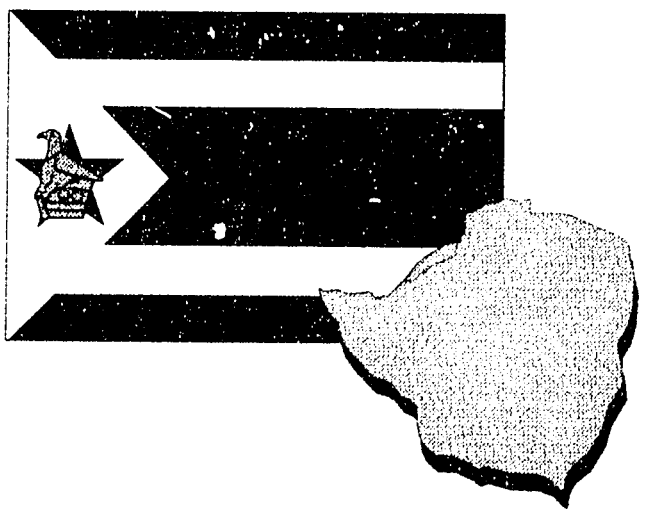
ZIMBABWE PRIVATE SECTOR HOUSING PROGRAM MONITORING AND EVALUATION SYSTEM

BASELINE SURVEY AND FINDINGS



Prepared for

Ministry of Public Construction and National Housing
Government of Zimbabwe

and

United States Agency for International Development/Zimbabwe

Prepared by

PADCO, Inc.

and

Plan Inc. P/L

November 1994

FINAL REPORT

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ABSTRACT

Planning and Development Collaborative International (PADCO, Inc.) provided technical assistance to the Government of Zimbabwe (GOZ) and the United States Agency for International Development (USAID) Zimbabwe to: (1) develop a Monitoring and Evaluation (M&E) System with a data collection plan for the Zimbabwe Private Sector Housing Program (PSHP), and (2) test and refine that System by collecting and analyzing baseline data. The consultancy produced two documents:

- The attached volume, *Baseline Survey and Findings*, which contains results from the baseline data collection of the M&E System; and
- The companion document, *Data Collection Plan*, which serves as the key reference for implementing the M&E System.

The *Baseline Survey and Findings* document concludes that the baseline survey was successful. Based on that survey, the study proposes certain changes in Program indicators, outputs, and targets. The document finds three underlying constraints in the shelter sector that contribute to housing shortages and low levels of formal sector, low-income housing production: (1) distortions in housing finance, (2) delays in the land development process, and (3) the organization of the builders and buyers in the shelter sector. The document concludes with the policy implications of those findings.

PREFACE

Planning and Development Collaborative International (PADCO, Inc.), under contract with the United States Agency for International Development (USAID) Zimbabwe, provided technical assistance to the Government of Zimbabwe (GOZ) Ministry of Public Construction and National Housing (MPCNH) and USAID/Zimbabwe to: (1) develop a Monitoring and Evaluation (M&E) System for the Zimbabwe Private Sector Housing Program (PSHP), and (2) test and refine that System by collecting and analyzing baseline data. PADCO, in association with Plan Inc. P/L, produced two documents:

- *Baseline Survey and Findings*, the present document, which contains results from the baseline data collection of the M&E System; and
- *Data Collection Plan*, which serves as the key reference for implementing the M&E System.

The consultancy began in May 1994, and conducted field work in Zimbabwe in June-August 1994, focusing on the urban centers of Harare, Bulawayo, Mutare and Bindura. The team produced final reports in November 1994. The PADCO team, supported by PADCO's Washington, D.C. office staff, and Plan Inc.'s staff in Harare, consisted of the following persons:

Robert Kehew	Team Leader
Lee Baker	Senior Urban Planning and Policy Specialist
Colleen Butcher	Social Scientist Specialist
Andrew Chataika	Housing Finance Specialist
Clever Ndlovu	Research Assistant

The PADCO Team worked under the direction of Dr. Michael Enders, USAID Regional Housing and Urban Development Officer; and with the guidance and support of Dr. Thomas Chiramba, USAID/Zimbabwe. Mr. M. Makuwe served as liaison with the MPCNH. We would like to express our appreciation to those persons, as well as the many officials of USAID; the MPCNH and other ministries of the GOZ; the local authorities of Harare, Bulawayo, Mutare and Bindura; and other persons who provided time and advice, as well as access to the information required to produce these reports.

EXECUTIVE SUMMARY

INTRODUCTION

The United States Agency for International Development (USAID) signed an agreement with the Government of Zimbabwe (GOZ) in August 1992 to launch a five-year Private Sector Housing Program (PSHP). The PSHP was designed to include a Monitoring and Evaluation System. Planning and Development Collaborative International (PADCO, Inc.) was retained to develop and begin implementation of this System. The PADCO team first developed a *Preliminary Data Collection Plan*. Based on that plan, the team collected and analyzed baseline data for 12 indicators. The team gathered data in Harare, Bulawayo, Mutare, and Bindura, for base year 1992 and for other years as feasible. When possible, results were contrasted with conditions in other countries. Baseline findings are presented in this report.

The document is divided into four chapters:

- Chapter One describes the implementation of the Data Collection Plan,
- Chapter Two presents the findings of the baseline data collection as they relate to tracking progress toward achieving the end of program status,
- Chapter Three discusses the findings of the baseline survey as they relate to the wider shelter sector, and
- Chapter Four presents the policy implications of those findings.

BASELINE DATA COLLECTION

The baseline data collection was generally successful. Implementation confirmed that secondary data were of acceptable quality for the baseline survey. In future years, the quality of certain data is expected to improve as a result of requirements associated with PSHP implementation.

PROGRAM TRACKING AND SHELTER SECTOR-RELATED FINDINGS

The 12 indicators included in the baseline survey were reviewed vis-à-vis their associated outputs and targets. Based on an analysis of the baseline data, Table ES-1 summarizes the survey findings, including recommended changes that: eliminate one indicator ("land registration coverage"); and modify/propose several other indicators, outputs, targets, and data collection frequencies.

