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HOUSING POLICIES AND PROGRAMS IN GUATEMALA: DIAGNOSIS, EVALUATION AND GUIDELINES FOR ACTION

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Executive Summary

This paper focuses on five related matters: (a) an analysis of the present economic, political, and social context of the Guatemalan housing sector; (b) a summary of the conditions prevailing in the sector; (c) a diagnosis of the status of housing policy in the country; (d) an evaluation of the Government=s current housing program; and (e) a set of guidelines for corrective action on housing policy in general and on the housing program in particular.

1. *The Economic, Social and Political Context*: The economic, social and political context of the Guatemalan housing sector is not conducive to a rapid improvement of housing conditions at the present time. Urban growth is very rapid: In the late 1990s, the urban population grew at 3.8% per annum. The country is poor and its income distribution is highly skewed: Almost 30% of the country=s population and 8% of its urban population still lives on less than $1.00/day, while 70% of the country=s population, and 30% of the urban population lives on less than $2.00/day. Economic growth, although solid, cannot keep up with the high rates of population growth, with the result that household incomes C the chief resource for housing investment C remain low and stagnant. A weak and fragile financial sector (domestic credit constitutes only 15.7% of GDP) prevents the development of a vibrant market in mortgages, a key to the growth of the residential construction sector. And low levels of public revenues (less than 12% of GDP) constrain the ability of the government to embark upon ambitious housing subsidy programs.

2. *Conditions in the Housing Sector*: Housing conditions in Guatemala are generally stagnant. Residential land is ample, but access to residential land is limited by low levels of savings and incomes. Land prices are relatively affordable, but it appears that the lowestBcost urban lots are disappearing. Mortgage credit for housing is largely restricted to highBincome households, and mortgage interest spreads are high despite low levels of inflation. Construction costs are typical of the region. House prices are relatively low, and the formal sector has successfully gone downBmarket. Housing sector growth is generally constrained by the near absence of mortgage finance, rather than by the high costs of land and construction. The share of the informal sector in housing provision is very largeCit provided almost 40% of the metropolitan housing stock, and 75% of it through invasions,

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mostly of public lands. Partly as a result of insecure tenure, the amount of space per person is very restricted, and overcrowding is nearing crisis proportions. On the whole, the quality of structures is improving, but the quality of residential amenities is worsening. New housing production, by all sectors, keeps up with household formation, but overall housing investment is still a relatively small share (1.2%) of the Gross Domestic Product.

3. *The Status of Housing Policy*: Earlier housing policy reforms, and the Government=s housing program created in 1997Cwith financial assistance from the InterBAmerican Development Bank (IDB)Cto implement them, positioned the Government solidly as an enabler and facilitator of housing action, moving it away from the direct production and financing of housing. The reforms were grounded in appropriate legislationCthe Housing and Human Settlements Law of 1996, which created the institutional framework for managing and monitoring the housing sector as a wholeCas well as in a new legal platform for the smooth transfer of invaded public lands to squatter families. They opened the way for increasing mortgage finance by the banking sector by ending loans at subsidized interest rates and replacing them with up-front subsidies accompanied by loans at market rates. In addition, they called for action on all the key components of modern housing policy reform: the legalization of property rights, direct subsidies for a variety of new housing solutions, infrastructure upgrading and environmental risk mitigation in informal settlements, as well as institutional and regulatory reform.

4. *The Government=s Housing Program*: The Government of Guatemala concluded a loan agreement with the IDB in 1997 for a comprehensive housing program balanced between creating new housing solutions and upgrading existing housing, and scheduled for completion in four years. The total cost of the program was estimated at $108.8 millionC$60 from the IDB and 48.8 from the Government of Guatemala. The directBsubsidy component of the program ($91.9 million) was implemented very rapidly and most of its budget was disbursed in two years. Most of the program funds were diverted away from upgrading and into new housing solutions, with the result that less than 1% of existing settlements were upgraded. Little progress was made in legalization as well, no new communities were legalized, and C contrary to contractual agreements with the IDB C subsidy funds may have been approved for the purchase of occupied public lands. By March 2000, almost 86,000 subsidies were approved, surpassing the original program budget by 38.5%C43% for 37,500 serviced lots, 44% for 36,000 house constructions on owned lots, 6.5% for 5,400 new housing units, and 3.5% for miscellaneous community improvement projects involving some 3,500 families. Only 2,000 subsidies were issued in conjunction with mortgage loans. No mechanisms were instituted for ensuring that land for serviced lots was bought at market prices, and the great majority of serviced lots, more than 90%, remain unoccupied. Not much is known about house construction on owned lots. New, and highly affordable, housing units were produced for an average price of Q53,000 ($6,800), amounting to 1.3 median annual household incomes. Subsidies for serviced lots generated 1.6 lots for every subsidy, and subsidies for new housing units generated 2.0 houses for every subsidy.

5. *Guidelines for Action on Housing Policy*: First, the legalization of tenure must be streamlined, and a Legalization Commission should be created to oversee and accelerate the transfer of property rights to squatters on both public and private lands. Second, mortgage lending for housing must be increased by finding the means to encourage banks to issue mediumBterm securities to finance mortgage loans. Third, the use of housing subsidies must be rationalized by allocating subsidies to programs and projects that generate the greatest multiplier effects, and by balancing subsidies between programs that aim to increase new housing supply and programs that aim at upgrading the existing housing stock. Fourth, a national upgrading program C focusing on the metropolitan area and based on the improvement of infrastructure and on the mitigation of environmental risk in established informal communities C must be pursued as a key housing policy priority. Fifth, the regulatory regime governing the housing sector must be reformed by creating an Environment Risk Commission to assess mudslide risk in informal communities, by rejecting any artificial metropolitan growth controls, and by enacting municipal regulations that allow and supporting progressive improvements of houses and community infrastructure. Finally, the institutional framework governing intervention in the housing sector should be strengthened by insisting that the Government remain a facilitator of housing action rather than a producer of housing, by engaging with individual families through privateBsector and civicBsector intermediaries rather than directly, and by creating a National Housing Council with the mandate to oversee the housing sector as a whole and to allocate government resources among programs aimed at making the sector efficient, equitable and sustainable.

6. *Guidelines for Action on the Housing Program*: The present housing program is now ready to embark upon its second phase of implementation. Five guidelines should be heeded during the implementation of the second phase: First, the information gaps on the first phase of the program must be closed. Second, the oversight of intermediaries as well as the process of selecting intermediaries must be improved. Third, direct program subsidies must be used more effectively to generate higher multiplier effects, to attract more housing finance, and to balance community subsidies and individual subsidies. Fourth, the balance between subsidies aimed at existing housing and those aimed at new housing must be restored by shifting subsidy funds to a national program of infrastructure upgrading and environmental risk mitigation in existing informal settlements. Fifth, the available funds in the program should be used to create and support key new institutions in the housing sectorCthe Legalization Commission, the Environmental Risk Commission, and the National Housing Council.

Introduction

In September of 1997, the Government of Guatemala, with financial and technical assistance from the Inter-American Development Bank (IDB), embarked upon major program of housing policy reform. The reform program positioned the government solidly as an enabler and facilitator of housing action, moving it away from the direct production and financing of housing. It was grounded in appropriate legislation C the Housing and Human Settlements Law of 1996, which created the institutional framework for managing and monitoring the housing sector as a whole C as well as in a new legal platform for the smooth transfer of invaded public lands to squatter families. It opened the way for increasing mortgage finance by the banking sector by ending loans at subsidized interest rates and replacing them with up-front subsidies accompanied by loans at market rates. In addition, it apportioned subsidies to all the other key components of housing policy reform: from the regularization of property rights and infrastructure upgrading in squatter settlements, to the provision of serviced residential lots, to the allocation of funds for small improvements of existing houses, to the reform of regulations governing housing and land development, and to institutional reform of government agencies involved in housing. In short, the reform program was, and still remains, a solid and sensible approach to rejuvenating government intervention in the housing sector in Guatemala and elsewhere.

The funds allocated for the program C $48.8 million by the Government of Guatemala and $60 million by the IDBC have largely been spent, and housing subsidies, in one form or another, were allocated to more than 85,000 families in little more than two years. Yet many of the original objectives of the program were not attained, and housing policy in Guatemala today is again at a crossroads.

This paper provides an analysis of the present economic, political, and social context of the Guatemalan housing sector, the conditions in the sector, and the status of housing policies and programs in the country at the present time, with the aim of shedding some light on why the expected results were not attained, and proposing a set of guidelines for corrective action. Its purpose is to organize and analyze the available information, so as to facilitate a fruitful discussion of housing policy and program reforms in Guatemala at this time, as well as to initiate a review of the present state of multiBlateral lending for comprehensive housing sector reforms in Guatemala and elsewhere.

I The Economic, Political and Social Context

Housing conditions in Guatemala, as well as the potential for government intervention in the housing sector, cannot be understood without reference to the macroBeconomy, the political situation, and the social conditions prevailing in the country. First, housing needs are more acute in countries, like Guatemala, that are still undergoing massive ruralBurban migration and rapid urbanization. Second, they are even more acute than expected in Guatemala, because its urban population is very highly concentrated in a single metropolitan region. Third, the housing sector in Guatemala generally reflects the level of economic development of the country and the distribution of wealth and income C its poor housing is basically a reflection, as well as a cause, of its poverty. Fourth, housing development in Guatemala is also hampered by distortions and inefficiencies in its financial sector that result in interestBrate volatility and cycles of credit booms and busts, as well as by the very limited demand for longBterm financial assets. Fifth, it is also adversely affected by the low rates of domestic savings and investment in the country, as well as by the relatively small contribution of the construction sector to the overall economy. Sixth, government support for the sector is hampered by the relatively small share of government revenues in the economy, by difficulties in raising the necessary revenues to meet the political commitments established in the Peace Accords of 1996, and by the reluctance to incur additional external debt. Finally, government intervention in housing in Guatemala also suffers during the current period of political transition, when priorities quickly change, programs are abandoned in mid-course without a clear understanding of their strengths and weaknesses, and new C and often untried C institutional arrangements are hastily put in place. Basic indicators measuring these contextual aspects of the housing sector in Guatemala, and comparing them with conditions in countries in Latin America and the Caribbean, in other lowerBmiddle income countries, and in the world at large are given in table 1.

Five aspects of the economic, political, and social context of the housing sector in Guatemala are discussed in greater detail below, because they are necessary for understanding conditions in the housing sector, as well as the status of housing policy in the country:

1. the level of urbanization and the rate of urban growth;
1. the level of development and the distribution of income;
2. the state of the financial sector;
3. fiscal conditions; and
4. domestic investment and construction activity.

