THE USAID HOUSING GUARANTY PROGRAM: HOUSING & URBAN DEVELOPMENT INDICATORS SURVEY (FY 1993)

Final Report

Prepared for

United States Agency for International Development
Bureau for Private Enterprise
Office of Housing and Urban Programs

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The USAID Housing Guaranty Program: Housing & Urban Development Indicators Survey (FY 1993)

The Housing Guaranty (HG) Program, established by the Foreign Assistance Act of 1961, stimulates U.S. private sector involvement in the financing of low-income shelter and related services in the developing world. The Program is administered by the U.S. Agency for International Development (USAID) Office of Housing and Urban Programs.

HG projects feature one or more areas of focus:

- Urban environment and infrastructure,
- Local government and municipal management, and
- Shelter and housing finance.

During three decades of activity, HG projects have increasingly focused on the urban environment and infrastructure. As shown in Figure 1, of those projects authorized before 1993 that are still active, only 17 percent center on urban infrastructure. By contrast, two-thirds of the projects authorized in 1993 emphasize improving the urban environment. Because these newer projects often enlist municipalities to help improve urban environmental conditions, local government and municipal management also represents a growing area of emphasis for the Housing Guaranty Program. Shelter and housing finance represents the historical area of HG focus, found especially in projects approved before the late 1980s.[1]

HG projects impact the wider housing sector and related economic systems both directly through project outputs, as well as indirectly, as governments make agreed-upon reforms as conditions precedent to disbursing funds. To help project managers and decision-makers understand those linkages and maximize positive project impacts, the Office of Housing has chosen a set of housing and urban development indicators.[2] Project officers choose specific indicators from the complete set that correspond to the foci of each HG project, and use them to help monitor relevant sectoral conditions.

Fiscal Year (FY) 1993 marks the second annual survey of HG indicators. The purpose of this report is to draw general conclusions about how HG projects assist host countries in making housing more affordable and improving urban services and related conditions, as measured by indicators collected to date.

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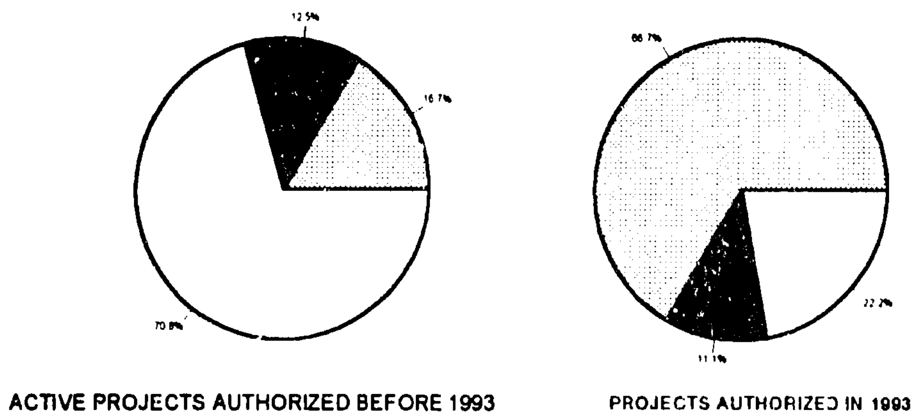
[1]Figure 1 expresses the primary focus of HG projects; however, those projects may also have secondary foci. See Table A-1 in the Appendix for a listing of the projects participating in the 1993 Indicators Survey and their respective areas of focus.

[2]See Appendix for definitions of various housing and urban development indicators.

FIGURE 1 - PRINCIPAL FOCUS OF HG PROJECTS



In recent years, improving the urban environment has become the major focus of HG projects.

KEY
- Urban environment and infrastructure
- Local government and municipal management
- Shelter and housing finance

For FY1993, the USAID Office of Housing received 21 indicator reports, from 20 individual countries and one region (see Table A-1 in the Appendix). Most countries reporting are hosts to one or more HG projects in progress. Other indicator reports capture benchmark conditions for new HGs where implementation has not yet started.

With two years of worldwide data collection completed, indicators begin to suggest change over time. Care, however, must be taken when attributing changes in indicators to HG project outputs. The indicators were not designed to isolate project impact; other factors such as inflation and macroeconomic policy may also spur change. Also, change in an indicator over a two year period may not represent a significant trend, but merely periodic fluctuation or sampling margin-of-error. In future surveys, multiple-year data collection should permit the drawing of more authoritative conclusions.

Given this caveat, below survey results are discussed: (1) worldwide and (2) by country.

1 Worldwide Indicators and Trends

Indicators and trends[3] are analyzed below for each of the three principal HG project foci.

1.1 Urban Environment & Infrastructure

Housing Guaranty projects increasingly focus on helping supply those elements of shelter and related services which low-income families have the most difficulty providing for themselves: infrastructure such as water and sewer lines that improve urban environmental conditions. A full 18 of the 21 countries reporting in this Survey host HGs with an environmental infrastructure component. Urban infrastructure is the major thrust of HGs authorized in the 1990s in Thailand, Tunisia, India, Sri Lanka, Morocco and in Central America.

The need is urgent for environmental infrastructure and services. A recent survey concluded that "About 1.3 billion people in the developing world lack access to clean and plentiful water, and nearly 2 billion people lack an adequate [sewage disposal] system."[4] As a result, those persons often suffer from diarrhea and intestinal worm infections, which account for about ten percent of the total burden of disease in developing countries, reducing productivity.[5] Unfortunately, as many governments struggled to down-size their budgets in the early 1980s, infrastructure outlays for both capital and maintenance dropped sharply.[6]

Confronting this need, a HG-type loan guaranty approach, as opposed to a grant, appears appropriate and feasible. The 1993 World Development Report finds that, "In most urban communities households are willing to pay the full costs of water service and often the full cost of sanitation service."[7] This willingness to pay permits loan repayment to governmental implementing agencies via hookup and service charges. The revenue repayment streams thus created in turn allow projects to yield ongoing, rather than one-time, benefits, since repaid funds can be recycled back into new infrastructure investments. Use of repayment plans where feasible also permits donor agencies to reserve scarce grant resources for projects where needy recipients cannot afford to repay a loan.

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[3]Table A-2 in the Appendix presents FY1993 Housing and Urban Development Indicator Survey results; data represent the most recent year available (1993 or previous). Table A-3 in the Appendix presents indicator data for all years surveyed.

[4]Source: The World Bank, *World Development Report 1993*, p. 90.

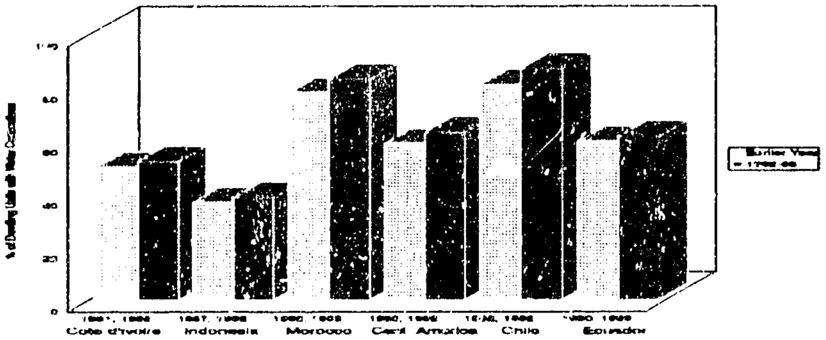
[5]*Ibid*, p. 91.

[6]Source: Peterson, G.; Kingsley, G.T.; and Telgarsky, J.P., *Urban Economies and National Development*, USAID Office and Housing and Urban Programs, 1991, p. 28.

[7]Source: The World Bank, *World Development Report 1993*, p. 93.

Active HG projects with infrastructure components contribute to improvements in indicators such as the percentage of dwelling units with individual water connections.[8] USAID Missions for all six areas where trend data exists reported improvements in nationwide water connection coverage during years of HG activity (see Figure 2).[9] Implementation of the 1988-authorized Municipal Finance Project in Indonesia, for example, which supports lending to municipal governments to finance urban services and infrastructure, as well as centrally planned capital improvements, coincides with a reported two percent increase in water connection coverage in urban areas nationwide between 1987 and 1992.

FIGURE 2 - INDIVIDUAL WATER CONNECTION TRENDS



All countries with active HG Projects for the period surveyed (where trend data were available) reported improvements in water connection ratios.

Besides guarantying loans to extend environmental infrastructure and provide basic services, HG projects can leverage institutional development. Privatization, in its various forms, offers one broad institutional strategy for improving infrastructure and service provision. (Another such basic strategy, the decentralization or delegation of authority to local governments, is discussed in the following section.)

Privatization may lead to the more efficient provision of urban environmental services, due to the greater flexibility of management, freedom of action, financial discipline and accountability to market forces that are said to characterize the private sector.[10] The

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[8]For definitions of the Individual Water Connections indicator and others, please see the Appendix.

[9]Reported increases imply that providers are keeping up with and increasing overall service coverage, even in the face of high ongoing levels of rural-to-urban migration and population growth. While indicator surveys may undercount the number of new informal households that lack basic infrastructure and services, reported trends are still encouraging.

[10]The economic arguments for and against privatization vary, depending on the specific urban environmental service being examined. For a discussion of one important urban service, see USAID Office of Housing and Urban Programs, *Privatizing Solid Waste Management Services in Developing Countries*, 1992, pp. 36 ff.

privatization option has not yet been fully explored in developing nations. In countries participating in the 1993 Indicators Survey, the maximum reported percentage of households receiving environmental services from private sector providers is 25 percent, in Côte d'Ivoire; virtually no private sector service delivery occurs in Tunisia, Ecuador and Indonesia (see Table 1). By contrast, more than 80 percent of municipal solid waste in the United States is collected by private firms.[11]

Newer HG projects are exploring innovative ways to privatize parts of the delivery systems of basic infrastructure and services. The newly-authorized HG in Thailand, for example, will support a new public/private guaranty facility that will open significant new opportunities for participation by commercial banks in the financing of environmental infrastructure. Tunisia's Private Participation in Environmental Services Program, authorized in 1993, will help foster an enabling structure of policies, institutions and incentives for increasing private sector involvement in basic services. These and other HG initiatives should result in changes in future years to the conditions captured in Table 1.

Table 1: Private Sector Delivery of Basic Urban Services

	1990s
Tunisia	0%
Ecuador	0%
Indonesia	2%
Thailand	20%
Côte d'Ivoire	25%

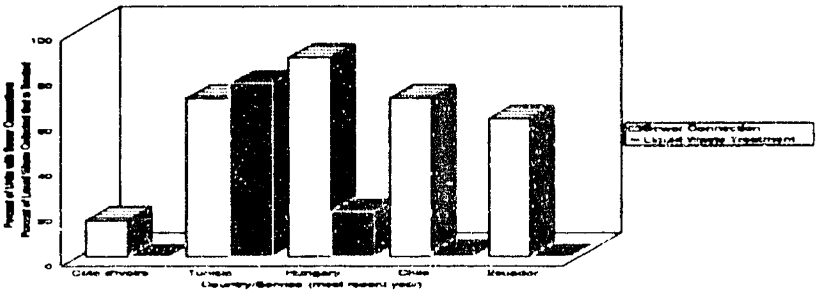
Survey data for 1993 highlights one sometimes overlooked but urgent need in developing countries: support for liquid waste treatment. While on average one out of every two urban dwelling units in surveyed countries reportedly features individual sewer connections, only an average of 16 percent of collected liquid waste is actually treated. Three countries with functioning sewage collection systems, Côte d'Ivoire, Chile and Ecuador, report treatment of less than five percent of collected liquid waste (see Figure 3). The scenario presented in the Côte d'Ivoire indicator report for 1993 is perhaps typical: "Most of the liquid waste treatment plants which were constructed two or so decades ago are now non-functional owing to lack of maintenance." While incomplete sewage collection systems may benefit the urban environment closest to neighborhoods, massive contamination of rivers, lakes and oceans close to cities is still common. Depending on site-specific factors such as hydrological conditions, mitigating this impact may be justified.