Table ES-1
Recommended Changes to Preliminary Data Collection Plan: Land Development Module

INDICATOR		OUTPUT/TARGET		FREQUENCY OF DATA COLLECTION	
Preliminary	Recommended	Preliminary	Recommended	Preliminary	Recommended
1. Number of Low-Income Serviced Stands	(no change)	Additional 45,400 serviced stands	(no change)	Quarterly	(no change)
2. Price of Low-Income Serviced Stand	(no change)	Average price of habitable stand reduced by 47% in 1992 Z$s	(no change)	Semi-annually or annually	Annually
3. Permits and Title Delays	(no change)	TBD based on analysis of baseline data	Reduction by 25% from base year levels, to 30 months average delay	Annually/ biannually	(no change)
4. Land Registration Coverage	Elimination of indicator	TBD based on analysis of baseline data	Elimination of indicator	Biannually	Elimination of indicator

Recommended Changes to Preliminary Data Collection Plan: Low-Income Shelter Finance Module

INDICATOR		OUTPUT/TARGET		FREQUENCY OF DATA COLLECTION	
Preliminary	Recommended	Preliminary	Recommended	Preliminary	Recommended
1. Number of Low-Income Mortgages	(no change)	Approximately 43,200 low-income mortgages	(no change)	Quarterly	(no change)
2. Mortgage-to-Deposit Difference	(no change)	TBD based on analysis of baseline data	-3, an improvement of 15 percentage points from base year levels	Semi-annually	Annually
3. Credit-to-Value Ratio	(no change)	TBD based on analysis of baseline data	No target proposed	Annually	(no change)

Table ES-1 (cont'd.)
Recommended Changes to Preliminary Data Collection Plan:
Construction and Building Materials Module

INDICATOR		OUTPUT/TARGET		FREQUENCY OF DATA COLLECTION	
Preliminary	**Recommended**	Preliminary	**Recommended**	Preliminary	**Recommended**
1. Construction and Infrastructure-Related Employment	(no change)	8000 construction jobs created over life of the Program	5000 construction jobs created over life of the Program	Quarterly	(no change)
2. Construction Price and Cost	(no change)	Construction costs decreased by up to 10% in 1992 prices	(no change)	Semi-annually or annually	Annually
3. Formal Low-Income Housing Production	(no change)	Volume of low-income houses increased by 10% per annum	(no change)	Semi-annually or annually	Quarterly
4. Down-Market Penetration	(no change)	TBD based on analysis of baseline data	Reductions from base year levels to average for countries of Zimbabwe's income group (1.9)	Annually	(no change)
5. Price-to-Income Ratio	(i) House superstructure price-to-income ratio; (ii) Household dwelling unit price-to-income ratio	TBD based on analysis of baseline data	No target proposed	Biannually	(no change)

POLICY IMPLICATIONS

Results of the base year survey are presented in Table ES-2. For indicators where comparative data are available, Table ES-2 also shows values for sub-Saharan Africa (other values presented in report).

The baseline survey established that **low levels of housing production** are a key cause of the housing shortages and overcrowding experienced in urban parts of Zimbabwe. Annual levels of production of authorized housing in Harare, for example, represent only about *one-tenth* of comparable average levels of construction in other major cities around the world. Coupled with rapid urban growth, this condition acts to worsen the existing housing shortage.

Table ES-2
PSHP Monitoring and Evaluation System
Baseline Survey Results

Indicator	Indicator Values	
	Zimbabwe PSHP Base Year Survey Results[a]	**Sub-Saharan Average or Median**
Land Development Indicators		
1. Number of Low-Income Serviced Stands (per 1000 population)	2.94	--
2. Price of Low-Income Serviced Stand	$ 5325	--
3. Permits and Title Delays (in months)	40.3	23[b]
4. Land Registration Coverage	49.5%	--
Low-Income Shelter Finance Indicators		
1. Number of Low-Income Mortgages	1220	--
2. Mortgage-to-Deposit Difference	-18.17	3[c]
3. Credit-to-Value Ratio	32.5%	13[c]
Construction and Building Materials Indicators		
1. Construction and Infrastructure-Related Employment	2932	--
2. Construction Price and Cost		
- Price	$ 24527	--
- Cost	$ 20944	--
3. Formal Low-Income Housing Production (per 1000 population)	0.60	2.85[c,d]
4. Down-Market Penetration	2.7	4.99[c]
5. Price-to-Income Ratio		
- House superstructure price ratio	9.8	--
- Household dwelling unit price ratio	2.6	4.69[c]

[a]See text for explanation and interpretation.
[b]Source: USAID Office of Housing and Urban Programs, *The USAID Housing Guaranty Program: Housing and Urban Development Indicators Survey (FY1993)*, PADCO, Inc., 1994. See Appendix C for further information.
[c]Source: IBRD/UNCHS, *Housing Indicators Program*, Volumes II and III, 1993. Data for years 1991 and 1992. See Appendix C for further information.
[d]PADCO, Inc., 1994.

The baseline survey underscored three underlying reasons for low levels of housing production, as follows.

Distortions in Low-Income Housing Finance. Zimbabwe's segmented finance system provides subsidized, low-income mortgages with interest rate ceilings. While the current system does provide some low-income families with affordable loans, it also poses several disadvantages. The system is not self-sustaining: lending institutions cannot earn a reasonable return on their investments in mortgages without a subsidy. At its peak, the system has provided only about 5500 low-income mortgages per year. While beneficial to recipients, those mortgages would finance only a fraction of the 66,000 units per year that the Ministry of Public Construction and National Housing (MPCNH) has estimated are necessary to eliminate Zimbabwe's housing shortage by the year 2000. Also under the current system, the supply of mortgages fluctuates substantially from year to year, as money market rates rise and fall, causing an external shock. Such a fluctuation occurred in 1991/92, as the number of low-income mortgages offered yearly plummeted to about one-fifth the previous year's level. The subsidies provided under the current system also cost the GOZ a substantial amount of foregone revenue.

