 2.1%, as compared to 3.8% in 2004.
- In the Euro Zone, industrial production grew 1.2%, 0.7 percentage points below the figure from 2004.

National outlook

In 2005, the Mexican economy grew at a moderate pace that remained relatively stable throughout all four quarters of the year, registering an average annual growth rate of 2.8%—below 2004’s 4.2%. Part of the dynamics of economic activity in general, and internal spending in particular, was aided by significant increases in the surplus of the trade balance in oil-related products and the income from family remittances.

When looking at the dynamics of the economy by sectors, it is possible to see contrasting trends. While growth in the farming sector was volatile due to its inherent cycle of sowing and harvest, the industrial sector showed poor performance that improved slightly in the last quarter of the year. Without a doubt, the service sector was the engine behind growth as it showed an average quarterly increase of 4.2%, well above the overall economy’s 2.8% (please refer to graph 5).

Graph 5. Gross Domestic Product (GDP) by economic sector: accrued annual percentage variation, 2005-2006

Source: SHF with information from INEGI.

By the second quarter of 2006, GDP had accrued an annual variation of 5.1%; the industrial sector, 5.4%; services, 5.3%; and farming, 5.1%.
Economic situation and housing policy

As for inflation, the national consumer price index (INPC) registered an annual variation of 3.3% by December 2005, which translates into a reduction of 1.9 percentage points compared to the same period a year before. When looking at the index’s dynamics throughout the year, it is possible to see that they followed a convergent trend towards 2005’s target of 3%. Core inflation, which is a clearer indicator of medium-term inflationary trends, also showed a downward movement settling at 3.1% in December, which translates into a 0.7 percentage-point reduction compared to the same month a year earlier. Despite the good performance seen so far, these figures must be taken with caution before declaring stability in the medium term, as there were temporary factors that significantly reduced inflation. Such was the case of non-core inflation which contracted mainly in farming products as they dropped -4.3%, together with an alignment of public prices with inflation goals. Accrued inflation from January to June 2006 totaled 3.2%.

Monetary policy was determined mainly by the behavior of inflation and the high liquidity of national and international financial markets. During the first half of 2005, Banco de Mexico decided on a restrictive monetary policy as inflation in this period was well above the limits set at the beginning of the year. As a result, short-term interest rates rose 1 percentage point, going from 8.7% in January 2005 to 9.7% in June of that year. Likewise, long-term interest rates were determined by the high liquidity of financial resources in emerging economies. This was partly due to the fact that yields in developed countries were not as attractive as expected. The rate on 10-year bonds showed variable behavior throughout the year, settling at 8.3% at yearend—the same level as the overnight rate. The drop in the overnight rate throughout the second half of the year can be explained by Banco de Mexico’s easing of monetary policy, as inflation converged on the established target.
Overall, the national economy showed moderate but positive behavior throughout 2005 and the first half of 2006. The good results in financial variables and the excellent control of inflation encouraged a stable macroeconomic environment which was reflected in lower country risk levels, as well as the improvement in the profile of public debt. Compared to the rest of the emerging economies in the continent, Mexico ranked second after Chile in June 2006, with a country risk of 144 points (please refer to graph 8).

2.1.2 Housing policy

With regard to housing, Vicente Fox made only one campaign promise: “to achieve an annual rate of financing of 750 thousand dwellings per year by 2006”. This goal made it necessary to set the legal, administrative, financial, and coordinating bases in order to achieve this rate of financing and production. To this effect, important changes were furthered in the housing sector, aimed at enabling growth, promoting greater financing, increasing productivity, and favoring land supply for housing.
Economic situation and housing policy

The government began the transformation of the structural components on which it would build the national housing effort and, together with real estate developers, construction materials producers and distributors, financial organizations and intermediaries that offer mortgage lending, a new housing policy was proposed, in which any person—based on their budget, credit history, borrowing capacity, and preference—can buy, build, remodel, or rent a dwelling for their family and thus, begin to establish a patrimony.

2001-2006 National Development Plan

As part of the administration’s agenda, the housing policy was outlined in the 2001-2006 National Development Plan (the full version can be viewed at www.presidencia.gob.mx/documentos), which states its objectives, strategies, and the establishment of new operating and coordinating authorities to strengthen and diversify the sector, as was explained in the corresponding program, which can be viewed at: www.conafovi.gob.mx.

Programa Sectorial de Vivienda 2001-2006 (Federal Housing Program)

This program was published in the Official Journal of the Federation, on May 29, 2002. It includes fourteen work programs implemented through four structural axes as follows:

Growth: quality norms and certification; new technologies; greater legal security of property and housing mobility facilities.

- Information and Sector Measurement Program.
- Home Improvement Program.
- Legal Housing Improvement Program.

Financing: analysis of housing purchase capability; greater flow of resources towards housing demand; promotion of the primary and secondary mortgage markets; strengthening mechanisms of government support to low-income families.

- National Coordination Program of Construction and Home Improvement Promotion.
- Institutional Strengthening Program.
- Housing Mobility Program.
- Mortgage Market Development Program.
- Savings Program.
- Direct Subsidies Program for Housing Acquisition.

Productivity: promoting the deregulation of the sector to reduce paperwork, improve regulations, and cut taxes in favor of lower transaction costs.

- Indirect Costs Reduction Program.
- Program to Simplify the Housing Application Process.
- Housing Production Competitiveness Program.
**Territorial (land for housing):** to generate a greater supply of housing land, with standard infrastructure and services where housing can be built.

- Housing Land Supply Promotion Program.
- Housing Infrastructure and Services Development Program.

The structural change in the housing sector will require strategic actions in order to promote the housing policy; therefore, in addition to the four axes mentioned above, the completion of three large strategic projects was also proposed:

A. Order and expand purchase capacity.- through steps taken by the national housing institutions, aimed at expanding their coverage, optimizing their areas of operation, increasing their investment processes, and improving their customer services.

B. Develop a new sectorial focus.- giving housing its own place, which will make it possible to appreciate the sector's priority value in the country's economic and social development.

C. Establish a national and local management network.- to follow up the sector's development through the joint work of the three levels of government and the other players involved in the production of housing.

To this effect, CONAFOVÍ⁶ (national housing commission) was created as the sole responsible body for conducting general housing policy, defining the mechanisms to implement it, and coordinating it, and the National Housing Council was set up as a tool for team work and to open spaces for citizen participation, in addition to acting as a reference and counseling forum for the Federal Executive.

### 2.2 Description of the formal and informal housing markets

#### 2.2.1 Housing supply

**2.2.1a Developer-built housing**

Over the last five years, the housing developer market in Mexico has shown unprecedented growth. Based on their production volume, business strategy, and degree of geographic coverage, developers can be divided into three broad groups:

**Large companies**

These are a total of nine companies that individually report annual sales of over 5,000 dwellings, and jointly represent 25% of the market share: HOMEX, HOGAR, GEO, ARA, URBI, SADASI, SARE, CONDAK, PULTE⁷. These large companies are characterized by being capable of surviving and even expanding in

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⁶ In June 2006, Congress passed the New Housing Law, further benefiting the sector. Comisión Nacional de Fomento a la Vivienda (CONAFOVÍ) will now be known as Comisión Nacional de Vivienda (CONAVI).

Description of the formal and informal housing markets

Adverse economic environments, and by gaining access to sources of financing other than banks, so that most of these companies are currently listed on the Mexican Stock Exchange (BMV). In the 2000-2005 period, the price index of the most important residential construction companies showed a nominal yield of 649%, whereas the IPC (Mexico’s leading index) gained 215% in the same period.

These large companies are present in the main cities of the country and have a vertically integrated organization that includes nearly every step in the production chain; both these factors have enabled them to have a highly competitive cost structure. In the initial stage, business operation consists in the purchase of large lots without services on the outskirts of cities. Later, the plot is urbanized and several housing complexes are developed following a standard housing model, generally in the Economic and Middle segments, although recently, companies like GEO and ARA have been successful in the Residential market. With regard to land use, large companies have a long-term business outlook; therefore, they have departments devoted to land acquisitions and management, constantly searching for profitable purchase opportunities.

2005 was a great year for these developers who increased their sales significantly—especially in the case of GEO and HOMEX (please refer to graph 9).

Graph 9. Number of units sold by the large companies, 2004-2005

![Graph showing number of units sold by large companies](image)

Source: Prepared by CIDOC with data from developers. No information was available for the rest of the companies.

Medium companies

These are companies with an annual sales volume of between 1,000 and 5,000 units. According to the 2004 Economic Census, there are 134 firms in this category of sales. In general, the appearance and expansion of these companies is closely linked to the movements of the market, and particularly, the demand dynamism; for this reason, they tend towards instability in adverse economic environments. Contrary to the large consortiums, medium companies have fewer financing opportunities, depending mainly on SOFOLS and INFOVAVIT. Their production structure also tends towards vertical integration, albeit with less standardized methods than large developers.
Small and microcompanies

These are companies that produce and sell less than 100 dwellings per year, and they generally appear only to develop a specific project and then disappear once the homes are sold. Also based on information from INFONAVIT and SHF, it is estimated that there are around 173,000 companies in the market. Contrary to large and medium developers, small businesses don’t have a long-term approach to the market and only enter it sporadically in search of low-investment, high-profit projects.

2.2.1b Social Production of Habitat

The road towards building a Government policy on housing implies the inclusion of the various forms of production that there are in this field, and of the social sectors which currently have no access to the housing market. Only then can the right to housing included in Article 4 of the Constitution be met, together with the international obligations Mexico has entered into through the Pact International of economic, social, and cultural rights.

The inclusion of the social Production of Habitat in its various forms in the country’s housing policy complements and enhances the national housing system, creating options and offering viable and legal support to sectors which currently face serious problems to gain shelter.

The New Housing Law, passed in June 2006, broadly includes the social Production of Habitat. It defines it as “housing built under the control of self-producers and self-builders who operate without intending to make a profit, and is mainly designed to meet the housing needs of the low-income population, including dwellings built through self-help and community organized procedures which prioritize the value of use of the home above its market value, combining resources, construction procedures and technologies, based on their own needs and managerial and decision-making abilities”. (Art. 4 VIII).

This law also devotes the Seventh clause to the instruments and programs related to the social Production of Habitat, and coordinates it to the other topics included in this instrument.

Thus, the New Housing Law gathers the need for legal acknowledgement of a productive sector which has filled and, with the proper regulation and support, will continue to fill, ever more efficiently, a relevant role in solving Mexico’s housing problems.

Graph 10 depicts the relative importance of the social Production of Habitat in the country’s GDP from 1988 to 2005. It is worth noting the consistency of this sector in time, as well as the macroeconomic impact it shares with private production of affordable entry level housing, which has institutional support.
Description of the formal and informal housing markets

**Graph 10. Housing investments as a percentage of GDP, 1988-2004**

![Graph](image)

Source: UAM-Xochimilco, 2005, Dimensión e impactos Macro y Microeconómicos de la Producción Social de Vivienda en México, page 54. Prepared based on information from INEGI and CONAFÓVI.

The importance of the social Production of Habitat has also been established by the cement industry in Mexico and other countries as, even in times of economic crisis, it has managed to keep a profitable level of sales, largely due to the small retail market, supported by social producers of housing.  

Added to its macroeconomic importance is the impact SPH has had on solving housing needs for two thirds of the country’s population—mainly those who don’t have access to market mechanisms. Still, today, and despite the huge efforts made in recent years to facilitate company production and increase the number of loans, social producers continue to offer a significant contribution to total production.

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**Table 4. Volume of Social Production of Housing (SPH). 1980-2004 (Thousands of dwellings to December of each year)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in number of new dwellings</td>
<td>4,289.8</td>
<td>100.0</td>
<td>5,493.8</td>
<td>100.0</td>
<td>1,010.1</td>
</tr>
<tr>
<td>Completed dwellings financed</td>
<td>1,568.1</td>
<td>36.6</td>
<td>2,192.0</td>
<td>39.9</td>
<td>1,154.5</td>
</tr>
<tr>
<td>Middle and Residential dwellings</td>
<td>278.7</td>
<td>6.5</td>
<td>356.4</td>
<td>6.5</td>
<td>134.6</td>
</tr>
<tr>
<td>Total SPH dwellings</td>
<td>2,443.0</td>
<td>56.9</td>
<td>2,945.4</td>
<td>53.6</td>
<td>812.0</td>
</tr>
<tr>
<td>Financed SPH dwellings</td>
<td>298.0</td>
<td>—</td>
<td>520.3</td>
<td>—</td>
<td>84.5</td>
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<tr>
<td>Non-financed SPH dwellings</td>
<td>2,145.0</td>
<td>—</td>
<td>2,425.1</td>
<td>—</td>
<td>727.5</td>
</tr>
</tbody>
</table>

1. This refers to inhabited single dwellings.

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8 See item 2.3, p. 22 of the “Current Housing Situation in Mexico, 2005” report, CIDOC – SHF, which cites that Cementos Apasco estimates that 80% of its sales are to retail distributors who report 45% of their sales as retail.
9 The reduction of SPH in recent years is only partly due to the increase in the number of loans, as they don’t reach the low-income sectors, except in a tiny proportion. The difficulty in gaining access to affordable urban land, the deterioration of salaries’ purchasing power, and the decrease of financial support to social producers (as can be seen in the table) are also behind this reduction. The main result is the increased overcrowding currently found in existing homes.
A large part of this gargantuan social effort implies processes that are highly taxing to families who self-build their dwellings, as well as a long period of administrative actions for those who do so in an organized manner through cooperatives, associations, and other collective methods.

Legal acknowledgement of this social effort, its macroeconomic importance, the vast institutional and social experience accumulated in Mexico, and the need to move towards an inclusive Government policy with regard to housing, currently require the development of a comprehensive system of instruments supporting SPH, and in coordination with the National Housing System.

The support system includes legal, financial, programmatic, administrative, induction (subsidies) and promotion (training and adequate technologies) instruments which have a bearing on the social production and generation of housing, and on the integration and management of its components: land, services and equipping, materials, technical assistance, social participation, financing and mobilization of other social resources.

There is work currently being done on the conceptualization, design, and prioritization of this system through a CONAFOVI initiative, in consultation with various players, and with the support of Habitat International Coalition, the Housing Office in the Iberoamericana University, and UAM – Xochimilco.

The development of a system to assist SPH has a bearing on the fight against poverty and exclusion as it focuses mainly on low-income sectors, on special and vulnerable groups. In this sense, a response is sought to Article 88 of the Housing Law which states that the National Housing Commission, “in coordination with housing organizations and federal, state, and municipal entities, will encourage, within the programs and projects for the social Production of Habitat, the inclusion of productive activities and the development of income-generating activities designed to financially strengthen the population that takes part in them.”

Due to its social and quantitative importance, and to the size of the space it takes up throughout the country, SPH cannot be restricted to producing housing units; instead, it must also focus on the construction of a city and citizenship, on the rational use of the economic and natural resources it employs, and on the preservation and improvement of the environment.

Thus, the United Nations’ Habitat Program’s Regional Office for Latin America and the Caribbean (ROLAC) stated in a recent study\(^{10}\) that “acknowledging people’s ability to produce, develop, and organize their habitat, the (SPH) process is in itself participative, equitable, inclusive, comprehensive, sustainable and multi-sectorial (...) aspiring to satisfy individual and collective needs and to bolster a responsible citizenship, as well as the local economies and social transformation”.

It is within these considerations and with these elements that the work is done to develop a support system for SPH and the establishment of the operating programs that must be promoted.

The consolidation and institutionalization of this system will make it possible to overcome the difficulties that are currently faced by social producers and the risks and negative urban impacts of the spontaneous production of human settlements and housing in our country.

\(^{10}\) Linden, Alexandra, 2005. Responding to the Qualitative and Quantitative Housing Deficit in the Latin American and Caribbean Region: Social Production of Habitat, a Sustainable Alternative for the Development of Human Settlements, ROLAC.
Description of the formal and informal housing markets

In this sense, it is worth noting the programs for home improvement and progressive construction of new housing in neighborhoods in the process of being consolidated, as they are expected to show significant growth over the next few years.