Certain newer HG projects are encouraging governments to support liquid waste treatment. In Indonesia, for example, USAID has proposed that the Government require real estate, commercial and industrial developers to construct and maintain environmental infrastructure, including, in certain cases, wastewater treatment systems. The newly-authorized HG in Chile includes a low-cost waste-water treatment component. Other approaches for mobilizing public and private capital to support liquid waste treatment are also being explored. Any project resources that support liquid waste treatment should however be deployed in concert with other funds, due to two factors. First, new treatment

[11] *Ibid*, p. 36.

systems are capital-intensive: taken on alone, such a project could quickly consume HG resources. Second, a pure market outcome—even if financing were available—may not lead to optimal results. The environmental cost of raw sewage dumping is often relatively non-local, i.e., is an externality. As a result, the World Bank reports that "households are less willing to pay for the cost of trunk sewers and treatment of excreta and wastewater" than for other environmental infrastructure.[12] Despite this finding, creative ways may exist for HG projects to mobilize the resources of private industry, municipalities, donors, and willing-to-pay beneficiaries, leading to effective sewage treatment solutions.

FIGURE 5 - COMPARISON OF INDIVIDUAL SEWER CONNECTIONS & LIQUID WASTE TREATMENT



Most of the liquid waste collected is released untreated

1.2 Local Government & Municipal Management

In recent years, municipalities have played an increasingly important role in HG projects. Twelve of the 21 countries participating in the 1993 Indicators Survey host HG projects with a local government/municipal focus.

Two broad rationales undergird USAID's work with municipalities. First, like privatization, the decentralization or delegation of authority away from a central government to municipalities may make the provision of services more efficient. As one economist writes, local governments "have the ability to be more responsive to the local citizen in establishing investment priorities, and...have a greater interest in seeing that local projects are built and operated efficiently."[13] Second, municipal involvement in HG activities may further the USAID objective of strengthening democracy in governance. Both purposes underlie, for example, the Central America Municipal Infrastructure Finance Program, authorized in 1993, which will support direct lending to municipalities to finance infrastructure investment.

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[12]Source: The World Bank, *World Development Report 1993*, p. 94.

[13]Source: Peterson, George E., *Infrastructure Finance, Volume I: Financing Urban Infrastructure in Less Developed Countries*, USAID Office of Housing and Urban Programs, 1991, p. 45.

For the sustainable provision of a service by a municipality to succeed, local government performance must be closely tracked, at least internally. Due to various factors-a lack of accurate cost data, weak political will, explicit policy choices-a municipality providing a service may not respond as decisively to market signals as would a private sector entity. Subsidies may result. While one might hope that a subsidy would benefit the urban poor, in reality the nonsustainability of the service generally means that providers do not have the resources to extend coverage into poor neighborhoods. As a result, the poor pay more for inadequate services, as found in Peru:

> In Lima, poor people may pay three dollars for a cubic meter of contaminated water collected by bucket from a private vendor, while the middle class pays 30 cents per cubic meter for treated water provided on tap in their houses by the publicly subsidized water company.[14]

The cost recovery indicator offers an important, clear gauge for monitoring municipal ability to sustain service delivery, as well as to repay loans from public and private sources, including resources borrowed from a national implementing agency backed by HG funds. Data collected suggest that municipalities vary greatly in performance in cost recovery, defined here as the percentage of infrastructure costs (capital, operational and maintenance) which are financed through locally generated revenues. Reported cost recovery varies, from only twelve percent recovery in Ecuador[15] up to 83 percent in Côte d'Ivoire[16] (see Table 2). Training and technical assistance can demonstrably improve cost recovery levels. The high cost recovery levels achieved in Côte d'Ivoire in the 1990s can no doubt be attributed in part to the decade-long support offered by USAID and other donors to that nation's efforts to strengthen local government.

Table 2: Municipal Cost Recovery

	1990s
Ecuador	12%
Indonesia	28%
Thailand	53%
Central America	60%
Chile	61%
Côte d'Ivoire	83%

In other areas of municipal administration, indicator data collected recently in the Philippines deepen our understanding of the interrelationships between the municipal and the shelter sectors—and incidentally underscore the value of indicators as management tools. The average number of months required by public officials to approve construction of a new residential subdivision increased recently,

[14]Source: The World Bank, *World Development Report 1993*, p.93.

[15]This relatively low composite value for various services nationwide obscures some individual success stories. RHUDO/SA reports that, in part as a result of USAID technical assistance, Quito's Water Company is now "100 percent self-sufficient," whereas until 1989, 43 percent of the Company's income "came from the Government of Ecuador and/or municipal transfers."

[16]This relatively high reported value is due in part to inclusion of figures for the metropolis of Abidjan in nationwide municipal budget summaries. The USAID Mission, in its indicators report for 1993, notes that Abidjan "finances 100 percent of all its operations and maintenance as well as its capital investment from its own locally generated resources."

from one month in 1990-91 to 2.25 months in 1992-93. The change turned out to be due not to decreasing Central Government efficiency, but to the recent devolution of some permitting authority from the national to local government, consistent with decentralization goals. Rising to the indicated need, the Decentralized Shelter and Urban Development Project in the Philippines is currently channeling resources into municipal training. Indicators thus help make explicit the tradeoffs involved between at-times conflicting project goals—a valuable tool for project managers.

1.3 Shelter & Housing Finance

Reflecting the historical focus of the Housing Guaranty Program, HGs for 18 of the 21 countries reporting in this Survey concentrate upon the market for shelter. Nearly all such projects work to release crimped demand for housing, by guarantying shelter loans for families with below-median incomes who otherwise might not enjoy access to credit. These HGs, however, do not just inject needed capital. Projects also leverage evolution of the housing finance system towards increasing sophistication and differentiation, through policy dialogue as well as institutional and regulatory reform. In Ecuador, for example, the Government decided to transform the Ecuadorian Housing Bank into a secondary mortgage facility, assisted by a Housing Guaranty project. HG efforts to help governments to secure land tenure for informal housing also stimulate demand by encouraging households to invest in shelter. Besides whetting demand, HG projects also strive to make housing supply less rigid and more responsive, by streamlining the urban development regulatory framework and rationalizing land policies. Taken together, HG supply and demand interventions should result in more affordable housing market solutions for the urban poor.

Down-market (i.e., low income) penetration is an appropriate indicator of HG-driven improvements in housing affordability. This "sensitive" indicator communicates whether the housing market is sufficiently differentiated so as to produce dwelling units affordable to families of less-than-median income.

For five of the six countries where some trend data exists and where there are authorized HGs with a shelter focus, Housing Guaranty activity appears to contribute to acceptable down-market penetration conditions. For three such countries, Tunisia, Chile and Ecuador, the indicator improved (i.e., lowered) during the early 1990s (see Figure 4). Programs such as Chile's Private Sector Housing Program, which entices private sector home building institutions to produce and sell homes to low-income families, clearly contribute to improving housing affordability conditions. For two other countries with active HGs, Honduras and Guatemala, the indicator increased marginally over the last year, to values of 1.5 and 1.8, respectively, suggesting slightly worsening conditions. However these 1993 values, while they merit continued tracking and in-country analysis, are still substantially below the mean worldwide of 4.37,[17] indicating (for the moment) acceptable down market penetration conditions.

[17]Source: IBRD/UNCHS, "*The Housing Indicators Program*," Volumes II and III, 1993.

FIGURE 4 - DOWN MARKET PENETRATION TRENDS

A trend towards a lower value indicates an improvement in housing affordability.

Down market penetration worsened substantially in only one country shown in Figure 4: Pakistan. One plausible explanation is that this worsening represents in part a short-term trade-off made in exchange for institutional gains. The HG Program in Pakistan reports that, in 1993, the private sector began to offer housing mortgages for the first time in recent history. This strengthening of housing finance should act to stimulate demand. Increased demand acts to drive up the market price of housing, particularly in the short run, including the price of low income housing tracked by the down market penetration indicator. Increased prices are expected in the short term in particular, before housing suppliers have a chance to respond to the increase in consumer demand by producing greater volumes of dwelling units for a more differentiated market. Despite this explanation, the worsening of the indicator should act as a red flag, prompting a renewed look at the housing delivery system for ways to relax impediments to a flexible supply response.

More detailed, country-by-country analysis of HG projects and indicator trends follows.

2 Indicators and Trends for Individual Countries

Housing and urban development indicators[18] for individual countries grouped by region are examined below for evidence of HG project impact.

2.1 AFRICA

2.1.1 Côte d'Ivoire

Since about 1980, the Government of Côte d'Ivoire has acted to strengthen the institution of the *commune* (municipality). In 1980, the President announced that local elections would be held for the first time in 37 *communes*. In 1985, another 98 *communes* were created from settlements, in time to hold local elections that same year. This communalization has led to improved local administration. A recent evaluation concluded that the *communes* are increasingly gaining competence in administering their areas of responsibility, and that settlements granted *commune* status "are considerably more successful in collecting taxes and other revenues than are similar-sized settlements that have not been communalized."[19]

Côte d'Ivoire: Key Trends and Indicators

	1991	1992
Shelter & Housing Finance		
Compliance	0.45	0.45
Land Registration	10%	10%
Permits Delay (months)	40	40
House Price-to-Income	--	7.5
Urban Infra. & Environment		
Environ. Encroachment	45%	47%
Individual Water Connect.	50%	52%
Liquid Waste Treat.	0%	0%
Solid Waste Collection	53%	51%
Local Gov't. & Munic. Man't.		
Cost Recovery	--	83%
Fiscal Independence	71%	83%

USAID seeks to support the communalization movement in Côte d'Ivoire. The purpose of the Municipal Development Support Project (681-0004)[20] is to improve the efficiency and effectiveness of local government operations, especially in the areas of governance, finance, management and service delivery; and to create models of sound municipal management, including those involving the effective use of the private sector, that can be replicated in other Ivorian secondary cities. The project seeks to meet those goals by providing municipal management training to government officials at both the central and local levels, by undertaking cadastral surveys and studies in twelve project cities, by encouraging the privatization of service delivery, and by constructing revenue generating community facilities in five project cities. Of those activities, municipal training and technical assistance is underway, tax rolls have

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[18]Key indicators are presented and discussed in this chapter. For a complete list of indicator values collected, see Tables A-2 and A-3 in the Appendix.

[19]Source: Strenn, Richard, *The Experience of Decentralization in Côte d'Ivoire, 1980-1993, Executive Summary*, pp. ii-iv.

[20]A grant; not a HG project.

been created and updated in seven cities and the private delivery public services is being implemented in four towns. Construction activities have begun in all five project cities selected.

Within the project cities, the Mission reports that the project has had a positive impact on revenue generation, which probably translates into an increase in the fiscal independence indicator for targeted *communes*. More generally, decade-long support by USAID and other donors to Côte d'Ivoire's efforts to communalize government have yielded improvements in municipal management, captured in part by indicators. *Communes* report an 83 percent level of cost recovery. The USAID Mission reports that this relatively high value is apparently due to inclusion in national totals of figures for the metropolis of Abidjan, which "finances 100 percent of all its operations and maintenance as well as its capital investment from its own locally generated resources." Other reasons given for this high value include the relatively small size of capital budgets of most other *communes* and calculation methodology. Côte d'Ivoire *communes* also exhibit high levels of fiscal independence. As the central government has cut back its allowance to *communes* over the last decade, the largest *communes*, supported by donor efforts, have made strides in mobilizing resources at the local level. The Mission does not believe that this trend holds for smaller communities, which tend to be heavily subsidized by the Central Government.

2.1.2 Kenya

The Kenya Small Towns Shelter and Community Development Project (615-HG-006), authorized in August, 1979 has been virtually concluded. Nearly all of the $14.55 million authorized have been disbursed, with the last HG disbursement occurring in 1989 ($159,000 remain in local escrow).

The purpose of the Project is to strengthen the capability of local authorities to identify, implement and administer capital improvements, low cost shelter, and employment generation programs. To these ends, a total of 33 infrastructure and community facilities have been finished (including four in 1993), and 18 core housing sites have been completed (including two in 1993).

Project-driven improvements in the supply of shelter and infrastructure are needed in Kenya. With a GNP per capita of $340, Kenya is considered one of the world's low income countries. Annual infrastructure expenditures in Kenya of $15 per capita are low, even relative to other low income countries (average: $24) surveyed by the UNCHS/IBRD.[21] And while housing appears fairly affordable in Kenya—the house price-to-income ratio is 1.0, compared to a 4.8 average for low income countries—the high down market penetration ratio of 6.9 suggests that the formal sector is not targeting much new housing towards families of less-than-medium income.

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[21] See Table A-4 in the Appendix for more information on UNCHS/IBRD data and definitions.