Delays in the Land Development Process. Permitting and titling a medium-sized residential estate in 1992 in Zimbabwe took, on average, about three years and four months. This is about *three times* the average delay for countries reporting worldwide, and is significantly longer than averages in sub-Saharan Africa (see Table ES-2). Those delays in the base year were actually reduced by the short-term hire of a team of professional surveyors who worked to eliminate the backlog of projects waiting to be surveyed. Delays are typically longer. Those delays may reduce volumes of shelter construction, raise housing prices, discourage new builders from entering the market, and force some to build unauthorized shelter outside the formal sector.

Insufficient Number of Small Builders. In the early 1990s, small-scale, indigenous builders appeared to be increasingly entering the housing market. Entry of small-scale builders increases competition. This encouraging trend was due in part to the correspondingly heightened activity of housing cooperatives. Given the current situation in Zimbabwe, where the shelter finance sector is undeveloped, builders can achieve greater economies of scale when they build for a housing cooperative, rather than being contracted by an individual client.

The baseline data survey conveys a clear message to policy makers: the need for the GOZ to adopt an increasingly comprehensive strategy aimed at **enabling** the private housing sector to improve the shelter conditions of the poor. The enabling approach should be complemented with the direct project approach to shelter provision when appropriate. The GOZ has undertaken many activities of an enabling nature. The PSHP signals a willingness of the GOZ to consider embracing a more comprehensive enabling strategy for the shelter sector.

As elements of a comprehensive enabling strategy, the GOZ should:

- *Make housing finance more sustainable.* A well-designed strategy would promise to increase the number of mortgages offered, stabilize the flow of mortgage loans, open shelter finance to new providors, retarget subsidies, and, in the long term, make mortgages a more attractive investment for lending institutions.
- *Streamline the land development process.* The entire permitting and titling process needs a thorough review. A streamlined process would promise to increase production of housing and reduce prices.
- *Improve market competitiveness.* The participation of small-scale builders and housing cooperatives should be further encouraged, both in the shelter sector as a whole, as well as in municipalities where the PSHP is implemented. Increased participation by those players would promise to increase production of housing at affordable prices.

INTRODUCTION

The United States Agency for International Development (USAID) signed an agreement with the Government of Zimbabwe (GOZ) in August 1992 to launch a five-year Private Sector Housing Program (PSHP). The PSHP includes US$ 77.68 million worth of inputs via USAID, as well as counterpart contributions from the GOZ and the private sector. The Program has three main components:[1]

- The *Land Development* component assists local authorities in servicing stands and selling them to low-income families;
- The *Low-Income Shelter Financing* component stimulates building societies to offer low-income mortgages; and
- The *Construction and Building Materials* component acts to improve private and public sector performance in providing construction-related goods, materials, and services, creating jobs, increasing shelter construction, and decreasing costs.

The PSHP was designed to include a Monitoring and Evaluation System.[2] According to the Terms of Reference for the System, the PSHP required the Monitoring and Evaluation System to serve two related objectives:

- *Objective One* — To track progress toward meeting the program purposes, i.e., toward achieving the end of program status; and
- *Objective Two* — To measure the broader impact of the Program on the shelter sector.

In 1994, USAID/Zimbabwe retained Planning and Development Collaborative International (PADCO, Inc.) to develop, test, and modify a monitoring and evaluation system to meet program needs.[3] Following the Terms of Reference, the assignment consisted of two phases, described below.

During Phase I, the consultancy drafted the *Zimbabwe Private Sector Housing Program Monitoring and Evaluation System Preliminary Data Collection Plan*.[4] The core of the draft System was a set of 12 indicators.[5] As shown in Figure 1, each of that original set of

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[1] For complete description of Program, see PSHP *Project Paper*.

[2] See GOZ/USAID/Zimbabwe, PSHP *Project Paper*, p. 82; also pp. 92-4.

[3] USAID/Zimbabwe, *Development of a Monitoring and Evaluation System for Zimbabwe Private Sector Housing Program*, Terms of Reference, p. 2. For full text, see *Preliminary Data Collection Plan*, PADCO, Inc. for GOZ and USAID/Zimbabwe, Appendix A.

[4] Prepared by PADCO, Inc. for the GOZ and USAID/Zimbabwe, Draft, July 1994.

[5] Based on conclusions developed by the consultancy and reviewed by the GOZ and USAID/Zimbabwe, the original set of indicators was refined. The final *Data Collection Plan*, the companion volume to this document, incorporates the revised set of indicators.

Figure 1: MONITORING AND EVALUATION SYSTEM INDICATORS

PSHP PROGRAM COMPONENT	PSHP OUTPUT INDICATORS	SHELTER SECTOR IMPACT INDICATORS	
		PSHP Impact Indicators	USAID Housing & Urban Development Indicators
 **Land Development System**	• Number of low-income serviced stands	• Price of low-income serviced stand	• Permits & title delays • Land registration coverage
 **Low-Income Shelter Financing**	• Number of low-income mortgages		• Mortgage-to-deposit difference • Credit-to-value ratio
 **Construction and Building Materials**	• Construction and infrastructure-related employment*	• Construction price and cost • Formal low-income housing production*	• Down-market penetration* • Price-to-income ratio*

NOTE:
*Indicator measures output/impact of more than one Program component.

indicators generally corresponds to one of the PSHP Program components listed above. Three of the indicators additionally measure progress toward Program outputs, while the other nine indicators reflect Program impacts upon the shelter sector. Definitions of the 12 indicators are provided in Appendix A.

The Mission proposed that the *Preliminary Data Collection Plan* should define data gathering in four urban centers — Harare, Bulawayo, Mutare, and Bindura — representing different geographic parts of the country and different population sizes. 1992 was set as the base year, with collection efforts focused on that year. The team carried out Phase I of the assignment from May-July of 1994, in Zimbabwe and in Washington, D.C.

Following completion and review of the draft *Preliminary Data Collection Plan*, Phase II of the consultancy tested the *Plan* by implementing it. The team collected and analyzed baseline data in the four selected urban centers for the base year 1992. When possible, indicator values were also gathered for other years, permitting some analysis of trends. As per the Terms of Reference, only secondary data were gathered. The team initiated Phase II in July 1994 in Zimbabwe.