1. *The Level of Urbanization and the Rate of Urban Growth*: Unlike most countries in Latin America, Guatemala is still a largely agricultural country, and the majority of its population still reside in rural areas. In 1990, 52% of its labor force was still employed in agriculture, compared with an average of 25% in Latin America and the Caribbean, and 58% in other lower–middle income countries. By 1997, less than 40% of its population lived in urban areas and, among Latin American and Caribbean countries, only Haiti and Guyana were

Table 1: Basic Economic and Social Indicators, 1990–2000[1]

Indicator	Guatemala	Panama	Ecuador	Venezuela	Latin America & the Caribbean	Lower-Middle Income Countries	The World
Country Population (millions), 1997	11.1	2.8[1]	12.0	23.0	494	2,283	5,820
Annual Population Growth Rate, 1997-2015 (%)	2.7	1.3	1.5	1.5	1.3	0.9	1.1
Urban Population (%), 1997	39.7*	56.4	60	86	74	42	46
Labor Force in Agriculture, 1990 (%)	52	21	33	12	25	58	49
Household Size, 1990	4.8*	4.2	4.7	4.4	4.3	4.6	4.1
Annual Urban Population Growth (%), 1990-2010	3.80	2.48	3.13	2.11	2.15	-	2.55
Country GNP ($ billions), 1997	18.8	8.4	18.4	78.7	1,196.8	2,817.9	29,925
GNP per Capita ($), 1997	1,691	3,080	1,570	3,450	4,127	1,230	5,180
Annual GDP per Capita Growth (%), 1990-98	1.5	2.9	1.0	5.3	1.8	-	-
Income Distribution Gini Index (1985-95)	59.6	57.0	46.6	46.8	51.6	-	39.1
Annual Inflation (%), 1990-97	17.0	1.4	37.7	52.0	106.2	-	14.4
Under-5 Mortality Rate per >000, 1996	55	25	40	28	41	44	73
Female Life Expectancy (years), 1996	69	76	73	76	73	71	69
Female Adult Illiteracy (%), 1995	51	10	12	10	15	27	38
Access to Safe Water (%), 1995	68	83	70	79	73	-	78
Access to Sanitation in Urban Areas (%), 1995	78	87	60	74	80	75	-
Government Revenues as % of GDP, 1996	11.0*	27.4	15.7	19.7	21.6	24.1	26.6
Government Budget Deficit as % of GDP, 1996	-2.8*	-3.0	0.0	1.4	-3.3	-3.4	-3.1
Debt as percent of GDP (%), 1997	22.4	88.1	75.0	39.9	33.6	-	-
Gross Domestic Investment as % of GDP, 1997	17.0*	34.9	20.2	18.8	24.4	27	22
Value Added by Construction as % of GDP, 1997	2.5*	4.5	3.2	5.2	5.3	-	-
Gross Domestic Savings as % of GDP, 1997	9.4*	35.6	19.2	30	20	27	22
Banking Sector Credit as % of GDP, 1997	15.8*	92.1	29.0	19.9	35.7	65.6	139.1
Institutional Investor Credit Rating, 1998	27.0	33.9	26.7	34.4	33.5	33.6	35.8
Corruption Perception Rank (lowest=99), 1999	68	-	82	75	61	-	49*

* Data for Guatemala is for 1998B1999.

[1] Sources for the table are given in endnote 1.

less urbanized. By contrast, by the year 2000, more than 80% of the population of Latin America and the Caribbean lived in cities.

The low level of urbanization in Guatemala is necessarily associated with its high rates population growth and its high levels of ruralBurban migration, and hence also with its high rates of urban growth. In the late 1990s, the Guatemalan population as a whole grew at an annual compound rate of 2.7%, a very high growth rate compared to 1.3% in Latin American and the Caribbean, and 1.1% in the world at large. The urban population grew at 3.8%, compared to 2.2% in Latin American and the Caribbean, and 2.6% in the world at large. At this rate of population growth, the urban population in Guatemala can be expected to double in less than 20 years. This will create severe pressure on housing demandCboth as the result of the high natural growth of population, and as a result of the move from villages (where people already have houses) to towns and cities (where they do not).

The total demand for new urban housing in GuatemalaCsome 40,000 units a year C is by no means evenly distributed among cities and municipalities. The greatest concentration of the urban population is in the Metropolitan area of Guatemala, where more than 2.5 million people resided by the year 2000. The next largest city, Quetzaltenango, had less than 150,000 people by that timeC6% of the population of the Metropolitan area. A substantial amount of new housing is therefore needed in the metropolitan area, which grew at 3.1% per annum between 1995 and 2000, a rate that will double its population in 20 years. Within the metropolitan area, several municipalities experienced considerably higher growth rates. While Guatemala City itself grew at the modest annual rate of 0.7% during this period, eleven municipalities within the metropolitan area experienced higherBthanBaverage growth rates, reaching 7.9% per annum in Villa Nueva. Among the more populated municipalities in the metropolitan region, Mixco grew at 3.8%, San Juan Sacatepequez at 4.4%, Canales at 3.5% and Chinautla at 3.1%. The major cities outside the metropolitan area grew at generally slower rates: Quetzaltenango at 2.9%, Esquintla at 1.4%, and Chimaltenango at 3.9%. In contrast, the rural population as a whole grew by less than 2% per annum from 1980 to 1999. It is clear, therefore, that the main demand for new housing in the next two decades C both in the formal and informal sector C will be concentrated in the urban areas in general, and on the metropolitan fringe in particular.

2. *The Level of Development and the Distribution of Income:* Housing conditions in Guatemala are largely a reflection of its level of economic development. Guatemala is a relatively poor and under-developed country. It had a GNP per capita of $1,690 in 1997, compared with an average of $4,127 for Latin America and the Caribbean as a whole. Among 36 countries in Latin America and the Caribbean, only 6 countries (Haiti, Honduras, Nicaragua, Guyana, Ecuador, and Bolivia) had lower levels of GDP per capita in 1997 [IDB, 1999]. It ranked 117 of a total of 174 countries in the UNDP Human Development Index in 1999. It had a very high rate of adult illiteracyC33.4% in 1997, and an even higher rate of female adult

illiteracyC51% in 1995. It had higher underB5 mortality rates and lower levels of access to safe water than Latin America and the Caribbean as a wholeC55 as against 41, and 68% as against 73% respectively. Finally, while the economy has been growing at a consistent rate of 4% during the past decade, GDP per capita growth has been rather stagnant, averaging 1.3% during this period.

Housing conditions in Guatemala are also a reflection of the distribution of wealth and income in the country. Guatemala has a highly skewed income distribution C the ratio of the per capita income of the richest 20% to the per capita income of the poorest 20% of the population was 30.0, compared with 12.7 for Costa Rica, 15.1 for Honduras, and 13.1 for Nicaragua [UNDP, 1999]. Its income distribution Gini Index was 59.6, compared with 51.6 for Latin America and the Caribbean and 39.1 for the world at large. Recent income distribution data for Guatemala (see table 2) puts the median monthly household income in 1999 at 1,922 Quetzales ($227) for the country as a whole, and Q3,129 ($423) for its urban areas. Almost 30% of the country=s population and 8% of its urban population still lives on less than $1.00/day, while 70% of the country=s population, and 30% of the urban population lives on less than $2.00/day. The distribution of income has a direct effect on the level of investment in housing and on the value of houses, as we shall see below. Realistically speaking, therefore, Guatemala cannot expect to have high standards of housing, while large sectors of its population live in abject poverty.

Table 2: The Household Income Distribution in Guatemala, 1999

Monthly Household Income Deciles	Guatemala (Quetzales)		Guatemala (US$)		Urban Areas (Quetzales)		Urban Areas (US$)	
	From	to	From	To	From	To	From	To
1st	1	690	1	$93	1	1,347	1	$182
2nd	691	1,039	$94	$140	1,348	2,027	$183	$274
3rd	1,040	1,349	$141	$182	2,028	2,209	$275	$299
4th	1,350	1,669	$183	$226	2,210	2,497	$300	$337
5th	1,670	1,922	$227	$260	2,498	3,129	$338	$423
6th	1,923	2,174	$261	$294	3,130	3,712	$424	$502
7th	2,175	2,979	$295	$403	3,713	4,291	$503	$580
8th	2,980	3,657	$404	$494	4,292	5,064	$581	$684
9th	3,658	4,921	$495	$665	5,065	6,857	$685	$927
10th	4,922+		$665+		6,857+		$927+	

Source: Provisional data adapted from INE information for March 1999. Q7.40=US$1.00.

3. *The State of the Financial Sector*: The financial sector in Guatemala is still small and fragile, both by global standards and by Latin American standards. The size of the banking sector in Guatemala, measured by domestic credit as a share of GDP, was 15.8%, compared to 33.5 in Latin America and the Caribbean, and 131.9 in the world at large. In March 2000,

Guatemala had a very low credit rating: Of 136 rated countries, it ranked 87 (down from 82 in September of the previous year), and of 20 rated countries in Latin America and the Caribbean, it ranked 14 [Institutional Investor, 2000]. After a slump in 1997, however, domestic credit began to expand rapidly: domestic credit as a share of GDP grew by 10.5% in 1998, and by 17.8% in 1999, and has helped fuel economic growth. Deposits in the banking system have been growing as well, but they are mostly shortBterm deposits C there are virtually no institutional sources of longBterm finance in the country. It is also estimated that an additional 50% of domestic credit is kept in AoffBshore@ financial institutions, both to secure its value and to evade local taxation. Rates of savings in Guatemala are still exceptionally lowC9.4% of GDP in 1999, as compared to 20.0% in Latin America and the Caribbean as a whole, 27% in other lowBmiddle income countries, and 22% in the world at large. Finally, interest rates on loans remain relatively high: 20.5% for banking loans in October of 1999 [IMF, 2000, 57], and 21-24% for mortgage loans in midB2000, despite relatively low inflation rates: inflation rates in Guatemala are currently of the order of 5-7%. The weakness of the financial sector and the persistent shortage of longBterm funds largely explain the weakness of the housing finance sector.

4. *Fiscal Conditions*: Government revenues are notoriously low in Guatemala. Government revenues as a percent of GDP were 21.6% in Latin America and the Caribbean as a whole, 24.1% in other lowBmiddle income countries, and 26.6% in the world at large. In Guatemala, they constituted only 9.8% of GDP in 1997, 10.4% in 1998, and 11.0% in 1999, and aimed at reaching 12.0% in 2002, as stipulated in the Peace Accords of 1996. The Peace accords Awere much more than an agreement to terminate the 34Byear civil war: they constituted an agenda for development, including a framework for economic and social policies. Fiscal policies in particular were given quantitative targets@ [Le Berre, 1999]. The low levels of government revenues severely limit the ability of government to allocate adequate subsidies to the housing sector. In the Peace Accords, the Government was committed to allocate 1.5% of its budget annually (approximately $30 million a year in current terms) to the housing sector. Yet, the sum total of direct Government housing subsidies (exclusive of the IDB loan, which is not part of the government budget) in 1998 and 1999 was $43.6 million ($21.8 million a year), and is expected to decline further in the year 2000. The government is facing a 2.8% budget deficit in the current fiscal year, and has recently frozen the budget of the Ministry of Communications, Infrastructure and Housing. Still, there is no doubt that the housing market by itself cannot be relied upon to ensure that everyone is adequately housed, and regular and reliable allocations of public funds will be necessary to achieve even the most modest of housing policy goals.

5. *Domestic Investment and Construction Activity*: The low rates of savings, which are partly a reflection of poverty and slow rates of economic growth, constrain the development of the financial sector, as well as the rate of gross domestic investment. Investment levels in Guatemala also comparatively lowC17.0% of GDP in 1999, compared to 24.4% in Latin

America and the Caribbean, and 27% in other lowBmiddle in come countries. The low levels of investment in the country also correspond to the relatively small share of the construction sector in the overall economy. The Guatemalan construction sector had a total volume of $453 million and contributed only 2.5% to GDP in 1999, although it grew by 10.0% in 1997, and 10.2% in 1998, and was expected to grow by an additional 6.3% in 1999. In comparison, in 1997, for example, value added by construction in Latin America and the Caribbean formed 5.3% of GDP. In short, both levels of domestic investment and construction activity in Guatemala are relatively low in comparative terms, conditions that both constrain and reflect the levels of residential construction activity.