Kenya: Key Trends and Indicators

	88/89	90/91	92/93[a]
Urban Infra. & Environment			
Infra. Expend. per Cap.	--	$15	--
Shelter & Housing Finance			
House Price-to-Income	--	1.0[b]	--
Down-Market Penetration	--	6.9[b]	--
Local Gov't & Munic. Man't			
Property Tax Receipts	4.8%	4.7%	6.5%

[a] Provisional Government of Kenya estimate.
[b] Source: UNCHS/IBRD, 1993

To further the end of strengthening local authorities, the Project institutionalized a local training program in which officials of 26 towns have participated to date. Quantifiable measures of improvements in local planning and management abilities were not available. One possibly relevant indicator, property tax receipts as a percent of the total local government budget, has remained essentially flat over the last five years. The FY 1993 report notes that depressed local economies have resulted in an overall erosion of the government's tax base, resulting in lowered property tax receipts.

2.2 ASIA

2.2.1 Indonesia

The Municipal Finance Project (497-HG-001) seeks to improve the shelter conditions of Indonesians with below median incomes by developing the means by which municipal governments can finance shelter-related urban services and infrastructure. As end-of-project goals, the HG, authorized in 1988, will enable the provision of shelter-related infrastructure valued at the equivalent of $120 million, benefitting below-median income families. The local government finance system's ability to mobilize and manage resources will be strengthened. The HG will establish the basis for increased private sector participation in providing and financing urban infrastructure and services.

The Mission reports that $100 million in housing guaranties have already been expended by the Government of Indonesia (GOI), in support of an infrastructure and services investment program. A lending facility to support local government borrowing has been established and is now operational. This facility will serve as a transitional institution to open municipal access to private credit markets. These changes should increasingly bolster the nationwide infrastructure expenditures per capita indicator. However, this indicator declined slightly during the early 1990s, from $6.84 per person in 1986 to $6.71 in 1992 (see Table). This decline, even after HG-backed expenditures are factored in, reflects the close of a major World Bank Urban Sector Loan and coincides with galloping population growth rates in urban areas.

Indonesia: Key Trends

	Pre-1991	1991-93
Shelter & Housing Finance		
Permits Delay	32	3.5
Mortgage-to-Dep. Diff.	-3.5	3.5
Down-Market Penetration	12.6	1.6
Urban Infra. & Environ.		
Infra. Expend. per Capita	$6.84	$6.71
Individ. Sewer Connections	9%	18%
Private Sector Service Del.	0%	2%
Local Govt. & Munic. Man't.		
Own Source Fin. of Cap. Imprvm'ts.	29%	36%

The Mission reports that the GOI has made progress in opening private participation in public services, another project goal. Private participation in water supply projects were noted in Bali and in East Java. In Jakarta, 14 different private firms were awarded solid waste collection contracts. These activities were apparently captured in an increase in the private sector service delivery indicator, which rose from 0 percent in the 1980s to two percent in 1991.

As noted above, the project also seeks to strengthen the capacity of the local government finance system to mobilize and manage resources. The Mission reports the training of about 80 GOI officials in urban financial management through the HG project, and the participation of eight city mayors and bank officials in a municipal bond study tour. This training coincides with improvements in municipal management indicators. Between 1989 and 1992, a period of program implementation, local governments improved in terms of own source financing for both capital improvements as well as operations and maintenance outlays. During the same period, total locally generated funds reportedly increased in absolute terms by 61 percent, while property tax receipts increased by 35 percent.[22]

2.2.2 Philippines

The $50 million Decentralized Shelter and Urban Development Project (492-HG-001), authorized in September 1990, aims to foster a greater role for elected city governments, the private sector and non-governmental organizations (NGOs) in the development of shelter-related infrastructure to benefit low income Filipinos in certain cities.

The Project reports progress in helping the Government of the Philippines (GOP) improve access to sustainable urban shelter delivery systems for low income households, reduce environmental infrastructure constraints on development, and implement a sustainable system of municipal finance in Charter Cities. As of November 1992, the GOP had expended $20 million. In the housing sector, the difference in percentage points between a mortgage loan and a commercial bank deposit narrowed during the project implementation period, from 5.8

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[22]The relevant indicators included in Table A-3 in the Appendix, expressed in relative (not absolute) terms, may not capture the extent of these improvements.

points in 1990-91 to 2.5 points in 1992-93 (see Table). The change suggests either a reduction in policy-induced market distortions, a decline in long-term investment risks, or improved efficiency in institutions leading to lower margins. The 1992-93 mortgage-to-deposit value compares favorably to the average difference for low-mid income countries of seven percentage points (Source: IBRD/UNCHS).

Philippines: Key Trends and Indicators

	Pre-90	1990/91	1992/93
Shelter & Housing Fin.			
Permits Delay	--	1.0	2.25
Mort.-to-Dep. Diff.	--	5.8[a]	2.5
Urban Environ. & Infra.			
Infra. Expend. Per Cap.	--	$45[a]	--
Indiv. Water Connections	57%	37%	--
Local Gov't & Munic. Man't			
Fiscal Independence	--	45%	41%
Prop. Tax Receipts	--	70.5%	71.9%
Cost Recovery	33%	--	--

[a]Source: IBRD/UNCHS, 1993.

In the area of environmental infrastructure, indicators collected to date offer a baseline portrait of conditions before Project implementation. In 1990, the government spent a reported $45 per person on infrastructure (capital, operations and maintenance expenses). This rate was slightly superior to the average $40.11 per capita for low-mid income countries. The coverage of individual water connections in urban areas nationwide reportedly declined over ten years, from 57 percent in 1980 to 37 percent in 1990. This anomalous downward trend was probably due to factors such as rural-to-urban migration and changes in data collection methodology. As of November 1992, the Project reported, "Provision of infrastructure valued at $50 million," with $43.75 million of GOP resources mobilized.[23]

In the area of municipal management, the Project reports that, in pilot project cities, "Substantial increases in local tax revenue have been achieved." However, this and other project-driven gains in management in pilot cities have not yet yielded improvements in relevant nation-wide indicators. The indicator for nation-wide municipal fiscal independence actually declined slightly, from 45 percent in 1991 to 41 percent in 1992, due to a one-time increase in the distribution of national revenues to local governments. Marginal increases in property tax receipts as a proportion of local budgets during the same period are not considered significant.

[23]Indicator data that would capture that positive impact were not available.

2.2.3 Thailand

The Urban Environmental Infrastructure Support Project (493-HG-005), authorized in September 1993, seeks to assist Thailand in developing a sustainable system for financing urban environmental infrastructure which will benefit urban households, including low-income families. The $100 million HG will support a new public-private guaranty facility that will mobilize commercial lending to municipalities to finance urban environmental infrastructure. The Government of Thailand is currently preparing a Cabinet proposal to establish that facility.

Indicator data from 1991 supports the need for the HG approach to improving basic services in the municipalities outside of Bangkok. While $229 are reportedly spent annually on infrastructure per capita in Thailand (see Table), a high value compared to other low-mid income countries (average: $31), the Mission reports that this figure is "extremely skewed" towards Bangkok, whose budget is about five times the size of all the 135 other municipalities combined. Likewise, the high value presented for individual water connections (85 percent coverage) appears to mask the pressing need for environmental infrastructure in municipalities outside of Bangkok.

Thailand: Key Indicators	
Urban Infra. & Environ.	1990-91
Infra. Expend. Per Capita	$229
Individual Water Connects.	85%
Individual Sewer Connects.	0%
Liquid Waste Treatment	0%
Private Sector Service Deliv.	20%
Solid Waste Removal	79%
Local Gov't. & Munic. Man't.	
Own Source Fin. of Cap. Exp.	23%
Own Source Ops. & Maint.	83%
Cost Recovery	53%

Low levels of sewer connections are reported for Thailand: 0 percent in 1990-91 with an estimated increase to one or two percent in 1994. These low figures are due to a preference for septic tank connections over sewer connections; about 85 percent of dwelling units are estimated to be served by septic tanks. Only two wastewater systems are in operation in Thailand, both of which treat only "gray" water, i.e., wastewater from sink, shower, etc.

By supporting lending to municipalities as well as providing training and technical assistance, the Project should substantially benefit local fiscal autonomy. Own source financing of capital expenditures, which now stands at only 23 percent of capital outlays, should increase. The cost recovery indicator shows that only about half (53 percent) of all costs for urban infrastructure and services are currently financed through locally generated revenues. This measure will have to increase markedly to ensure Project sustainability, affirming the need for municipal training and technical assistance.

2.2.4 India

The poor of India (GNP per capita: $330) confront a lack of affordable housing. The median price for buying a dwelling unit stands at 7.7 times the median annual household income (see Table)—a rate nearly double the average for low income countries of 4.8 (Source: UNCHS/IBRD, 1993). Severe permit delays of 36 months to approve construction of a new subdivision, measured in 1990, represent one housing supply rigidity that contributes to a situation of unaffordable housing.

India: Key Trends and Indicators			
Shelter & Housing Finance	1990	1992	1993
House Price-to-Income Ratio	7.7*	--	--
Permits Delay	36*	--	--
Credit-to-Value Ratio	--	0.2	0.2
Mort.-to-Deposit Difference	4.5*	2.0	2.68

*Source: UNCHS/IBRD, 1993.

USAID launched the Housing Finance System Program (386-HG-003) in September 1988. The purpose of this $100 million program is to "Promote the development of a financially sound, self-sustaining, private sector housing finance system which makes long-term shelter finance available to a wide range of households, particularly those below medium income." To accomplish this, India's National Housing Bank (NHB) is promoting, regulating and providing liquidity to over 20 private housing finance companies (HFCs).

The borrowing of the second tranche of $25 million in HG funds by the NHB was delayed due to arbitration of a dispute between the NHB and a commercial bank over stock trading irregularities. During 1993, USAID worked with NHB to help resolve those irregularities and strengthen its management controls.

Given delays in implementation, it is not surprising that relevant indicators do not demonstrate improvement between 1992 and 1993. The credit-to-value ratio, which indicates that portion of housing investment made through the use of formal credit, reportedly remained constant at 0.2. While this ratio indicates constricted demand relative to values in industrial countries, India's ratio remains in fact slightly superior to the average value for both low income countries (0.13) and South Asia (0.08) as surveyed by the UNCHS/IBRD. Another key indicator, the mortgage-to-deposit difference, fluctuated within an acceptable, sustainable range at or below 4.5 over the last four years.

2.2.5 Pakistan

The traditional weakness of the housing finance system in Pakistan has contributed to a scarcity of acceptable, affordable housing. USAID/Islamabad describes both private sector mortgage finance and construction finance facilities as "virtually non-existent" before 1993. The public sector House Building Finance Corporation has offered some heavily subsidized mortgage lending, but not nearly enough to meet demand. At first glance, the house price-to-income ratio of 1.9, low relative to the average value of 4.84 for low income countries, would seem to suggest acceptable housing conditions (see Table). However, this figure incorporates large volumes of informal housing. The Mission estimates that "probably 90 percent or more of all new housing being built" is unserviced and built of non-permanent materials. The Mission further reports that formal housing is very expensive relative to average earnings.

Pakistan: Key Trends and Indicators

Shelter & Housing Finance	90/91	1992	1993
House Price-to-Income 1.9*	--	--	
Down Market Penetration	6.4	6.4	7.5
Mortgage-to-Deposit Diff.	--	2.6	8.5

*Source: IBRD/UNCHS, 1993.

To help improve housing in Pakistan, the Mission targeted the underdeveloped housing finance sector. The Shelter Resource Mobilization Program (391-HG-001) assists the Government of Pakistan in establishing a market-oriented housing finance system in which private sector housing finance companies operate in a regulated environment, as part of the Government's overall financial sector adjustment program. The $40 million program was authorized in June 1989. Among other accomplishments, the Mission reports creation of a legal framework and a licensing process, and the establishment of a regulatory unit for the private housing finance sector. Seven private sector lenders are either licensed and operating or else currently engaged in the licensing process.

Expansion of the private sector into mortgage lending in 1993, an institutional gain, may have actually contributed to a temporary set-back in housing affordability as captured by the down market penetration indicator (6.4 in 1992, 7.5 in 1993). The private sector offering of mortgage finance should have stimulated demand. An increase in demand acts to drive up the market price of housing in the short term, including the price of low income housing tracked by the down market penetration indicator. This market outcome is to be expected in the short-term, before housing suppliers have a chance to respond to the shift in consumer demand by producing greater volumes of dwelling units for a more differentiated market. The worsening of the indicator should however act as a red flag, prompting a renewed look at the housing delivery system for possible impediments to a flexible supply response.