The following report contains *Baseline Data Collection and Findings* for the Monitoring and Evaluation System. The document is divided into four chapters:

- *Chapter One* describes the implementation of the *Preliminary Data Collection Plan*;
- *Chapter Two* presents the findings of the baseline data collection as they relate to tracking progress toward achieving the end of program status;
- *Chapter Three* examines the findings of the baseline survey as they relate to the wider shelter sector; and
- *Chapter Four* discusses the policy implications of those findings.

CHAPTER 1
BASELINE DATA COLLECTION

The consultancy collected baseline data for the 12 indicators of the Monitoring and Evaluation System.[6] In gathering data, the team followed the draft *Preliminary Data Collection Plan*, as prepared by the consultancy and reviewed by the GOZ and USAID in July 1994.

As elaborated below, the baseline data collection was generally successful. Baseline values were collected for the 12 indicators in virtually all urban centers as per the draft *Preliminary Data Collection Plan*. As per the Terms of Reference, the team relied entirely on secondary data collection and interviews. Implementation confirmed that secondary data were of acceptable quality for the baseline survey.[7] In future years, secondary data will continue to be of sufficient quality to calculate all indicators, with the exception of one intermediate indicator value. As current estimates of median household income become out of date, some supplemental primary data collection will become necessary to maintain an accurate estimate of this intermediate indicator value.[8]

The quality of secondary data, while at acceptable levels, varied depending on the source (see discussion below). Whenever possible, the team relied on written records, but fell back on interviewed sources when documents did not exist, were not accessible, or were not of acceptable quality. As discussed below, some "surrogate" values were used as necessary; those substitutions were judged acceptable. In future years, the quality of certain data collected is expected to improve as a result of requirements associated with PSHP implementation. In some cases, the team could have gathered higher quality information using primary data collection. However, the greatly increased costs of primary data collection would have outweighed the marginal benefits of such procedures. Discussion of data collection for individual indicators follows.

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[6] Most data were collected in July 1994. Responding in part to comments received during briefings with the GOZ and USAID in August 1994, the consultancy performed some additional secondary data collection after those meetings.

[7] "Acceptable quality" refers to criteria established in the *Data Collection Plan*. The Monitoring and Evaluation System "...seeks to...be parsimonious in its data collection...Data quality is adequate to all needs but not excessive. Secondary data are used where possible; primary data collection is employed where absolutely necessary." To avoid regional generalizations of indicator inputs, virtually all values were collected *in situ*. The only intermediate indicator value that is generalized across urban centers was median annual household income. As discussed below, for indicators where this value plays an important role (e.g., price-to-income ratio), indicator calculation was limited to those urban centers where generalization of household income was analytically justified.

[8] For recommendations, see Chapters 3 and 4 of *Data Collection Plan*.

1.1 Land Development Module

1. Number of Low-Income Serviced Stands. Data were collected for base year 1992 and also 1993 in all four urban centers: Harare, Bulawayo, Mutare, and Bindura. The team collected data of acceptable quality. The indicator definition focuses on the provision of stands to households of less-than-median income; however, information on the income of individual households was not available without resorting to primary data collection. For the base year, therefore, the team collected secondary information on the provision of stands in high-density suburbs, a reasonable surrogate for household income data. During Program implementation, the Monitoring and Evaluation System will provide more precise secondary information on this indicator.

2. Price of Low-Income Serviced Stand. In the base year, the team collected values in Harare and Bulawayo. No stands were serviced in Bindura in 1992. The team collected additional values in Harare (for 1993), Mutare (for 1993), and Bindura (estimated for 1994). Data were of acceptable quality. Both in collecting and calculating the values, the consultancy made an effort to standardize values across municipalities. For example, in each urban center, the team sought cases where difficult terrain did not impose additional costs on stand servicing.

3. Permits and Title Delays. Data were collected for the base year in all four urban centers. Data from secondary sources were of acceptable quality. Final values reflect written records rather than interviewed sources to the full extent practicable.

4. Land Registration Coverage. Data were collected for the base year in all four urban centers. To rely upon secondary sources, the consultancy slightly modified its methodology from the draft *Preliminary Data Collection Plan* to include several additional assumptions, e.g., that all land within a commercial business district has been title surveyed. For this reason, final indicator values were of acceptable though not of high accuracy.

1.2 Low-Income Shelter Finance Module

1. Number of Low-Income Mortgages. National values were collected for this indicator. In future years, the System will permit tracking low-income mortgages by geographical area. Data were available from secondary sources only by fiscal year (which ends in June), not by calendar year. In addition to the base year, data were collected for three previous fiscal years.

While the indicator involves receipt of mortgages by households of "less-than-median income," secondary sources did not directly provide information on household income. The building societies can, however, distinguish mortgages issued to high-density areas from low-density areas. They may also distinguish between loans of less than $35,000 or more. Those surrogate pieces of information permit calculation of a reasonably accurate indicator value.

2. Mortgage-to-Deposit Difference. National values were collected for this indicator. Data came largely from written sources rather than interviews and were of acceptable quality. Data were available from secondary sources only by fiscal year, not by calendar year, and were collected for two fiscal years.

3. Credit-to-Value Ratio. As per the draft *Preliminary Data Collection Plan*, data were collected in Harare for the base year. Data were additionally collected in Bulawayo (not proposed by the draft *Plan*). Data were of acceptable quality. Calculation of informal sector housing investment, an intermediate value, was based on published secondary sources; data quality could only be improved by supplemental primary data collection.

1.3 Construction and Building Materials Module

1. Construction and Infrastructure-Related Employment. The consultancy calculated base year values for this indicator in the four urban centers visited. Intermediate values for this indicator come directly from collection of two other indicators: number of low-income serviced stands and formal low-income housing production. For that reason, see discussion of those two indicators for collection details.

2. Construction Price and Cost. Values were collected in all four urban centers studied for 1992. The team gathered additional values in Harare and Bulawayo for 1994. Of the two indicator components, price and cost, price proved to be more easily definable and collectable from secondary sources. Builders may not calculate construction costs rigorously or consistently. Where cost information exists, private builders especially may be reluctant to divulge data.