The program of home-building on a family lot, developed by the Mexico City government, in coordination with the Colegio de Arquitectos (Architects Association) and the Habitat Mexico Coalition’s NGOs (2002 National Housing Award), began an initial large-scale experiment which, up to April, 2006, has produced 103,631 housing actions including new housing and home improvement on family lots—a program that represents 77% of the total actions financed by the Housing Institute.\(^{11}\)

The microfinance mechanism, designed and set in motion as a pilot program in September, 2005 by SHF, begun its massification and gradual application in 2006, through various financial intermediaries around the country. It will focus on financing home improvement, expansion, and remodeling of self-built dwellings, as well as the acquisition of serviced lots by the population—both rural and urban—with incomes below 5 minimum wages.

The Housing Law and this new financial instrument are two important pillars in the process of integration of the SPH support instruments system.

**2.2.1c Used housing**

Used housing is one of the most affordable options in the acquisition of a home due to advantages in price, location, and space. At present, it is estimated that the housing stock comprises above 25 million dwellings nationwide and over half could be sold through housing finance. However, according to data from the most important Housing Institute in the country—INFONAVIT—only 13% of the loans it placed throughout 2005 were for used housing, while the figure for SHF is 6%. When comparing these figures with more industrialized countries such as the US, which devote nearly 85% of their mortgage loans to used housing, the proportion of loans placed in Mexico in this heading is extremely low. This reduced participation is mainly explained by the increasing competition in new housing supplied by developers.

With a view to boost used housing acquisitions in 2006, INFONAVIT will begin a program with four lines: a) the sale of between two and three thousand dwellings allocated in 2003, due to lack of payment; b) strengthening of the liabilities payment scheme for those who wish to sell their house to another rightsholder; c) mortgage insurance substitution to allow housing mobility and mortgage loan transfers; and d) regulation of lease transfers. The goal for this year is to apply 5% of the INFONAVIT loans to used dwellings, which would translate into roughly 20 thousand credits.

In the case of homes financed through mortgage SOFOLS, it is estimated that the proportion of loans for used housing was 6% (3,267 loans), which translates into a 3 percentage-point reduction from last year. This reading is considered very low in view of the existing housing stock and the current boom in the industry.

\(^{11}\) Casa y Ciudad, 2006. Proprietary document, based on the report from SEDUVI to ALDF.
In view of the low share this type of housing has in our country, we must note that the used housing market has several advantages. For instance, the price of a used house is generally 30% lower than that of a new one, in addition to offering an alternative for families to purchase their first dwelling via financing. Another advantage is location as, in most cases, houses for sale are in accessible places and have all the services. In addition, a used home is also often up to 35% larger than a new one.

Among the recommendations to buyers of used housing are: i) that the home have drinking water, electricity, sewage or a septic tank, and public lighting in working order; ii) check to make sure the structure is free of collapses, cracks, warping, salt peter, or humidity; and iii) that it guarantees a 30-year life. Last, it is very important that the dwelling have a title deed in the name of the seller, duly recorded in the Public Register of Property.

2.2.1d Rental housing

The rental market is the second market of mobility. According to CONAFÖVI, close to 13.5% of national housing investments are in rental units, equivalent to close to 2,900,000 homes. 48% of this sum is concentrated in five states: Mexico City, the State of Mexico, Jalisco, Veracruz, and Puebla. The following features of this market are worth noting:

1. Five out of every ten rental units are single homes, duplexes, or apartments in a building.
2. Six out of every ten homes have a signed rental contract.
3. In seven out of every ten rental homes, up to 30% of family income is used to pay rent.
4. Out of every ten rented units, in four, the sum paid is more than the location and the condition of the home are worth; in five, the payment is fair, and in one, it is low.
5. Eight out of every ten rented units are close to labor, shopping, and entertainment areas.

This is a well-placed market, at affordable prices, within the law, and in physically good conditions. In 2006, several housing institutions have begun to work together with some states on a program to make local regulation more flexible and encourage rental housing.

2.2.2 Housing demand

2.2.2a Socio-demographic situation

This section presents the results of the 2005 Population and Housing Count, making it possible to outline the Mexican housing market’s demographic profile; based on this information, we present the potential housing demand estimates for the whole nation and by state.

On average, in each of the first 5 years of the XXIst century, Mexico’s population has increased by 1 million12. This is equivalent to the creation of almost 582 thousand homes per year, or to a state such as Colima or Baja California Sur (please refer to graph 11).

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12 The census moment in 2000 was February, 14, whereas for the 2005 Population Count, it was October 16, that is, 2,037 days later.
The annual average population growth rate was 1.0%, whereas households grew 1.9%, reflecting a significant reduction in their average size. Should this trend continue, the number of households throughout the country would double in less than four decades (37 years); thus, it is to be expected that housing demand will continue to show significant growth.

From an international point of view, Mexico’s current population growth rate of 1% is well below that of other nations considered as less developed where, according to the United Nations, the rate is 2.4% per year. Nonetheless, when compared to more developed regions with a growth rate of 0.3%, it is clear that Mexico’s growth rate is three times as high. This makes it possible to see the effort that must be made in order to offer inhabitants the minimum possibilities of welfare.

When analyzing the population distribution in the states, it is clear that the five most populated in the country are the State of Mexico, Mexico City, Veracruz, Jalisco, and Puebla, holding 40.6% of the total population. In contrast, the four least populated states (with less than 1 million inhabitants) are Nayarit, Campeche, Colima, and Baja California Sur with only 2.7% (please refer to table 5).
Paradoxically, the states with the largest growth over the last five years are Quintana Roo and Baja California Sur which, as was noted above, are two of the states with the lowest population volume. Should the current trend continue, it would take the population in these states 15 and 19 years, respectively, to double. At the opposite end are 15 states with growth rates below 1%, which shows that demographic growth there has tended towards stability (please refer to table 6).
Natural demographic growth, as well as internal migratory flows, indicate that most of the states in the north of the country, the states surrounding the Capital, and the Yucatan Peninsula, show the greatest demographic dynamics. Housing demand will probably show different dynamics on a regional level, due to these differences.

There are three main factors which largely determine the volume and type of housing demand in the country: i) the population age structure, ii) the income level and distribution, and iii) urbanization trends.
With regard to the first element, based on the results from the 2005 Population Count, it is inferred that 24.9% of the population is at the age of household formation (between 20 and 34 years old). This percentage represents a 0.64 percentage-point decrease compared to data from 2000. Likewise, due to a lower fertility rate, the population under 35 has decreased, whereas the share in all the groups above 40 has increased. This is a result of the gradual aging process (please refer to graph 12).

Due to current financing schemes, only people who earn over 5 minimum wages have the payment capacity to get a mortgage loan. Only 12.2% of the occupied population is in this segment. From 2000 to 2005, income distribution improved significantly within the segments that earn less than five minimum wages (please refer to graph 13).
Description of the formal and informal housing markets

Housing demand responds to the changes in the population pyramid and in income distribution. The supply of financial products must adapt to the current demography with new products such as programs for rental housing, microfinance for self-building, expansion, and remodeling, and schemes with upfront subsidies.

Workers’ current income distribution is mostly in a range below five minimum wages, with no access to traditional housing finance. In order to correct this situation, new products and upfront subsidy schemes that adapt to the preferences and payment capacity of this segment must be created.

Last, the third important element in the country’s demographic dynamics is the growing urbanization of the last few years. In fact, in the last five years, the population in urban areas has increased by 5.7 million inhabitants (7.8%), whereas rural population has dropped slightly. This is a sign that population growth is concentrated in the country’s urban areas and that the inhabitants of rural areas (locations with 2,500 inhabitants or less) are migrating towards the cities (please refer to graph 14).

![Graph 14. Population growth and distribution by size of the locality, 2000-2005](image)

Source: Prepared by SHF with information from INEGI.

Mexico is becoming more urbanized each day. Achieving quality housing growth within the framework of sustainable urban development is undoubtedly one of the main challenges. For every percentage-point increase in urban settlements, potential housing demand rises 0.6%.

It is estimated that, in 2005, there were 24.8 million households in the country, which translates into an 11.38% increase compared to the figure reported in 2000 (22.26 million). This result is mainly due to natural population growth, as well as to the decrease in the number of household members.

2.2.2b Housing backwardness

The most recent information available on the degree of housing backwardness in Mexico are the national, state, and municipal estimates made in 2000 by CONAFONVI, whose base source of information was that year’s XII General Population and Housing Census¹³. In general terms, housing backwardness is defined as the number of homes that, due to their features of occupation and material components of the building, do not

¹³ CONAFONVI is expected to presently update its estimates with the information from the II Population and Housing Count 2005.
offer a minimal welfare to their inhabitants. The results of these estimates show two types of housing backwardness:

a. Serving new housing: those cases where more than one household inhabits a single dwelling, or where it is so deteriorated that it must be replaced.

b. Expansions and improvements: overcrowded dwellings that require expansions, or dwellings which need some sort of repair, due to the poor state of their materials.

When analyzing the estimates for both categories, it is possible to see important regional differences between the levels of backwardness, particularly in the case of new housing. As can be seen in table 7, the states with the highest backwardness are in the center and south of the country. The ten states with the highest backwardness levels represent 62% of the total estimates (please refer to table 7).

<table>
<thead>
<tr>
<th>State</th>
<th>New housing</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>216,965</td>
<td>261,386</td>
</tr>
<tr>
<td>Mexico City</td>
<td>153,239</td>
<td>92,245</td>
</tr>
<tr>
<td>Veracruz</td>
<td>151,871</td>
<td>269,067</td>
</tr>
<tr>
<td>Jalisco</td>
<td>109,859</td>
<td>77,423</td>
</tr>
<tr>
<td>Guanajuato</td>
<td>107,915</td>
<td>65,222</td>
</tr>
<tr>
<td>Puebla</td>
<td>90,873</td>
<td>187,472</td>
</tr>
<tr>
<td>Michoacan</td>
<td>84,425</td>
<td>101,213</td>
</tr>
<tr>
<td>Chihuahua</td>
<td>80,281</td>
<td>209,033</td>
</tr>
<tr>
<td>Guerrero</td>
<td>71,619</td>
<td>176,226</td>
</tr>
<tr>
<td>Oaxaca</td>
<td>70,240</td>
<td>179,690</td>
</tr>
<tr>
<td>Nuevo Leon</td>
<td>67,680</td>
<td>31,179</td>
</tr>
<tr>
<td>Tamaulipas</td>
<td>45,735</td>
<td>69,801</td>
</tr>
<tr>
<td>Chihuahua</td>
<td>44,851</td>
<td>66,561</td>
</tr>
<tr>
<td>Baja California</td>
<td>42,418</td>
<td>48,836</td>
</tr>
<tr>
<td>Yucatan</td>
<td>42,117</td>
<td>57,566</td>
</tr>
<tr>
<td>San Luis Potosi</td>
<td>42,088</td>
<td>61,354</td>
</tr>
<tr>
<td>Sinaloa</td>
<td>41,113</td>
<td>56,514</td>
</tr>
</tbody>
</table>

Source: CONAFOMI.

### 2.2.2c Housing mobility

The concept of housing mobility indicates the mechanisms that make it easier for families to use their housing assets as patrimony for a new home, based on their changing needs of space, price, or location; therefore, housing mobility is closely related to the processes of used housing turnover, transfer regularization, and housing rentals in their various formats.

Progress has been made in the housing sector regarding housing mobility. Specifically, INFONAVIT has set up procedures through which its rightsholders can request the regularization of a dwelling when there is a transfer transaction, the authorization to rent housing, and the most recent alternative that makes it possible to purchase new housing by transferring the balance of the previously received loan to a new dwelling, when there is a need for growth or a change in working place.
Description of the formal and informal housing markets

On the other hand, SHF has begun a rental program with a purchase option, which is currently in its first stage; this program is expected to offer options to very specific regions such as the Northern border, as well as to buyers who have been unable to get the down payment together or who do not wish to purchase the home right away, as this plan enables them to do so in five years' time.

The main challenges are consolidating and improving these programs, to strengthen the capitalization of housing inventory in favor of families, while also lending substance to the changes in the legal and regulatory framework in favor of home rentals.

2.2.2d Demand estimations

National level

Estimating housing demand in Mexico is no easy task since, as has been seen in the previous sections, it is dependent on various factors such as demographic growth, household composition, the degree of housing backwardness, the sum and distribution of individual and family income, trends towards greater urbanization, and households’ preferences regarding their investment decisions, among others. However, making use of the information currently available, it is possible to determine the potential demand for housing finance in 2006, and break it up by states. These estimates are based on a study by SHF which takes into account the following elements:

1. *New household formation*: According to the final results of the Count, the total number of households in the country in the 2000-2005 period showed average annual growth of 1.9%.

2. *Containment of housing backwardness*: the new housing backwardness calculated by CONAFONVI in 2000 at 1.8 million dwellings is used as a base. A decreasing containment trend is assumed for the coming years.

3. *Housing mobility*: These are households that already have a dwelling but, in view of an improvement in their income, demand higher quality housing.

4. *Origination cures*: Households that are turned down for first-time mortgage loans, but who are later granted a loan due to improvements in their credit rating.

Based on these inputs, it is possible to estimate the number of households that integrate the potential demand for one of the housing finance programs currently on the market, due to their income, employment situation, and size of the city where they live. The following results are found by incorporating the results from the Count and the information from the national housing institutions (ONAVIS):

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14 With regard to housing backwardness, although official estimates mention 3 million dwellings, demand estimates only consider the coverage of part of this backwardness, assuming a gradual and decreasing rate of attention to the housing deficit for the next 10 years.
Should the goal of 750,000 mortgage loans for 2006 be achieved, 83% of the potential demand would be served. It is worth noting that, in this sense, estimated national demand must be viewed as a reference parameter of the households that need a dwelling and that have the resources to obtain financing.

**State level**

Demand estimates by state are based on the nationwide results, broken up by states, incorporating information from CONAPO, INEGI and CONAFOVI. The State of Mexico heads the list with an estimated demand of over 130 thousand homes. The rest of the states with high demand are located in the area of the Valley of Mexico, the Gulf and Center-west, in addition to Chiapas and Chihuahua (please refer to table 9).
Description of the formal and informal housing markets

Table 9. Estimated housing finance demand by state, 2006

<table>
<thead>
<tr>
<th>State</th>
<th>Estimated demand</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>134,799</td>
<td>14.9%</td>
</tr>
<tr>
<td>Veracruz</td>
<td>55,841</td>
<td>6.2%</td>
</tr>
<tr>
<td>Mexico City</td>
<td>53,375</td>
<td>5.9%</td>
</tr>
<tr>
<td>Jalisco</td>
<td>52,093</td>
<td>5.8%</td>
</tr>
<tr>
<td>Puebla</td>
<td>46,941</td>
<td>5.2%</td>
</tr>
<tr>
<td>Nuevo Leon</td>
<td>44,151</td>
<td>4.9%</td>
</tr>
<tr>
<td>Michoacan</td>
<td>39,919</td>
<td>4.4%</td>
</tr>
<tr>
<td>Chiapas</td>
<td>39,912</td>
<td>4.4%</td>
</tr>
<tr>
<td>Chihuahua</td>
<td>36,251</td>
<td>4.0%</td>
</tr>
<tr>
<td>Guanajuato</td>
<td>35,720</td>
<td>4.0%</td>
</tr>
<tr>
<td>Tamaulipas</td>
<td>35,584</td>
<td>3.9%</td>
</tr>
<tr>
<td>Guerrero</td>
<td>29,793</td>
<td>3.3%</td>
</tr>
<tr>
<td>Oaxaca</td>
<td>29,774</td>
<td>3.3%</td>
</tr>
<tr>
<td>Sonora</td>
<td>24,558</td>
<td>2.7%</td>
</tr>
<tr>
<td>Coahuila</td>
<td>23,742</td>
<td>2.6%</td>
</tr>
<tr>
<td>Sinaloa</td>
<td>21,338</td>
<td>2.4%</td>
</tr>
<tr>
<td>Yucatan</td>
<td>19,211</td>
<td>2.1%</td>
</tr>
<tr>
<td>Baja California</td>
<td>19,018</td>
<td>2.1%</td>
</tr>
<tr>
<td>Quintana Roo</td>
<td>18,906</td>
<td>2.1%</td>
</tr>
<tr>
<td>San Luis Potosi</td>
<td>17,532</td>
<td>1.9%</td>
</tr>
<tr>
<td>Hidalgo</td>
<td>16,608</td>
<td>1.8%</td>
</tr>
<tr>
<td>Tabasco</td>
<td>15,419</td>
<td>1.7%</td>
</tr>
<tr>
<td>Queretaro</td>
<td>15,001</td>
<td>1.7%</td>
</tr>
<tr>
<td>Morelos</td>
<td>14,767</td>
<td>1.6%</td>
</tr>
<tr>
<td>Durango</td>
<td>9,840</td>
<td>1.1%</td>
</tr>
<tr>
<td>Aguascalientes</td>
<td>9,818</td>
<td>1.1%</td>
</tr>
<tr>
<td>Tlaxcala</td>
<td>8,994</td>
<td>1.0%</td>
</tr>
<tr>
<td>Campeche</td>
<td>8,335</td>
<td>0.9%</td>
</tr>
<tr>
<td>Zacatecas</td>
<td>7,061</td>
<td>0.8%</td>
</tr>
<tr>
<td>Nayarit</td>
<td>6,933</td>
<td>0.8%</td>
</tr>
<tr>
<td>Baja California</td>
<td>5,828</td>
<td>0.6%</td>
</tr>
<tr>
<td>Colima</td>
<td>5,825</td>
<td>0.6%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>902,869</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: SHF estimates.