2.2.6 Sri Lanka

Formal sector housing is not affordable for most households in Sri Lanka (GNP per capita: $500). The relatively high down market penetration ratio of 9.68 shows that the private sector is not producing housing which is affordable to the median household.

Authorized in 1980, a principal purpose of the $100 million Sri Lanka Low Income Shelter Program (383-HG-004) is to assist the Government of Sri Lanka (GSL) in increasing private sector participation in low income housing finance via housing guaranties. A fourth tranche of $25 million was obligated in March 1991.

The Mission reports that the GSL has achieved the policy changes necessary to develop a sustainable housing finance system. A subsidized scheme for interest rates on housing loans has been eliminated. In response to sectoral changes and new financial guaranties, some financial institutions have signalled their willingness to provide or liberalize provision of housing credit. While the Mission reports that, "The private sector has not invested in housing through this program as once envisioned," still five commercial banks, two Housing Banks and eight Rural Banks, representing a mix of public, private and non-governmental organizations, have signed up to date. By the end of 1993, about $5 million had been loaned for housing. Moreover, the Mission reports success in targeting small loans to the poorest percentiles of the population.

Sri Lanka: Key Trends and Indicators		
Shelter & Housing Finance	1992	1993
Down-Market Penetration	9.68	--
Credit-to-Value Ratio	0.20	0.31
Mortgage-to-Deposit Diff.	2.5	2.5

Program successes in widening housing finance opportunities for lower income families coincide with substantial improvement in the reported credit-to-value ratio, from 0.20 in 1992 to 0.31 in 1993. This change suggests a marked increase in mortgage loans as a proportion of total investment in housing. However, while the interest rate on mortgages stays on average only a moderate 2.5 percentage points above commercial interest rates, the Mission considers both rates as "high," reflecting Sri Lanka's still thin financial market.

Besides a shallow long-term debt market typical of low and low-mid income countries, the Mission has identified land titling and registration as a key constraint to lending in Sri Lanka, suggesting an area for future intervention. A report notes that while "almost all land title is clouded...the cost to clear title is often beyond the financial reach of low-income families." Private banks then refuse to take mortgage security against a flawed chain of title.

2.3 NEAR EAST

Jordan: Key Trends and Indicators	1986	1990	1992
Shelter & Housing Finance			
House Price-to-Income	--	3.39	3.12
Down Market Penetration	--	--	1.20
Compliance	0.70	0.65	--
Land Registration Coverage	90%	85%	--
Tenure Regularization	65%	50%	--
Permits Delay	7	7	--
Mortgage-to-Deposit	--	0.5	--
Credit-to-Value Ratio	--	0.19	--
Urban Infra. & Environ.			
Infra. Expend. Per Cap.	--	$458[a]	--
Individ. Water Connects.	97%	97%	--
Individ. Sewer Connects.	--	--	55%
Upgrading Informal Areas	--	45%	--
Private Sector Land Dev't.	--	5%	--
Solid Waste Coll. Cov.	--	80%	--

[a] Source: UNCHS/IBRD, 1993.

2.3.1 Jordan

USAID authorized the Jordan Housing Policy Program (278-HG-004) in September 1988, at a time when public sector control over the housing sector was slowly eroding. While the government still accounted for some 95 percent of formal land development in 1990, compliance with the building permitting process declined during the late 1980s from 70 percent of new housing starts in 1986 to 65 percent in 1990 (see Table). Declines in land registration coverage and tenure regularization efforts also suggest institutions increasingly less responsive to mounting demand for housing.

The purpose of the $17.8 million HG is to improve delivery of affordable housing and services to low-income families and increase private sector participation. A major project output was formal adoption of the National Housing Strategy by the Government of Jordan. Other outputs include simplified procedures and permit regulations for low cost housing, as well as improved access to housing credit for low income families. The first $15 million loan under the program was disbursed in August 1993.

Indicator values collected to date offer a base-line from which to measure off future project advances. The simplified regulatory framework planned, if vigorously institutionalized and administered, should result in reversals of the declines noted above in the late 1980s in one or more of the following: building permit compliance, land registration coverage and tenure regularization. Improved access of low income families to housing credit may also increase the credit-to-value ratio, which currently stands at 0.19, well below the average for low-mid income countries of 0.38 (Source: IBRD/UNCHS, 1993). Private sector land development, now only five percent of all formal land development, should also increase dramatically under the new Housing Strategy. Project goals vis-a-vis basic infrastructure and services, and thus potential impacts upon urban environmental indicators, cannot be clearly determined from documentation reviewed.

2.3.2 Morocco

Project status reports and indicator analyses were submitted for three Housing Guaranty projects, as follows:

Tetouan Urban Development Project

The Tetouan Urban Development Project (608-HG-001), authorized in September 1985, is "...addressing one of the major imbalances that Morocco is experiencing as a result of rapid urbanization—the creation of unauthorized and underserviced neighborhoods." Project loans will help finance potable water hookups, sewage lines, roadways and street lighting to benefit 90,000 low-income people. The Municipality of Tetouan will help private land owners produce 10,000 serviced plots.

Aided by Project resources, water connections increased by over three percent per year between 1989 and 1993, with on average 1246 new hookups added per year. By 1991, about 78 percent of dwelling units in Tetouan enjoyed water connections, a greater proportion than the nationwide coverage of 67 percent (see Table). In the area of land development, eight private land developments were authorized in 1993 in the Tetouan areas, containing 1900 plots where basic infrastructure is now being installed.

National Shelter Upgrading Agency (ANHI) Low-Income Housing Project

This Housing Guaranty Housing Project (608-HG-003) works with the National Shelter Upgrading Agency (ANHI) to increase the production levels of serviced land, lower the costs of serviced plots, increase the participation of the private sector in the production of shelter, and increase access for low-income beneficiaries to existing housing finance programs. This $20 million HG was authorized in September 1990.

Morocco: Key Indicators **Urban Infra. & Environ.**	
	1993
Individual Water Connections	67%
Individual Sewer Connections	50%

HG funds have been used to implement those parts of ANHI's program intended to serve low-income families. By December 1995, ANHI plans to deliver 10,000 serviced plots. As of November 1992, 5,200 serviced plots that were program-eligible had been delivered. The Program reports that all 10,000 plots are now under construction. ANHI has been increasing the participation of private sector landowners, builders and developers in the production of plots and housing units affordable to below-median income households.

Morocco Urban Infrastructure, Land Development and Financing Program

Housing Guaranty Project No. 608-HG-004 will work to help ANHI improve shelter conditions in Morocco, and increase the capability of municipalities to provide environmental infrastructure and services. USAID anticipates authorizing $100 million, with $80 million for the ANHI and $20 million for the Municipal Development Bank. The first borrowing of $20 million for ANHI is scheduled for March-June 1994.

2.3.3 Tunisia

The three HG Projects that were reported on for the FY1993 survey in Tunisia offer complementary approaches to the twin challenges of providing affordable housing and extending basic services.

The original Tunisia Low Cost Shelter Project (LCSP I) was designed to increase the supply of housing and serviced land affordable to households earning below the median. The $15 million Housing Guaranty (664-HG-004C, authorized in September 1986) worked through two land and housing development institutions: the Housing Bank and the Agence Foncière d'Habitation.

The second part of the Low Cost Shelter Project (LCSP II, 664-HG-004D) focuses primarily on improving the quality of urban infrastructure and shelter for households having incomes below the median. This $15 million HG, authorized in September 1990, features a municipal/private sector partnership approach to constructing, rehabilitating and maintaining infrastructure. To help implement plans, LCSP II calls for establishing a Municipal Development Authority, restructuring the Municipal Development Agency and improving municipal management. The Mission reports that 1993 is the first year of implementation of this Project.

The final HG reported on, the Private Participation in Environmental Services Program (PPES, 664-HG-V, authorized in August 1993), aims to improve the coverage and efficiency of urban environmental services through increasing participation of the private sector. This

Tunisia: Key Trends and Indicators		
Shelter & Housing Finance	1990/91	1992
House Price-to-Income Ratio	--	3.6
Down-Mkt. Penetration	3.72	3.17
Mort.-to-Dep. Diff.	-1.39	-1.13
Credit-to-Value Ratio	--	0.16
Urban Infra. & Environ.		
Infra. Expend. Per Capita	$86*	--
Individ. Water Connections	--	92%
Individ. Sewer Connections	--	70%
Liquid Waste Treatment	--	77%
Private Sector Land Dev't	38%	--
Private Sector Service Deliv.	--	0%
Solid Waste Removal	--	82%
Local Gov't & Munic. Man't.		
Fiscal Independence	--	46%
Own Source Op. & Mt. Finan	--	88%
Property Tax Receipts	11.6%	10.8%

*Source: IBRD/UNCHS, 1993.

HG, with $10 million authorized, takes a policy-based approach to creating an institutional and regulatory structure for increasing private sector participation in providing basic services.

In the shelter sector, LCSP I funds have permitted $64 million in Housing Bank loans to be provided to low income beneficiaries for purchase of serviced land or housing. Other lands have been serviced with primary infrastructure and sold wholesale to private developers for housing development. These works coincide with improvements in housing affordability, as measured narrowly by the down-market penetration indicator (see Table). This ratio of the price of low cost private sector housing to median annual household income declined from 3.72 in 1991 to a more affordable 3.17 in 1992. This ratio is substantially better than the worldwide average of 4.37. With a value of 3.6, the house price-to-income ratio, the broader measure of housing affordability, also contrasts favorably with the worldwide average of 5.2 (Source: IBRD/UNCHS). However, the mortgage interest rate is reportedly still lower by a percentage point than commercial deposit interest rates—a condition termed "unsustainable" by World Bank housing analysts.

In terms of urban environmental conditions, LCSP II is authorized to provide $15 million of infrastructure in poor Tunisian neighborhoods. The project should add to Tunisia's already relatively high level of annual spending on infrastructure: $86 per capita in 1990, more than double the average for middle income countries of $40 per person (Source: IBRD/UNCHS). These levels of spending translate into relatively high levels of current service coverage. Nine out of ten urban dwelling units (92 percent) reportedly feature individual water connections. Seven out of ten units (70 percent) additionally possess sewer hookups, while eight out of ten dwellings (82 percent) benefit from periodic solid waste pickup. Helping the Government manage trade-offs between indicators—maintaining and expanding service quality and coverage while increasing sustainable private sector involvement in service delivery (currently 0 percent)—will be a principal challenge of the newly authorized PPES (664-HG-V) in coming years.

In the area of municipal management, the LCSP II reports a substantial gain: "tax collection rates of target municipalities increased sufficiently to service debt on investments made by the program..." Values for the indicator relevant to municipal sustainability, cost recovery, have not been reported to date. However, a partial indicator of cost recovery, own-source operations and maintenance financing, stands at a relatively high level of 88 percent. Increased consultation and collaboration by municipalities with private sector planning, design and construction firms is also reported.

2.4 EUROPE

HG projects in Europe must confront a different set of challenges than those elsewhere in the world. The formerly socialist economies of Eastern Europe are engaged in the transition from a command to a market economy; Housing Guaranty projects may assist in creating various market mechanisms that were virtually non-existent. HG projects elsewhere occur in developing economies, where markets for housing, land and urban services generally exist, but are often overregulated, underdeveloped or undercapitalized.

2.4.1 Hungary

Housing and urban development indicators offer a tool for managing the transition of Hungary's housing sector away from a government-dominated system towards one with a more private sector orientation.

The reported 100 percent coverage of a land registration system, coupled with only a two percent rate of private sector land development in 1992, suggests the large extent of the Central Government's traditional involvement in the housing sector (see Table). The two year average delay for approval of construction of a residential subdivision, represents a serious institutional obstacle to vigorous private sector housing production; helping reduce that delay would be an appropriate project objective.

One positive sign in housing finance is the narrowing but still substantial difference in percentage points between mortgage loans and one year commercial deposits: from 21 points in 1991 to 12 points only a year later. While greatly improved, the 12-point difference is still wide compared to the two-to-four percent differences found in most countries surveyed by the IBRD/UNCHS. Parallel to this positive trend, however, the credit-to-value ratio declined during the same period, suggesting that homebuyers are becoming more dependent on their own savings to finance new housing investment.