3. Formal Low-Income Housing Production. Baseline data for calendar year 1992 were collected in Harare, Mutare, and Bindura. Despite repeated requests for supplemental information, to date the City of Bulawayo has only provided data for fiscal year 1992/93. Additional data for calendar year 1993 were collected in Mutare and Bindura. Additional data on *total* housing production were gathered in Harare, Bulawayo, and Bindura. As per the draft *Preliminary Data Collection Plan*, construction was assumed to be for low-income households if it occurred in high-density areas. Determining the household income of individual families building new housing would have entailed primary data collection.

Secondary data quality varied by urban center. For example, while computerized records by area existed in Harare, collection in Bindura involved reviewing individual records with the Building Inspector. The City of Mutare was invited to review calculations for 1992, but provided no comments. Depending on the enforcement of local building and occupation

regulations, *formal sector*[9] housing production may or may not include housing built by the Ministry of Public Construction and National Housing (MPCNH).[10]

4. Down-Market Penetration. Values were calculated for 1992 and 1994 for Harare and Bulawayo. Because national or primary city values for median annual household income, an intermediate indicator value, are not usually representative of incomes in smaller cities, values were not calculated for Mutare and Bindura. Information gathered was of acceptable quality.

5. Price-to-Income Ratio. Per request of USAID/Zimbabwe, this indicator was divided into two variations: (1) house superstructure price-to-income ratio, and (2) household dwelling unit price-to-income ratio. Values were calculated for 1992 and 1994 for Harare and Bulawayo. As with the down-market penetration indicator, because large-city values for median annual household income are not usually representative of incomes in smaller cities, "house" price-to-income values were not calculated for Mutare and Bindura. Intermediate values of housing stock were of acceptable quality. Estimation of the number of households (and number of dwelling units) per structure was based on secondary sources of generally small sample size.

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[9] That is, locally authorized.

[10] Information on housing production requested from the MPCNH by letter on 15 June 1994 not yet received.

CHAPTER 2
FINDINGS RELATED TO PROGRAM TRACKING

Following baseline data collection, the consultancy calculated indicator values (see Appendix B for worksheets). Based on survey results, the Monitoring and Evaluation System was reviewed for its ability to track progress toward meeting the program purposes. For six of the 12 System indicators, the GOZ and USAID had previously defined the end-of-program status (EOPS). For those six indicators, EOPS were reviewed in light of findings.

As called for in the *Preliminary Data Collection Plan*, the consultancy proposed (where appropriate) end-of-program targets for the other six indicators. Targets are appropriate where program and government officials would consider a change (either an increase or decrease) in the indicator value as unambiguously positive. Targets are proposed based on what appears achievable during a five-year Program life, and in some cases on comparisons with indicator values reported in other countries.[11]

Findings are presented below in tabular form[12] and discussed (by indicator module).

2.1 Land Development Indicators

Land development indicator results are shown in Table 2.1 and discussed below by indicator.

2.1.1 Number of Low-Income Serviced Stands

In base year 1992, a total of 5750 stands were serviced and ready for sale in the four urban centers surveyed. This represents 2.94 newly serviced stands per 1000 population. Between 1992 and 1993, stand servicing levels declined on average to only 1.77 stands per 1000 population.

This indicator will measure progress toward a planned PSHP output: an additional 45,400 serviced stands made available for low-income families over the life of the Program. To meet that goal during the planned five-year life of the Program will require servicing an average of 9080 stands per year in Zimbabwe. That level of production is nearly double the average annual production sustained by the four urban centers in 1992 and 1993 of 4660 stands per year. Depending on the number of municipalities that participate in the Program, meeting this target would appear challenging but achievable.

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[11] Cross-country comparisons of indicator values are discussed in detail in Chapter Three.

[12] Findings are presented in graphic form in Chapter Three. Findings concerning USAID Housing and Urban Development Indicators are provided in Appendix E, in a form acceptable to submit directly to USAID Office of Environment and Urban Programs for their annual indicator survey (if requested).

Table 2.1
Land Development Indicator Baseline Survey Results

Indicator (Year)	Indicator Value (by Geographic Area)				
	Final Value	Harare	Bulawayo	Mutare	Bindura
1. Number of Low-Income Serviced Stands (per 1000 population)[a]	(weighted average)				
1992	2.94	1.08	6.72	2.29	0.00
1993	1.77	0.89	2.39	6.99	0.00
2. Price of Low-Income Serviced Stand	(average)				
1992	$5325	$7137	$3513	n/a[b]	n/a[b]
1993	--	$6738	--	$5174	--[b]
1994	--	--	--	--	$7081
3. Permits and Title Delays (months)	(average)				
1992	40.3	41.65	35.75	38.15	45.65
4. Land Registration Coverage	(average)				
1992	49.5%	78%	60.5%	22.1%	37.4%

Notes:
[a] See corresponding Figure for total number of stands serviced.
[b] No stands were reportedly serviced in year shown.

2.1.2 Price of Low-Income Serviced Stand

In the base year, the average value reported for this indicator was $5325, with the highest price reported in Harare ($7137) and a lowest value in Bulawayo ($3513).

In future years, this indicator should reflect the impact on price of reducing the minimum stand size from 300 sqm to 150 sqm, as authorized by MPCNH Circular No. 3 of December 1992. In the base year, all reported prices were for a 300 sqm stand. Since then, Bindura has begun to lower its minimum stand size as authorized. The municipality is currently (1994)

planning 200 sqm stands. Unfortunately, because no stands were reportedly serviced in Bindura in 1992 or 1993, the cost savings resulting from implementation of that policy were not reflected in changes in indicator values.

It should be noted that a lower stand price is not always better. If the price drops below the marginal cost of the serviced stand, provision is subsidized. Subsidized prices may lead to underproduction of serviced land. One analyst has concluded that this underproduction currently occurs in Harare: "The aversion of officials of the City of Harare to providing more serviced stands is related to the negative impact such provision has on the budget deficit. The root cause is that the price at which...stands are turned over...is too low." One result is that, confronted with development pressure, some unserviced stands are also released. The analyst concludes simply, "The solution is to raise the price."[13] Because a lower price is not necessarily better, it becomes difficult to set an appropriate end-of-project target for this indicator.