2.2.3 Balance of supply and demand

When comparing the resulting estimates for 2006 with the loans programmed, there is a huge variability in the degree of coverage (please refer to table 10). Indeed, there are states where loan placements are remarkably higher than the demand. This situation doesn’t necessarily mean there is an excess supply of loans, but that in those states, new household formation and a larger proportion of housing backwardness are being covered. In contrast, there are some states where it is estimated that the degree of attention will be relatively low, compared to the requirements. Such is the case in Chiapas, Guerrero, Jalisco, State of Mexico, Michoacan and Oaxaca, where not even an average 50% of expected demand will be covered.
### Table 10. Programmed loans and estimated demand by state, 2006

<table>
<thead>
<tr>
<th>State</th>
<th>Programmed loans</th>
<th>Estimated demand</th>
<th>% served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baja California</td>
<td>38,984</td>
<td>19,018</td>
<td>205.0 %</td>
</tr>
<tr>
<td>Aguascalientes</td>
<td>18,812</td>
<td>9,818</td>
<td>191.6 %</td>
</tr>
<tr>
<td>Colima</td>
<td>9,871</td>
<td>5,625</td>
<td>169.4 %</td>
</tr>
<tr>
<td>Baja California Sur</td>
<td>8,831</td>
<td>5,828</td>
<td>151.5 %</td>
</tr>
<tr>
<td>Mexico City</td>
<td>76,216</td>
<td>53,375</td>
<td>142.8 %</td>
</tr>
<tr>
<td>Durango</td>
<td>11,573</td>
<td>9,840</td>
<td>117.6 %</td>
</tr>
<tr>
<td>Queretaro</td>
<td>17,114</td>
<td>15,091</td>
<td>114.1 %</td>
</tr>
<tr>
<td>Nayarit</td>
<td>7,736</td>
<td>6,933</td>
<td>111.6 %</td>
</tr>
<tr>
<td>Chihuahua</td>
<td>39,763</td>
<td>36,251</td>
<td>109.7 %</td>
</tr>
<tr>
<td>Sinaloa</td>
<td>23,281</td>
<td>21,338</td>
<td>109.1 %</td>
</tr>
<tr>
<td>Coahuila</td>
<td>25,853</td>
<td>23,742</td>
<td>108.9 %</td>
</tr>
<tr>
<td>Zacatecas</td>
<td>7,597</td>
<td>7,061</td>
<td>107.6 %</td>
</tr>
<tr>
<td>Sonora</td>
<td>26,067</td>
<td>24,538</td>
<td>106.2 %</td>
</tr>
<tr>
<td>Guanajuato</td>
<td>37,516</td>
<td>35,720</td>
<td>105.0 %</td>
</tr>
<tr>
<td>Hidalgo</td>
<td>17,240</td>
<td>16,608</td>
<td>103.8 %</td>
</tr>
<tr>
<td>Yucatan</td>
<td>19,703</td>
<td>19,211</td>
<td>102.6 %</td>
</tr>
<tr>
<td>Nuevo Leon</td>
<td>44,271</td>
<td>44,151</td>
<td>100.3 %</td>
</tr>
<tr>
<td>San Luis Potosi</td>
<td>16,643</td>
<td>17,532</td>
<td>99.4 %</td>
</tr>
<tr>
<td>Tlaxcala</td>
<td>8,502</td>
<td>8,994</td>
<td>94.5 %</td>
</tr>
<tr>
<td>Quintana Roo</td>
<td>17,686</td>
<td>18,906</td>
<td>93.5 %</td>
</tr>
<tr>
<td>Jalisco</td>
<td>47,820</td>
<td>52,093</td>
<td>91.8 %</td>
</tr>
<tr>
<td>Tamaulipas</td>
<td>28,736</td>
<td>35,883</td>
<td>80.8 %</td>
</tr>
<tr>
<td>Tabasco</td>
<td>12,386</td>
<td>15,419</td>
<td>80.3 %</td>
</tr>
<tr>
<td>Campeche</td>
<td>6,842</td>
<td>8,335</td>
<td>79.7 %</td>
</tr>
<tr>
<td>Morelos</td>
<td>9,201</td>
<td>14,767</td>
<td>62.3 %</td>
</tr>
<tr>
<td>Veracruz</td>
<td>30,021</td>
<td>55,841</td>
<td>53.8 %</td>
</tr>
<tr>
<td>Puebla</td>
<td>23,439</td>
<td>46,941</td>
<td>49.9 %</td>
</tr>
<tr>
<td>Michoacan</td>
<td>18,515</td>
<td>39,919</td>
<td>46.4 %</td>
</tr>
<tr>
<td>Chiapas</td>
<td>18,111</td>
<td>39,912</td>
<td>45.4 %</td>
</tr>
<tr>
<td>Mexico</td>
<td>60,079</td>
<td>134,799</td>
<td>44.6 %</td>
</tr>
<tr>
<td>Guerrero</td>
<td>12,552</td>
<td>29,793</td>
<td>42.1 %</td>
</tr>
<tr>
<td>Oaxaca</td>
<td>9,239</td>
<td>29,774</td>
<td>31.0 %</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>750,000</strong></td>
<td><strong>902,869</strong></td>
<td><strong>83.1 %</strong></td>
</tr>
</tbody>
</table>

1. It is possible that the programmed loans by state won't match CONAFOR's official figures, as small adjustments were made to assign 31,500 loans proportionally which are considered Not Placed.

Source: Programmed loans refer to the official figures released by state, and potential housing demand is figures estimated by SHF.
2.3 Key findings

- In 2005, the Mexican economy grew at a moderate pace that remained more or less stable throughout the four quarters, with average annual growth of 2.8%, below 2004’s 4.2%. Part of the dynamics of overall economic activity, and particularly of internal spending, was favored by significant rises in the trade balance surplus in oil-related products and in the income from family remittances. The good results in financial variables and the excellent control of inflation played in favor of a stable macroeconomic environment, reflected in lower country risk levels, as well as in an improvement of the public debt profile.

- As for housing, Vicente Fox made only one campaign promise: “to achieve an annual rate of financing of 750 thousand dwellings per year by 2006”. This goal made it necessary to set the legal, administrative, financial, and coordinating bases in order to achieve this rate of financing and production. To this effect, important changes were furthered in the housing sector, aimed at enabling growth, promoting greater financing, increasing productivity, and favoring land supply for housing.

- Over the last five years, the housing developer market in Mexico has shown unprecedented growth. Based on their volume of production, business strategy, and degree of geographic coverage, developers can be divided into three broad groups:

  a) Large companies: These are a total of nine companies—five of which are currently listed on the Mexican stock exchange—that individually report annual sales of over 5,000 dwellings per year. Jointly, they represent 25% of the market share.

  b) Medium companies: These are companies with an annual sales volume ranging between 1,000 and 5,000 units. Although there is no exact information on the number of companies in this category, INFOVAVIT and SHF estimates show that there are around 50 companies that fit this description.

  c) Small and microcompanies: These are companies that produce and sell less than 100 dwellings per year; they generally appear only to develop a specific project and then disappear once the homes are sold. Also based on information from INFONAVIT and SHF, it is estimated that there are around 173,000 companies on the market.

- The inclusion of the social production of habitat in the country’s housing policy complements, enhances, and synergizes the national housing system, in addition to creating options and offering viable and legal support to sectors which currently face serious difficulties in finding shelter. The New Housing Law, passed in June 2006, broadly includes the social production of habitat, offering legal recognition to a highly important productive sector which has filled and, with the proper regulation and support, will continue to fill, ever more efficiently, a relevant role in solving Mexico’s housing problems.

- The rental market is the second market of mobility. According to CONAFOVI, close to 13.5% of national housing investments are in rental units, equivalent to close to 2,900,000 dwellings. 48% of this sum is concentrated in five states: Mexico City, the State of Mexico, Jalisco, Veracruz, and Puebla. This is a well-placed market, at affordable prices, within the law, and in physically good conditions. In 2006, several
housing institutions have begun to work together with some states on a program to make local regulation more flexible and promote rental housing.

- On average, in each of the first 5 years of the XXIst century, Mexico’s population has increased by 1 million. This is equivalent to the creation of almost 582 thousand dwellings per year, or to a state such as Colima or Baja California Sur. Natural demographic growth as well as internal migratory flows, indicate that most of the states in the north of the country, the states surrounding the Capital, and the Yucatan Peninsula, show the greatest demographic dynamics. Housing demand will probably show different dynamics on a regional level, due to these differences.

- Progress has been made in the housing sector regarding housing mobility—notably, INFONAVIT’s reforms to allow its rightsholders to request the regularization of homeownership when there is a transfer transaction, the authorization to rent housing, and the most recent alternative that makes it possible to purchase new housing by transferring the balance of the previously received loan to a new dwelling.
3.1 Structure of the housing finance market

As has been stated above, the Federal Government promised to achieve an annual rate of financing for 750 thousand dwellings, as both housing program and goal for 2006.

In order to achieve this goal, it was necessary to transform the existing legal, administrative, financial and coordination conditions which, in turn, caused changes to take place from the very first year of government, through a reengineering process that affected all the financial housing institutions (INFONAVIT, FOVISSSTE, and FONHAPO), and included the integration of a subsidy scheme and efficient institutional coordination, as well as adjustments to have access to further resources for more loans.

A new housing development bank was created—Sociedad Hipotecaria Federal (SHF)—which substituted FOVI, as a tool to modernize the financial system, making it possible to channel additional resources from the private sector into the mortgage market, via SOFOLS and Banks, in order to increase housing finance.

On the other hand, the private sector consolidated its representation through the creation of the National Industry Chamber for the Development and Promotion of Housing (CANADEVI), including mortgage loan promotion and processing activities, which are complemented by the activities and experience of the Mexican Construction Industry Chamber (CMIC).

Some of the main achievements of the current Administration were:

- As of 2000, banks made a remarkable comeback into the housing finance market and continue to show growth in it, significantly improving lending conditions from those that caused serious problems in the second half of the ’90s. The passing of the Law of Transparency and Promotion of Competition of the Guaranteed Credit and the reforms to the Miscellanea Secured Lending played an important role in this comeback.

- Interest rates have dropped from 30.3% in 2000 to the current average of 7.32%, and down payments have decreased from 30 and 35% in 2000, to 20% and even less nowadays.

- Private intermediaries have diversified their funding sources by issuing bonds, as in the case of SOFOLS; there is also construction lending for developers; the opening of new schemes and products from national housing institutions, such as Cofinanciamiento and Apoyo INFONAVIT; and the adoption of steps such as tax deductibility of real interest rates on mortgage loans.

- With the existing conditions in 2000, a person applying for a loan of $300,000 with a 15-year term needed a monthly income of over $25,500 pesos. Currently, for the same type of loan, an income of under $13,000 is enough.
• Last, but not least, FONHAPO went through a transformation process in order to become a second-floor financial institution. In June, 2003, a decree was published in the Official Journal of the Federation ordering the integration of the National Fund for Economic Housing Support (FONAEVI), which makes it possible to concentrate, in a single entity, the management, follow-up, and assessment of federal subsidy programs for housing construction, improvement, and acquisition for low-income families.

Steps taken by the National Housing Institutions (ONAVIS)

In the case of INFONAVIT, a significant product diversification has been achieved based on the potential demand by district and income level.

Such is the case of both the Apoyo INFONAVIT and Cofinanciamiento programs, in which private intermediaries participate. In the former, the resources that workers accumulate in their housing subaccount are used as payment guarantee for a loan granted by a bank or SOFOL, whereas Cofinanciamiento compounds a partial loan from INFONAVIT with another from some other financial institution.

It is worth highlighting the Institute’s renewed social orientation, focusing on Economic Housing worth 117.06 MW (equivalent to $173,200), which has made it possible to benefit rightsholders with incomes below three minimum wages (MW)—a sector that had not been served by the traditional schemes.

On the other hand, FOVISSSTE allocates resources for loans based on the number of workers in each office and in each state, through open invitations where all its rightsholders can participate through a lottery in each state.

SHF distributes its resources based on market performance and credit demand.

A mortgage loan program for migrants was created jointly by the Foreign Relations’ Institute of Mexicans Abroad, BANSEFI, SHF, CONAFOVI, and the direct operations of three SOFOLS, funded by SHF, to enable them to purchase used or new housing in Mexico.

Other related actions

In order to gain legal security of property ownership, a modernization program of Public Registers of Property is being carried out, focusing on the following aspects:

• Legal security in property ownership.
• Certainty in the integration of the public patrimony inventory.
• Greater availability of financial resources for the real estate sector.
• Identification of public property.
Performance of the public sector

Main statistics

From January 2001 to December 2005, 3,394,973 loans and subsidies had been placed in the various formats of the program. Of these, 2,321,331 were used for housing acquisition and 1,073,642 for home improvement and other types of credits.

<table>
<thead>
<tr>
<th>Year</th>
<th>Acquisition</th>
<th>Improvement</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>326,757</td>
<td>135,170</td>
<td>461,927</td>
</tr>
<tr>
<td>2002</td>
<td>400,291</td>
<td>304,221</td>
<td>704,512</td>
</tr>
<tr>
<td>2003</td>
<td>500,721</td>
<td>234,447</td>
<td>735,168</td>
</tr>
<tr>
<td>2004</td>
<td>532,012</td>
<td>263,011</td>
<td>815,023</td>
</tr>
<tr>
<td>2005</td>
<td>561,550</td>
<td>116,793</td>
<td>678,343</td>
</tr>
<tr>
<td>Jun 2006</td>
<td>272,328</td>
<td>59,045</td>
<td>366,026</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,593,659</td>
<td>1,132,687</td>
<td>3,760,999</td>
</tr>
</tbody>
</table>

Source: CONAFONVI.

On an annual basis, an average of 678,994 loans and subsidies were placed in the first five years—464,266 for housing acquisitions and 214,728 for home improvement.

It is important to note that, from 2002 to 2005, there were consecutive all-time highs in the placement of loans for housing acquisitions by four of the national institutions—namely, INFONAVIT, SHF, FOVISSSTE and FONHAPO—which achieved 350 thousand, 435 thousand, 455 thousand, and 501 thousand loans, respectively, in those years.