To conclude, the economic, social and political context of the Guatemalan housing sector is not conducive to a rapid improvement of housing conditions at the present time. Economic growth, although solid, cannot keep up with the high rates of population growth, with the result that household incomes C the chief resource for housing investment C remain low and stagnant. A weak and fragile financial sector prevents the development of a vibrant market in mortgages, a key to the growth of the residential construction sector. And low levels of public revenues and fiscal austerity constrain the ability of the government to embark upon ambitious housing subsidy programs. Given these constraints, it is essential to tailor housing policy to realistic goals that can be attained with available resources, rather than to continue to think that government can eradicate subbstandard housing, replace it by highBrise apartment blocks, or relocate it out of sight. The great majority of subBstandard houses in Guatemala can and must be upgraded and transformed into dignified houses over time. Prevailing economic conditions no longer allow the elaboration of plans and policies that are fiscally irresponsible C such as massive resettlement, strict limits on metropolitan growth, or the extensive public investments necessary to attract people into smaller urban areas C that could never command the resources needed to implement them.

II Conditions in the Housing Sector

In general, housing conditions in Guatemala are a reflection of its economic conditions. The generallyBstagnant economy of the past decade has resulted in a general stagnation of conditions in the housing sector as well. Overall, therefore, conditions in the housing sector cannot be said to be improving. The foregoing analysis will focus on the housing situation in the metropolitan area of Guatemala, where most of the urban population is concentrated, and where housing problems are most acute. The rural housing problem, in comparison, is relatively simple: Rural houses in Guatemala are of low quality C reflecting both rural poverty and the destruction brought about by the Civil War, and rural basic services, particularly roads, electricity and drinking water, are deficient and in short supply. Inexpensive land for housing, however, is typically not in short supply, because the house forms an integral part of the landBbased agricultural economy. Housing is relatively low among the rural development priorities, particularly in the remote regions affected by the Civil War. The housing situation in the metropolitan area of Guatemala is considerably more complex. To examine the conditions of the metropolitan housing sector in Guatemala, we must look both at the factors affecting housing demand and supply, and at housing sector performance. Over and above the general lack of availability of resources for housing discussed above C in terms of household incomes, investment capital, or government subsidies C there are three important factors that affect the demand and supply of housing:

1. the availability of residential land;
2. the availability of mortgage credit; and
3. conditions in the residential construction sector.

In addition, there are five important dimensions of housing sector performance that shed light on the prevailing conditions in the sector:

4. house prices, rents and affordability;
5. dwelling units and living space;
6. housing quality;
7. housing production and investment; and
8. tenure.

These various dimensions of the housing sector performance in Guatemala in general, and in the metropolitan area in particular, will be discussed in the paragraphs below. Key indicators that provide summary measures of these dimensions are presented in table 3, and compared to conditions in other cities.

1. *The Availability of Residential Land:* Residential land in the metropolitan area is clearly divided into two types: the relatively flat land on the plateau in which Guatemala City is located, and land in the canyons (barrancos) cutting into that plateau. Formal sector housing generally occupies the flat lands, while the informal sector occupies the slopes of the canyons. A distribution of land uses in the metropolitan area in 1992 is shown in table 4 below. In general, there should not be a shortage of residential land for the expansion of the metropolitan area, which is expected to double its population in the next 20 years. There is ample room for relatively unlimited expansion to the south and the southwest. Yet, there are three factors that limit the availability of residential land: (a) land use and zoning regulations, (b) inadequate transport and basic infrastructure services, and (c) land prices. First, official insistence on the preservation of large green areas and on “exclusion zones” — where no construction is allowed because of the risk of landslides —limits the land available for residential development, and prevents (or postpones) the legalization of squatter settlements, although they have been in continued existence for decades. The actual percentage of the metropolitan population that is in serious danger of landslides— similar to the landslides that devastated the metropolitan area in 1976Ccan be roughly estimated from the preliminary results of a study undertaken in 1997 [ILS, 1997], it is of the

order of 5%.[2] The rest are in areas where the risk can be mitigated with lowBlevels of infrastructure improvements. Yet, there is a general reluctance among planning officials to move

Table 3: Selected Housing Indicators, 1990–1998[3]

Indicator	Guatemala City, Guatemala	Panama City, Panama*	Quito, Ecuador	Caracas, Venezuela	Latin America & Caribbean Cities,1990	Lower-Middle Income Countries	The World 1990
Dwelling Units per 1,000 People	202	250	239	236	221	195	229
Median House Size (m^2)	38	45*	33.6	78	67	47	62
Floor Area per Person (m^2)	8	11*	8.6	16	15.6	9.4	15.3
Urban Density (persons per km^2)	6,400	-	9,200	6,000	5,700	6,300	6,600
Land Registration (%)	50	80	55	35	70	78	100
Permanent Structures (%)	87	90	71.3	89	90	94	97
Water Connection (%)	88	90	94.1	90	91	87	95
Journey to Work (minutes)	45	40	56	49	56	40	37
Infrastructure ExpenditureBtoBincome Ratio	8.9	-	9.1	-	4.1	7.9	5.9
Public Housing (%)	0	0	0	38	10	12	12
Unauthorized Housing (%)	39	15	30.0	40	26.4	27.1	15
Squatter Housing (%)	29	12.2	7.5	40	25	16	4
Homelessness per 1,000 people	2	<1	0.6	5.0	2.1	0.2	0.9
Owner Occupancy (%)	61	77	79	67.6	65	59	55
The Median House Price ($)	7,742	25,000	6,767	29,000	11,818	16,205	20,315
The House Price-to-Income Ratio	1.53	4.0	2.4	5.7	2.4	4.5	5.0
The Rent-to-Income Ratio (%)	22.0	-	12.5	15.0	19.8	16.2	16.2
Down-Market Penetration	1.2	2.3	2.1	6.74	3.9	3.6	3.4
Construction Cost per m^2 ($)	155	150	171	225	171	156	171
The Housing Credit Portfolio (%)	4.6	20	20.1	<10	20	8	14
The Mortgage-to-Prime Difference (%)	3.0	2.0	B20	14	3.2	0.5	0.2
The Mortgage Arrears Rate (%)	5	<1	3	5.8	6	10	5
New Household Formation (%)	3.0	2.55	4.2	1.56	3.1	3.9	3.1
Housing Production per 1,000 people	6.8	7.8	9.3	5.8	6.0	7.7	6.5
Residential Mobility **(%)**	1.5	-	3.4	5.6	3.4	5.0	7.1
The Vacancy Rate (%)	7.6	-	1.6	8.3	4.2	2.8	3.5

* Figures for Panama are preliminary. [2] Sources for the table appear in endnote 2.

decisively to upgrade them. The 2010 development plan for the metropolitan area, for example, recommends declaring these settlements as areas of high risk and endangerment to their inhabitants, and transferring them to dormitory communities outside the metropolitan area [Municipality of Guatemala, 1995, 64]. In the process, it promises to increase the amount of land in the metropolitan area devoted to green areas, forests and protected areas to 46.1% of the total: Athe existing canyons (barrancos) in the metropolitan area should be utilized as forested areas that will create the ecological green belt@ [Municipality of Guatemala, 1995, 9]. Such policies C unrealistic, unattainable, and imposing as they are C postpone the improvement of infrastructure services in these residential communities, and delay the mitigation of environmental risk and the consequent investment of families in consolidating their houses and transforming them into dignified dwellings. Fortunately, these policy prescriptions are not shared by all: four municipalities in the metropolitan area are presently seeking IDB funding for infrastructure upgrading in these settlements. Municipal officials acknowledge that at least 70% of existing settlements are on lands with slopes of less than 25%, which do not pose an inordinate risk of landslides and can be legalized.[4]

Table 4: Land Use in the Metropolitan Area of Guatemala, 1992

Land Use	Area (km^2)	Percent
Residential	121.0	46.6%
Commercial, Industrial, Institutional	16.5	6.4%
Agricultural and Nature Reserve	79.4	30.6%
Transport	22.1	8.5%
Other	20.3	7.8%
Total Area	259.3	100.0%

Source: Viceministerio de Vivienda, 1996, 8.

Second, while residential land is available on the urban periphery, commuting times are becoming large. Median journeyBtoBwork times are now of the order of 45 minutes. As the city expands outwards, as it surely will, longer commuting times will increase the total cost (land+house+transport) of residing in outlying locations. Third, land prices have gradually escalated. The informal market in residential lots that sold for Q8,000B16,000 ($1,030B2,060 in 2000 prices) has shrunk in recent years. Invasions of lands have been reduced in scope, partly because most public lands, including the lands of the National Housing Bank (BANVI), are now occupied, and partly because of the government=s stronger stance on squatter eviction. FormalBmarket land prices in the metropolitan area may now be out of reach of the lower half of the urban income distribution. Partial data on 33,629 lots in 77 land subdivisions in three metropolitan districts (Guatemala, San Lucas and San Juan Sacatepequez) for September of 1998 is shown in table 5 below.

At that time, the median price for a building lot was of the order of Q18,000 ($2,800). In the past two years, lowBcost building lots appear to have increased in price by 12B24% (is US$ terms), and there are very few lots to be found for less than Q16,000. Typical 100m^2 serviced lots on the urban fringe, at an average distance of 18km. from the city center, are presently advertized in newspapers at an average cost of Q27,000($3,500), or Q270($35)/m^2.. The serviced landBpriceBtoBincome ratio[5] in the metropolitan area is, therefore, 0.7%. This is slightly higher than the value for Latin American and Caribbean countries (0.5%), and considerably lower than in other lowBmiddle income countries (2.1%). Land in the metropolitan area at present is not too expensive, but, as we shall see later, the land market that supplies land to very lowBincome families may have shrunk. This is clearly a cause for concern.

Table 5: Available Building Lots for Sale in the Metropolitan Area, 1998

Price Range for a Building Lot (Quetzales)		Price Range for a Building Lot (US$)		Available Number of Lots
From	To	From	To	
8,000	15,999	$1,250	$2,499	6,977
16,000	-	$2,500	-	8,166
16,001	25,000	$2,501	$3,906	10,953
25,001	40,000	$3,907	$6,250	3,038
40,001	60,000	$6,251	$9,375	835
100,000+		$15,625+		3,660
Total				33,629

Source: Chamber of Construction. Q6.40 = $1.00 in 1998.

2. *The Availability of Mortgage Credit:* In 1997, for example, the construction sector contributed a total $409 million to GDP, yet new credit for the construction sector amounted to a total of $161 millionCless than half the value of constructionCand formed 10.4% of total new banking credit. New residential construction credit was $87 million in 1997 (54% of all new construction credit, and 5.6% of total new credit). It declined to $84 million in 1998, and to $52 million in 1999. The housing credit portfolio, measuring the share of housing credit in total banking credit, was 4.6% in 1999, compared with 20% with Latin America and the Caribbean, and 8% in other lowBmiddle income countries. In comparative terms, therefore, mortgage finance is clearly not readily available in Guatemala. Not only is the financial sector as a whole still depressed, but, within the financial sector, housing finance accounts for a very small share of total credit. This remains so, despite the fact that Guatemala has long had a good system of mortgage insurance C the Institute for the Promotion of Secure Mortgages (FHA) has been in operation since 1961. The principle causes for the relatively small size of the mortgage market in Guatemala are the general lack of confidence in the economy, the lack of institutional sources for longBterm funds, and the absence of mortgage instruments (such as indexation) that preserve the value of longBterm

investments. Only one small commercial bank, Vivibanco, provided the lion share of mortgage loans with upBfront subsidies, and issued shortBterm securities (of two to three years) to finance them, at moderate liquidity risk.[6] But other banks have not emulated Vivibanco.