This indicator tracks changes in stand servicing prices — which should correlate with the costs of what the *Project Paper* refers to as a habitable stand. A habitable stand includes a wet block and a one-room slab as well as a serviced stand. The PSHP has a target of reducing the cost of a habitable stand by 47 percent to Z$ 9600 (1992 Z$).

2.1.3 Permits and Title Delays

In the four urban centers studied, the time required to approve, permit, and title a new, medium-sized residential subdivision in 1992 averaged about three years and four months. A decline in this value can be expected to permit developers to build housing quicker, in larger quantities, and at more affordable prices. A decline in this indicator is therefore normatively "good," assuming some minimum standards are maintained.

As stated in the *Preliminary Data Collection Plan*, the end-of-project target for this indicator was "to be determined" based on baseline findings. Given an average baseline delay of 40.3 months in permitting and titling, a reasonable target would be a 25 percent reduction, to an average delay of 30 months by the end of the Program. Alternatively, a more ambitious target would be to reduce delays by 43 percent, to 23 months, which represents the average of sub-Saharan countries surveyed by the World Bank/UNCHS.

2.1.4 Land Registration Coverage

For the four urban centers surveyed, in 1992 an average of half (49.5 percent) of urban lands were covered by land registration systems. The highest levels of coverage were reported in the most populous centers, Harare and Bulawayo (60 to 80 percent coverage). Investigators found the lowest levels of registration coverage in the smaller centers, Mutare and Bindura (20 to 40 percent coverage).

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[13] USAID/Zimbabwe, *Constraints on the Development and Successful Operation of Housing Cooperatives in Zimbabwe*, Abt Associates, May 1994, p. 17 and p. 8.

In Zimbabwe, a high value of this indicator is not necessarily a sign of more efficient development. This is because land registration is just one part of a comprehensive system or framework that provides for efficient urban growth. For example, if Harare annexes extensive new areas of rural land in the near future, it will be proactively planning for the future. Such an action would, however, temporarily reduce the coverage of land registration, perhaps by as much as one-half or two-thirds. In the same way, the low value reported for Mutare (22.1 percent) reflects a recent extensive annexation of unregistered land.

Because an increase in the land registration coverage indicator is thus not necessarily positive, setting targets for, and further tracking of, this indicator are not recommended. No substitute is proposed.

2.2 Low-Income Shelter Finance Indicators

Results of the baseline survey are displayed in Table 2.2 and discussed below by indicator.

2.2.1 Low-Income Mortgages

The number of low-income mortgages issued declined sharply in the early 1990s, from 5534 in 1990/91 to 1220 in 1991/92. From the standpoint of housing affordability, a sustainable increase in this value is a desired outcome.

The PSHP *Project Paper* calls for an end-of-project output of 43,200 of low-income mortgages. This indicator will track achievement of that output. Achieving that output during the five-year life of the Program would require extending an average of 8640 low-income mortgages per year. This would represent a sustained increase of 55 percent over the highest annual levels of low-income mortgages achieved to date in Zimbabwe of 5578 per year (in 1988/89). That previous peak, however, was reached when only three building societies were active, not four as is currently the case. With further liberalization of the financial sector, reaching this Program output appears challenging but achievable.

2.2.2 Mortgage-to-Deposit Difference

The baseline survey determined values of -9.98 in FY 1991/92 and -18.17 in FY 1992/93. For reasons presented in Chapter Three, achieving a modest, positive value for this indicator can be considered desirable as a long-term goal.

Table 2.2
Low-Income Shelter Finance Indicator Baseline Survey Results

Indicator (Year)	Indicator Value (by Geographic Area)		
	Final Value	Harare	Bulawayo
1. Low-Income Mortgages	(national)		
1990/91	5534	--	--
1991/92	1220	--	--
2. Mortgage-to-Deposit Difference	(national)		
1991/92	-9.98%	--	--
1992/93	-18.17%	--	--
3. Credit-to-Value Ratio	(Harare)		
1992/93	32.5%	32.5%	130.0%

Given the wide gap between base year values of -18.17 and a long-range goal of a "modest, positive value," a reasonable end-of-project target for this indicator is proposed to be -3, the median value reported by the World Bank/UNCHS for Europe, the Middle East, and North Africa.

2.2.3 Credit-to-Value Ratio

The base year indicator value was 32.5 for Harare and 130.0 for Bulawayo. This indicator represents the ratio of mortgage loans to total investment in housing (expressed as a percentage). World Bank economists argue that a higher value is a good, signalling a greater "...degree of access of housing consumers to long-term mortgage finance." Conversely, a lower value suggests that a larger "...proportion of housing investment requires savings and cash outlays, ...depressing housing demand."[14] An increase in this indicator appears less ambiguously positive, however, if one considers that repressing informal sector activity will also lead to higher values for this indicator. Such measures are not universally considered appropriate shelter policy.

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[14] World Bank/UNCHS, *The Housing Indicators Program Volume III: Preliminary Findings*, 1992, p. 44.

Because an increase in this value is not necessarily positive, no targets are considered appropriate for the PSHP. However, because its values have some utility when analyzed in conjunction with other indicators. For this reason, and because comparative worldwide values are available, continued collection of this indicator is considered appropriate.

2.3 Construction and Building Materials Indicators

Survey results for the five construction and building materials indicators are presented in Table 2.3 and discussed by indicator below.

2.3.1 Construction and Infrastructure-Related Employment

In the four urban centers surveyed, the construction, infrastructure, and related industries provided an estimated 2932 person-years of employment in the base year. Nearly half (49 percent) of that employment occurred in Harare, while all but one percent of the remainder took place in Bulawayo and Mutare.

Increases in employment, and thus in this indicator, can be considered positive. Achieving the Program output by creating 8000 "jobs" in construction and infrastructure-related employment may, however, be an overly optimistic goal. The *Preliminary Data Collection Plan* defined a "job" as one person-year. Sustainably achieving the output thus requires providing an average of 8000 person-years of employment per year during the life of the Program. This level of employment is more than double the total levels reported in the base year in the four urban centers surveyed.