3.2 Performance of the public sector

In the five years of this administration, important achievements have been made enabling the transformation of the sector’s dynamics, in addition to advances in the creation of the technical and administrative conditions to make it possible for any person at all to purchase, build, remodel, or rent a home for their family, based on their financial possibilities and their preferences regarding type and location.

The transformations seen in the sector in the last few years followed a new approach to housing: the promotion of policies establishing joint responsibility of the public, social, and private sectors in a new form of social management and participation, and in coordinating and promoting the various stages of the housing construction process.

The implementation of these steps came as a response to the goals, strategies, and work programs established at the beginning of the Administration in the 2001-2006 Federal Housing Program. The success of both the Program and the current housing policy must be analyzed in light of the planned goals, their
comparison to the problems that existed at the time, and the transformation of old schemes and practices into a more open and transparent mechanism.

3.2.1 Towards a comprehensive housing subsidy policy

The 2001-2006 Federal Housing Program includes four main goals: a) Consolidating the housing sector’s growth via institutional coordination and support programs for low-income families; b) Increasing the mortgage credit supply from both public and private institutions; c) Improving the sector’s productivity and efficiency; and d) Increasing the supply of land and infrastructure for housing. Harmony and enhanced efficiency and equality in the current housing subsidy programs are considered essential in the strategies to achieve these goals.

Based on how subsidies are granted, they can be divided into:

- **Implicit**: Resource transfers derived from the allocation of mortgage loans below market interest rates. Currently, these subsidies are placed by INFONAVIT, FOVISSSTE and, to a lesser extent, FONHAPO.

- **Upfront**: Direct transfers that complement borrowers’ down payment at the beginning of the loan, be it for acquisition or improvement. Contrary to the former category, upfront transfers have no tax effects throughout the life of the loan. These subsidies are placed through the TU CASA program and SHF’s Special Program for Housing Credits and Subsidies (PROSAVI), both of which are managed by FONAEVI.

Due to their majority participation both in the number and value of loans placed, INFONAVIT and FOVISSSTE are the most important subsidy providers in the country. The placement of these loans is not directly controlled by the Federal Government.

Under the “Housing and Urban Technical Assistance Loan” obtained from the World Bank by the current administration in March 2005, the creation of a workgroup integrated by the main housing institutes was agreed upon in order to concur on a single subsidy measurement methodology. The ultimate goal of this project is the design and implementation of a unified and consistent policy which will simplify access to a home for low-income households, by encouraging family savings and private funding. The workgroup’s initial assessment of the current subsidy package detected the following flaws:

- Inconsistency between programs.

- Unclear program goals.

- There is considerable superimposition of available subsidy schemes for some groups of recipients, whereas other groups—particularly those employed in the informal sector and families with incomes below three minimum wages—receive relatively little support.

- Most programs only serve a small portion of eligible families; however, some households receive subsidies from more than one program.

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15 INFONAVIT, FOVISSSTE, FONHAPO, SHCP, SHF, and CONAFOVI as sector coordinator.
Performance of the public sector

- Clear inefficiencies in program design and implementation.
- The programs are not structured to gradually reach lower-income households.
- The cost per recipient seems unnecessarily high and there is the perception that an excessively large portion of the subsidy does not benefit the family, but the supplier.
- The programs don’t make the most of private savings or other contributions from the recipients.
- There are significant bottlenecks in the regulatory and land processes at the local level.
- The programs do not encourage changes in families’ mentality regarding the use of savings and income.

In addition, one of the most important points highlighted by the evaluation was the fact that implicit subsidies are, by nature, not very transparent and therefore, liable to create a negative effect on the expansion of the lending system, both in the primary and secondary mortgage market.

445,949 loans were placed throughout 2005 with some type of subsidy (implicit or upfront). These subsidies amounted to $31.153 billion pesos, 96% of which represented implicit subsidies. The average sum for implicit subsidies was $74 thousand pesos, whereas for upfront subsidies, the sum only reached $22.8 thousand pesos\(^{16}\). Compared to 2004, the number of loans increased significantly in both cases: 40% in implicit and 91% in upfront subsidies. In contrast, the average sum decreased 11% and 38%, respectively (please refer to tables 15 and 16).

Graph 15. Number of subsidized loans, 2004-2005

Source: Prepared by SHF with information from the Special Committee of Housing Subsidies.

\(^{16}\) This difference is explained, among other reasons, by the fact that the sum of the implicit subsidy is estimated taking into account the loan’s maturity.
When analyzing the behavior of the average subsidy based on the borrowers' level of income, the sum does not decrease as borrowers' income increases (progressivity). As can be seen on graph 17, families with incomes of two to three minimum wages receive a significantly lower subsidy than those with three or four minimum wages, whereas in the following segment, the subsidy decreases by more than half, going from $104 thousand to $42 thousand pesos. Last, it is also worth highlighting the fact that there is no real difference between the sum obtained by households with incomes between seven and ten minimum wages.
3.3 Performance of the private sector

Before 2000, the private sector’s role in housing finance was quite small, and in the case of banks, practically null. Fortunately, the situation nowadays is radically different. From 2000 to 2005, mortgage loans placed by SOFOLS rose from 45,566 to 102,377, which implies growth of 224%. As for banks, growth is even more astounding: they went from being virtually absent from the mortgage sector to placing 55,537 loans in 2005 (please refer to graph 18). All told, in that same year, the loans funded by SOFOLS and banks represented 25% of the total homes financed and nearly 45% of their total worth.

![Graph 18. Number of loans placed by SOFOLS and Banks, 2000-2005](image)

Source: CIDOC with data from CONAFONVI and AMSFOL

**SOFOLS**

Mortgage SOFOLS’ important role in housing finance and the increased dynamism they have displayed in the last few years show the significance and the interest of private investors in this sector. Although until 2001 SOFOLS depended almost exclusively on SHF funding, in recent years, they have cut back this financing from 84% in 2002, to 74% in 2003, 66% in 2004 and 52% in 2005. With total assets equivalent to $121,335,000 pesos at the end of 2005, Mortgage SOFOLS stand as the most dynamic group in the non-bank bank sector. Proof of this is that from 2000 to 2005, Mortgage SOFOLS placed close to 381 thousand loans at a compounded annual growth rate of 14%.

The success of these financial institutions can be largely explained by the existence of a broad network of branches in the main cities and by both their client selection and loan origination methods. This becomes clear in a relatively low delinquent portfolio of 2.5% by December, 2005. In most cases, SOFOLS have proven to be companies with significant competitive advantages when it comes to channeling financing, as well as recognized by their clients and perfectly acquainted with the segment of the population to whom they cater.

Given the increasing housing demand—particularly in the sector currently served by SOFOLS—a greater diversification of their funding sources seems in order. It is expected that, in the short and medium term, some SOFOLS will be acquired by banks, thus affording them the necessary capital to sustain or even increase their rate of loan originations. As for the rest of the SOFOLS, it will be crucial that they access the stock markets via securitization of their credit portfolios.
Banks

Banks have been in the mortgage lending segment for over 3 years of uninterrupted growth and are expecting to grow even further. The balance of banks’ mortgage lending showed a total of $181.329 billion pesos in December 2005, which translates into a 29% increase compared to the previous year.

Regarding portfolio management, banks’ performance has been very favorable, particularly as it showed the lowest level of delinquency in 2005 since the last bank crisis, and compared to the rest of the credit circuits. According to information from Banco de Mexico, banks’ delinquency rate in mortgage lending was at 2.4%—the lowest since the last monetary crisis, where it reached up to 40.2%. Likewise, the level of delinquent portfolios is also at its lowest, standing at 9.7%.

One of the main triggers of this expansion has been the reduction in interest rates and in the required down payment, which have produced more borrowers. Before, mortgage interest rates reached 25%, whereas nowadays, they are around 10.9%. Likewise, the required down payment was 50%, whereas now it is as low as 10%. In fact, a couple of months ago, HSBC launched the first financing scheme to acquire housing from the pre-sale stage with no down payment required.

As a result of these and other steps, the average sum financed by banks has decreased significantly, expanding their coverage to lower-income families. Scotiabank recently registered the highest minimum value of a home in the sector, at $400 thousand pesos, followed by Santander and Banamex, both of which averaged $350 thousand pesos, and Banorte, $300 thousand pesos.

Despite the strong growth in the volume of funded dwellings, their geographical distribution indicates that bank financing is focused in a few states throughout the country. 80% of bank-placed mortgage loans were in 15 states, such as Mexico City, Jalisco, Nuevo Leon and the State of Mexico.

In terms of market structure, banks are expected to continue pursuing the acquisition of more SOFOLS in the medium term—particularly those with over 5% market share. So far, significant acquisitions have been made, with the 100% purchase of Hipotecaria Nacional by Grupo Financiero BBVA standing out, together with the 100% acquisition of Fincasa by Grupo Financiero IXE, and the acquisition of a 25% stake in Hipotecaria Su Casita by Caja Madrid.

The following section will look at another important aspect of the private sector’s role in housing, regarding the development of the secondary market and the creation of mortgage insurance and financial guaranty.
3.4 Mortgage Insurance

Given the strong growth seen in housing finance demand and the expectation that it will continue to grow over the coming years, it is crucial to channel institutional investors’ savings towards the purchase of mortgage portfolios. The most efficient way to organize these investments is through the secondary mortgage market, whose development offers several benefits to the sector. First of all, it allows the participation of specialists in each stage of the lending process, with the corresponding improvements in terms of financial efficiency and strength. Second, it makes it possible to reveal costs and risks related to loan origination, enabling competition in favor of the consumer. Last, the development of a secondary mortgage market reduces the sector’s vulnerability and supplies bank regulators and supervisors with information to measure the inherent risk, in turn resulting in better reasonable regulation.

Based on specialized literature and international experience, it is possible to pinpoint five key elements to achieve a good rating on mortgage portfolios on the stock markets: i) strict and clear origination rules in order to ensure “Minimum Standards of Origination”, ii) Mortgage Insurance, iii) Subordinated Bond that supports a Senior Bond, iv) Financial warranty, and v) Minimum Wage–UDI Swap for UDI-denominated loans. SHF, which has been the main promoter of the private sector’s participation in housing finance, considers mortgage insurance to be the option that, supplied by a third party, can have a greater impact in promoting a solid mortgage market, and in the development of securitization in Mexico.

Mortgage insurance (MI) is a mechanism to transfer the credit risk from mortgage loans to an insurance company at relatively low down payments. In various countries such as the US, Canada, Australia, and Hong Kong, this insurance has been successful in promoting a mortgage market with reduced down payments (please refer to diagram 1).

**Diagram 1. Comparison of the composition of mortgage loans with and without insurance**

Source: Prepared by SHF.
Broadly speaking, the mortgage insurance operates under a scheme of joint responsibility shared by the bank or SOFOL and the insurance company, as follows:

- The bank or SOFOL originates the loan based on preset rules, which implies that the insurance company underwrites the loans one by one.
- The bank or SOFOL manages the loan whereas the insurance company supervises and audits the insured loans.
- The bank or SOFOL provides information on the state of the loan and the insurance company supplies the bank or Sofol with the risk analysis.
- The bank or SOFOL processes the collateral recuperation and the insurance company supervises loss mitigation actions.
- The bank or SOFOL demands payment from the mortgage insurance and the Insurance company reviews and pays the claim.

The main benefits of mortgage insurance consist in the improvement of the standards for placing mortgage loans by promoting competition in price and quality, and not based on allowing lax lending criteria. In addition, it stimulates the generation, analysis, and spreading of high-quality credit information, promotes the integrity of valuations, and increases access to credit.

With regard to mortgage insurance, it is currently offered by SHF with a view to supply a new credit tool on the mortgage market, as well as enabling SHF to stimulate the growth of the secondary market and supply capital to financial intermediaries. The general features of this product are:

- SHF will grant individual coverage on each loan (funded or not by SHF), based on the percentage of the loan compared to the value of the dwelling and at the levels agreed upon with each financial intermediary. Coverage could range from 5% to 35%, based on the type of loan.
- Loans funded by SHF require financing of 65%; that is, a combination of the down payment and the guaranty’s coverage equal to 35%.
- The premium to renew the guarantee is paid monthly and it will be valid for the lifetime of the loan. Likewise, SHF can accept a one-time payment for this premium.

The main benefits of this guaranty are to encourage credit expansion, as different coverage percentages make mortgage lending more accessible. Likewise, the group of consumers increases as the guaranty’s coverage spans loans both funded and not funded by SHF. Last, and most importantly, the secondary market develops via the standardization of products, in turn generating added value for the securitization of mortgage loans.
3.5 New products and practices

3.5.1 Microfinance schemes in Mexico

Undoubtedly, promotion of housing finance is a priority issue on the agenda of both the federal administration and the state governments. The efforts made to this effect can be seen in the close to 3.4 million loans placed in housing from 2001 to 2005, equivalent to $550 billion pesos. However, it is important to note that all this growth in mortgage lending has mostly been aimed at the acquisition of finished housing. In this period, the average share of finished housing loans was 68% in number and 97% in value (please refer to graphs 19 and 20).

Graph 19. Number of loans for housing acquisition and home improvement, 2001-2005

Source: Prepared by SHF with information from CONAFOR.

Graph 20. Value of loans for housing acquisition and home improvement, 2001-2005

Source: Prepared by SHF with information from CONAFOR.

Given the small role of home improvement and progressive homes programs, and keeping in mind that nearly 2/3 of the housing stock in Mexico and over half the new dwellings are self-built, it seems clear that there is an important sector of the population that is not being served in the necessary degree by the current
financing schemes. If, in addition, we consider that 75% of the dwellings around the country require some sort of repair, including 14% that must probably be replaced\(^\text{17}\), the problem is serious.

In our country, 60% of households don’t have benefits to get mortgage lending, and more than half (52.3%) earn less than three minimum wages (ENIGH, 2004). This represents, approximately, a total of 8 million households whose housing solution is self-building financed with their own resources. Furthermore, it must be kept in mind that, for many low-income families, progressive housing is both a need and a choice as it allows them to determine the rate of construction based on their own needs and the volume and frequency of their income and savings.

Currently, FONHAPO is the only federal government Housing Institute that offers loans for improvement and progressive housing to low-income families. Throughout 2005, FONHAPO placed 94,500 loans, 231 of which were used for finished housing, 94 for home improvement, 32,803 as subsidies for initial housing, and 61,372 as subsidies for improvement. On a state level, OREVIS also consider progressive housing finance, but their share is quite small and varies significantly from one state to another.

With regard to the private sector, it has had a more active participation. Microfinance institutions appeared in Mexico close to 25 years ago and have gradually become a highly-sought resource among low-income households. At the beginning, these institutions focused on offering small loans for productive investment, mainly to women. Such is the case of COMPARTAMOS, the most successful microfinance company in Mexico, founded in 1990, which has grown astoundingly from the start and currently has 240 thousand clients. In the same category are microfinance company FinComun with over 46 thousand active clients, and CAME with close to 38 thousand.

In view of these excellent results in credit management and timely payment, gradually more institutions appeared, but now focused on consumer goods financing and, more recently, on the support to progressive housing.

Self-building in Mexico is a process that takes somewhere from 5 to 15 years. Due to the uncertainty of the availability and frequency of their income, low-income families avoid acquiring long-term debt for high sums. These families generally finance the construction of their homes through their savings, often purchasing construction materials. In times of crisis, they turn to loans from family and friends, or from local lenders at high interest rates. Informal lending networks are in high demand as a large part of the population—particularly the low-income one—has no access to formal financial services, since they are considered high-risk clients. In addition, compared to the formalities necessary to obtain a mortgage loan, microfinance companies are much more flexible with regard to the legal state of the property and land use when offering financing. The latter is an important advantage, as most self-built homes have no legal security of their ownership.