In general, mortgage loans are now given at market interest rates, which hover between 20 and 24%, for a period of 20 years. Mortgage rates are currently 3% above the prime rate, 13B17% above the inflation rate, and 10% above the deposit rate C a very wide spread, typical of a number of Latin American financial sectors. Not atypically, housing loans in Guatemala mostly serve higherBincome groups. For example, 91% of $84 million in new housing credit in a recent oneByear period (Oct. >97BSept. >98), was issued for loans valued at Q50,000 ($6,760) and up. This high proportion was more or less maintained between 1996 and 1999, despite the introduction of subsidies for lowBcost housing loans in 1998. These subsidies (to be discussed at a greater length later) were limited to houses costing less than Q65,000($8,400), and to families with a monthly income of less than Q2,640($340). The typical loan issued by Vivibanco, for example, was of Q44,000 ($5,680) for a house valued at Q60,000 ($7,770). It was accompanied by a oneBtime upBfront subsidy of Q12,000 ($1,550), and required a down payment of Q4,000 ($520).

3. *Conditions in the Residential Construction Sector:* In relative terms, the stock of informalBsector housing is very largeCunauthorized housing forms 39% of all housing units, of which threeBquarters are squatters on public and private lands along the edges of flat lands, typically along canyon slopes. The formal construction sector builds apartments and single family homes, as well as land subdivisions for the construction of individual houses by home owners. Many of the homes on individuallyBowned plots are apparently built by construction companies as well, but no data is presently available on their activities. Housing production is relatively concentratedCof a total of 52,000 housing units that were offered on the market by the private sector in 1998, 14,900 (28.7%) were offered by 5 construction companies. It is not clear, therefore, whether the building industry is sufficiently competitive, or whether monopoly practices keep construction costs higher than necessary. In fact, construction costs in Guatemala are similar to those in other lowBmiddle income countries: a medianBpriced finished house costs Q1,200($155)/$m^2$ to build in current prices. They are not high relative to incomes either: the construction costBtoBincome ratio in urban Guatemala[7] is 3.4%, compared to 4.2% in Latin America and the Caribbean, and 4.9% in lowerBmiddle income countries. The costs of construction of a basic shell house (block walls, concrete floors, and a corrugated iron roof) in informal settlements are considerably lower, of the order of Q385($50)/$m^2$, or Q14,000($1,800) for a 3Broom 36m^2 house. In short, construction costs are not a major impediment in housing supply, and therefore, the hope for new appropriate technologies or sophisticated prefabrication systems that would reduce them significantly, may be misplaced. This is not

to say, however, that there is no room for increasing productivity and efficiency in the residential building industry.

4. *House Prices, Rents and Affordability*: Preliminary calculations suggest that the median value of a dwelling unit in the metropolitan area of Guatemala is of the order of Q60,000 ($7,750). The median value of existing houses in the informal sector is of the order of Q30,000 ($3,870). While some of the newer houses in the informal sector are very rudimentary, usually made of wood and galvanized iron sheets, the majority is permanent structures made of concrete blocks. Given that the median annual household income is Q37,550 ($5,075), the median house priceBtoBincome ratio in the metropolitan area should be of the order of 1.53. In fact, the formal sector now produces new housing in this price range. It appears that houses in Guatemala are eminently affordable. Comparable ratios in other Latin American countries are higher (2.4), and in other lowBmiddle income countries they are considerably higher (4.5). The formal sector has also penetrated downBmarket in recent years, producing new singleBfamily homes for as low as Q46,800 ($6,040), homes which would have a house price toBincome ratio of 1.2. DownBMarket Penetration in Guatemala, measured by this ratio, compares favorably with other Latin American and Caribbean Countries (3.9), as well as with other lowBmiddle income countries (3.6). The lack of affordability in Guatemala is, therefore, largely a problem of the absence of housing finance that could smooth the payments for houses over time, rather than a problem of the high costs of land and construction. In the absence of housing finance, however, lowBincome families have no alternative but to construct houses over time. This essentially means that the key to new housing remains access to landCeither through invasion or through the purchase of a plot. But land purchase, the most common option available now, is a lumpy purchase, and this does present an almost insurmountable obstacle for the urban poor in Guatemala at the present time.

5. *Dwelling Units and Living Space*: According 1994 Census data, the number of occupied dwelling units per 1,000 in the Department of Guatemala was 202, a relatively low number in comparative terms. This number was low for three reasons: the relatively large household size (4.7) in the metropolitan area, the relatively high vacancy rate (7.6%), and the relatively high number of households per occupied dwelling unit (1.07)Cin other words, there were 7% more households than occupied dwelling units, and at least 14% of the households shared dwelling units. There are also good reasons to believe that the amount of living space per person in the metropolitan area is rather low, and that many families experience a high degree of overcrowding. The median house size in the metropolitan area is 38m^2, and the floor area per person is only 8m^2. The respective numbers are almost double in other Latin American cities (67m^2 and 15.6m^2). Land parcels also appear to be relatively small C typical building lots average 100m^2 in new housing developments, and considerably less than that in informal settlements. Furthermore, on the whole, overcrowding in Guatemala appears to be on the increase: the recent national household

survey [INE, 1999] reported that, between 1994 and 1998, the percent of familiies in overcrowded quarters (those with more than 4 persons per room) increased from 41% to 55% in the country as a whole, from 24% to 36% in urban areas, and from 51% to 66% in rural areas. Overcrowding can be said to be reaching crisis proportionsCthe amount of living space is grossly inadequate. There is, however, considerable room for increasing the amount of living space by the gradual densification of existing settlements, and by gradually adding rooms and floors to existing houses. Overall residential density in the metropolitan area, 6,400 persons/km^2, is by no means excessive.

6. *Housing Quality*: Housing quality is measured both in terms of the solidity and longevity of structures, in the availability of basic amenities, and in the quality of neighborhoods in terms of public safety, air quality, and accessibility. The percentage of permanent structures in the metropolitan area C housing units which can last 20 years or more C was 62 in 1994 [Viceministerio de Vivienda, 1996, 53]. This number is similar to that of other Latin American countries, 65%, as well as other lowBmiddle income countries, 59%. There are some indications that the quality of structures has increased in recent years: between 1994 and 1998, the percentage of houses made with temporary materials has decreased from 23% to 15% in the country as a whole, from 22% to 17% in the urban areas, and from 24% to 15% in the rural areas. Water supply to houses has somewhat worsened during this period: the number of houses without a water connection increased from 12% to 18% in the country as a whole, from 8% to 10% in the urban areas, and from 15% to 22% in the rural areas [INE, 1999, and 1994 Census]. Only 53% of the population in the metropolitan area now enjoys regular garbage collection.

On the whole, transportation services have not improved adequately to accommodate population growth, and the journey to work, reported to average 40 minutes in 1992 [Viceministerio de Vivienda, 1996, 34], now averages 45 minutes. Heavy traffic volumes in the metropolitan area also lead to a high level of air pollution, which now far exceeds acceptable standards. In 1998, for example, the total amount of suspended particles in the air, 321mg/m^3, was four times the maximum allowable amount (80mg/m^3). The expected rapid growth of the city in the coming years, and its continued reliance on car travel and on relatively lowBrise residential neighborhoods (which are considerably cheaper to build than highBrise apartment blocks), is likely to worsen environmental conditions. All in all, then, it may be safely concluded that housing quality in the metropolitan area of Guatemala is stagnant, largely a reflection of the stagnant growth of real incomes in the past decade.

7. *Housing Production and Investment*: There are no exact figures available on housing production and investment in the metropolitan area, or in the country as a whole. The value added to GDP by the entire construction sector in 1999 was Q3.5 billion ($452 million), of which, we can assume, half was added by residential constructionCQ1.75 billion ($226 million). According to Chamber of Construction data, formal sector housing supply in the metropolitan area in 2000 amounted to a total of 7,392 units, valued at Q1.2 billion ($155

million).[8] The average price of a formal housing unit was Q163,000 ($21,000), and the median formalBhouse price was Q133,000($17,200), more than double the median house price in the metropolitan area (estimated at Q60,000, or $7,742). The distribution of formalBsector house prices in the metropolitan area is summarized in table 6.

Table 6: FormalBSector Housing Supply in the Metropolitan Area of Guatemala, 2000

Price	Price Range (Quetzales)		Price Range (US$)		Average Price	
Quintile	From	To	From	To	(Quetzales	(US$)
1st	50,000	97,200	$6,452	$12,542	65,729	$8,481
2nd	97,201	120,257	$12,542	$15,517	108,001	$13,936
3rd	120,258	139,802	$15,517	$18,039	134,348	$17,335
4th	139,803	170,365	$18,039	$21,983	170,365	$21,983
5th	170,366	1,395,000	$21,983	$180,000	308,679	$39,830

Source: Cámara Guatemalteca de la Contrucción, 2000.

While there were no units for sale below Q50,000 ($6,452), there were some 750 units (10% of the total) for sale at or below Q60,000 ($7,742). Given that the population of the metropolitan area was 2,169,000 in 1999 [INE, 1999], housing production by the formal sector amounted to 3.4 units per 1,000 people. There are no figures on formal construction on individuallyBowned lots or on informalBsector construction, but, in crude terms, the two together may have doubled the number of units produced, bringing housing production to some 6.8 units per 1,000 people. Housing production in the metropolitan area may thus be comparable to that of other countries in Latin America and the Caribbean and in other lowBmiddle income countries. This rate of housing production implies an annual housing stock growth rate of 3.3%, a rate sufficient to accommodate new household formation (3%) and to prevent visible homelessness. In broad terms, therefore, the rate of housing production and investment by both the formal and informal sector may be keeping up with urban population growth. But this will continue to be true only if access to land is not impeded, and if individual contractors and informal home builders continue to produce lowBcost and very lowBcost houses to cater to the needs of the lowBincome population.

8. *Tenure:* Housing tenure refers to the type of property rights prevailing in the metropolitan areaCthe levels of unauthorized housing, squatter housing, owned vs. rental housing, and homelessness. While no precise figures are available, it is estimated that 39%[9] of the households in the metropolitan area (180,000 of a total of 464,422 households in 1999) live in precarious conditions, in unplanned and unauthorized settlements along the slopes of the canyons that cut into the plateau on which Guatemala City is located. Of these, possibly 75% are squatters who have occupied these lands through invasions, or through the gradual infiltration of invaded areas. Squatter households thus form 29% of all households in the metropolitan area. These numbers are relatively high in comparative terms, similar to those prevailing in Caracas and Guayaquil, and higher than median values

for Latin America and the Caribbean as well as for other lowBmiddle income countries. It is inconceivable that in the mediumBterm, say in the next twenty years, the informal housing stock can be replaced by formal housing. More conservatively speaking, it is even inconceivable that formalBsector annual production can replace all new informalBsector annual production. On the contrary: it is quite reasonable to assume that informalBsector housing production will continue to be a key contributor to the housing sectorCboth in terms of meeting new housing needs, and in terms of gradually consolidating the savings and sweatBequity of poor families (who do not have access to housing finance) into solid housing investments over time.