Hungary: Key Trends and Indicators

	1991	1992	1993
Shelter & Housing Finance			
House Price-to-Income	--	6.4	6.2
Permits Delay	23.7	23.7	--
Land Regist. Covrge.[a]	100%	100%	--
Mort.-to-Dep. Diff.	21	12	--
Credit-to-Value Ratio	0.31	0.27	--
Infra. & Environ.			
Individual Water Conn.[a]	99%	99%	--
Individual Sewer Conn.[a]	87%	88%	--
Liquid Waste Treatment[a]	20%	20%	--
Solid Waste Rmvl[a]	100%	100%	--
Private Sector Land Devt	2%	2%	--
Local Gov't & Mun. Man't.			
Own Source Finan. of Cap. Expendit.[a]	40%	40%	--
Own Source Finan. of Ops. & Maint.[a]	44%	53%	--

[a]Budapest.

Statistics provided suggest that Hungary or at least Budapest) enjoys relatively high levels of environmental infrastructure and service coverage. Virtually every Budapest household reportedly enjoys potable water and solid waste removal coverage. Sewer connections are also prevalent (88 percent coverage). While only 20 percent of collected liquid waste is actually treated, this rate is nonetheless equal or superior to other countries studied (see Figure 3).

Local government own-source finance of operations and maintenance expenditures increased between 1991 and 1992, from 44 percent to 53 percent. While this suggests increasing local independence, further investigation is needed to see if total revenues available are sufficient to sustain development.

2.4.2 Poland

Poland's housing finance system appears to have become more functional over the last three years. In 1990, the finance system as a whole was wildly distorted, as evidenced by a reported 116 percentage-point difference between mortgage loans and one-year commercial deposits (see Table). These rates were reportedly equalized by 1992, and by 1993 mortgage rates stood a modest 2.5 points above commercial deposit rates.

Poland: Key Trends and Indicators

	1990	1992	1993
Shelter & Housing Finance			
House Price-to-Income	--	4.5	4.17
Down-Market Penetr.	--	1.92	1.67
Permits Delay	60[a]	--	--
Mort.-to-Deposit Difference	-116[a]	0	2.5
Credit-to-Value Ratio	0.325[a]	--	--
Urban Environ. & Infra.			
Infra. Expend. Per Cap.	$50[a]	--	--

[a]Source: IBRD/UNCHS, 1993.

Whether or not similar supply-side distortions have also been reduced is unknown from available data. In 1990, approval to construct a medium-sized residential subdivision took a full five years (60 months)—an all but insurmountable obstacle to private formal sector initiative. Tracking of the permits delay indicator is recommended, and institutional reform would be an appropriate HG goal.

Despite recent and possibly current market distortions, housing affordability shows signs of improvements. The ratio of median house price to median household income reportedly improved, dropping from 4.5 in 1992 to 4.17 in 1993, giving Poland better than average marks for housing affordability compared to other middle-income countries (average: 4.97) and than the region (average: 4.57).[24] The down-market penetration ratio, a more sensitive measure of housing affordability that focuses on the low income submarket, also improved over the last year, from a value of 1.92 in 1992 to 1.67 in 1993. These ratios are superior to the worldwide reported average of 4.37 (Source: IBRD/UNCHS).

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[24]The region consists of countries surveyed in Europe, the Middle East and North Africa defined as non-industrialized. Source: IBRD/UNCHS, 1993.

In 1990, Poland's level of infrastructure expenditure per capita ($50) was above average for middle income countries (average: $40). While rates were low for a region made up of European, Middle Eastern and North African countries (average: $86), this is not surprising given the number of countries in the region with higher per capita incomes than Poland's (Source: IBRD/UNCHS).

2.4.3 Portugal

Indicator data for Portugal points to downturns since 1992 in housing affordability. The down market penetration indicator, which expresses the price of a lowest-priced formal dwelling unit in multiples of the median annual household income, went up from 4.50 in 1992 to 5.24 only a year later (see Table). This trend was paralleled by an increase in the difference in percentage points between a mortgage loan and a one-year commercial deposit, up from 6.3 in 1992 to 6.9 a year later. This rate is significantly higher than the average for other mid-high income countries of only two percentage points.

Portugal: Key Trends		
Shelter & Housing Finance	1992	1993
Down-Market Penetration	4.50	5.24
Mortgage-to-Deposit Diff.	6.3	6.9

The Portugal Low-Income Housing Program (150-HG-IV), which was essentially inactive in 1993, was authorized in September 1990 to address such concerns. The Program's purposes are to support policies that increase and open new windows of credit to local developers and to help promote investment in low-cost housing, land, infrastructure, community facilities, as well as home and neighborhood improvements. Of the $55 million HG at one time authorized, $25 million was disbursed in January 1991; the remaining $30 million HG funds were deauthorized.

The Program made available financing for new and expanded lending by the National Housing Institute of Portugal (INH) to encourage and support investments by private developers, municipalities, and housing cooperatives in upgrading low-income shelters, producing new affordable housing, and promoting increased supply of land and services for low-cost housing.

The Mission reports good progress in helping to broaden access to mortgage loans and in expanding home improvement. However, the Mission signals: "Very slow progress in providing construction financing for low-cost housing developers..." with only 2,200 units contracted for financing as of the end of September 1993. The Mission also reports "virtually no progress" in lending for land purchase, subdivision, infrastructure and community facilities. Limited progress is also observed in divestiture of government owned land and in the sale of Government-owned housing. For FY 1993, the Mission reports no activities, "...besides the assistance of RHUDO PSC in Lisbon on an as-needed basis."

The Mission concludes: "There has been no real progress by the INH in its basic function of financing construction of low cost housing. The INH has shown virtually no interest in the HG-IV Program." Another obstacle to successful implementation has been the difficulty in keeping costs down for units targeted at low income families. Housing demand has also been slowed by the relatively high mortgage interest rates noted above.

2.5 LATIN AMERICA & CARIBBEAN

2.5.1 Jamaica

The purpose of the Shelter and Urban Services Policy Program (532-HG-013) is to produce a self-sustaining delivery system for shelter, water, sewerage and other urban services to meet the needs of the city-dwelling poor. The $25 million HG was authorized in September 1988.[25]

Jamaica: Key Trends and Indicators

	1989/90	1991/92	1993
Shelter & Housing Finance			
House Price to Inc. Ratio	4.9*	--	--
Down-Market Penetration	2.7*	--	--
Mortgage to Deposit Diff.	13.0*	17	10.5
Credit to Value Ratio	0.28*	--	--
Urban Infra. & Environ.			
Infra. Exp. Per Cap.	$27*	--	--
Environ. Encroachm't	2.5%	2%	--

*Source: IBRD/UNCHS, 1993.

In the shelter sector, Jamaica is in many ways typical of other countries in its region and per capita income bracket. The house price to income value reported (4.9) is typical of middle income countries (average: 4.97; source: IBRD/UNCHS). The mortgage-to-deposit difference in Jamaica, which fluctuated through the early 1990s between ten and 17 percentage points, is high compared to other middle income countries (average: three), but stands close to the regional average of eleven points difference.

The Program's goal in the housing sector is to increase public sector provision of low cost shelter solutions as well as private sector/NGO/PVO shelter provision. The Mission reports that design construction is nearly complete on 1,358 serviced/upgraded sites.

In terms of environmental infrastructure, the National Water Commission, an implementing agency, is completing projects to reach over 10,000 households. Such an intervention meets an important need in Jamaica, where infrastructure expenditures of $27 per person in 1990 ran well below regional and income group averages in 1990 of $48 and $40, respectively (Source: IBRD/UNCHS). Data provided do not permit trend analysis of project impacts.

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[25]Two substantial grants, not analyzed here, work towards goals similar to the HG purpose. A $10 million grant (532-012B) helps to stimulate private sector participation in providing affordable housing, while a $20 million grant (532-012C) helps finance upgrading, sites and services activities and home improvement loans.

2.5.2 Central America

The two Housing Guaranty loans reported on for Central America offer different solutions to overlapping concerns, as follows:

Central America Shelter & Urban Upgrading Program

The purpose of this Housing Guaranty Program (596-HG-006), authorized in September 1986, is: "To increase availability of [1] shelter and [2] basic services to low income Central American families..." in part through strengthening institutional capacity to provide those services. The principal implementing agency is the Central American Bank for Economic Integration (CABEI), along with national agencies. The $25 million HG (with an additional $10.2 million CABEI counterpart) focuses on Costa Rica, Guatemala and Honduras.

Of the 10,000 shelter solutions planned, 5,199 units were reported constructed (52 percent completion to date). While low income housing production can contribute to downturns in the down-market penetration indicator, this indicator actually increased slightly in Guatemala and Honduras between 1992 and 1993, to values of 1.79 and 1.50, respectively, due to factors exogenous to the Program (see Table; data for Costa Rica not available). The 1993 values, were, however, still substantially lower than the world-wide average of 4.37, indicating relatively affordable housing conditions as measured by this indicator (Source: IBRD/UNCHS).

Guatemala: Key Trends		
Shelter & Housing Finance	1992	1993
House Price to Income Ratio	2.12	2.41
Down Market Penetration	1.57	1.79
Honduras: Key Trends		
Shelter & Housing Finance	1992	1993
House Price to Income Ratio	1.76	1.85
Down Market Penetration	1.43	1.50

In the area of basic services, the Program goal is to provide 145,000 families with improved access to such services.[26] In fulfillment of that goal, a $10 million urban upgrading sub-program for Honduras was signed by CABEI and the Honduras Central Bank, and a similar sub-program is slated for approval in Guatemala. The FY1993 Project Status Report does not, however, report any basic service extensions completed to date.

The current Project Status Report identifies certain difficulties with Program implementation. The Report notes that "Hondurans have been able to package only $1.9 million of $2.5 million for the final disbursement." In Guatemala, "mortgage registration and market problems" delayed the submittal of disbursement requests.

[26] The USAID's Regional Office for Central American Programs (ROCAP) reports: "This goal will have to be revised once [the office] amends the I.A. to reflect" the decreased Program funding available.

Municipal Infrastructure Finance Program

The Municipal Infrastructure Finance Program (596-HG-010), authorized in August 1993, will also be implemented by CABEI, as well as by Central American financial intermediaries and municipalities. Its purposes are two-pronged: "[1] To contribute to the transfer of authority and control over financial and human resources from central to local governments while [2] helping to improve local governments' response to citizen demands for improved services and political enfranchisement." As such, the Program dovetails with the aims of the Local Government Regional Outreach Strategy (LOGROS; 596-0167), implemented by RHUDO/Central America, and was in fact designed as a HG supplement to LOGROS.[27]

To achieve its purposes, the Program aims to: "Establish a municipal infrastructure lending program to make investments available to municipalities, encourage investment by public and private lenders in municipal projects, increase citizen participation and increase availability of basic services to low income Central American families." Twenty million dollars have been authorized, which in turn are mobilizing funds from other international donors and lenders. To date, the lending program has been institutionalized in CABEI. Upcoming activities include signing the Implementation Agreement and preparing the Program Implementation Plan.

Indicators assembled to date represent baseline conditions for this 1993-authorized program. Regional baseline data shows improvements in the reported proportion of persons with access to potable water between 1980 and 1993 (from 59 percent to 63 percent), complimented by substantial reported increases in the percentage of dwelling units with sewer connections during the same period (from 54 percent to 67 percent; see Table). Reported increases imply that providers are keeping up with and actually increasing overall service coverage, even in the face of high ongoing levels of country-to-city migration and population growth. While indicator surveys may undercount the number of new informal households that lack basic services, reported trends are still encouraging.

Central America: Key Trends and Indicators

	1980	1992/93
Urban Infra. & Environ.		
Individ. Water Connects.[a]	59%	63%
Individ. Sewer Connects.[a]	54%	67%
Solid Waste Collection[b]	--	48%
Local Gov't & Municipal		
Fiscal Independence[c]	--	63%
Property Tax Receipts[c]	--	11%
Own Source Cap. Fin.[c]	--	45%
Cost Recovery[c]	--	60%

[a]Includes Belize and Panama. Water connections indicator includes people who receive water from systems within 200 meters of their home.
[b]Capital Cities of El Salvador, Guatemala and Honduras.
[c]Guatemala, El Salvador, Honduras, Nicaragua and Costa Rica.

In 1993, about half (48 percent) of dwelling units in three capital cities benefitted from solid waste collection. The three cities varied greatly, as San Salvador lagged far behind Guatemala City and Tegucigalpa in service coverage, with only 19 percent coverage as opposed to 65 percent (Guatemala) and 60 percent (Tegucigalpa).