\(^{17}\) Weisner, Michael, Formalizing the Informal Sector: Should Microfinance Play a Role in Mexico’s Housing Policy?, Kennedy School of Government, 2005.
New products and practices

Currently, there are only three institutions involved in housing microfinance:

- FinComun launched a home improvement product in 2003. It offers loans from $500 to $1,000 with a maximum maturity of one year and weekly payments at a monthly interest rate of 6%.

- FUNHAVI was established in 1996 in Ciudad Juarez in order to support the workers from the *maquiladoras* in the region. By 2001, this organization had gained over 1,000 clients and a 97% timely repayment rate. Its housing loans go from P$500 to P$2,500 and include a technical assistance component offered through agreements with other organizations of companies in the construction sector.

- SHF launched a new program last year where this institution will act as a second-floor bank, placing the necessary resources for funding financial intermediaries, who will in turn offer their clients loans for housing expansion, improvement, and remodeling, as well as for the acquisition of lots with services. This program is designed for those who earn less than five minimum wages and includes both the formal and informal sector of rural or urban areas. The maximum sum for each loan is $35 thousand with a maximum maturity of 24 months. 131 loans have been placed from its launch in 2005 to March 2006.

3.6 Key findings

- From January 2001 to December 2005, 3,394,973 loans and subsidies had been placed in the various formats of the program. Of these, 2,321,331 were used for housing acquisition and 1,073,642 for home improvement and other types of credit. In these five years of Administration, the important transformations seen in the sector followed a new approach to housing activity: the promotion of policies establishing the joint responsibility of the public, social, and private sectors in a new form of social management and participation, and of coordinating and promoting the various stages of the housing construction process.

- Based on how housing subsidies are granted, they can be divided into: i) *Implicit*: resource transfers derived from the allocation of mortgage loans below market interest rates, currently placed by INFONAVIT, FOVISSSTE and, to a lesser extent, FONHAPO; and ii) *Upfront*: transfers that complement borrowers’ down payment at the beginning of the loan, placed through the TU CASA program and SHF’s Special Program for Housing Credits and Subsidies (PROSAVI), both of which are managed by FONAEVI. 445,949 loans were placed throughout 2005 with some type of subsidy (implicit or upfront). These subsidies amounted to $31.153 billion pesos, 96% of which represents implicit subsidies.

- Before 2000, the private sector’s role in housing finance was quite small, and in the case of banks, practically null. Fortunately, the situation nowadays is radically different. From 2000 to 2005, mortgage loans placed by SOFOLS rose from 45,566 to 102,377, which implies growth of 224%. In the case of banks, growth is even more astounding: they went from being virtually absent from the mortgage
sector to placing 55,537 loans in 2005. All told, in that same year, the loans funded by SOFOLS and banks represented 25% of the total dwellings financed and nearly 45% of their total worth.

- Given the strong growth seen in housing finance demand and the expectation that it will continue to grow over the coming years, it is crucial to channel institutional investors’ savings towards the purchase of mortgage portfolios. The most efficient way to organize these investments is through the secondary mortgage market, whose development offers several benefits to the sector: a) it allows the participation of specialists in each stage of the lending process, with improvements in terms of financial efficiency and strength; b) it makes it possible to reveal costs and risks related to loan origination, enabling competition in favor of the consumer; and c) it reduces the sector’s vulnerability and supplies bank regulators and supervisors with information to measure the inherent risk, in turn resulting in better reasonable regulation.

- Given the small role of home improvement and progressive homes programs, and keeping in mind that nearly 2/3 of the housing stock in Mexico and over half the new dwellings are self-built, it seems clear that there is an important sector of the population that is not being served in the necessary degree by the current financing schemes.

- Despite the huge progress made in housing finance, there is still a large sector of the population that is not being served by the current schemes. If we consider that 2/3 of the housing stock in our country and over half the new dwellings are self-built, it seems clear that there is a need to encourage housing construction and improvement programs.
SECTION 4. CITY BUILDING

4.1 Urban development and housing finance

Regarding urban land requirements, it is estimated that for every million homes, 25 thousand hectares of apt land are needed. It is expected that housing needs from 2006-2012 will total 5.5 million new homes, and therefore, 137,500 hectares of urbanized land with the necessary infrastructure and equipping, including water, electricity, sewage, treatment plants, hospitals, schools, shopping centers, transportation, streets, culture, and leisure.

4.1.1 Infrastructure and land for development

Beginning in the nineties, some institutional instruments—such as subsidies—for land purchases catering to the lower-income sectors of the population have been eliminated in most Latin American countries with emerging economies; Mexico is no exception.

Both the disappearance of direct subsidies for land and housing acquisitions, as well as the reforms made in the public entities in charge of low-cost living—namely FONHAPO and INFONAVIT—in order to strengthen their financial and operating efficiency, have led, on the one hand, to restrict access to housing finance for workers with minimum incomes or those who are subemployed, and on the other hand, the virtually absolute disappearance of public aids for low-cost land acquisition and self-building.

From that time on, for nearly one decade, the incorporation of land into urban development—in the terms set forth by the urban development plans of the population centers—mainly for low-cost housing, has been ruled almost exclusively by the criteria of the real estate market, neglecting the population with the most need for homes and the least financial resources, who sought housing finance outside the formal channels of the market.

Under these terms, the prevailing mechanisms over the last few years for the incorporation of land for low-cost housing into the development of cities have been those run by the real estate market and, increasingly, those which the poorer sectors of society employed to get a dwelling—mostly illegal occupation of the land and self-building—with the public sector’s participation practically disappearing from the incorporation of land into urban development.

Based on information gathered by CONAFOVI in 2004 and 2005, the land reserve owned by State Housing Institutes totaled a little over 16 thousand hectares in various stages of urbanization. These surfaces are often withheld and, unfortunately, only used to serve middle and economic housing, excluding institutional programs for the poorer population.

It is worth highlighting SEDESOL’s Habitat Program and the steps taken by FONHAPO in land acquisition as exceptional cases over the last three years.
With regard to the former, in its Land for Social Housing and Urban Development plan within the Habitat Program, concurrent steps are taken by the federal and local governments for land acquisition. As a result of these tasks, a little over 3,000 hectares were acquired between 2003 and 2005. On the other hand, FONHAPO, through its Acquisition of Land for Housing Program, also offered support to local governments to acquire nearly 2,000 hectares between 2004 and 2005, when this program was in operation.

<table>
<thead>
<tr>
<th>Program</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>HABITAT ¹</td>
<td>1,872</td>
<td>1,124</td>
<td>92</td>
<td>3,088</td>
</tr>
<tr>
<td>LAND ACQUISITION²</td>
<td>DID NOT APPLY</td>
<td>1,170</td>
<td>825 ³</td>
<td>1,995</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,872</td>
<td>2,294</td>
<td>917</td>
<td>3,083</td>
</tr>
</tbody>
</table>

1 Source: SEDESO
2 Source: FONHAPO
3 Preliminary figure

The steps taken in both cases match the placement of focalized resources, aimed at population in patrimonial poverty with limited assets.

As the country’s current economic situation and the performance strategy of all three levels of government make mass programs for the transfer of land to the low-income population—via direct subsidy—unfeasible, the current mechanisms that make it possible to promote an incorporation of low-cost land into urban development go through processes involving the participation of the social groups who demand this land and housing, and the establishment of administrative-governmental mechanisms enabling the reduction of direct and indirect urbanization costs which affect the end price of land, following a flexible public operation.

That is, the implementation of novel initiatives for the acquisition and incorporation of land into urban development, is based on assuming, on the one hand, an active role in adapting the legal, administrative and financial mechanisms that condition access to the real estate market, and on the other, adapting a regulatory framework that will enable land acquisition and habilitation to fill the housing needs of the more neglected sectors of society.

In view of these facts, mechanisms for land acquisition and incorporation into urban lands must, on the one hand, acknowledge the existence of an accumulated social participation that can be capitalized and promote alternative real estate management mechanisms; and on the other, consider the possibility of using the existing instruments, adapting them to the performance and possibilities of the low-income sectors of society.

It may be assumed that the bottom-line option to deal with this complex problem is advancing decisively towards the creation of the necessary conditions to contribute to the financial solvency of the lower-income segments through instruments such as prior savings, upfront subsidies, and direct financing for the legal acquisition of a lot where to build a dwelling.
Urban development and mortgage financing

Likewise, there must be a more efficient use of urbanized land, enabling initiatives aimed at generating enough and adequate land within a framework of legality and security, encouraging the deregulation, and simplification of the legal processes, as well as coordinating actions with the social sectors that originate and take advantage of urbanized land, reinforcing the coordination of policies, projects and actions between the various levels of government.

Access to infrastructure and urban services

With regard to access to infrastructure and urban services, it must be noted that over the last few years there has been a significant increase in the number of homes served, as well as in the percentages of coverage in services such as drinking water (inside and out of the home), and sewage.

As can be seen in graph 21, over 90% of the urban population has piped-in and drinking water in their dwellings. The coverage of this service has grown at a steady pace since 1990, as in the 1990-2004 period there was a population increase of 17.9 million, whereas the water service coverage increased by 25.9 million. Coverage of this service is nearly full in urban areas where close to 95.7% of the population is served, in contrast with rural areas where only 71.3% of the inhabitants are served.

Sewage coverage also showed steady growth in the same period as 27.4 million people were supplied with this service; that is, 10 million people above the population growth rate were served. However, the gap between the service of rural and urban areas is much greater than in the case of water: while in urban and semi-urban areas coverage was 90.4% of the population, in rural areas only 38.5% of the inhabitants were served.

Although it is true that, with regard to electricity, coverage is close to universal, with regard to paving and road access, there is still much work to be done in both urban and rural areas. It is worth noting that, in this sense, SEDESOL’s Habitat Program has supported local governments, sponsoring 650 projects for road access and car and pedestrian bridges that make it possible to integrate backward areas with the rest of the cities.
4.1.2 In search of a greater integration between urban growth and housing finance

There are various indicators of the population’s living conditions, such as the Human Development Index of the United Nations Development Program (UNDP) which contemplates variables like education, health and income per capita; the Marginalization Index created by CONAPO, including the variables of education, housing and income; GDP per capita: average monetary income per inhabitant; 2000 Socioeconomic Regions in Mexico (INEGI), among others.

Through its credit policy, SHF is trying to reach those municipalities whose level of welfare is between 1 and 4, in order to create housing finance policies that will help the sustainability of cities in two ways: 1) aimed at people who get a loan from SHF in terms of their accessibility to housing finance based on their level of welfare, and 2) with regard to the territory to encourage a greater participation in the more backward municipalities or those with lower welfare levels.

This section presents the geographic distribution of loans placed by SHF in 2004 (64,419 loans), 2005 (54,449) and by June 2006 (21,641) both in UDIs and in pesos.

Based on the level of the municipality where the housing complexes are, the result is as follows:

- From the total municipalities in Mexico, around 14.3% were served in 2004, 15.4% in 2005, and 12.1% in 2006.
- On average, 89.7% of the municipalities served from 2004 to June 2006 are in the 5, 6 and 7 welfare levels; that is, in the higher strata.

18 Welfare levels are based on Socioeconomic Regions in Mexico. Their goal is to supply data on the various economic and social conditions that characterize the nation’s population. The Socioeconomic Regions in Mexico show a comparative summary of the states, municipalities, and basic geostatistic areas, synthesized in seven different strata (Level 1 shows the most disadvantages, whereas 7 shows the best situation), their differences and similarities, based on indicators related to some of the aspects of welfare, such as education, employment, occupation, housing, infrastructure, overcrowding, equipping, and health, based on information from the XII General Population and Housing Census 2000.
Urban development and mortgage financing

- Based on the weight of the number of loans placed, over 74% were in level 7 in 2004 and 2005.

Graph 23. Loans placed by SHF, 2004-2006

- Nonetheless, there is a slight decrease in the share of level 7 in the last year and an increase in the same year in levels 5 and 6.

- Both in the last few years and in the new allocations, SHF continues to focus on level 7.

SHF’s challenges are to effectively serve the lower-income target market with quality, in addition to assessing and encouraging financing in new municipalities—mainly those whose welfare is classed between 1 and 4.

4.1.3 Urban growth and quality of life

Population in our country is becoming more and more urban. Currently, three out of four Mexicans live in one of the country’s urban areas, where 85% of the Gross Domestic Product (GDP) is generated. It is also in cities where 54% of the poor population is located (SEDESOL, 2004), and most of the inhabitants’ economic, political, social, and cultural activities take place. Given the importance of cities and territories as promoters of economic and social development, and their influence on the design of human settlements, it is necessary to strengthen the link between economic development policies and the physical space where they are applied, through habitat management

A mass scheme was set in motion to contain the existing needs within the 2001-2006 Federal Housing Program, whose goal it is to promote the development of the mortgage market in Mexico. Five years past its start, this program has financed close to 2.3 million dwellings with an average annual investment equivalent to 1.5% of GDP.

Note: The figures for each year total 100%.

That is, through cities’ quality and sustainability.
Although there has been great progress in quantitative terms, with regard to quality, there is a lack of information available to evaluate the typologies, models, construction standards, housing designs, and their impact on the urban setting. The fact that many of these homes are built on the outskirts of the city is particularly distressing, as land costs there are lower, but lacking in infrastructure, services, and rather disconnected from other economic and social activities.

No housing institution should exist if it can’t achieve the population’s housing satisfaction; this is why the following section shows the results of SHF surveys in order to find out inhabitants’ perception of the dwellings obtained between 2000 and 2005 in nine cities throughout the country.

Conceptual framework

Quality of life refers to people’s possibility to properly satisfy their basic human needs\textsuperscript{20}, and housing quality refers to the features and properties of the house and the demands and assessments that the subject(s) make(s) of them.

In a broader sense, residential quality is a part of the concept of quality of life. It is a way of highlighting the features of a dwelling and its surroundings, related to the city, and based on variables of an essentially social, cultural, economic, and political nature. On the other hand, housing satisfaction is defined as individuals’ or groups’ perception and assessment of the attributes of the dwelling and its surroundings, related to the city, based on their needs and aspirations, which define a specific way of appreciating their residential quality.

Survey

The survey has a total of 48 questions: 46 are of the semantic differential type in a scale from 1 to 10\textsuperscript{21}, and 2 are regarding preferences, aimed at the inhabitants of the chosen dwellings, who are 18 or over—preferably the head of household. They are divided into two topics:


\textsuperscript{21} Where 1 is the lowest rating, pertaining to a negative perception, whereas 10 is the highest, showing a positive perception of their dwelling, community, and/or city.
Urban development and mortgage financing

Table 13. Definition of the residential satisfaction indices and their attributes

<table>
<thead>
<tr>
<th>Indices of satisfaction with the dwelling</th>
<th>Attributes</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Physical characteristics of the construction</td>
<td>Physical characteristics of the construction: floors, walls and ceilings.</td>
<td></td>
</tr>
<tr>
<td>2. Spatial, functional, and formal characteristics</td>
<td>Referring to the way in which activities are performed within each space of the dwelling, as well as the importance given to each of said spaces: bedrooms, kitchen, dining room, bathroom and living room.</td>
<td></td>
</tr>
<tr>
<td>3. Environmental characteristics of the dwelling</td>
<td>The environmental characteristics of a dwelling which offer some degree of satisfaction in having control over the environment’s illumination (natural light).</td>
<td></td>
</tr>
<tr>
<td>4. Flexibility regarding its adaptability</td>
<td>Adaptability flexibility refers to the versatility, convertibility, and expansibility of the dwelling, that is, the possibility to expand and transform the dwelling, as well as preferences in remodeling.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indices of satisfaction with the housing complex and the city</th>
<th>Attributes</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Characteristics of the location</td>
<td>This refers to the site of the land and the plot, its location, its insertion into the urban environment (with regard to the urban tissue: the distance and time relationship between the dwelling and the most important places related to other activities), pollution, and levels of environmental risk.</td>
<td></td>
</tr>
<tr>
<td>2. Characteristics of the housing complex</td>
<td>Surface, size, density of the housing complex.</td>
<td></td>
</tr>
<tr>
<td>3. Characteristics of the urbanization and services</td>
<td>With regard to the supply of basic infrastructure, transportation, communication, and trash collection services: drinking water, treated water and rain water treatment, electric power, gas, street lighting, street paving and size, vegetation and trees.</td>
<td></td>
</tr>
<tr>
<td>4. Characteristics of the social and community equipping</td>
<td>This refers to the supply and easy access to schools, healthcare centers, supply centers, as well as recreational, sports and cultural services.</td>
<td></td>
</tr>
<tr>
<td>5. Perception of the housing complex and the city</td>
<td>The social dimension and interaction are urban variables; the former is understood as an information exchange process between individuals; that is, how people perceive each other; the latter refers to the way in which the inhabitants of a neighborhood interact with one another.</td>
<td></td>
</tr>
</tbody>
</table>

Source: based on the conceptual framework of the SHF surveys, 2006.