Squatter invasions and informal land subdivisions should have contributed to the rise of a homeBowning population in urban Guatemala. In 1989, 61% of urban households in the country owned their own homes (or were making payments for it), and 29% rented their homes [INE National SocioBdemographic Survey, 1989 in Clarke, 1996, 3]. This figure is not high by Latin American standards (65%), or by the standards of countries with a high level of squatter invasions, but it is similar to the rate of home ownership in other lowBmiddle income countries. Guatemalan cities still contain high numbers of renter households, and it is not clear to what extent their needs are being met either by the housing marketCboth formal and informalCand by government housing policy. Finally, homelessness in the metropolitan area, measured by the number of homeless persons per 1,000 people, is relatively lowCboth in absolute terms and in comparative termsCbut it does present a serious housing problem. It is estimated that some 3,500B5,000 children sleep outside homes in the metropolitan area. This number would amount to 2 persons per 1,000 people, a figure comparable to other countries in Latin America, and this figure may be doubled if adult homelessness were to be included. But, unfortunately, there are no reliable figures on adult homelessness.

To conclude, housing conditions in Guatemala at the present time largely reflect the stagnant growth of real incomes during the past decade, the uneven distribution of income, the relatively small size of the financial sector, and limited fiscal resources of the government. Residential land is ample, but access to residential land is limited by low levels of savings, and has resulted in high rates of squatting and illegal occupation. Land prices are relatively affordable, but it appears that the bottom of the land market is shrinking, and that affordable residential plots in the open market are becoming difficult to find. Mortgage credit for housing is minimal, largely restricted to highBincome households, and mortgage interest spreads are high despite low levels of inflation. Construction costs are typical of the region. House prices are relatively low, both in the formal and the informal sector, and the formal sector has successfully gone downBmarket. Generally speaking, housing sector growth is constrained by the near absence of mortgage finance, rather than by the high costs of land and construction. As a result, the amount of space per person is very restricted, and overcrowding is nearing crisis proportions. On the whole, the quality of structures is improving, but the quality of residential amenities is worsening. New housing production, by all sectors, generally keeps up with household formation, but overall housing investment is still a relatively small share of the Gross Domestic Product. Finally, the share of the informal sector in housing provision is very largeCit provided almost 40% of the metropolitan housing stock, and 75% of it through invasions, mostly of public lands. Given these conditions in the housing sector, we can now take a critical look at the status of housing policy in Guatemala, the extent to which government action has been able to affect housing conditions in recent years, and the potential for more effective government interventions in the housing sector in the years to come.

III Diagnosis and Evaluation of Housing Policies and Programs

The basic elements of the present housing policy in Guatemala can be traced to the Political Constitution of the Republic of 1985 that established the State as a supporter, enabler, promoter and facilitator of housing. This document heralded the abandonment of direct provision of housing by the National Housing Bank (BANVI) C mostly in the form of serviced sites accompanied by lowBinterest loans to pay for land and building materials C a policy that had been in operation since the early 1970s. Over the years, the Bank was responsible for the creation of more than 50,000 serviced sites, but as many as 62% of its loans were in default [IDB, 1997, Annex 2, 2], and it was ordered to liquidate in late 1987.[10] Several years later, in 1992, the Guatemalan Housing Fund (FOGUAVI) was established in the Ministry of Urban and Rural Development with the objective of financing lowBincome housing solutions, through privateBsector intermediaries, at preferential interest rates. A National Housing Council (CONAVI) was created in 1993 to formulate and manage a longBterm housing policy, and that same year the Fund was transferred to the Office of the President.

The ViceBMinistry of Housing incorporating the Fund was created in 1995, in the Ministry of Economy, and given the role of formulating a legal and financial framework that would enable the private sector to embark upon a massive construction program, as well as creating a mechanism for giving direct housing subsidies to lowBincome families. Also in 1995, the Government established a legal mechanism for selling occupied public lands to squatters at market rates. The Housing and Human Settlements Law was promulgated a year later, in 1996, grounding housing policy in the issuance of housing subsidies and in the use of subsidies to facilitate access to housing finance for a variety of housing solutionsCserviced and unBserviced sites, house construction or acquisition, house improvement and expansion, and basic infrastructure services in residential neighborhoods. A system based on combining household savings for a down payment with subsidies (at a ratio of subsidiesBtoBsavings of 3:1), and with a longBterm loan at market interest rates, was established. The Law also assured squatters that they will be represented in the Fund=s governing board. A year later, in 1997, the decree governing the sale of public land to squatters was amended to tailor sale prices to the monthly income of residents, but sale at market prices was restored later that year, and squatters were excluded from representation on the Fund=s board that same year. The Government=s Program for 1996B2000 established three sensible principles of housing policy: the role of the state as enabler and facilitator, the complementarity of all actors C public, private, civic and communal C in housing action, and the necessity of making housing policy compatible with macroBeconomic policy.[11]

The Ministry of Communications, Transport, Public Works and Housing concluded a loan agreement with the InterBAmerican Development Bank (IDB) in 1997 (GUB0022), aimed at putting the subsidy mechanism and the three principles into practice in a broad program that promised action on all six components of modern housing policy: (a) the property rights regime, (b) the housing finance regime, (c) housing subsidies, (d) residential infrastructure, (e) the regulatory regime, and (f) the institutional framework for government intervention in the housing sector. The Guatemalan Housing Fund (FOGUAVI) was charged with administering the program within the ViceBMinistry of Housing. The total cost of the program C scheduled for completion in four years C was estimated at $108.8 million C $60 from the IDB and 48.8 from the Government of Guatemala. It contained three major components:

(1) direct housing subsidies ($91.9 million), of which $55.4 were to be disbursed through a social window and $36.5 through a commercial window. Social window subsidies were essentially for place–based interventions in the housing sector, using civil society intermediaries (NGOs) to assist organized communities in infrastructure upgrading, the reduction of environmental risks, improvements of existing homes, and community purchase of new lands. Commercial window subsidies were to use the private–sector (construction companies and banks) as intermediaries for channeling direct housing subsidies in conjunction with mortgage finance, using the mechanism created in the 1996 Law. Beneficiaries were to combine $650 of their savings for a down payment with a maximum subsidy of $2,000 (a 3:1 ratio), to obtain a market–rate loan for a new house.

(2) land market reform ($5.85 million), of which $4.35 million were for accelerating the procedures for the legalization of property rights in squatter settlements (a precondition for initiating infrastructure upgrading) and $1.35 million were for accelerating the reform of municipal regulations governing land subdivision and building codes; and

(3) institutional development ($5 million), for increasing the capacity of government intervention in the housing sector by contracting professional services, conducting studies (including an environmental risk assessment of informal settlements on

canyon slopes), creating a policy–sensitive information system, and generating regular evaluation reports.

The direct–subsidy program was executed more rapidly than originally envisioned, at least partly because it coincided with an election year, a year that ended in December of 1999 with the defeat of the ruling party. There is no doubt that the program was implemented too rapidly to assess it weaknesses and to institute corrective measures in time. According to a recent auditors' report, by March, 2000 [out:(two–and–a–half years after the date of project approval] (a mere two years after the signature of the contract), 51,056 subsidies, for a total of Q543.7 million ($70.2 million), were disbursed (see table 7). This amount comprised 76% of the total program budget for direct housing subsidies. An additional Q120.5 million ($15.6 million), was by then transferred to financial intermediaries, bringing the total amount transferred to 93% of the total program budget for direct housing subsidies [Lizarralde et al, 2000, table 1]. By March 2000, FOGUAVI approved, and not yet disbursed, some 34,938 additional subsidies amounting to Q443 million ($57 million), surpassing the original program budget by 38.5%. These authorized funds are now owed to intermediaries and contractors who have undertaken (or initiated works on) approved projects in the belief that funds will be available to finance them.[12]

Table 7: The Status of the FOGUAVI Direct Subsidy Program, March, 2000 (in millions)

Item	Commercial Window			Social Window			Total		
	(Q)	($)	%	(Q)	($)	%	(Q)	($)	%
Original Subsidy Budget	282.9	36.5	39.7	429.4	55.4	60.3	712.2	91.9	100.0
Approved Disbursements	904.8	116.8	89.9	82.3	10.6	10.1	987.1	127.3	100.0
Disbursed Funds	508.1	65.6	89.8	35.6	4.6	10.2	543.7	70.2	100.0
Subsidies Approved	77,349		89.9	8,645		10.1	85,994		100.0
Subsidies Disbursed	45,873		89.8	5,183		10.2	51,056		100.0

Source: Lizarralde, Ayestas, Asturia and Ramos, 2000, table1 and table 2.17.

During the short course of implementation, two critical changes were made in the program: (a) most of the funds originally assigned for disbursement through the social window to civicBsociety intermediaries (NGOs), and through them to informalBsector communities, were disbursed instead through the commercial window to individual families; and (b) subsidies that were to accompany loans from commercial banks were disbursed by these banks without the promised loans. Needless to say, these two changes entirely transformed the character, as well as the spirit, of the program.

The first change commandeered virtually all the funds destined to assist existing informalBsector communities with infrastructure upgrading, house improvement and environmentalBrisk mitigation. The share of the social window in the original program was 60%, and it was reduced to 10% of approved disbursements. As we shall see below, it is estimated that the social window approved a total Q15 million ($2 million) for some 1,700 subsidies for community projects involving infrastructure upgrading, house improvements and extensions, and the rest was approved for legalization and for new serviced lots. As a result, virtually no improvements were made in informalBsector communities in the metropolitan area, and very few of their inhabitants C not more than 1% C benefitted from the program at all. The spirit of the program was essentially transformed from a peopleBbased program involving communities to a commercial program involving individual families. This change also upset the delicate balance between the two prongs of housing policy C between the improvement of the existing stock on the one hand, and the generation of new stock on the other C and used practically all the approved subsidy funds (97%) for new housing solutions. As a result, fewer people, and still fewer poor people, were served by the program. The second change was a rejection of the directBsubsidy mechanism (saving + subsidy + loan) envisioned in the Housing and Human Settlements Law by agreeing to decouple subsidies for new housing solutions from mortgage loans. In short, the upBfront subsidies failed to induce (or enable) commercial banks to lend for lowBincome housing, and FOGUAVI agreed to let banks issue subsidies without loans. The results of this change will be discussed in greater detail below.

To better understand the status of housing policy in Guatemala at the present time, we need to examine the status of each of the six elements that make up modern housing policy: (a) the property rights regime; (b) the housing finance regime; (c) housing subsidies; (d) residential infrastructure; (e) the regulatory regime; and (f) the institutional framework for government intervention.

1. *The Property Rights Regime*: The quality as well as the relatively small size of houses in informal settlements in Guatemala can be at least partly explained by the relatively insecure tenure of their inhabitants. Because of the continued occurrence of forced evictions (see below), the refusal of the planning authorities to recognize established settlements, and the continued weakness of the legalization program, squatter families in Guatemala feel less secure than their counterparts in Caracas or Guayaquil, for example, and are therefore less inclined to invest their savings and labor in improving and enlarging their houses. It stands to reason, therefore, that improving tenure security is an essential component of the campaign to reduce overcrowding in the metropolitan area.

The legal framework for the sale of occupied public lands to squatters who reside on that land has been established and is clearly understood. The latest amendment to the legislation (Decree 81B97) requires payment at market rates, instead of the earlier requirement for payment tailored to family incomes (Decree 3B97). The demand for payment at market rates is not a sensible demand, because land occupied by squatters does not command the same market value as nearby vacant land. In recent years, there have been a number of initiatives, both by NGOs, by the National Housing Bank (BANVI), and more recently by FOGUAVI, to legalize land tenure in squatter settlements. SODEVIP, for example C an NGO working in squatter areas C completed the legalization of tenure for 2,500 families in La Limonada in 1997, and of an additional 500 families in 27 smaller settlements since. But in general, the legalization program has proceeded very slowly, and toBdate no legalization under the FOGUAVI program has taken place [CHF, 1999a,13].