[27]The LOGROS promotes: Regional consensus on a municipal development agenda, national decentralization policies and programs, greater citizen participation in local government, and more effective response of municipal government to the demands of their constituents.

Municipal indicator values vary greatly between the countries of Central America. Honduras, Nicaragua and Costa Rica all report high levels of fiscal autonomy, with the percent of "independent" budgetary resources standing at 85 percent, 87 percent and 73 percent, respectively. Guatemala and El Salvador, on the other hand, report only 30 percent and 38 percent levels of fiscal independence, respectively. This indicator can, however, oversimplify reality. For example, while Costa Rican municipal budgets may include high levels of locally generated funds, the overall budget size may be smaller than elsewhere in the region, due in part to relatively limited municipal mandates.

Countries also vary greatly in terms of the locally generated financing of infrastructure and services. The percentage of capital expenditures funded through locally generated revenues, on average 45 percent for the region, reportedly varies from between five percent in the case of Guatemala and El Salvador, to 95 percent in Nicaragua.[28] Municipalities also vary in terms of the cost recovery indicator, defined here as the percent of operational, maintenance and capital costs financed through locally generated revenue. Guatemala, El Salvador and Costa Rica all reportedly achieve between 30 percent and 40 percent cost recovery, while Honduras and Nicaragua are reported to enjoy nearly 100 percent recovery of costs.

2.5.3 Honduras

The purposes of the Shelter Sector II Housing Guaranty (522-HG-008), authorized in December, 1986, are: "[1] To improve the institutional capacity of the private sector and municipal government in shelter provision and [2] to increase the availability of housing and infrastructure services for low income families." The $25 million HG was designed to accomplish those aims through long term financing of new shelter construction and home improvement loans, as well as upgrading services for low income families.

Outputs reported through the end of FY1993 include the construction of 2,605 shelter units out of a planned 2,917 units (89 percent completion to date). The Project Status Report notes that the National Housing Fund (FOVI), one of the implementing agencies, has established a functional shelter delivery system. Project implementation coincides with acceptable shelter affordability conditions.

Honduras: Key Trends and Indicators

	1992	1993
Shelter and Housing Finance		
House Price to Income Ratio[a]	1.76	1.85
Down Market Penetration[a]	1.43	1.50
Urban Infra. & Environ.		
Individual Water Connections[b]	--	79%
Individual Sewer Connections[b]	--	30%
Solid Waste Collection Covrge:		
- Eleven municipalities	--	24%
- Tegucigalpa	--	60%
Local Gov't and Municipal Man't.		
Own Source Cap. Financing	80%	--
Cost Recovery	95%	--

[a]National urban.
[b]Eleven municipalities.

[28]The Nicaragua figures apparently represent conditions before institution of the Emergency Social Investment Fund (FISE) in 1990-91, to which USAID is the principal contributor, which currently funds a significant amount of local capital improvements.

While the down-market penetration indicator crept up slightly from 1.43 in 1992 to 1.50 in 1993, this ratio is still substantially superior to the worldwide average of 4.37, suggesting relatively affordable shelter conditions.

In terms of basic services, the Project aims to benefit 25,300 families via urban upgrading; as of the end of 1993, 21,887 families have so benefitted (87 percent completion to date). Approved upgrading projects include the Villa Nueva water system, the Choluteca sewerage system, and a treatment plan for La Ceiba. However, the Project Report notes that construction and regulation problems have delayed completion of activities in La Ceiba and Lomas de San Juan. Data available do not permit analysis of the project's basic service benefits. Reported values do, however, reveal the disparity in urban environmental conditions between Tegucigalpa and other municipalities. While a full 60 percent of dwelling units in the capital city enjoy solid waste collection coverage, this percentage drops to 24 percent for eleven other Honduran municipalities. This sort of disparity between capital cities and the rest of the country, frequent in developing countries, points up the value of HG programs that strengthen service provision in secondary cities and smaller municipalities.

2.5.4 Panama

The Shelter and Urban Planning Project (525-HG-012), first authorized in September 1983, was reactivated following a suspension of activities between 1987 and 1990. The $10 million project seeks to assist in meeting the shelter needs of low income families. Goals include helping the National Mortgage Bank achieve greater autonomy, and helping this Bank and the Ministry of Housing produce shelter "for at least 25 percent of the total annual increase for low income families." As of 1992, the Project was being redesigned to incorporate participation of the National Savings Bank. Due to Project changes, indicator data serves mainly to define new baseline conditions.

Panama: Key Trends		
Shelter & Housing Finance	1992	1993
House Price-to-Income	6.93	6.72
Permits Delay	6	6

Indicators suggest a slight improvement in shelter affordability in metropolitan Panama between 1992 and 1993. The ratio of the median free-market price of a dwelling unit and the median household income declined from 6.93 in 1992 to 6.72 a year later (see Table). This improvement helps to bring Panama more in line with average conditions in Latin America and the Caribbean (average: 3.92) and for other middle-income countries (average: 4.97). The approval process for a residential subdivision reportedly still requires six months. This delay is double the average for South America of just over three months and could act to restrict housing supply.

2.5.5 Bolivia

The Private Sector Low Cost Shelter Project (511-HG-007) sought to expand the private sector's capacity to address the shelter-related needs of Bolivia's low-income families. The $10 million loan guaranty was authorized in July 1983. The outstanding balance was fully disbursed in FY1993 as the Project was closed.

Project goals in the housing finance sector included the provision of 9,500 subloans to below median-income families. As of September 1992, 46 percent of those loans (4,360 loans) had been provided. Under another goal, savings and loans institutions (S&Ls) were supposed to have captured 13 percent of the savings market by the end of 1991, with a total of 170,000 savings accounts. By September 1992, the S&L share of the savings market had reached eleven percent, with 164,000 savings accounts open.

The Project appears to have contributed to better-than-average housing affordability conditions in Bolivia. As the Table shows, the ratio of the median price of a dwelling unit on the free market in Bolivia to median family income was only 3.23 in 1993-a more affordable ratio than the average in the Latin America and the Caribbean region (average: 3.92) and in other low-middle income countries (average: 4.23; Source, IBRD/UNCHS). The down-market penetration ratio of 1.33 is also substantially better than the worldwide average of 4.37.

Bolivia: Key Trends and Indicators

Shelter & Housing Finance	1992	1993
House Price-to-Income Ratio	--	3.23
Down-Market Penetration	--	1.33
Credit-to-Value Ratio	--	0.53
Mortgage-to-Deposit Diff.	6.76	8.11

Indicators paint a mixed picture of the performance of housing finance system. On one hand, just over half (53 percent) of all housing investment in both the formal and informal sectors is made using mortgage loans. This rate is high relative both to the region (average: 37 percent) and low-mid income countries (38 percent), and suggests relative financial depth and institutional development in the subsector. On the other hand, the difference between mortgage interest rates and rates on commercial deposits widened, from 6.8 percentage points in 1992 to 8.1 points a year later. The 1993 value, high compared to worldwide averages, suggests an increase in one or more of the following: market distortion caused by a policy bias away from housing investment, institutional inefficiency, or long-term debt risk. This change could lead to declines in housing affordability. The 1993 rate is, however, fairly typical for Latin America and the Caribbean (average: 11 point difference) and low-mid income countries (average: 7 point difference; source: IBRD/UNCHS).

2.5.6 Chile

The strategy of the Chile Private Sector Cooperative Housing Program (513-HG-008, authorized in 1988) and the Housing II Program (513-HG-009, authorized in 1990) has been to improve housing affordability by supporting the expansion of activities by the private sector in low cost housing markets. Both Housing Guaranty Programs have supported the expansion of COVIP, a group of private sector home building institutions, into the low-cost housing market. New homes are built and sold to families with incomes up to the urban median, using a revolving line of credit.

As of September 1993, the original Cooperative Housing Program had provided $20.0 million to COVIP through a $5 million revolving line of credit. Of the $20 million, $18.6 million has been repaid, leaving $1.4 million outstanding. Working toward the goal of 3,000 new homes sold, as of February 1994, the program had facilitated 2,430 new home sales (81 percent completion to date), with another 262 homes under construction.

The Housing Cooperative II Program has also provided a $5 million loan to COVIP, with the goal of 1,800 new homes sold. Of this, as of February 1994, 568 new homes have been sold (32 percent completion to date), with another 419 homes under construction. By early 1994, $11.3 million have passed through the revolving fund, of which $9.8 million has been reimbursed, leaving $1.5 million outstanding.

Together the two Housing Guaranty Programs appear to have contributed to an improvement in housing affordability, as measured narrowly by the down-market penetration indicator. This ratio of the lowest priced, unsubsidized formal dwelling unit to median annual household income, declined from 5.0 reported in 1992 to 4.49 in 1993 (see Table). The 1993 value is typical, both for Latin America and the Caribbean (average: 4.7) and for middle-income countries (average: 4.5; Source, IBRD/UNCHS). Data suggests, however, that the house price-to-income ratio increased during the early 1990s. While this anomaly may be due to different data collecting methodologies, the house price-to-income indicator is broader than the down-market penetration indicator, and would be less sensitive to low income activities of organizations such as COVIP.

Chile: Key Trends

Shelter & Housing Finance	1990-92	1993
Down Market Penetration	5.0	4.49
House Price to Income Rat.	2.1[a]	6.08
Tenure Regularization	6.0%	6.6%
Permits Delay (months) 3	3	
Land Registration Coverage	100%	100%
Informal Land Development	35%	35%
Mortgage to Deposit Diff.	4.70	6.00
Credit to Value Ratio	0.25	0.22

[a]Source: IBRD/UNCHS, 1993.

Indicators of housing finance worsened slightly between 1992 and 1993. The difference in percentage points between interest rates on a mortgage loan and a one year commercial deposit increased during that period from 4.7 to 6.0. This change could have been brought on by the government seeking to divert investment away from housing, by decreased efficiency in lending institutions leading to higher margins, or by increased risks in long-term investments including housing. While high for middle income countries (average: 3.0), the difference is still, however, low for Latin America and the Caribbean (average: eleven percent), where chronic inflation and other factors have contributed to regionally high levels of the mortgage-to-deposit indicator.

Indicators suggest that the non-finance housing institutional framework is fairly sound. Land registration coverage is a reported full 100 percent, while only three months are required to win approval of a median-sized residential subdivision. While less than ten percent of informal development has experienced tenure regularization to date, this coverage improved modestly between 1992 and 1993, from 6.0 percent to 6.6 percent.

A third HG, the Chile Private Sector Shelter and Urban Initiatives Program (513-HG-010) was authorized in August 1991. The $40 million HG seeks to increase local government and nongovernmental participation in mortgages to low-income families, as well as support urban revitalization projects and small-scale environmental initiatives. The Implementation Agreement was executed in October 1993, and a first borrowing of $10 million is expected in 1994.

2.5.7 Ecuador

Urban Ecuador faces severe environmental problems related to the explosive growth of marginal housing. In the City of Guayaquil (pop. 1.7 million), some 60 percent of the population lives in marginal areas, lacking water, sewerage and solid waste collection. Quito (pop. 1.4 million) is estimated to confront approximately a 30 percent level of urban marginality. Altogether nearly half (48 percent; see Table) of the urban population in Ecuador reportedly lives in unserviced, informal or environmentally marginal areas. The Government of Ecuador (GOE) has made strides in 1990s in removing some market constraints (reducing permit delays, regularizing tenure of informal housing); however, severe housing and urban environmental problems remain.

Ecuador: Key Trends and Indicators

	1990	1991/92	1993
Shelter & Housing Finance			
Informal Land Dev't	--	--	48%
Permits Delay	6[a]	--	3.5
Tenure Regularization	--	--	27.9%
House Price-to-Income	2.4[a]	2.08	2.37
Down Market Penet.	2.21	2.47	1.82
Credit-to-Value Ratio	0.37	0.44	0.39
Mortgage-to Deposit Difference	-9.3[a]	--	17.2

[a]Source: UNCHS/IBRD for Quito, 1993.

The National Shelter Delivery System (518-HG-007), authorized in 1987, addresses these problems by assisting the Government of Ecuador (GOE) in expanding the access of low income families to private sector financial resources, both to upgrade existing dwellings and to build new units. In part to implement the $35 million Project, the GOE decided to transform the Ecuadorian Housing Bank (BEV) into a secondary mortgage facility. The GOE has also decided to establish a privately managed, secondary mortgage bank, apart from the BEV. Congress approved use of an accounting unit indexed to inflation, which is expected to stimulate savings mobilization. Goals of the Project include making possible 16,000 shelter solutions, and 10,000 home improvement loans. As of 1992, 3,012 new solution and home improvement loans have been executed (12 percent of goal), using $3.8 million from the HG and $3.7 million counterpart funds.