Sustaining this level of output would entail meeting several conditions and assumptions. The Program must achieve full end-of-project outputs for both numbers of stands serviced and low-income mortgages provided. Moreover, achieving Program targets involving greater efficiency in construction could prevent the Program from reaching employment targets. Given these considerations, if flexibility in adjusting Program outputs exists, providing 5000 person-years of employment per year would represent a more realistic output target than 8000 person-years.

2.3.2 Construction Price and Cost

In 1992, prices for a four-room unit averaged $24,527 (in 1992 constant Z$s) across the four urban centers. Costs for the same unit averaged $20,944. Reductions in construction price and cost can be considered as clear benefits. The Program target is a 10 percent reduction in construction costs in constant dollars from the base year. Review of survey results suggests that this target is achievable.

Table 2.3
Construction and Building Materials Indicator Baseline Survey Results

Indicator (Year)	Indicator Value (by Geographic Area)				
	Final Value	Harare	Bulawayo	Mutare	Bindura
1. Construction and Infrastructure-Related Employment	(cumul-ative)				
1992	2932	1445	833	644	10
2. Construction Price and Cost (1992 Z$)	(average)				
1992	$24527 -P $20944 -C	$37883 -P $27059 -C	$19000 -P&C	$20317 -P $16772 -C	$20909 -P
1994	--	$28369 -C	$17325 -P&C	--	--
3. Formal Low-Income Housing Production (per 1000 population)[a]	(weighted average)				
1992	0.60	0.45	0.40[b]	3.03	0.33
1993	--	--	--	1.24	1.67
4. Down-Market Penetration	(Harare)				
1992	2.7	2.7	2.6	--	--
1994	3.3	3.3	2.8	--	--
5. (i) House Superstructure Price-to-Income Ratio	(Harare)				
1992	9.8	9.8	4.7	--	--
1994	9.3	9.3	3.8	--	--
5. (ii) Household Dwelling Unit Price-to-Income Ratio	(Harare)				
1992	2.6	2.6	3.0	--	--
1994	2.4	2.4	2.4	--	--

Notes:
[a] See corresponding Figure for total number of units.
[b] For Fiscal Year 1992/93; data for calendar year 1992 not available.

2.3.3 Formal Low-Income Housing Production

In 1992, an average of 0.60 housing units were built per 1000 population in the four urban centers. An increase in this indicator can be considered as positive. Achieving the Program target of a 10 percent increase in yearly production volumes appears a reasonable goal.

2.3.4 Down-Market Penetration

In 1992, values of 2.7 and 2.6 were found in Harare and Bulawayo, respectively. As explained in Chapter Three, a decrease in this indicator marks an improvement in housing affordability. The *Preliminary Data Collection Plan* calls for setting a target for this indicator following the baseline survey. Based on survey results, reducing values from base year levels of 2.7 (Harare) and 2.6 (Bulawayo) to a target of 2.0 by end-of-Program appears challenging but achievable.

2.3.5 Price-to-Income Ratio

Per the request of USAID/Zimbabwe, this indicator was divided into two variations, as follows.

House Superstructure Price-to-Income Ratio

In the base year, the consultancy developed values of 9.8 in Harare and 4.7 in Bulawayo. This finding suggests that the median household in Harare must pay 9.8 times its annual income to purchase the median house. This finding appears to support the conclusions of other studies regarding the unacceptable costs of housing in Harare. Unfortunately, no international averages are available to compare with this indicator.

Household Dwelling Unit Price-to-Income Ratio

In the base year, the team developed values of 2.6 in Harare and 3.0 in Bulawayo. As discussed in the next chapter, those values are comparatively low, relative to worldwide averages.

Care should be taken when interpreting those results. World Bank economists generally interpret a low value for this indicator[15] as desirable. A high value for this indicator, conversely, "...is a sign that house prices are high, and that generally the supply of housing is failing to meet demand."[16] Careful calculation and interpretation of this indicator, however, calls this conclusion into question. Rather than measuring the price of *houses*, the indicator is actually the ratio of the median price of a *dwelling unit* and the median annual household income. Moreover, when more than one household inhabits a structure, each

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[15] The indicator referred to in this document as "household dwelling unit price-to-income ratio" is defined the same as that indicator referred to by World Bank economists as the "house price-to-income ratio."

[16] World Bank/UNCHS, *The Housing Indicators Program Volume III: Preliminary Findings*, 1992, p. 20.

household is said to occupy its own "dwelling unit."[17] Thus, in very overcrowded conditions, low values for this indicator may obtain. This appears to explain the findings in Zimbabwe: the low values of this indicator signal overcrowding, rather than affordable housing conditions.

Given that low values for this indicator are not necessarily positive, no targets are proposed for end-of-project conditions. However, given the comparative value of this indicator, the Program should continue to collect values every two years as proposed in the *Data Collection Plan.*

2.4 Summary of Recommendations

Recommendations made above for modifications to the *Preliminary Data Collection Plan* are summarized below, in tabular form. Based on data collection experience, the consultancy also recommends that all future indicator values be collected by fiscal year, rather than calendar year.[18]

[17] Up to the total number of habitable rooms per structure. Source: Mayo, Stephen, World Bank Housing Indicators Program, telephone conversation, 17 August 1994.