Instead of involving third parties in the legalization process as originally envisioned, FOGUAVI socialBwindow personnel have been directly involved in the legalization of tenure for 8,550 families in 61 settlements on National Housing Bank (BANVI) land. The actual administrative cost of issuing titles is only Q500B550 ($65B$70), but BANVI is demanding payment for the land C a total of Q43 million ($5.6 million). This amounts to a payment of Q5,080 ($655) per family, and it is not clear how this figure was agreed upon. What is clear, however, is that FOGUAVI has approved the use of program subsidy funds to pay BANVI, and it is quite possible that IDB funds were transferred to the social window for this purpose, although the loan agreement specifically forbids it.[13] BANVI, which is under liquidation, hopes to use this money in part payment for its debt of Q109 million ($14 million) to the Ministry of Finance. However, all BANVI assets are scheduled to be transferred by law to FOGUAVI by February 2002, when there would no longer be a need for FOGUAVI to pay for the land. The original spirit of the law governing the sale of public lands to squatters, one must remember, was for the people to pay for the land and not for one government agency to pay another.

At present, there is no overall plan for legalization, with clear goals, clear allocations of responsibility, affordable sale prices, and clear administrative procedures, although adequate funds are available. It is also not clear how the legalization of squatters on private lands is to proceed. Finally, the details of legalization aside, evictions of new squatters are not uncommon in Guatemala. It is estimated that during the years 1990B1998, the Government of Guatemala evicted 10,400 families in the metropolitan area [Martínez López, 29B30]. Compared to many other countries in similar circumstances, this is quite a large number. In general, given that new squatter families cannot afford formal housing, eviction does not offer a realistic housing policy option in Guatemala at this time. Those families are, in fact, the most challenging and the most appropriate target for housing assistance. In general, however, evictions in recent years are rather haphazard and inconsistent, and there is little reliable information about new squatterBsettlement formation.

2. *The Housing Finance Regime*: As noted earlier, government involvement in the housing finance regime in Guatemala focused on the provision of upBfront subsidies coupled with loans at market interest rates. By March, 51,000 subsidies, for a total of Q543.7 million ($70.2 million), were disbursed through FOGUAVI intermediaries, while the total credit issued by the private sector in support of the program amounted to Q91 million ($11.7 million) [Lizarralde et al, 2000, table 1].[14] It appears that only some 2,000 subsidies (4.5% of disbursed subsidies) were actually issued in conjunction with loans. The total credit issued by the private sector in connection with FOGUAVI subsidies amounted to slightly more

than 10% of all mortgage credit in 1998 and 1999. And the great bulk of this credit (94.3%) was issued by one small bank C Vivibanco C that had a total portfolio of Q218 million ($28 million) in December, 1999. Despite the introduction of upBfront subsidies, the total annual volume of new loans in the range of Q20,000B50,000 remained practically the same (between Q42 million and Q53 million) between 1996 and 1999, and its share of the total volume of new loans hardly fluctuated (between 12% and %16). In other words, government intervention in the housing finance market did not increase the availability of housing finance for lowBcost housing.

Other than intervening in the mortgage market with direct upBfront subsidies, a rather recent intervention, the government of Guatemala has supported the mortgage market by the creation of the Institute for the Promotion of Secure Mortgages (FHA) in 1961 (Decree 1448). The FHA secures mortgages, and pays mortgage debts in the case of default. Between 1962 and 1998, it has insured 31,822 mortgages for a total value of Q1,362 million ($175 million) [Morris, 2000, 46]. Still, the mortgage market remains small and relatively inefficient. As noted earlier, the main constraint preventing the development of housing finance in Guatemala at the present time is the absence of regular and reliable sources for longBterm funds C typically insurance and pension funds that, in Guatemala, are generally either small or have little need for longBterm investments. In the absence of longBterm funds, the approach used by Vivibanco C issuing shortBterm securities of twoBtoBthree years to finance mortgage loans C can and should be emulated by other banks. The bank=s liquidity risk is moderate, because, as we saw earlier, most of the present value of mortgage loans is recovered within a few years. It is not clear, at present, why other banks have not followed suit. In general, it may be said, that conditions are not ripe for the creation of a secondaryBmortgage market in Guatemala at the present time. In the absence of a secondary market, short and mediumBterm policies for increasing the availability of mortgage finance must focus on adBhoc measures.

3. *The Housing Subsidies Regime*: As noted earlier, the government has pledged to allocate 1.5% of its annual revenues (approximately Q233 million, or $30 million in 1999) for housing. Yet, the sum total of government transfers to FOGUAVI in 1998 and 1999 amounted to Q306 million ($39.5 million)Can annual average of Q153 million ($19.7 million)Cand it is expected to decline further in the year 2000. Needless to say, housing policy in Guatemala will not be able to attain it goals, modest as they may be, unless the promised funds are allocated regularly and in full for approved housing programs.

There are, at present, three major channels for housing subsidies in Guatemala, two AonBtheBbooks@ subsidies (included in the Government=s budget) and one AoffBtheBbooks@ subsidy:

(1) The direct housing subsidy program of FOGUAVI, which will be discussed in greater detail below;

(2) Subsidies for the improvement of infrastructure in legalized settlements implemented by the Directorate of Human Settlements and Housing (DAHVI) in the Office of the President. These subsidies amounted to Q14 million ($1.8 million) in 1999, but averaged Q7 million ($0.9 million) in the four previous years. DAHVI provides infrastructure only in legalized settlements on National Housing Bank (BANVI) lands, at an average cost of Q3,500 ($45) per family; and

(3) Value–addedBtax forgiveness on the sale of houses of less than 120 m^2: According to Chamber of Construction data, there were 4,700 such housing units available in the metropolitan area in March, 2000, with an average value of Q153,000 ($19,700). The valueBaddedBtax subsidy on these units amounts to Q15,300 ($1,970) per unit, and to a total of Q72 million ($9.3 million). It is difficult to calculate this amount of subsidy for the country as a whole. Needless to say, this "offBtheBbooks" subsidy is highly regressive.

In the span of two years, the FOGUAVI program authorized some 85,994 housing subsidies, of which 51,056 were disbursed by March 2000. As we noted earlier, the great majority of the subsidies were authorized by FOGUAVI for disbursement through the commercial window (90%). Each subsidy amounted to Q12,000 ($1,550), and was provided on condition that beneficiaries contribute oneBthird of that amountCQ4,000($520) to obtain the subsidy. These subsidies were allocated in the proportions shown in table 8 below.

(a) Serviced lots: As table 8 below shows, serviced lots were one of the two most important components of of the program. They aimed directly at lowBincome families, and consumed 43.0% of the total subsidy resources in the program. Serviced lots were mostly provided by private–sector intermediaries (an estimated 86%), although the FOGUAVI social window also provided serviced lots, mostly to victims of Hurricane Mitch (an estimated 14%).

The demand for FOGUAVIBsubsidized serviced lots was very high, and supply responded rapidly. A total of 111 projects, containing 59,207 lots, were initiated by privateBsector developers throughout the country. This number was higher by 58% than the number of subsidies approved by FOGUAVI for serviced lots. In other words, in the country as a whole, 37,526 subsidies generated 59,207 serviced lots, and thus had a multiplier effect of 1.6. By January, 2000, 39.7% of this total number were 100% complete, 32.7% were 80B100% complete, 26.7% were 0B80% complete, and only 0.9% (510 lots) had no work initiated in them at all (calculated from FOGUAVI, 2000b) . This implies an annual rate of production of 30,000 lots, a very impressive—and, quite possibly, unequaled—accomplishment by international standards. It leaves no doubt that the private sector in Guatemala is indeed capable of effectively replacing government agencies in the provision of serviced sites.

According to a recent study, lots did reach lowBincome familiesC35% of lots were allocated to families with monthly incomes below Q1,200 ($155), and an additional 42% of lots to families with monthly incomes of Q1,200B2,000 ($155B260) [CIF, 1999b, 3]. Part of the explanation for this may lie in the finding that the servicedBlot program was eventually implemented as a rural, rather than as a urban, program: the study found that only 5% of the lots were urban lots, 26% were semiBurban, 10% were semiBrural, and 58% were rural. This was not the original intention of the program, because land for housing is not an especially high priority in rural areas, and because the demand for building lots is especially acute in the metropolitan area. According to this study, the average land prices paid with FOGUAVI subsidies for urban and semiBurban lots C Q246($33)/$m^2$ and Q144($19)/$m^2$ respectively C were considerably higher than land prices paid for rural lots, Q88($12)/$m^2$. The important questions whether or not the program was indeed oriented to the rural areas, and if so why, remain to be answered.

Table 8: The Distribution of Approved FOGUAVI Direct Subsidies, March 2000

Type of Subsidy	Number of Subsidies	Amount of Subsidy (Q millions)	Amount of Subsidy ($ millions)	Percent of Total
Serviced Lots	37,526[15]	424.5	54.8	43.0%
House Construction on Owned Lots	35,992	431.7	55.7	43.7%
New HouseBandBLand Projects	5,375	64.4	8.3	6.5%
House Improvements and Extensions	2,906	34.6	4.5	3.5%
Infrastructure Upgrading (rural)	701	0.5	0.1	0.0%
Miscellaneous SocialBWindow Projects	3,494[13]	31.5	4.1	3.2%
Total	85,994	987.1	127.4	100.0%

Source: Lizarralde, Ayestas, Asturia and Ramos, 2000, table 2.17 and table 3.

Other data [FOGUAVI, 2000b] do not confirm this finding, and show that of a total number of 59,207 serviced lots built in conjunction with FOGUAVI subsidies, 17,047 (29%) were located in Guatemala Province, essentially in the metropolitan area of Guatemala. In general, as we noted earlier, more lots were offered for sale in each project than lots receiving subsidies. The prices of lots offered for sale by developers in Guatemala Province are shown in table 9. It is important to note that, of a total of 17,047 offered in 60 projects throughout the metropolitan area, only 7,174 (42%) were associated with approved FOGUAVI subsidies, and the rest were offered on the free market with no subsidies. In other words, in the metropolitan area every subsidy generated an additional 1.4 serviced lots with no subsidy, and thus had a higher multiplier effect (2.4) than servicedBlot subsidies for the country as a whole (1.6).

It is still debatable whether the relativelyBhigh value of the FOGUAVI subsidy for serviced lots (75% of the price in most cases) increased land prices. It appears that the overall level of land prices in the country did not increase [CHF, 1999b, 13B16]. Still, one cannot help suspect that C at least in the metropolitan area C the bottom of the land market disappeared, and that the minimum price of a serviced lot in fact became Q16,000 ($2,065). Otherwise, it would indeed be difficult to explain why, in table 9, 59.6% of all the lots offered, and 68% of the lots with approved subsidies sold for exactly Q16,000; or why, among the lots costing Q40,000 or less, the percentage of lots costing less than Q16,000 decreased from 20.7% of the total in 1998 (table 5), to 6.9% of the total in 2000 (table 9).