Sample

The survey on housing satisfaction was taken in three large cities (Mexico City, Monterrey, and Tijuana), three medium ones (Merida, Chihuahua, and Oaxaca), and three small ones (San Pablo Etla, Poza Rica, and Guaymas), chosen based on their income per capita and population volume. All of them are municipal centers of one of the 55 Metropolitan Areas in the National Urban System (NUS)\(^{22}\), where housing has been built through SHF resources at an average value of 131,185 Investment Units (UDIs) (please refer to table 14).

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\(^{22}\) National Urban System (NUS), SEDESOL-CONAPO-INEGI.2004, Interinstitutional study “Delimitación de Zonas Metropolitanas en México”. 
The sampling was done through a probabilistic procedure stratified by value of the dwelling for the cities mentioned above; the size of the sample was 461 homes in 21 housing complexes.

Within the socioeconomic profile of the subjects, it is worth noting that 68% were female and 32% male; their socioeconomic level ranged from medium to high; 46% were predominantly young, aged 25 to 35, and 36% aged 35 to 50; with regard to the level of education, 42% have professional and postgraduate studies, whereas 33% only finished high school. Regarding homeownership, 81.34% of the dwellings are self-owned and 11.93% are rented, as compared to 72.54% and 13.72%, respectively, nationwide23 (ENIGH, 2004).

Results

i) Housing Satisfaction Index Matrix shows—for the cities chosen—the result of each of the attributes it comprises24, and is explained by a) attributes, b) city, c) attributes with city, and d) socioeconomic level.

Table 15. Residential satisfaction with the dwelling

<table>
<thead>
<tr>
<th>City</th>
<th>Mexico City</th>
<th>Monterrey</th>
<th>Tijuana</th>
<th>Merida</th>
<th>Chihuahua</th>
<th>Villahermosa</th>
<th>San Pablo</th>
<th>Poza Rica</th>
<th>Guaymas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributes / Index total</td>
<td>5.5</td>
<td>7.0</td>
<td>4.5</td>
<td>7.8</td>
<td>5.6</td>
<td>5.6</td>
<td>5.4</td>
<td>5.3</td>
<td>6.9</td>
</tr>
<tr>
<td>1. Physical characteristics of the construction</td>
<td>6.1</td>
<td>6.8</td>
<td>4.3</td>
<td>8.1</td>
<td>6.4</td>
<td>6.0</td>
<td>4.3</td>
<td>4.6</td>
<td>6.4</td>
</tr>
<tr>
<td>2. Spatial, functional and formal characteristics</td>
<td>5.5</td>
<td>6.9</td>
<td>4.3</td>
<td>8.1</td>
<td>4.9</td>
<td>5.8</td>
<td>5.9</td>
<td>5.3</td>
<td>6.8</td>
</tr>
<tr>
<td>3. Environmental characteristics of the dwelling</td>
<td>6.1</td>
<td>8.9</td>
<td>6.1</td>
<td>0.4</td>
<td>8.7</td>
<td>7.9</td>
<td>8.1</td>
<td>8.6</td>
<td>9.7</td>
</tr>
<tr>
<td>4. Flexibility regarding its adaptability</td>
<td>3.1</td>
<td>7.5</td>
<td>5.2</td>
<td>7.0</td>
<td>5.4</td>
<td>5.3</td>
<td>4.9</td>
<td>6.3</td>
<td>6.2</td>
</tr>
</tbody>
</table>


a) By attributes.- Residents graded natural lighting satisfactorily (an attribute of environmental features), above the mean; the lowest satisfaction was regarding the flexibility to expand or remodel.

---

23 The remaining 13.74% is for dwellings whose ownership is: A) borrowed from friends or family, B) a perk, C) unidentified.
24 A factorial analysis was carried out to determine the relative weight of each variable in the index. Statistically, they all have a measurement of 1 and a standard deviation of 0; b) The values obtained in each variable were multiplied by the weight obtained and added, in order to get the index.
Urban development and mortgage financing

b) By city.- Merida, Monterrey, and Guaymas show the highest perception of satisfaction, and Tijuana, the lowest.

c) Attribute and city combined.- Expansions and remodeling, walls, floor, and roof quality, and space function and design\textsuperscript{25}, are features that promoters must pay attention to, particularly in Tijuana, where women and low socioeconomic groups show the lowest perception rating. On the other hand, the dwellings with the highest perception of housing satisfaction are Merida, Monterrey, and Guaymas (please refer to graph 24).

\begin{center}
\textbf{Graph 24. Index of residential satisfaction with the housing complex by attributes and city}
\end{center}


d) By socioeconomic level.- In Mexico City, Tijuana, Chihuahua, and Poza Rica, all the socioeconomic strata show low levels of housing satisfaction. In contrast, in Merida, Monterrey, and Guaymas, satisfaction by socioeconomic level is positive. In the other cities, the degree of satisfaction varies based on the socioeconomic level (please refer to graph 25).

\textsuperscript{25} Attributes number 4, 1 and 2, respectively.
Residents’ dissatisfaction is based on a reduced surface of the dwelling, and lack of flexible designs that foresee growth. In fact, 71% of the surveyed population would like to expand their home, mainly in the group from 25 to 35 years old; this confirms the demand to strengthen home improvement programs not only for low-income sectors.

Moreover, it seems interesting that the Social housing served by SHF has better quality standards from local and regional building companies as compared to national developers, according to the results of people’s satisfaction with their dwellings.

**Conclusions on housing satisfaction**

**ii) The complex and city satisfaction index matrix** shows—for each city chosen—each of the attributes it comprises. The result is explained by a) attributes, b) city, and c) the combination of a) and b).
Urban development and mortgage financing

Table 16. Residential satisfaction with the housing complex and the city

<table>
<thead>
<tr>
<th>City</th>
<th>Mexico City</th>
<th>Monterrey</th>
<th>Tijuana</th>
<th>Merida</th>
<th>Chihuahua</th>
<th>Villahermosa</th>
<th>San Pablo Etla</th>
<th>Poza Rica</th>
<th>Guaymas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributes/ Index total</td>
<td>5.1</td>
<td>7.3</td>
<td>5.1</td>
<td>8.0</td>
<td>6.2</td>
<td>5.9</td>
<td>4.3</td>
<td>4.2</td>
<td>7.2</td>
</tr>
<tr>
<td>1. Characteristics of the location</td>
<td>6.4</td>
<td>6.5</td>
<td>4.6</td>
<td>6.9</td>
<td>4.8</td>
<td>4.7</td>
<td>3.1</td>
<td>5.3</td>
<td>6.2</td>
</tr>
<tr>
<td>2. Characteristics of the housing complex and/or community</td>
<td>3.4</td>
<td>5.9</td>
<td>3.8</td>
<td>7.4</td>
<td>4.6</td>
<td>4.4</td>
<td>3.5</td>
<td>3.9</td>
<td>5.5</td>
</tr>
<tr>
<td>3. Characteristics of the urbanization and services</td>
<td>7.5</td>
<td>8.1</td>
<td>6.8</td>
<td>8.4</td>
<td>6.2</td>
<td>4.7</td>
<td>6.1</td>
<td>6.3</td>
<td>8.1</td>
</tr>
<tr>
<td>4. Perception of the housing complex</td>
<td>5.6</td>
<td>6.4</td>
<td>6.0</td>
<td>8.1</td>
<td>6.9</td>
<td>5.8</td>
<td>4.7</td>
<td>5.2</td>
<td>7.3</td>
</tr>
<tr>
<td>5. Characteristics of the social equipping</td>
<td>4.4</td>
<td>6.9</td>
<td>4.9</td>
<td>7.5</td>
<td>5.7</td>
<td>5.5</td>
<td>3.9</td>
<td>6.3</td>
<td>6.3</td>
</tr>
<tr>
<td>6. Perception of the city</td>
<td>4.2</td>
<td>7.5</td>
<td>5.3</td>
<td>8.6</td>
<td>7.3</td>
<td>6.4</td>
<td>6.3</td>
<td>7.1</td>
<td>7.3</td>
</tr>
</tbody>
</table>


a) By attributes.- Residents grade urbanization and services and, to a lesser extent, the surface, size and density of the complex, as satisfactory.

b) By city.- Merida and Monterrey show the highest perception of satisfaction, whereas Poza Rica and San Pablo Etla, show the lowest.

c) By attribute and city.- The homes with the highest ratings are in Merida, Monterrey, and Guaymas. Merida, particularly, received the best evaluation by the young and the low-middle socioeconomic level, contrary to Poza Rica and San Pablo Etla, which show the lowest rating among the young and
the low-middle socioeconomic level. The urban aspects requiring more attention are: social and community equipping, in the perception of the housing complex, and in the location of the dwellings.

**Conclusions on satisfaction with the complex and the city**

The fact that the index of satisfaction with the housing complex and the city is relatively low, shows that the quantitative advances (number of housing loans placed) are not enough to create cities with urban order, with the following aspects of urban dissatisfaction standing out:

a) Supply of equipping (schools, healthcare centers, supply centers, recreational, sporting and cultural services).

b) Location of the complexes (distance/time).

c) Community organization to sustain the warranty’s real value through “maintenance” fees.

**4.2 Urban planning**

The challenge in urban planning is to answer, through design, to the future of urban areas, establishing more efficient systems of government, administration, and service rendering. Planning is necessary, due to the negative effects in the territory caused by continuous disorderly expansion; this planning must be based on the requirements of effective information systems to monitor the trends of urban development and social change. Small changes in urban living conditions or in the underlying factors of space change can lead to significant changes in population. It is also necessary to find quick actions to implement urban policies related to housing, bypassing the slow process of evaluation and acceptance, as changes are constant and accelerated and they must be managed immediately.

Cities must be sustainable in at least four aspects in order to promote the welfare of their residents and the nation’s citizens:

- They must ensure a quality of life with satisfactors in the dwelling and community or housing complex linked to the city, in addition to the same opportunities for all residents.
- They must be productive and “competitive”.
- They must be well governed and well managed.
- They must be financially sustainable or “financiable”.

Each dimension implies territorial policies at national, regional, local, and institutional levels, including a healthy fiscal environment at the macro level and a solid financial sector.

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Key findings

An effective administration for the city must keep in mind two principles: urban areas require proactive governments involved in higher levels, and they must have mechanisms to redistribute the costs and benefits of urban growth throughout the territory that actually generates growth.

4.2.1 City models

Urban ecosystems are a challenge that must be faced, as urbanism cannot easily deal with them, due to their complexity. In order to take on the commitment made to urban ecology, it is necessary to make cities’ urban systems more efficient. One reference is the dense and the compact city, where a better use translates into a more complex organization and significantly reduces the aggressions to the environment.

As reference, below is a table that shows the densities of various cities around the world; comparatively, the Mexico City Metropolitan Area shows the lowest density. It must be noted that these figures are approximate and, in popular areas, densities are well above these figures due to the overcrowding phenomenon.

<table>
<thead>
<tr>
<th>City</th>
<th>Density (inhab/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico City Metropolitan Area</td>
<td>25</td>
</tr>
<tr>
<td>Paris</td>
<td>300</td>
</tr>
<tr>
<td>Barcelona</td>
<td>500</td>
</tr>
<tr>
<td>Kowloon District (Hong Kong)</td>
<td>1,700</td>
</tr>
<tr>
<td>Downtown London</td>
<td>78</td>
</tr>
<tr>
<td>London Plan (Recommended density for areas with good access to transportation)</td>
<td>240-435</td>
</tr>
<tr>
<td>Amsterdam</td>
<td>100</td>
</tr>
<tr>
<td>San Francisco</td>
<td>188</td>
</tr>
</tbody>
</table>

Source: CIDOC.

Below is a comparative chart describing the uses, limitations, and advantages of two basic urban settlement models: the concentrated or compact and the dispersed or diffuse, based on the models analyzed by urban ecologist Salvador Rueda27.

The analysis of these two opposite models of compact and diffuse cities is evaluated in order to become acquainted with the two ends of urban organization. Both indicators make it possible to gain an approximate diagnose of the city’s situation, determining the point where both poles are.

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27 Salvador Rueda is an urban ecologist, member of the European Union Expert Group on the Urban Environment and Generalitat de Catalunya.
Land consumption and the deterioration of the support systems from the diffuse city model, in addition to the expense on materials and energy extracted from the system to keep its urban organization, have greater repercussions than those in the compact city model. The same is true for the flow of pollution, due to the forms of mobility, construction, and related services, as can be seen in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Support systems</th>
<th>Diffuse</th>
<th>Compact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploitation pressure on the support systems</td>
<td>Materials consumption</td>
<td>Greater built area per inhabitant.</td>
<td>Smaller built area per inhabitant.</td>
</tr>
<tr>
<td></td>
<td>Energy consumption</td>
<td>Greater energy consumption-housing typology.</td>
<td>Lower energy consumption-apartment blocks.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Greater consumption in single-family model.</td>
<td>Lower consumption in apartments.</td>
</tr>
<tr>
<td>Impact pressure on the support systems</td>
<td>Land consumption</td>
<td>Urban explosion without demographic growth.</td>
<td>Restricted to the rate of population growth.</td>
</tr>
<tr>
<td></td>
<td>Loss of infiltration capacity</td>
<td>Impermeabilization of infiltration areas and channeling rivers.</td>
<td>Conservation of infiltration areas.</td>
</tr>
<tr>
<td></td>
<td>Gas emissions/ greenhouse effect</td>
<td>Greater energy consumption.</td>
<td>Lower energy consumption.</td>
</tr>
<tr>
<td></td>
<td>Emissions of energy pollutants</td>
<td>Greater due to the mobility and energy models.</td>
<td>Lower, and greater accessibility.</td>
</tr>
<tr>
<td>Maintenance and increase of the urban system’s organization</td>
<td>Complexity</td>
<td>The uses and functions are separated in space.</td>
<td>Greater diversity among information carriers.</td>
</tr>
<tr>
<td></td>
<td>Compactness and proximity of information carriers</td>
<td>Dispersion of uses and functions.</td>
<td>Concentration leads to dense urban tissues/proximity in uses and functions.</td>
</tr>
<tr>
<td></td>
<td>Social cohesion</td>
<td>Population segregation.</td>
<td>Greater contact and social stability.</td>
</tr>
<tr>
<td>Urban quality</td>
<td>The separation of uses allows for lower emission levels.</td>
<td>Greater proximity immisions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Less noise in certain urban tissues.</td>
<td>Increase in noisy emissions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The urban space is reduced and substituted by private spaces.</td>
<td>Streets and squares are points of contact.</td>
<td></td>
</tr>
</tbody>
</table>


This chart makes it possible to jointly appreciate some of the main features of the models mentioned above. Although no city fully follows either one of these city models, or any other where we attempt to "simplify" the urban, they are indicators that make it possible to understand growth trends and, especially, costs and environmental implications.

We must restate the management models that rule cities in order to keep the necessary balance with the environment and ensure the future. It is crucial to analyze the components of the current urban system models, their degree of exploitation, and impact on the environment to establish the indicators that will follow up future trends, always seeking to optimize existing resources.
Key findings

4.2.2 International and national references

Urban centers in our country offer difficulties in “city building” in an environment derived from their rapid expansion over the last few decades. Thus, it will be necessary to establish multipurpose policies that will enhance the awareness of the city as a group of simultaneous mixed uses, while also stressing environmental and social awareness in all its stages, beginning with transportation, planning, economy, and education.