Project achievements have apparently contributed to a reported improvement in the affordability of housing. Between 1990 and 1993, a low-cost formal dwelling unit became more affordable for the median-income household, as tracked by the down market penetration indicator. However, the housing finance sector appeared unstable through the early 90s. While the World Bank reported mortgages offered at an unsustainable 9.3 percentage points *below* commercial deposit rates in 1990, by 1993 mortgages stood a reported 17 points above commercial deposit rates. This 17-point spread is high both for the Latin American region and the Caribbean (average: eleven points) as well as for other low-mid income group countries (average: seven points).

APPENDICES

3,4

Appendix A
Definitions of Housing and Urban Development Indicators

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1. Shelter and Housing Finance

1.1 Housing Affordability and the Private Sector

- **Housing Price to Income Ratio** - Median free-market price of dwelling unit to median annual household income.
- **Down-Market Penetration** - Lowest priced unsubsidized formal dwelling unit produced by the private sector in significant quantities to median annual household income.

1.2 Institutional Framework

- **Tenure Regularization** - Percentage of the total area of informal land development that has been regularized.
- **Permits Delay** - Median length in months to get approvals, permits and titles for a new medium-sized (50-200 unit) residential subdivision in an area on the urban fringe where residential development is permitted.
- **Compliance** - Ratio of building permits issued to new housing starts in both formal and informal sectors during the past year.
- **Land Registration Coverage** - Percentage of area covered by a land registration system that enables buying, selling, long-term leasing, and mortgaging of urban land.
- **Informal Land Development** - Percentage of surface area which was developed outside the legal regulatory framework.

1.3 Housing Finance

- **Mortgage to Deposit Difference** - Average difference in percentage points between interest rates on mortgages in both commercial and government financial institutions and the interest rate on one year deposits in the commercial banking system.
- **Credit to Value Ratio** - Ratio of mortgage loans for housing last year to total investment in housing, both formal and informal.

2. Urban Environment and Infrastructure

2.1 Infrastructure and Environment

- **Infrastructure Expenditure per Capita** - Ratio of total annual expenditures for operations, maintenance and capital by all levels of government, including private utilities and parastatals, on infrastructure services (roads, drainage, water supply, electricity and garbage collection) to the urban population, in current U.S. dollars.

- **Individual Water Connections** - Percentage of dwelling units with individual water connections.
- **Individual Sewer Connections** - Percentage of dwelling units with individual sewer connections.
- **Liquid Waste Treatment** - Percentage of total liquid waste that is treated.
- **Upgrading Informal Areas** - Percentage of total informal land development that is serviced by water, roads and electricity.
- **Environmental Encroachment** - Percentage of residential development occurring on unsafe, environmentally sensitive or priority agricultural land.

2.2 Institutional Strengthening

- **Private Sector Formal Land Development** - Percentage of formal land development that was developed by the private sector.
- **Private Sector Housing Development** - Percentage of formal housing development that was developed by the private sector.
- **Private Sector Service Delivery** - Percentage of households receiving private sector water, liquid waste or solid waste services.
- **Local Management: Solid Waste Removal** - Percentage of residential areas serviced by solid waste removal.

3. Local Government and Municipal Management

3.1 Generation of Local Revenues

- **Fiscal Independence** - Percent of budgetary resources generated locally or borrowed in capital markets.
- **Property Tax Receipts** - Percentage of property tax receipts in the local government budget.

3.2 Urban Infrastructure and Services Finance

- **Own Source Financing of Capital Expenditures** - Percentage of capital expenditures financed through locally generated revenues.
- **Own Source Operations and Maintenance Financing** - Percentage of operations and maintenance expenditures financed by locally generated revenues.
- **Cost Recovery** - Percentage of operational, maintenance and capital costs financed through locally generated revenues.

TABLE A-1	COUNTRIES SURVEYED (FY 1993)							
Region	Country/Area	Program/Project Title	Program/ Project Number	Dates		Focus[a]		
				1st Authorization	PACD	Shelter & Housing Finance	Environment & Infrastructure	Local Gov't & Man't.
AFRICA								
Western Africa	Côte d'Ivoire	Municipal Development Support Project[b]	681-C004	9/90	n/a		x	x
Eastern Africa	Kenya	Kenya Small Towns Shelter and Community Development Project	615-HG-006	8/79	n/a	x	x	x
ASIA								
East Asia	Indonesia	Municipal Finance Project	497-HG-001	8/30/88	9/30/94		x	x
	Philippines	Decentralized Shelter and Urban Development	492-HG-001	9/27/90	n/a	x	x	x
	Thailand	Urban Environment Infrastructure Support Project	493-HG-005	9/27/93	9/30/94		x	x
South Asia	India	Housing Finance System Program	386-HG-003 & 003A	9/22/88	9/30/96	x		
	Pakistan	Shelter Resource Mobilization Program	391-HG-001	6/30/89	6/30/94	x		
	Sri Lanka	Low Income Shelter Program	383-HG-004	1980	n/a	x		
NEAR EAST								
	Jordan	Jordan Housing Policy Program	278-HG-004	9/29/88	n/a	x	x	
	Morocco	Tetouan Urban Development Project	608-HG-001	9/26/85	9/30/94	x	x	x
		National Shelter Upgrading Agency Low-Income Housing Program	608-HG-003	9/26/90	4/30/94	x	x	
		Urban Infrastructure, Land Development and Financing Program	608-HG-004	8/24/93	n/a	x	x	x
	Tunisia	Tunisia Low Cost Shelter Project	664-HG-004C	9/30/86	9/30/93	x	x	
			664-HG-004D	9/27/90	n/a		x	x
		Private Participation in Environmental Services Program	664-HG-V	8/23/93	n/a		x	x

[a] Judgement based on information available. [b] A grant; not a Housing Guaranty project.

TABLE A-1	COUNTRIES SURVEYED (FY 1993)							
Region	Country/Area	Program/Project Title	Program/ Project Number	Dates		Focus[a]		
				1st Author-ization	PACD	Shelter & Housing Finance	Environment & Infrastructure	Local Gov't & Man't.
EUROPE								
	Hungary	Housing Finance Restructuring Program	185-HG-I	8/23/93	n/a	x	x	x
	Poland	Housing Finance Program	181-HG-I	9/05/91	n/a	x	x	
	Portugal	Low Income Housing	150-HG-IV	9/28/90	n/a	x	x	
LATIN AMERICA & CARIBBEAN								
Caribbean	Jamaica	Shelter and Urban Services Policy Program	532-HG-013	9/20/88	n/a	x	x	
Central America	Region	Central America Shelter and Urban Upgrading (Costa Rica, Guatemala and Honduras)	596-HG-006	9/30/86	9/30/92	x	x	x
		Municipal Infrastructure Finance Program	596-HG-010	8/22/93	9/30/99		x	x
	Honduras	Shelter Sector II	522-HG-008	12/30/86	9/30/93	x	x	x
	Panama	Shelter and Urban Planning	525-HG-012	9/19/83	n/a	x	x	
South America	Bolivia	Private Sector Low-Cost Shelter	511-HG-007	7/25/83	n/a	x	x	
	Chile	Chile Private Sector Cooperative Housing Program	513-HG-008	1988	n/a	x		
		Chile Private Sector Housing II Program	513-HG-009	9/13/90	n/a	x		
		Chile Private Sector Shelter and Urban Initiatives Program	513-HG-010	8/09/91	n/a	x	x	x
	Ecuador	National Shelter Delivery System	518-HG-007	8/19/87	n/a	x	x	x

[a] Judgement based on information available.

Region	Africa		Asia						Near East		
			East Asia			South Asia					
Country	Côte d'Ivoire	Kenya	Indonesia	Philippines	Thailand	India	Pakistan	Sri Lanka	Jordan	Morocco	Tunisia
GNP per Capita ($US, 1991)[b]	690	340	610	730	1570	330	400	500	1050	1030	1500
I. SHELTER AND HOUSING FINANCE											
Housing Affordability											
House Price to Income Ratio	7.5	1.0[c]	3.5[c]	2.6[c]	4.1[c]	7.7[c]	1.9[c]		3.12	6.7[c]	3.6
Down-Market Penetration	3.0	6.9[c]	1.6	2.2	1.7[c]		7.5	9.68	1.20		3.17
Institutional Framework											
Tenure Regularization	4%						4%		50%		
Permits Delay	40	6[c]	3.5	2.25	11[c]	36[c]	7	5	7	3[c]	12[c]
Compliance	0.45						0.80		0.65		
Land Registration Coverage	10%		50%				33%	40%	85%		
Informal Land Development											
Housing Finance											
Mortgage to Deposit Difference	9	2.8[c]	3.5	2.5	3.8[c]	2.68	8.5	2.5	0.5	3.5[c]	-1.13
Credit to Value Ratio	0.078[c]	0.115[c]	0.351[c]	0.58[c]	0.663[c]	0.20	0.09	0.31	0.19	0.25[c]	0.16
II. URBAN ENVIRONMENT & INFRASTRUCTURE											
Infrastructure and Environment											
Infrastructure Expend. per Cap.		$15[c]	$6.71	$45[c]	$229	$15[c]	$79[c]		$458[c]	$12[c]	$86
Individual Water Connections	52%		38.5%	37%	85%				97%	67%	92%
Individual Sewer Connections	16%		18%	19.6%	0%				55%	50%	70%
Liquid Waste Treatment	0%				0%						77%
Upgrading Informal Areas									45%		
Environmental Encroachment	47%								3%		
Institutional Strengthening											
Private Sector Land Dev't	100%								5%		38%
Private Sector Housing Dev't											
Private Sector Service Delivery	25%		2%		20%						0%
Local Man't: Solid Waste Remvl	51%		45%		79%				80%		82%
III. LOCAL GOV'T AND MUNICIPAL MANAGEMENT											
Generation of Local Revenues											
Fiscal Independence	83%		29.5%	41%	69%						46%
Property Tax Receipts	8%	6.5%	81.0%	71.9%	61%						10.8%
Urban Infra. & Services											
Own Source Finan. of Cap.	100%		35.6%		23%						
Own Source Ops & Maint.			29.8%		83%						88%
Cost Recovery	83%		28.4%	33%	53%						

Region	Europe			Latin America & the Caribbean								Mean (UNCHS /IBRD)[b]
				Caribbean	Central America				South America			
Country	Hungary	Poland	Portugal	Jamaica	Central Am.[d]	Guatemala	Honduras	Panama	Bolivia	Chile	Ecuador	
GNP per Capita ($US, 1991)[b]	2720	1790	5930	1380	980	930	580	2130	650	2160	1000	--
I. SHELTER AND HOUSING FINANCE												
Housing Affordability												
House Price to Income Ratio	6.2	4.17		4.9[c]		2.41	1.85	6.72	3.23	6.08	2.37	5.2
Down-Market Penetration		1.67	5.24	2.7[c]		1.79	1.50		1.33	4.49	1.32	4.37
Institutional Framework												
Tenure Regularization										6.6%	27.9%	
Permits Delay	23.7	60[c]		6[c]				6	3	3	3.5	
Compliance										0.80	0.20	
Land Registration Coverage	100%								57%	100%	49.8%	
Informal Land Development										35%	48.1%	
Housing Finance												
Mortgage to Deposit Difference	12	2.5	6.9	10.5					8.11	6.00	17.2	
Credit to Value Ratio	0.275	0.325		0.28[c]					0.53	0.22	0.39	
II. URBAN ENVIRONMENT & INFRASTRUCTURE												
Infrastructure and Environment												
Infrastructure Expend. per Cap.		$50[c]		$27[c]						$22.5	$73.15	$341
Individual Water Connections	98.7%				63%		79%			87%	61.4%	
Individual Sewer Connections	88%				67%		30%			70%	61%	
Liquid Waste Treatment	20%									2%	0%	
Upgrading Informal Areas												
Environmental Encroachment				2%					30%			
Institutional Strengthening												
Private Sector Land Dev't	1.6%									100%	65%	
Private Sector Housing Dev't			94%									
Private Sector Service Delivery											0%	
Local Man't: Solid Waste Remvl	100%				48%		24%			85%	69.6%	
III. LOCAL GOV'T AND MUNICIPAL MANAGEMENT												
Generation of Local Revenues												
Fiscal Independence					62.6%					65%	5%	
Property Tax Receipts					11.2%					40%		
Urban Infra. & Services												
Own Source Finan. of Cap.	40%				45%		30%			21%	33%	
Own Source Ops & Maint.	53.3%									80%	70%	
Cost Recovery					59.6%		95%			61%	12%	

A. Data from 1993 or most recent year.
B. Source: IBRD, *World Development Report 1993*, pp. 238-9. Data applies to primate cities only.
C. Source: IBRD/UNCHS, *The Housing Indicators Program: Volume II (Indicator Tables) and Volume III (Preliminary Findings)*, 1993.
D. Average of Nicaragua ($460), Honduras ($580), Guatemala ($930), El Salvador ($1080) and Costa Rica ($1650).