Table 9: Serviced Lots Offered for Sale in Guatemala Province, January, 2000

Sale Price Range				Offered for Sale		With Subsidies	
(Quetzales)		(US$)		Number	Percent	Number	Percent
From	To	From	To				
8,000	16,000	$1,032	$2,065	1,137	6.7%	432	6.0%
16,000		$2,065		10,152	59.6%	4,877	68.0%
16,000	29,000	$2,065	$3,742	1,777	10.4%	1,077	15.0%
30,000		$3,871		1,850	10.9%	214	3.0%
31,000	42,500	$4,000	$5,484	2,131	12.5%	574	8.0%
Total				17,047	100.0%	7,174	100.0%
Average				Q20,637	$2,663	Q19,196	$2,477
Median				Q16,000	$2,065	Q16,000	$2,065

Source: FOGUAVI, "Listado de Proyectos de Lotes Por Banco," January, 2000.

A critical question that arises regarding the serviced lot program is whether lots provided by participating developers were actually worth the price paid for them by FOGUAVI and its beneficiaries. The program did not have any valuation mechanism for assessing the actual market value of projects, nor was there an institutional incentive on the part of any of those involved to obtain the highest Avalue for money@ for each project. There was no process for selecting the best projects or for auctioning subsidy funds to the most efficient developers. It should come as no surprise, therefore, that FOGUAVI has recently been accused in the local press of paying Q30 million for land valued at Q2.3 million [Siglo Venteiuno, 2000]. Recent field observations suggest that many of the Q16,000 urban lots in the program were of low quality and in lessBthanBdesirable locations, and were overBpriced compared to serviced lots in completed housing projects nearby C these latter lots were situated on flatter land, had paved roads, underground electrical wiring, water, drainage and sewerage C and still did not cost more than Q25,000 ($3,200) per lot.

The chief disappointment with the serviced lot program was the low level of occupancy. By June 1999, for example, only 6.5% of the subsidized lots surveyed had been occupied, 54% of the projects were partially occupied by some families, and 46% remained completely vacant. 55% of subsidy beneficiaries had no plans to move into the lots, and more than 70% of beneficiaries cited the lack of resources as their main reason [CHF, 1999b,6B8]. It is difficult to assess why levels of occupation were so low, but several reasons come to mind:

(a) lots were provided in rural and semiBrural areas, where actual demand for housing was not acute; (b) lots were bought as speculative investments (most at a quarter of their market price, the rest being a subsidy) and not as places to live; and (c) families with an urgent need for housing were not reached by the program. The level of completion of infrastructure services was cited as a reason by less than 5% of those interviewed. More recent data on the occupation of lots is not available.

(b) House construction on individuallyBowned lots: A surprisingly high share of the authorized FOGUAVI subsidies, $55.7 million or 43.7%, was directed toward the construction of *individual* houses C rather than housing projects C on previously owned lots. This is a very large share of the program, and yet documentation as to what was accomplished with these subsidies is sorely lacking. An incomplete report from Vivibanco suggests that most subsidies were given without additional housing finance, and that most of these subsidies were given in rural and semiBrural areas. Subsidies without finance were restricted to families with monthly incomes of less than Q1,200 ($155), and those with additional finance to families with monthly incomes of less than Q2,400($310). Of 3,170 subsidies given for this purpose through Vivibanco, for example, 96% were given without additional credit. Of these 91% were for houses contracted to construction companies that build small houses on individual lots, and 9% were built by the owners themselves. As of August, 2000, 100% of these houses were reported by Vivibanco to be complete. This component of the subsidy program remains intriguing C it could have resulted in a very large number of new houses C but there is no systematic information to evaluate it properly. It is also completely unclear why it has received such a high percentage of the total subsidy funds, as the original project document makes no mention of it at all.

(c) New houseBandBland projects: A FOGUAVI document dated 25 January, 2000 lists 37 new houseBandBland projects with a total number of 10,926 units, of which only 5,375 (49%) were approved to receive FOGUAVI subsidies. [FOGUAVI, 2000b]. This again implies that FOGUAVI subsidies had a multiplier of 2.0Ceach subsidized house generated an additional house without a subsidy. More than half of the units were reported to be more than 50% complete as of that date. There is no question that new housing projects were located in urban areas: of the total number of units, 63% were in the metropolitan area of Guatemala.

In general, new houses C all singleBstory houses C were built on small lots, varying in area between 50m^2 and 200m^2, and averaging 97m^2. Houses were also small, varying in floor area between 25.5m^2 and 47.5m^2, and averaging 35.5m^2. Their prices fluctuated between Q35,000($4,500) and 67,500($8,700), the average price of houses was Q53,000($6,800) and the median price was 55,500($7,200). Approximately 75% of the subsidies for these units were given through Vivibanco, and half of those were accompanied by a mortgage loan. A typical buyer of a medianBpriced house deposited a down payment of Q4,000, obtained a subsidy of Q12,000, and a loan of Q39,000 at 20%

interest (including mortgage insurance) for 20 years. The monthly payment for such a house would be Q660($85)/month, and it would be affordable by families with monthly incomes of Q2,650($342) that spend 25% of their incomes on housing, or by families with monthly incomes of Q2,200($285) that spend 30% of their incomes on housing. These houses can generally reach lowerBmiddle income urban families, in the 4th and 5th deciles of the urban income distribution, and, according to Vivibanco officials, they do.

4. *Residential Infrastructure*: As table 8 clearly shows, 97% of the funds were approved for disbursement to some 82,500 individual families for new housing solutions. Only 3% of the funds were approved for disbursement to some 3,500 families in informal communities. As noted earlier, approximately half of these subsidies were approved for transfer to the National Housing Bank (BANVI) as payment for legalization, and half for infrastructure upgrading, community projects, and house improvements and extensions. Assuming that some 180,000 mostlyBpoor families live in informal communities in the metropolitan area of Guatemala, the program planned to improve living conditions in only 1% of them C an unacceptably low percentage for a housing program aimed at assisting the poor. At this time, there is no available information to evaluate these projects or to test their cost effectiveness C the FOGUAVI subsidy of Q12,000($1,550) per family is 3.4 times higher than the subsidy given by the Directorate of Human Settlements and Housing (DAHVI) in its infrastructure upgrading projectsCQ3,500 ($45) per family. There is no doubt, however, that there is an urgent need for an urban infrastructure upgrading program. Indeed, the InterBAmerican Development Bank (IDB) has recently been approached by the Government of Guatemala, with a new request, unrelated to FOGUAVI, for a $54 million loan for legalization, infrastructure upgrading, community facilities, and landslideBrisk reduction in informal settlements in four municipalities in the metropolitan area (Guatemala, Chinauta, Mixco and Villa Nueva). It is an irony that an amount almost identical to that ($55.4 million)was already made available in the original IDB loan to FOGUAVI for that same purpose.

5. *Regulatory Reform*: The funds allocated by the loan program for land market reform ($5.85 million) were largely left unspent. There is, as yet, no legal procedure for the legalization of invaded private lands, and the regulations governing the sale of public lands to squatters at market rates need to be revised yet again to reflect the real market value of occupied lands (which is substantially lower than the value of vacant lands in the vicinity). Regulatory decisions governing the level of environmental risk in informal settlementsCand requiring a broad consensus among numerous government agencies and community groupsChave been needlessly postponed. They are now an essential precondition for any progress on legalization of titles, which is itself an essential precondition for infrastructure upgrading in these settlements. It is not clear, however, that such linkages need to be maintained, because they tend to lead to inordinate delays. Promised reforms of municipal regulations governing land subdivision and housing construction are expected in the near future, but

the present regulations have not prevented rapid progress in the provision of serviced lots or of lowBincome housing projects. Finally, it must be noted here that the issuance of land subdivision and building construction permits in the Municipality of Guatemala has been privatized as of 1998, through an international bidding process, and is now being managed by a Dutch company. Permits can now be obtained in as little as one week, and generally in less than one month, and payment for permits covers all the costs of issuing them.

6. *The Institutional Framework for Government Intervention:* As we saw at the beginning of this section, the government agency charged with the responsibility for housing in Guatemala has been shifted from one Ministry to another once too often. This has made it difficult to train a cadre of knowledgeable personnel, to rely on a set of well-oiled working procedures, or to build a solid power base within the government bureaucracy. This should be a cause for concern. At present, the housing agency is again in the throes of reorganization, and the ViceBMinister of Housing has recently issued a call for a broad review of housing policy, scheduled for completion before the end of the year 2000. In light of the above analysis, it should be clear that government intervention in the housing sector indeed suffers from serious problems that need immediate attention. A number of those problems can be traced to the institutional framework for government intervention in the housing sector.

First, there is at present no central policy unit C such as that envisioned by the law creating the National Housing Council (CONAVI) in 1993Cwhich can guide housing policy and oversee the housing sector as a whole, as well as approve and monitor the housing programs designed to intervene in the housing market. There is a serious lack of an overall housing policy perspective in Guatemala C a perspective that will incorporate the interests of all the key actors in the sector and integrate housing policy with macroBeconomic policy, social policy, and municipal development policy. An unfortunate consequence of this lack of an overall perspective is the imbalance in present programs between private sector programs on the one hand, and the civic and community sector programs on the other. Another serious imbalance is to be found between the central government housing programs on the one hand, and local governments housing programs on the other (which until now have been minimal). A balance among these various interest needs to be restored, and it can only be restored if all of them are represented adequately in a decisionBmaking body that monitors the housing sector as a whole, guides housing policy, and allocates public resources to various housing programs. IDB resources have been made available for increasing the amount of information needed to guide housing policy at the national level, but these resources have been left unused. There are, at present, numerous sources of information on the housing sector, but they are not brought together to inform decision making in the housing sector in a systematic fashion.

Second, the housing agency with the principal role of executing housing programs C the Vice Ministry of Housing, and within it the Guatemalan Housing Fund (FOGUAVI) C has not been able to delegate responsibilities, centralize control, and monitor the performance of its programs as originally envisioned. In commercialBwindow activities it may have delegated too many responsibilities C failing to create the necessary incentives for making an efficient use of subsidy funds C and in the social window it may have delegated too few C failing to involve civic groups as intermediaries, and instead becoming involved itself in community work and in legalization efforts. Control over program expenditures has been lax, and it appears that, as a result, budgets were overshot by a high and unacceptable margin. Similarly, monitoring of progress has been weak and promised annual evaluation reports have not been forthcoming. Although adequate budgets were made available, the agency failed to strengthen its own manpower capabilities sufficiently, or to obtain the necessary professional and technical assistance from the private sector, both locally and abroad. In light of the high levels of expenditures in the program over a very short period of time, this is a serious cause for concern. Still, all in all, a number of important goals were accomplished, and a number of important lessons have been learned. These accomplishments can now form the foundations for a more comprehensive and betterBinformed approach to housing policies and programs in Guatemala in the years to come.

IV Guidelines for Action on Housing Policy

The Government of Guatemala is presently reassessing its intervention in the housing sector, and, as we noted earlier, the viceBMinister of Housing has recently issued a call to all the key stakeholders in the housing sector to participate in the process of formulating a new housing policy, a process which is scheduled to be completed before the end of the year 2000. Given the above analysis, there are six operational guidelines that should guide housing policy reform in Guatemala at the present time:

1. *Streamline the Legalization Process:* Increasing tenure security is the key to the reduction of overcrowding in established squatter communities. A commission should be created to oversee and accelerate the transfer of property rights to squatters on both public and private lands, and to introduce the necessary legislation to simplify such transfers. The Commission should act to reform the Law governing the sale of public lands to reflect real market value. It should introduce a new law to govern the sale of occupied private lands. It should create a mechanism for the privatization of the legalization process. And it should negotiate terms of payment with landlords and settlers, and manage its funds as a revolving fund for legalization.