Below are some examples of sensible urban planning and recovery.

Madrid, Spain

Empresa Municipal de Vivienda de Madrid seeks a way to dignify and innovate the program and the image of social housing on the outskirts of Madrid. In 2000, this commitment sought to adopt new views and the company invited nine experts in architectural studies from various countries to make new designs of the city, all in response to a fixed density of 150 dwellings per hectare, and medium height. As reference, in the Mexico City Metropolitan Area, this indicator stands at 25 dwellings per hectare.

Among the guests were David Chipperfield, Ricardo Legorreta, MVRDV, Rogelio Salmona, Wiel Arets, to name a few, all of acknowledged capacity and worldwide prestige. The proposal was to generate, in the city’s peripheral areas of development and growth, mixed use urban centers containing all the satisfactors for neighborhood life and a functional road system of communication and integration with the city, as well as an efficient public transportation system.

The spatial network is structured through spaces of communication and coexistence, encouraging the integration of community life.

Amsterdam, Netherlands

The Netherlands is known for its innovative architectural design and for intense urban activity derived from its location over water, generating land for development by taking large expanses of land over the sea. From 1902 to 1977, the quay area east of the city remained as a port. In the 70’s, this area was abandoned due to its obsolescence in view of the increasing size of new ships. Towards 1980, city authorities decided to integrate them as residential areas, since their location keeps them linked to the city and affords them easy access. The islands are now a highly coveted residential area with amazing architecture.

28 A Metropolitan Area (MA) is defined as an urban conglomerate whose extension and functioning involves two or more political/administrative districts, and whose towns each have over 50 thousand inhabitants. Source: Interinstitutional study “Delimitación de Zonas Metropolitanas en México”. SEDESOL-CONAPO-INEGI. 2004.

29 Maas, Van Rijs, De Vries, Dutch Architects headed by Winnie Mass.
In the beginning, four peninsula-islands were developed: KNSM\(^{30}\), Java, Borneo, and Sporenburg; currently, the fifth peninsula, IJburg, is being integrated into the group, considering mixed uses and a density of 100 dwellings per hectare.

Housing construction began towards the end of the ‘80’s in what was once the city’s slaughterhouse and cattle market, and in 1990, a definite plan for the whole area was set forth. The basic infrastructure for the development of the area went hand in hand with the construction of the subway, thoroughfares and bridges between the islands of Borneo and Sporenburg.

It began with the design of low houses, creating a homogeneous profile of three- to four-storey buildings, and integrating some higher and larger emblematic buildings.

The reactivation of subused areas now densely populated and close to the city is exemplary, as they comprise all the satisfactors that integrate the housing system and have public transportation by tramway and buses extending their routes towards them.

**Buenos Aires, Argentina**

Puerto Madero in Buenos Aires, was a port area, deteriorated by abandonment and obsolescence. To reuse it, a high impact metropolitan project was implemented based on the creation of “Corporacion Antiguo Puerto Madero, S.A.”, with participation from the national Government of Argentina and of the city of Buenos Aires.

In 1991, there was a national contest to develop a master plan allowing the re-conversion of this deteriorated area; the underground area was used for parking; the old buildings were restored and expanded to satisfy new uses, offices, movie theaters, food areas, trade, and housing.

The success of this project has been clear in that it recovered the central port area of “Puerto Madero” for an intense use of the City of Buenos Aires, achieving:

1. Conservation of the area.
2. The redistribution that helped recompose its urban character.
3. Promotion of trade, culture, and residential settlements.
4. Reincorporation of green leisure areas.

Puerto Madero is a successful metropolitan project due to the interest and participation of public, private and social players.

\(^{30}\) KNSM is the name the island has taken from the previous user, the shipping company “Koninklijke Nederlansche Stoomboot Maatschappij”.
Key findings

Aguascalientes, Mexico

Aguascalientes was the first state in the Mexican Republic to negotiate the reception of Federal contributions via FONHAPO, enabling it to build the Valle de los Cactus Development on a 57.46 hectare lot which is currently being urbanized.

The development has 19 superblocks with 2,235 lots, 2,100 of which are for basic housing units. The highlight of the project is its integration of commercial areas, schools, parks, gardens and urban equipping. The parking lots have been set in groups that make it possible to eliminate streets in front of the dwellings, leaving these spaces as walkways that encourage community interaction.

The other complementary services include a healthcare center, daycare, fire station, free Internet center, and a public market with 85 store spaces where the inhabitants can sell food and crafts. 2,912 m² were devoted to sports activities and 3,260 m² to neighborhood gardens and parks.

The Aguascalientes Government and the Aguascalientes Housing Institute (IVEA, in Spanish), significantly increased the inhabitable area, from 21 m² to 34 m²—the basic unit model conceived as a two-storey house. The public area has high vault ceilings, enabling growth within, while keeping the urban image.

The project is remarkable in that it acknowledges the priorities of community interaction, sustainability, leisure, and cultural equipping, integrating the necessary services in order to generate a harmonious compound. The basic unit offers an attractive solution of progressive, spatially integrated growth.

4.2.3 Profiles of the cities in Mexico

Over the last 60 years, Mexico has shown one of the highest population growth rates in the world. Of the census localities existing in 1900, only 33 were urban (with over 15 thousand inhabitants), but gradually this number increased; by 1940, there were 55; and from that time on, the number grew at a rapid pace, reaching 311 in 1990 and 513 in 2000. It is estimated that by 2020, urban census localities will total 632.

In this light, we can consider Mexico to be a mostly urban country. Of the 103.3 million inhabitants registered in the II 2005 Population and Housing Count, 64.9 million (63%) live in 550 census localities (343 population centers) with over 15 thousand inhabitants. Based on this Count, in the period from 2000 to 2005, the population growth rate in the country was 1.02%, whereas in the 55 Metropolitan Areas of the country, it was 1.45%. Nonetheless, population decreased in some Metropolitan Areas such as Tecoman-Armeria in Colima, Acapulco in Guerrero, Moroleon-Uriangato in Guanajuato, La Piedad in Michoacan, and Rio Verde-Ciudad Fernandez in San Luis Potosi.

Likewise, Metropolitan Areas such as Monclova in Coahuila, the Mexico City Metropolitan Area (MCMA), Cuautla in Morelos, Guaymas in Sonora, Tulancingo in Hidalgo, Acayucan, Coatzaocoalcos, Minatitlan, Orizaba, and Poza Rica in Veracruz, showed growth rates below 1%; that is, below the national growth rate.

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31 It is estimated that total population currently adds up to 104 million.
In contrast, Metropolitan Areas such as Puerto Vallarta in Jalisco and Nayarit, Reynosa-Rio Bravo in Tamaulipas, and Cancun in Quintana Roo, showed rates of over 3.00%, with Cancun leading with a 5.56% rate. Should these rates continue, Cancun’s population would double in a mere 12.5 years.

It is clear that, although Metropolitan Areas have grown at a faster pace than the nation in general, this is not a homogeneous trend; that is, not all Metropolitan Areas grow at the same rate, and some are even losing population. However, as a principle, the country is still in a metropolization process where it is not yet possible to identify whether there is a tendency towards stabilization.

Table 19 shows the Metropolitan Areas with median annual growth rates below the national rate, as well as remarkable cases with high growth.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>La Piedad</td>
<td>229,372</td>
<td>229,289</td>
<td>-0.006 %</td>
</tr>
<tr>
<td>Acapulco</td>
<td>791,558</td>
<td>786,830</td>
<td>-0.10 %</td>
</tr>
<tr>
<td>Rio Verde-Cd. Fernandez</td>
<td>128,935</td>
<td>126,997</td>
<td>-0.27 %</td>
</tr>
<tr>
<td>Moroleon-Uriongato</td>
<td>100,063</td>
<td>99,828</td>
<td>-0.41 %</td>
</tr>
<tr>
<td>Tecoman-Armeria</td>
<td>127,863</td>
<td>123,089</td>
<td>-0.67 %</td>
</tr>
<tr>
<td>Minatitlan</td>
<td>323,389</td>
<td>330,781</td>
<td>0.40 %</td>
</tr>
<tr>
<td>Guaymas</td>
<td>180,316</td>
<td>184,816</td>
<td>0.43 %</td>
</tr>
<tr>
<td>Acayucan</td>
<td>102,992</td>
<td>105,552</td>
<td>0.43 %</td>
</tr>
<tr>
<td>Cuautla</td>
<td>358,405</td>
<td>368,543</td>
<td>0.49 %</td>
</tr>
<tr>
<td>Poza Rica</td>
<td>443,419</td>
<td>458,330</td>
<td>0.58 %</td>
</tr>
<tr>
<td>Orizaba</td>
<td>367,021</td>
<td>381,086</td>
<td>0.66 %</td>
</tr>
<tr>
<td>Monclova</td>
<td>282,853</td>
<td>294,191</td>
<td>0.69 %</td>
</tr>
<tr>
<td>Coatzacoalcos</td>
<td>307,724</td>
<td>321,182</td>
<td>0.75 %</td>
</tr>
<tr>
<td>MCMA</td>
<td>18,396,677</td>
<td>19,231,829</td>
<td>0.78 %</td>
</tr>
<tr>
<td>Tulancingo</td>
<td>193,638</td>
<td>204,708</td>
<td>0.98 %</td>
</tr>
<tr>
<td>Reynosa-Rio Bravo</td>
<td>524,692</td>
<td>633,730</td>
<td>3.38 %</td>
</tr>
<tr>
<td>Puerto Vallarta</td>
<td>244,536</td>
<td>304,107</td>
<td>3.91 %</td>
</tr>
<tr>
<td>Cancun</td>
<td>431,128</td>
<td>586,288</td>
<td>5.56 %</td>
</tr>
<tr>
<td><strong>NATIONAL TOTAL</strong></td>
<td><strong>97,483,412</strong></td>
<td><strong>103,263,388</strong></td>
<td><strong>1.02 %</strong></td>
</tr>
</tbody>
</table>

Source: SEDESOL based on the 2000 Population and Housing Census and on the 2005 Population and Housing Count (INEGI)

In 2000, 52.83% of the country’s total population was concentrated in Metropolitan Areas, whereas by 2005, the percentage had risen to 54.12%.
Key findings

Likewise, in absolute terms, national population increased by 5.8 million inhabitants in the same period, whereas in the Metropolitan Areas, this figure reached close to 4.4 million.

Thus, of the country’s overall growth, 76% was found in Metropolitan Areas. The rest of the country grew by 1.4 million at a rate of 0.53%, which stands for 24% of the new inhabitants.

In addition to confirming the fact that the country is still in a metropolization process, these results show the urgent need for adequate metropolitan planning and coordination instruments.

SEDESOL has made a significant effort and takes an active role in the conurbations of the Mexico City, Puebla, and Tlaxcala Metropolitan Areas. However, further efforts are required in the intrastate and interstate Metropolitan Areas32, as their growth dynamics have placed at risk the access to basic services for the population, as well as the sustainability of these cities.

With regard to the quality of life in some cities, SEDESOL has begun an analysis based on surveys of competitiveness, social violence, and quality of life in 23 Metropolitan Areas and three cities33.

Competitiveness is defined as a city’s ability to achieve steadily high economic growth rates, so that, in addition to improving the competitiveness of the various institutions in its makeup, its residents’ quality of life and living conditions will also be better.

As for social violence, it is legally defined from two points of view: the first one is the physical or moral coercion of one person over another, in such a way that the latter will consent to the enactment of something to which this person would never have agreed of his or her own free will. In turn, violence is understood as the behavior of a person who threatens or attacks another (or others) physically, psychologically, or both34.

Last, quality of life is defined as a situation in which a city has the following elements35:

a) Available resources to cover basic needs, such as: food, housing, hygiene, clothing, and others.

b) Administrative capacity to offer the basic public services.

c) Social and programmatic creation of competent alternatives that will enable development with equality and justice.

32 Intrastate or intraurban conurbation refers to an expansion phenomenon generated within a state, whereas interstate or interurban conurbation refers to the expansion of the territory between states, creating metropolis.
33 For in-depth details on the results of these surveys, please contact SEDESOL’s Undersecretary Office of Urban development and Territorial Ordinance.
34 Rodríguez Ortega, Graciela, “Violencia Social”, in: Marcia Muñoz de Alba Medrano (coord.), Violencia Social, México City, Universidad Nacional Autonoma de Mexico, 2002.
4.2.4 Sustainable development and sustainability

The main demographic trend at the beginning of the XXIst century is and will continue to be people’s leaving the country and migrating to cities. The United Nations states that “practically all worldwide demographic growth for the 2000-2030 period will be centered in the cities”, as we have mentioned above.

Mexico displays the same demographic growth trend in cities throughout the country. Sustainability plays a crucial role in comprehensive development within this scenario of greater urbanization.

The more widespread definition of "sustainable development" is the one from the 1987 Brundtland Report, according to which development is sustainable if it meets the needs of the current generations without compromising the possibility of future generations to satisfy their own. This definition was adopted and expanded on from the Rio Declaration (United Nations, 1992).

Beginning in the nineties, numerous interpretations of sustainable growth were proposed,36 most of them are based on the considerations in the Brundtland Report and the United Nations’ Program 21, namely:

- It is necessary to encourage development strategies that will preserve, and if possible improve, the environment for future generations;
- Living conditions must be improved exclusively within the limitations of the various ecosystems’ capacities;
- Any social, spatial, or temporal transfer of the consequences and costs on the environment must be avoided or reduced as much as possible.

Consensus surrounding these objectives indicates that the concept of “sustainable development” has become an essential part of the three main dimensions: environmental, social, and economic, as well as spatial, from the local to the global scale.

For their part, sustainable cities are those which have and supply quality services to all their population, a healthy environment, decent and sufficient dwellings, safety, parks, sports and leisure areas, intense and fruitful social coexistence, decent and well-paid jobs, full and efficient sanitary services, quality education, and access to cultural activities; also, the use of land is an essential aspect of urban planning, directly related to sustainable development, both in the adequate distribution of dwellings, businesses, and industrial facilities, and in the efficient use of the urban green areas.

Cities—in contrast to what a city should be nowadays—are highly inefficient systems, ravenously consuming energy and materials. Nonetheless, some cities which have incorporated sustainability into their urban planning and development are Sydney and Turin.

36 Around 200 definitions were identified.
Key findings

Sydney

Sydney’s Olympic Village was built on a 90 hectare surface adjacent to the Olympic park, and has now been turned into a housing complex, developed through an urban plan of territorial distribution, based on sustainability and the generation of public spaces that order the social-urban network.

The complex, known as Newington, has a total of 6,000 dwellings, a retirement center, a business center, and a natural reserve.

The Olympic Village promotes energy efficiency through the use of solar energy, displaying the ability to manage renewable resources that fill the whole demand. This is the largest housing complex in the world to use these technologies and it is known as the “Solar Village”.

Energy is obtained through the placement of photovoltaic panels, which generate electricity and heat water, placed on the rooftops.

Water consumption was reduced by 50% through separating gray waters and sending them to treatment plants in order to reuse them in toilets and watering.

The wood used to build the complex was obtained from trees planted expressly for this purpose; the paint was required to be non-toxic, and construction leftovers were used as landfill for streets and avenues.

Sydney’s former Olympic Village has received several awards, both for its spatial quality and its efficiency in using self-sustaining systems, thus contributing to the regeneration of some ruined areas. An exemplary housing proposal within the framework of sustainability.

Turin

Located beside the Lingotto, Turin’s Olympic Village is comprised of the residences and services that housed the 2,500 athletes who participated in the 2006 Winter Olympics.