TABLE A-3

HOUSING AND URBAN DEVELOPMENT INDICATOR TRENDS

Country	Côte d'Ivoire		Kenya			Indonesia				Philippines		
	1991	1992	1988-89	1990-91	1992-93	Pre-1990	1990-91	1992	1993	Pre-1990	1990-91	1992-93
I. SHELTER & HOUSING FINANCE												
Housing Affordability												
House Price to Income Ratio		7.5		1.0[a]			3.5[a]				2.6[a]	
Down Market Penetration		3.0		6.9[a]		12.6			1.6		2.2	2.2
Institutional Framework												
Tenure Regularization	4%	4%										
Permits Delay	40	40		6[a]		32			3.5		1.0	2.25
Compliance	0.45	0.45										
Land Registration Coverage	10%	10%						50%				
Informal Land Development												
Housing Finance												
Mortgage to Deposit Difference		9		2.8[a]		-3.5	-6.5[a]		3.5		5.8[a]	2.5
Credit to Value Ratio	0.078[a]			0.115[a]			0.351[a]				0.58[a]	
II. URBAN ENVIRONMENT & INFRASTRUCTURE												
Infrastructure and Environment												
Infrastructure Expen. per Cap.				$15[a]		$6.84		$6.71			$45[a]	
Individual Water Connections	50%	52%				36.7%		38.5%		57%	37%	
Individual Sewer Connections		16%				9%	18%				19.6%	
Liquid Waste Treatment	0%	0%										
Upgrading Informal Areas												
Environmental Encroachment	45%	47%										
Institutional Strengthening												
Private Sector Land Dev't	100%	100%										
Private Sector Housing Dev't												
Private Sector Service Delivery		25%				0%	2%		2%			
Local Man't: Solid Waste Remvl	53%	51%				40%			45%			
III. LOCAL GOV'T AND MUNICIPAL MANAGEMENT												
Generation of Local Revenues												
Fiscal Independence	71%	83%					30.5%	29.5%			45%	41%
Property Tax Receipts	10%	8%	4.8%	4.7%	6.5%		81.0%	81.0%			70.5%	71.9%
Urban Infra. & Services												
Own Source Finan. of Cap. Exp.		100%					29.0%	35.6%				
Own Source Ops & Maint. Finan.							24.2%	29.8%				
Cost Recovery		83%				29.9%		28.4%		33%		

Country	Thailand	India			Pakistan			Sri Lanka		Jordan			Morocco	
	1990-91	1990	1992	1993	1990-91	1992	1993	1992	1993	1986	1990	1992	1990	1993
I. SHELTER & HOUSING FINANCE														
Housing Affordability														
House Price to Income Ratio	4.1[a]	7.7[a]			1.9[a]						3.39	3.12	6.7[a]	
Down Market Penetration	1.7[a]				6.4	6.4	7.5	9.68				1.20		
Institutional Framework														
Tenure Regularization					3.5%	4%				65%	50%			
Permits Delay	11[a]	36[a]			7			5		7	7		3[a]	
Compliance					0.80					0.70	0.65			
Land Registration Coverage					33%			40%		90%	85%			
Informal Land Development														
Housing Finance														
Mortgage to Deposit Difference	3.8[a]	4.5	2.0	2.68		2.6	8.5	2.5	2.5		0.5		3.5[a]	
Credit to Value Ratio	0.663[a]		0.20	0.20	0.08	0.08	0.09	0.20	0.31		0.19		0.25[a]	
II. URBAN ENVIRONMENT & INFRASTRUCTURE														
Infrastructure and Environment														
Infrastructure Expen. per Cap.	$229	$15[a]			$79[a]						$458[a]		$12[a]	
Individual Water Connections	85%									97%	97%			67%
Individual Sewer Connections	0%											55%		50%
Liquid Waste Treatment	0.0001%													
Upgrading Informal Areas											45%			
Environmental Encroachment											3%			
Institutional Strengthening														
Private Sector Land Dev't											5%			
Private Sector Housing Dev't														
Private Sector Service Delivery	20%													
Local Man't: Solid Waste Remvl	79%										80%			
III. LOCAL GOV'T AND MUNICIPAL MANAGEMENT														
Generation of Local Revenues														
Fiscal Independence	69%													
Property Tax Receipts	61%													
Urban Infra. & Services														
Own Source Finan. of Cap. Exp.	23%													
Own Source Ops & Maint. Finan.	83%													
Cost Recovery	53%													

Country	Tunisia			Hungary				Poland			Portugal		
	1990	1991	1992	1990	1991	1992	1993	1990	1992	1993	1991	1992	1993
I. SHELTER & HOUSING FINANCE													
Housing Affordability													
House Price to Income Ratio			3.6			6.4	6.2		4.5	4.17			
Down Market Penetration		3.72	3.17						1.92	1.67		4.50	5.24
Institutional Framework													
Tenure Regularization													
Permits Delay			12[a]		23.7	23.7		60[a]					
Compliance													
Land Registration Coverage					100%	100%							
Informal Land Development													
Housing Finance													
Mortgage to Deposit Difference		-1.39	-1.13		21	12		-115.6[a]	0	2.5		6.3	6.9
Credit to Value Ratio			0.16		0.31[a]	0.275		0.325[a]					
II. URBAN ENVIRONMENT & INFRASTRUCTURE													
Infrastructure and Environment													
Infrastructure Expen. per Cap.	$86							$50[a]					
Individual Water Connections			92%		98.7%	98.7%							
Individual Sewer Connections			70%		87%	88%							
Liquid Waste Treatment			77%		20%	20%							
Upgrading Informal Areas													
Environmental Encroachment													
Institutional Strengthening													
Private Sector Land Dev't		38%			1.6%	1.6%							
Private Sector Housing Dev't											97%	94%	
Private Sector Service Delivery			0%										
Local Man't: Solid Waste Remvl			82%		100%	100%							
III. LOCAL GOV'T AND MUNICIPAL MANAGEMENT													
Generation of Local Revenues													
Fiscal Independence			46%										
Property Tax Receipts		11.6%	10.8%										
Urban Infra. & Services													
Own Source Finan. of Cap. Exp.					40%	40%							
Own Source Ops & Maint. Finan.			88%		44.2%	53.3%							
Cost Recovery													

Country	Jamaica				Central America		Guatemala		Honduras	
	1989-90	1991	1992	1993	1980	1992-93	1992	1993	1992	1993
I. SHELTER & HOUSING FINANCE										
Housing Affordability										
House Price to Income Ratio	4.9[a]						2.12	2.41	1.76	1.85
Down Market Penetration	2.7[a]						1.57	1.79	1.43	1.50
Institutional Framework										
Tenure Regularization										
Permits Delay	6[a]									
Compliance										
Land Registration Coverage										
Informal Land Development										
Housing Finance										
Mortgage to Deposit Difference	13.0[a]		17	10.5						
Credit to Value Ratio	0.28[a]									
II. URBAN ENVIRONMENT & INFRASTRUCTURE										
Infrastructure and Environment										
Infrastructure Expen. per Cap.	$27[a]									
Individual Water Connections					59%	63%				79%
Individual Sewer Connections					54%	67%				30%
Liquid Waste Treatment										
Upgrading Informal Areas										
Environmental Encroachment	2.5%	2%								
Institutional Strengthening										
Private Sector Land Dev't										
Private Sector Housing Dev't										
Private Sector Service Delivery										
Local Man't: Solid Waste Remvl						48%				24%
III. LOCAL GOV'T AND MUNICIPAL MANAGEMENT										
Generation of Local Revenues										
Fiscal Independence						62.6%				
Property Tax Receipts						11.2%				
Urban Infra. & Services										
Own Source Finan. of Cap. Exp.						45%			80%	
Own Source Ops & Maint. Finan.										
Cost Recovery						59.6%			95%	

Country	Panama		Bolivia		Chile			Ecuador		
	1992	1993	1992	1993	1982	1990-92	1993	1990	1991-92	1993
I. SHELTER & HOUSING FINANCE										
Housing Affordability										
House Price to Income Ratio	6.93	6.72		3.23		2.1[a]	6.08	2.4[a]	2.08	2.37
Down Market Penetration				1.33		5.0	4.49	2.21	2.47	1.82
Institutional Framework										
Tenure Regularization						6.0%	6.6%			27.9%
Permits Delay	6	6	3	3		3	3	6[a]		3.5
Compliance						0.80				0.20
Land Registration Coverage				57%		100%	100%			49.8%
Informal Land Development						35%	35%			48.1%
Housing Finance										
Mortgage to Deposit Difference			6.76	8.11		4.70	6.00	-9.3[a]		17.2
Credit to Value Ratio				0.53		0.25	0.22	0.37	0.44	0.39
II. URBAN ENVIRONMENT & INFRASTRUCTURE										
Infrastructure and Environment										
Infrastructure Expen. per Cap.						$22.5		$67[a]	$73.15	
Individual Water Connections					81%	87%		59.6%		61.4%
Individual Sewer Connections					63%		70%	62.4%	61%	
Liquid Waste Treatment							2%			0%
Upgrading Informal Areas										
Environmental Encroachment				30%						
Institutional Strengthening										
Private Sector Land Dev't						100%	100%			65%
Private Sector Housing Dev't										
Private Sector Service Delivery										0%
Local Man't: Solid Waste Remvl						85%		69.6%		
III. LOCAL GOV'T AND MUNICIPAL MANAGEMENT										
Generation of Local Revenues										
Fiscal Independence						65%				5%
Property Tax Receipts						40%	40%			
Urban Infra. & Services										
Own Source Finan. of Cap. Exp.						21%		32.6%		
Own Source Ops & Maint. Finan.						80%		69.6%		
Cost Recovery						61%		12%		

A. Source: IBRD/UNCHS, *The Housing Indicators Program: Volume II (Indicator Tables) and Volume III (Preliminary Findings)*, 1993.

INDICATOR DATA COLLECTED BY THE IBRD/UNCHS

Indicator values were collected from up to 52 countries by the United Nations Centre for Human Settlements and the World Bank in 1990. Five income categories of countries were obtained by dividing the countries in the survey into five groups, as follows:

1. Low-income countries with annual per capita incomes of $130 - $390 (10 countries);
2. Low-middle income countries with per capita incomes of $500 - $1,220 (10 countries);
3. Middle-income countries with per capita incomes of $1,260 - $2,450 (10 countries);
4. Middle-to-high income countries with per capita incomes of $2,470 - $10,450 (10 countries); and
5. High-income countries with per capita incomes of $14,360 - $23,810 (12 countries).

Average values for selected indicators referred to in the text, divided by income groups and by region, are as follows:

TABLE A-4 VALUES FOR COUNTRIES, BY INCOME GROUP AND REGION

Income Group	House Price-to-Income	Mort.-to-Deposit Difference	Credit-to-Value	Infra. Expend. per Capita
Low Income Countries	4.84	0.03	0.13	$15.04
Low-Mid Income Countries	4.23	0.07	0.38	$31.35
Middle Income Countries	4.97	0.03	0.30	$40.11
Mid-High Income Countries	4.12	0.02	0.62	$304.59
High Income Countries	4.44	0.03	0.87	$813.50
Region				
Sub-Saharan Africa	4.69	0.03	0.13	$16.56
South Asia	6.25	0.04	0.08	$15.00
East Asia	4.15	0.03	0.41	$72.52
Latin America and Caribbean	3.92	0.11	0.37	$48.42
Europe, Middle East and North Africa	4.57	-0.03	0.34	$86.19
Industrialized Countries	4.58	0.03	0.90	$656.00
WORLDWIDE	5.2	--	--	$341

Source: IBRD/UNCHS, *The Housing Indicators Program, Volume III: Preliminary Findings*, 1993.