2. *Increase Mortgage Lending for LowBIncome Housing:* The absence of mortgages is the main obstacle to housing affordability in Guatemala. Still, the government should resist the temptation to lend for lowBincome housing at subsidized interest rates. It should continue to offer upBfront subsidies in conjunction with bank loans for new houses. It should find means to encourage banks to issue mediumBterm securities to finance mortgage loans. It

should create the legal means for introducing indexation, so as to make longBterm securities more attractive to investors. And it should pursue, support and insure microBfinance pilot schemes that use commercial bank branches to lend mediumBterm funds for house extension and improvement. And it should seek to import some longBterm funds from overseas through multilateral institutions.

3. *Rationalize the Use of Housing Subsidies:* Even the most modest of housing goals will not be attained without a regular and reliable allocation of housing subsidies. The government should recommit itself to ensure the regular allocation of 1.5 percent of government revenues for housing subsidies, as promised in the Peace Accords of 1996. Housing subsidies should be allocated or, better yet, auctioned to programs and projects that generate the greatest multiplier effects over and above the investment value of the subsidies. Housing subsidies must be balanced between programs that aim to increase new housing supply and programs that aim at upgrading the existing housing stock. There should also be a balance between subsidy vouchers given to communities for infrastructure improvements on the one hand, and vouchers given to individual families for houseBandBland purchase or house construction, improvement and extension on the other. Finally, the subsidy hidden in the nonpayment of value added tax on houses of less than 120m^2 in floor area should be either eliminated, or applied to houses with a much lower floor area.

4. *Plan and Implement a LongBterm Residential Infrastructure Program*: An aggressive residential infrastructure program C both in existing communities and on the urban fringe C is an essential precondition for both housing quality and housing affordability. First, a national upgrading program C focusing on the metropolitan area and based on the improvement of infrastructure and on the mitigation of environmental risk in established informal communities C must be pursued as a key housing policy priority at this time. And the planning and implementation of infrastructure upgrading projects in established settlements must be contingent upon the initiation C rather than the completion C of the legalization process. And second, the systematic expansion of infrastructure networks into the urban fringe must be planned, financed and implemented as a basic precondition for controlling growth, and for ensuring an adequate amount of residential land supply at affordable land prices in the coming years.

5. *Reform the Regulatory Regime Governing the Housing Sector*: An efficient, equitable and sustainable regulatory regime for the housing sector is an essential component of housing policy. At present, it must be based on three important thrusts: First, a national Environmental Risk Commission, including representatives of all concerned parties, should be set up to decide conclusively and realistically which squatter communities can be upgraded and which ones must be resettled. Second, the metropolitan area of Guatemala must be prepared to double in size in the next 20 years, and any artificial growth controls must be rejected as unrealistic, counterproductive, and regressive. And third, municipal

regulations governing residential land subdivision and house construction should be reformed, so as to allow and support progressive improvements of houses and community infrastructure.

6. *Strengthen the Institutional Framework for Government Intervention in Housing*: The Government should remain a facilitator of housing action rather than a producer of housing, and should engage with individual families through privateBsector and civicBsector intermediaries rather than directly. It should do so, first of all, by creating a National Housing Council with the mandate to oversee the housing sector as a whole and to allocate government resources among programs aimed at making the sector efficient, equitable and sustainable. The Council should aim at understanding, leading, supporting and regulating the entire housing sector C the entire formal sector, as well as the entire informal sector C and should not restrict itself to overseeing government programs. It should be supported and informed by a Housing Intelligence Unit, a research unit with a mandate to collect and process relevant information on the housing sector and on government housing programs.

V Guidelines for Action on the Existing Housing Program

The present housing program, financed by the Government of Guatemala and the InterBAmerican Development Bank (GUB0022), is now ready to embark upon its second phase of implementation. As noted earlier, by June 2000, most of the direct subsidy funds in the program were either disbursed or approved for disbursements, while most of the funds for housing market reform and institutional reform were left unspent. Out of $60 million of approved IDB funds, for example, $49.3 Million or 82% were disbursed, leaving a balance of $10.7 million. In addition, there are $20 million that the IDB can make available for the second phase of the program, scheduled for completion by March 2002. Given the analysis above, five guidelines should be heeded during the implementation of the second phase of the program:

1. *Close Information Gaps on First Phase of the Program*: Information on the achievements and weaknesses of the first phase of the program is an essential precondition for its successful continuation. First, there is a need for information on the use of subsidies for building houses on individuallyBowned lots C their targeting, their final products, their completion rates, and their actual financing in the absence of mortgage loans. Second, there is a need for information on the quality and the market value of serviced lots, as well as on their present rate of occupation. Third, there is a need for better information on the impact of the subsidy program on the lowBend of the metropolitan market for residential land. Finally, there is also a need for better information on the current projects administered by the social window.

2. *Improve Oversight of Intermediaries*: FOGUAVI, the housing agency charged with the allocation of subsidy funds, must be strengthened, its human resources must be improved, and its monitoring techniques must be upgraded. Its entire work in the field should be done by intermediaries, both in the privateBsector and in the civic sector. But better ways must be found to work with these intermediaries and to keep them accountable, both through the use of improved reporting requirements and through the use of independent valuers and auditors. In addition, better methods must be found to ensure that the subsidies are allocated to the more efficient and more equitable projects. Rather than leaving these decisions to intermediaries, auctions and other allocation mechanisms must be explored.

3. *Use Subsidies More Effectively*: The direct subsidy program must be thoroughly analyzed before it is further pursued. The original intention of the Housing and Human Settlements Law must be heeded C upBfront subsidies should be used only to enable families to gain access to mortgage funds, and, in general, they should not be used without ensuring that they generate a high multiplier effect. There is an urgent need to better understand the multiplier effects of each subsidy component and the targeting of each subsidy component before allocating new subsidies. In the future, there should be a balance between individual and community subsidies, and between subsidies for new housing on the one hand and existing housing on the other.

4. *Initiate an Infrastructure Upgrading and Environmental Risk Mitigation Program*: The balance between subsidies aimed at existing housing and those aimed at new housing must be restored by shifting subsidy funds to infrastructure upgrading and environmental risk mitigation in existing informal settlements. A national plan for urban upgrading should be initiated, grounded by the necessary legal prerequisites mentioned in the previous section C planning action on environmental risk, and legal action on property rights. Purchase of occupied public lands with program subsidy funds should definitely be avoided. Resources for the upgrading program should be allocated as community vouchers that could only be used in common, to be distinguished from individual vouchers that could be used for construction and improvement of individual houses.

5. *Initiate Institutional Reform in the Housing Sector*: The available funds in the program should be used to create and support key new institutions in the housing sector C the Legalization Commission, the Environmental Risk Commission, and the National Housing Council. These should be actively supported with funds for the necessary legal work, research studies, and technical assistance to bring them into being and to make them into effective tools for the conduct of housing policy.

These proposed guidelines, taken together, form a comprehensive package of possible housing policy and program initiatives in Guatemala at the present time. They should be explored carefully by all the key stakeholders in the housing sector, with a view to selecting the best among them and combining them into a modern, relevant and realistic housing policy and a sensible housing program that can sustain a vibrant and equitable housing sector in the coming years.

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Endnotes

1. Sources: The World Bank, *World Development Report-1998/9*; International Monetary Fund, *International Financial Statistics Yearbook-1998*; United Nations, *World Urbanization Prospects-The 1992 Revision*; Inter-American Development Bank, IDB Statistics and Quantitative Analysis Unit, www.iadb.org; and Transparency International, *The Corruption Perceptions Index-1999*.

2. According to the ILS study [ILS, 1997, 3], of a total builtBup area of 210 km^2 in 1997, only 3 km^2 fell within the area of the 1976 landslides, and only 1.2 km^2 of that total was in highBdensity housing areasCthe areas occupied by informalBsector housing. The metropolitan population in 1997 amounted to 2.01 million, and, therefore, the overall density of the builtBup metropolitan at that time was of the order of 9,600 persons (2,000 households) per km^2. Even if we assume, conservatively, that the density in the highBdensity housing areas was 3 times the overall density (28,800 people or 6,100 households per km^2), then only 4.4% of the total number of households in informal sector housing (39% of total households) are likely to be located in areas at risk of landslides.

3. *Sources*: UNCHS Urban Observatory, *Urban Indicators*; Angel, Shlomo, *Housing Policy Matters: A Global Analysis* ; Carlos Valladares, *Guatemala Housing Sector Assessment* (various sources); Caroline Clarke, AAn Overview of the Housing Sector in Guatemala@; Instituto Nacional de Estadistica de Guatemala, *Census of 1994*. The figure for Guatemala is for new mortgage credit as a percentage of all new credit issued annually during 1994B1998. The percentage for 1999 was 4.62.

4. Interview with Mr. Enrique Godoy, First Councilor, Municipality of Guatemala, 27 June, 2000.

5. Defined as the ratio of the price of 1m^2 of serviced land on the urban fringe and the median annual household income.

6. At the present annual rate of interest of 20%, 34% of the present value of loans is recovered in 2 years, 66% in 5 years, and 90% in 9 years.

7. Defined as the ratio of the cost per m² of a medianBpriced house and the median annual household income.

8. This number actually refers to houses being offered on the market, rather than to houses completed during the year.

9. In 1991, UNICEF estimated this figure to be of the order of 50% [Clarke, 1996, 1].

10. The liquidation process is scheduled for completion by February, 2002, at which time all the assets of the Bank will be transferred to the Guatemalan Housing fund (FOGUAVI).

11. The review of the history of recent housing policy in Guatemala is based ,in large part, on Martínez López, 1999, 7B13.

12. The government froze the FOGUAVI budget in early 2000, and, as of the date of this writing, it is under review. The future, as well as the legal status, of FOGUAVI=s financial obligations visBaBvis banks and developers remains unclear.

13. FOGUAVI documentation makes clear that it has approved the use of subsidy funds through the social window to purchase land occupied by squatters from the National Housing Bank (BANVI). For example, FOGUAVI has approved 219 subsidies totaling Q501,432 ($64,700) for El Limon [Lizarralde et al, table 2.17, 21], and these subsidies appear in the socialBwindow budget plan for the purchase of lands from BANVI [FOGUAVI, 2000a]. The loan agreement with the IDB (GUB0022) forbids the use of IDB funds for payment for government lands [IDB, 1997, 17]. As of March, 2000, the funds transferred to the social window amounted to Q65.9 million, and of this total, Q47.8 million (73%) were IDB loan funds, but it is not clear whether IDB funds were, in fact, approved for the purchase of BANVI lands.

14. In addition, it must be noted, informal credit was given by sellers of serviced lots to help buyers with their down payment. The required down payment to qualify for a subsidy was Q4,000, but the average down payment was only Q1,292 ($175) [CHF, 1999b,11], and the rest was apparently given as a loan by developers. This implies an informal loan of Q2,708 ($366) for each subsidy. If all the beneficiaries approved for servicedBlot subsidies received such financing, this would imply a total of Q93 million ($12.6 million) in informal financing, an amount equivalent to the formal financing associated with mortgage loans.

15. In the absence of detailed information, it is assumed that oneBhalf of the 6,988

subsidies approved through the FOGUAVI social window by March, 2000 [Lizarralde et al, 2000, table 2.17] were for new serviced lots, one quarter was for community projects (infrastructure upgrading, community facilities and house improvements and extension), and oneBquarter for transfers to the National Housing Bank (BANVI) for the purchase of occupied lands on behalf of squatters, so that they can be legalized. For details on the latter, see endnote 12.