In an area of over 100 thousand square meters, there are 750 apartments and the necessary services: an administrative center, a shopping area, a leisure area, and green spaces. None of the volumes in the complex is larger than 14 by 24 meters, with height ranging from 4- to 7-storey buildings. The inner buildings are linked, alternating solids and open spaces which create green and light areas, with a density similar to that of a block urban tissue; however, the spatial experience derived from this composition is more open and attractive.

The bio-architecture criteria used in the project is worth noting, as it creates a group of sustainable buildings, designed to save energy and reduce the emission of pollutants. Both passive and active energy preservation systems include double windows for harnessing solar energy, heating through radiating floor, photovoltaic panels and cells, and a network of teleheating and solar systems with air for ventilation. The whole complex uses sustainable techniques; the systems to collect rain water and the greenhouses are significant.
Resorting to these techniques has led to 60% energy savings, and significantly reduced the emission of pollutants.

The Olympic Village is an example of planned sustainability that minimizes the use of non-renewable resources and makes the most out of renewable ones.

4.3 Key findings

- In the 2006-2012 period, housing needs in Mexico will total around 5.5 million additional dwellings, therefore causing demand for 137 thousand hectares of urbanized land with the necessary infrastructure and equipping.

- Mexico does not have enough public supports and/or direct subsidies for acquiring low-cost land for the poorer population.

- Current mechanisms for the incorporation of low-cost housing into the development of cities have been those run by the real estate market, while those catering to the population in patrimonial poverty operate on limited resources.

- Therefore, novel initiatives are necessary for the acquisition and incorporation of land into urban development, considering: a) adapting the legal, administrative, and financial mechanisms as well as the regulatory framework that will enable land acquisition and habilitation to fill the housing needs of the more neglected sectors of society; b) acknowledging the existence of an accumulated social participation experience that can be capitalized to promote alternative real estate management mechanisms; and c) strengthening the existing instruments.

- With regard to the availability of services such as water, sewage, and electricity, 90% of Mexico’s urban population is covered. As for more specialized services, such as water treatment, solid waste, pavement, and street accessibility, coverage drops to 50% of the urban population.

- It is important to understand housing as something more than a physical object; it is an essential element of what we call urban-residential habitat which, in its territorial reserve, forces us to consider not only the dwellings-and-lot unit, but also its immediate surroundings: the housing complex and how it enables the creation of a community; its location, and how it knits together the city network.

- In the socio-cultural aspect, housing implies the determination of which factors encourage the creation of social networks and identities in the political-economic aspect; how the supply-demand relationship is answered with normally contrary logic between housing needs, which are dynamic, and a static supply; and what constitutes a need from subjects who save, receive a subsidy, and/or are paying a mortgage.

- The goal to supply adequate and satisfactory housing solutions incorporates the need to offer more diverse and flexible solutions than the housing currently built by developers, mainly with regard to
Key findings

social and economic housing, as they show the least consolidation ability, and whose inhabitants have the least payment capacity. In addition, the financial products to deal with the potential housing demand must consider the needs of the population not only based on their income levels, but also on their age structure and the geographic distribution.

- A very important aspect to be worked on in housing programs is the creation of community life, which demands advances in the development of pre- and post-sale systems designed to train the recipients for a life of joint ownership; in addition, this helps maintain the value of the dwelling in time, as a result of better preservation within the schemes of neighborhood organization.

- Urban planning must be the first step in a city’s orderly development and growth, defined through the land’s development potential and the feasibility of its being integrated into the existing infrastructure networks. Currently, housing has outpaced cities in terms of urban planning.

- A compact city has various advantages in land use, proximity of services due to mixed uses, smaller distances for everyday activities, and a more efficient use of energy sources.

- There are national and international references that make it possible to identify elements which contribute to creating better cities, such as: designs with medium to high housing densities; mixed urban uses that supply life satisfactors; considering functional thoroughfares and efficient public transportation services; creative urban designs to incorporate subused, abandoned and/or deteriorated areas; the use of alternative energy sources such as solar energy, to name a few. In addition, it is crucial for the public, private, and social sectors to take an active role in order to achieve better community coexistence and sustainability of their habitat.
SECTION 5. CONCLUSIONS

5.1 Achievements

Below are listed the most significant achievements in 2005, in order to emphasize the steps that have been taken to improve the sector in general.

- Explicit recognition from the various political, entrepreneurial, and academic players, who agree that housing is an essential factor that has a favorable effect on a nation’s political, economic and social development.

- The current administration’s housing policy has boosted real estate construction throughout the country, the generation of new financial instruments, and the private sector’s participation, achieving historical figures in housing finance with 2.3 million loans placed over a five-year period.

- Taking a look at the legal aspects, the New Housing Law was passed last June, benefiting the sector by establishing the legal framework and necessary guidelines to supply the population with housing. This new law sets forth the strengthening of the coordination mechanisms of all three levels of Government—federation, states, and municipalities—as well as the mechanisms to coordinate with the social and private sectors, thus generating healthy competition in the market. In addition, the Housing Law makes a certainty not only out of supplying housing as a physical object, but also out of seeking “results in inhabitants’ welfare and quality of life”.

- As for the social Production of Habitat, various schemes have been implemented with a view to cover the needs of the lowest-income families and prevent the generation of new irregular settlements on the outskirts of the cities. Such is the case of SHF’s microfinance programs and the housing program in family lot run by the Mexico City Government together with Colegio de Arquitectos de la Ciudad de Mexico.

- As a result of competition within the mortgage sector, interest rates have dropped and the number of loans placed by SOFOLS and Banks has increased significantly. Likewise, the boost given to the entry of new products into the market is worth noting, as they encourage housing mobility. Such is the case of Apoyo INFONAVIT and Cofinanciamiento, which have made it possible to broaden access to financing for a larger number of families; moreover, INFONAVIT recently launched a program for obtaining a second loan.

- The need to develop feasible schemes for the urban improvement of Mexican cities has led to the discussion of, and an initial movement towards densification through vertical housing models and mixed-use schemes. Through these models, the use of existing infrastructure will be promoted, thus avoiding cities’ continuous and costly horizontal growth.

- Furthermore, the topic of “Land”, debated in the various forums held over the last few years, led to the creation of a workgroup coordinated by CONAVI; its goals are the creation of a public urban land agenda that will make it possible to contribute to the following aspects:
a) Understanding the causes of urban precariousness\(^{37}\) and irregularity, as part of a solution.

b) Spreading the regulations and simplifying the administrative procedures to offer legal security to the players who take part in urban development.

c) Continuing the efforts of the various levels of government to guarantee the poorer population access to basic infrastructure and equipping.

d) Prompting, arranging, and in some cases, arbitrating the actions of individuals and the civilian population.

e) Carrying out public interest and social benefit actions.

f) Studying the convenience and effectiveness of classing as a crime the invasion or illegal sales of *Ejido* areas or the division of lots without supplying them with basic urban infrastructure.

g) Designing a national policy on urban land supplied with the instruments to be applied at the three levels of government (Urban Reform).

- Most public institutions and some developers acknowledge more and more the application of sustainable technologies in housing and in urban planning as a priority. Currently, the market shows examples of housing with energy- and water-saving technologies which contribute to a rational use of natural resources.

### 5.2 Challenges and actions

In the framework of the democratic change that the country is undergoing, it is crucial to identify the most important challenges of the sector to be solved over the coming years.

- One of the most important challenges has to do with the ability of all the agents involved—public and private—to satisfy housing demand over the next years with a comprehensive view of urban development. Official estimates indicate that, in addition to the existing housing backwardness, each day there will be more households in need of decent housing. The housing supply must adapt to demographic dynamics with new products designed to satisfy families’ needs and preferences, as well as the geographic characteristics of each region in Mexico.

- The national housing policy must include both a medium- and long-term view, that will consider the homologation of the financing organisms’ criteria and strategies, and that will act in coordination with state housing entities as well as financial institutions, aiming their goals towards meeting the needs of lower-income families.

- Within this long-term housing policy, it is also necessary to work towards the design of a comprehensive and transparent system of upfront subsidies for the lower-income population. The family’s economic capacity and previous savings efforts must be considered, in order to combine, in all fairness and justice, households’ income and savings with the size of the subsidy.

\(^{37}\) The term “urban precariousness” refers to the way in which the poor gain access to land that is low quality and inconvenient in its location, design, and basic services. Irregular settlements are also another way of gaining access to land from the point of view of land ownership. Iracheta, et al, 2003.
• The Social Production of Habitat can’t be restricted to the production of units; it must take on the challenge of building the city and citizenry, focusing on the rational use of economic and natural resources it employs, as well as the preservation and improvement of the environment. It is urgent to work on the development of a comprehensive system of support to the social Production of Habitat. Thus, the consolidation and institutionalization of the system will make it possible to revert the difficulties that social producers currently face, as well as the urban risks and negative effects of the spontaneous production of human settlements and housing in our country.

• Housing needs at the state and municipal levels must be considered in order to better plan the placement of loans, preventing excess supply in some regions and a deficit in others.

• The construction industry and the real estate sector must invest further in research and development of technology that will make it possible to reduce direct housing costs. To achieve this, it will be crucial to have a closer relationship with the country’s universities and research centers.

• The managerial abilities of key market agents—state and municipal authorities and the housing industry—must be increased, reducing the gap to move on towards world class operating models. The financial and operational soundness of national housing entities must be used to generate loans, so those responsible for urban administration will supply the conditions to allow housing to build cities. The residual value of land with infrastructure and services, the homologation of urban and building regulations, as well as the Public Registers of Property, are undeveloped areas of opportunity. Housing development must take into account the various aspects that integrate a city, through the inclusion of services, infrastructure, transportation and the balance of uses and costs of land. Our cities must be densified keeping up with the rate of growth and the urban spread, as well as beginning a process of recycling disused spaces in order to reactivate the central areas which have all the services and are currently subused.

• Housing mobility must be given priority as it will make it possible to increase the housing asset value together with its urban setting. This strategy compounds developers’ post-sale programs, the participation of municipalities in encouraging citizens’ participation and regulating the complementary use of dwellings, as well as steps to stimulate the philosophy of timely payment linked to the option of consecutive loans, as the one offered by INFONAVIT, to move to better houses.

• Working on the housing programs to encourage community life, making it possible to develop a life of joint ownership, thus contributing to the maintenance and preservation of housing and better conservation within the neighborhood organization schemes.

• The challenge of urban and regional development is to: i) guarantee the efficient functioning of cities as the engine of development, in synergy with their region; ii) face the marked inequality of access to housing, equipping and urban services; iii) prevent the growth of cities from being explosive and disorderly; and iv) have better planning in the urbanization process.

• The challenge of offering the underprivileged population greater access to housing and a housing lot must be attacked assuming that there is no supply of legal urban land (that is, urbanized, with equipping, close
Challenges and actions

to the city, and safe). Therefore, it is essential to have adequate land policies that will enable all inhabitants to gain access to land, thus preventing speculation and irregular settlements.

- It is necessary to strengthen the existing mechanisms so that urban development and local housing entities will acquire and equip land in order to incorporate it into the urban areas, as well as creating new forms of support for the needier sectors through instruments such as savings, subsidies, or land financing. It is very important to revert the paradigm, “whoever controls land, controls urban development”. So far, it has been controlled by the submarkets—legal and illegal—and not the State, as is the case in more developed countries. Another important challenge will be establishing new financing mechanisms such as the conversion of private capital, property taxes—that is, for the government to recover resources via real estate taxes (property tax, added value); the latter makes it possible to transfer rights: share costs and earnings between various areas of the city, preventing speculation.

- Urban land reforms in Mexico will have to enable the supply of broad and low-cost land, mainly for the underprivileged sectors, through various courses of action such as:
  a) Establishing an ecological and social culture,
  b) Property tax linked to zoning,
  c) Tax on increasing added value,
  d) Master plans and large projects with mandatory land readjustments for development in planned terms,
  e) Inclusion of public, social, and environmental uses, and linking housing to the public interaction, healthcare, work, and recreation areas.
  f) Expropriation according to the current land use if not developed on time.

- Several factors integrating cities must be considered in housing development, through the incorporation of services, infrastructure, transportation, the balance between land uses and costs, and sustainability, in order to increase our cities’ productivity and efficiency in international competition for job creation. It is necessary to densify our cities and begin a process of recycling disused spaces in order to reactivate the central areas that have all the services and are currently subused.

- The principle of sustainability must direct all housing activities, offering alternatives of saving, reusing, and recycling.

- Stimulate the application of sustainable models that will guarantee the efficient use of natural resources, preventing further damage to the environment.

- Strengthen freedom of choice by instructing recipients on how to look for and choose their best housing solution, based on their needs, be it through the acquisition of new or used housing, or by renting. Thus, it
will be necessary to generate and strengthen new products and agents by market niche, such as the so-called Mortgage Brokers.\(^{38}\)

- Based on the potential of diversity and of local response offered by small and medium companies, it is necessary to identify mechanisms to strengthen and keep them in the market.

In this urban/territorial/environmental scheme, together with the increase in the sector’s contribution to total GDP, it is necessary to consider the challenges and pending actions as strategic. To begin the “construction of sustainable cities”, the current housing production must be qualitatively strengthened to satisfy the population’s demand as well as the city’s needs.

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\(^{38}\) These are intermediaries between an end client and an institution offering some type of mortgage product for housing acquisition; therefore, the suppliers are Banks and Mortgage SOFOLS—the client is the person seeking to buy a house through a loan, and the broker offers counseling to meet the client’s needs.
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<tr>
<td>AMSFOL</td>
<td>Asociación Mexicana de Sociedades Financieras de Objeto Limitado A.C.</td>
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<tr>
<td>BANSEFI</td>
<td>Banco del Ahorro Nacional y Servicios Financieros</td>
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<tr>
<td>BANXICO</td>
<td>Banco de México</td>
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<tr>
<td>BMV</td>
<td>Bolsa Mexicana de Valores</td>
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<tr>
<td>CIDOC</td>
<td>Centro de Investigación y Documentación de la Casa</td>
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<tr>
<td>CONAFOVI</td>
<td>Comisión Nacional de Fomento a la Vivienda</td>
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<tr>
<td>CONAPO</td>
<td>Consejo Nacional de Población</td>
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<td>CONAVI</td>
<td>Comisión Nacional de Vivienda</td>
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<tr>
<td>ENIGH</td>
<td>Encuesta Nacional de Ingreso y Gasto de los Hogares</td>
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<td>FONAEVI</td>
<td>Fondo Nacional de Apoyo Económico a la Vivienda</td>
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<td>FONHAPO</td>
<td>Fideicomiso Fondo Nacional de Habitaciones Populares</td>
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<tr>
<td>FOVISSSTE</td>
<td>Fondo de Vivienda del Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado</td>
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<tr>
<td>HIC</td>
<td>Habitat International Coalition</td>
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<tr>
<td>INEGI</td>
<td>Instituto Nacional de Estadística Geografía e Informática</td>
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<td>INFONAVIT</td>
<td>Instituto del Fondo Nacional de la Vivienda para los Trabajadores</td>
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<td>IPC</td>
<td>Índice de Precios y Cotizaciones</td>
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<td>ONAVIS</td>
<td>Organismos Nacionales de Vivienda</td>
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<td>OREVIS</td>
<td>Organismos Estatales de Vivienda</td>
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<td>PNUD</td>
<td>Programa de Naciones Unidas para el Desarrollo</td>
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<tr>
<td>PROSAVI</td>
<td>Programa Especial de Créditos y Subsidios para la Vivienda</td>
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<td>SCH</td>
<td>Seguro de Crédito Hipotecario</td>
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<tr>
<td>SEDESOL</td>
<td>Secretaría de Desarrollo Social</td>
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<td>SHCP</td>
<td>Secretaría de Hacienda y Crédito Público</td>
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<tr>
<td>SHF</td>
<td>Sociedad Hipotecaria Federal</td>
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<td>SER</td>
<td>Secretaría de Relaciones Exteriores</td>
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<tr>
<td>SOFOLES</td>
<td>Sociedades Financieras de Objetos Limitado</td>
</tr>
<tr>
<td>UDI</td>
<td>Unidad de Inversión</td>
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