[18] The consultancy incorporated all recommendations summarized in this section into the final *Data Collection Plan.*

Table 2.4
Recommended Changes to Preliminary Data Collection Plan: Land Development Module

INDICATOR		OUTPUT/TARGET		FREQUENCY OF DATA COLLECTION	
Preliminary	**Recommended**	Preliminary	**Recommended**	Preliminary	**Recommended**
1. Number of Low-Income Serviced Stands	(no change)	Additional 45,400 serviced stands	(no change)	Quarterly	(no change)
2. Price of Low-Income Serviced Stand	(no change)	Average cost of habitable stand reduced by 47% in 1992 Z$s (Note: "habitable stand" includes stand, whose price is tracked by indicator, as well as wet block and slab.)	(no change)	Semi-annually or annually	Annually
3. Permits and Title Delays	(no change)	TBD based on analysis of baseline data	Reduction by 25% from 1992 levels, to 30 months average delay	Annually/ biannually	(no change)
4. Land Registration Coverage	Elimination of indicator	TBD based on analysis of baseline data	Elimination of indicator	Biannually	Elimination of indicator

Table 2.4 (cont'd.)
Recommended Changes to Preliminary Data Collection Plan:
Low-Income Shelter Fiance Module

INDICATOR		OUTPUT/TARGET		FREQUENCY OF DATA COLLECTION	
Preliminary	Recommended	Preliminary	Recommended	Preliminary	Recommended
1. Number of Low-Income Mortgages	(no change)	Approximately 43,200 low-income mortgages	(no change)	Quarterly	(no change)
2. Mortgage-to-Deposit Difference	(no change)	TBD based on analysis of baseline data	-3, an improvement of 15 percentage points	Semi-annually	(no change)
3. Credit-to-Value Ratio	(no change)	TBD based on analysis of baseline data	No target proposed	Annually	Biannually

Recommended Changes to Preliminary Data Collection Plan:
Construction and Building Materials Module

INDICATOR		OUTPUT/TARGET		FREQUENCY OF DATA COLLECTION	
Preliminary	Recommended	Preliminary	Recommended	Preliminary	Recommended
1. Construction and Infrastructure-Related Employment	(no change)	8000 construction jobs created over life of the Program	5000 construction jobs created over life of the Program	Quarterly	(no change)
2. Construction Price and Cost	(no change)	Construction costs decreased by up to 10% in 1992 prices	(no change)	Semi-annually or annually	(no change)
3. Formal Low-Income Housing Production	(no change)	Volume of low-income houses increased by 10% per annum	(no change)	Semi-annually or annually	(no change)
4. Down-Market Penetration	(no change)	TBD based on analysis of baseline data	Reductions from base year levels to average for countries of Zimbabwe's income group (1.9)	Annually	(no change)
5. Price-to-Income Ratio	(i) House superstructure price-to-income ratio (ii) Household dwelling unit price-to-income ratio	TBD based on analysis of baseline data	No target proposed	Biannually	(no change)

CHAPTER 3
FINDINGS RELATED TO SHELTER SECTOR

In interpreting results of the baseline data survey, values in Zimbabwe were compared when possible with shelter sector indicator values from other countries. Zimbabwe values were contrasted with average and median values: worldwide, for the region (sub-Saharan Africa), as well as for countries in Zimbabwe's per capita income group. Those comparative values were drawn from two sources: the World Bank/UNCHS Housing Indicators Program and the USAID Office of Environment and Urban Programs' annual surveys of housing and urban development indicators. Those two sources are discussed in Appendix C.

Baseline shelter conditions (1) are presented below and explained via (2) underlying constraints in the shelter sector, leading to (3) policy implications.

3.1 Baseline Conditions: Housing Shortage

3.1.1 Overcrowding

Various studies have concluded that a severe housing shortage exists in Zimbabwe, especially in urban areas. The PSHP *Project Paper* estimated that, in 1992, "...nearly one in four Zimbabweans [was] seeking shelter."[19] In 1993, the Ministry of Public Construction and National Housing (MPCNH) estimated the housing backlog in urban areas as 500,000.[20]

This housing shortage manifests itself in severe overcrowding. In Harare in 1990, the median floor area per person (one of the clearest indicators of overcrowding) was reported as 7.0 sqm.[21] Zimbabweans thus had to survive with less than half the worldwide average of floor area per person (18 sqm), signalling overcrowding. Individual cases underscore the hardship caused by crowded living conditions in Zimbabwe. In some high-density areas, up to 30 people may inhabit one 300 sqm stand.[22] Another researcher reported that, "A room in [a hostel in Harare] which is supposed to accommodate four persons actually had a family of ten members living in just one corner, in addition to the other three occupants."[23]

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[19] GOZ/USAID/Zimbabwe, PSHP *Project Paper*, 1992, p. 39.

[20] MPCNH, *Zimbabwe: The Facts. No. 12: Housing*, 1993, pp. 2-3.

[21] IBRD/UNCHS Housing Indicators Program information sheet, *The Ten Key Indicators — Results of the Extensive Survey. Country: Zimbabwe. City: Harare.* The "floor area per person" indicator is defined as "the median usable living space per person last year."

[22] GOZ/USAID/Zimbabwe, *PSHP Project Paper*, 1992, p. 36.

[23] Research Unit, *Extent of Overcrowding in Mbare Hostels*, 1990, p. 6.

3.1.2 Low Levels of Formal Sector Housing Production

Key to understanding the urban housing shortage are the low annual levels of formal sector housing production. In Harare in base year 1992, the formal sector[24] produced a total of only 552 houses and flats for all income groups — about 0.47 units per 1000 population (see Figure 2). Nearly all (96 percent) of that production occurred in high-density areas. That low yearly level of formal construction represents *only about one-tenth* the estimated average formal sector production worldwide of 4.8 units per 1000 population. Production in Harare is well below estimated annual averages in other low- and mid-income countries (4.54 units per 1000 pop.), as well as in sub-Saharan Africa (2.85 per 1000 pop.).[25]

In the base year, as shown in Figure 2, per capita levels of low-income housing production in Bulawayo and Bindura were generally similar to those reported in Harare. Production levels in Bindura and Mutare fluctuated in the early 1990s, rising to higher levels during years when significant progress was made in large projects funded with GOZ and/or international assistance. Officials contend that economic structural adjustment and famine acted to crimp housing production in 1992, in Harare and Bulawayo, respectively.

3.1.3 Cost of Building Shelter

To explain the low levels of production of affordable housing in Zimbabwe, one theory appears *not* to be true. Shelter construction is not necessarily prohibitively expensive. Investigation shows that affordable housing can be built, and is currently being built in urban centers (albeit in small quantities). A key measure of the affordability of new housing construction is the down-market penetration indicator. This indicator represents the ratio of the lowest price of a dwelling unit produced by private builders to the median annual household income. The lower the ratio, the more affordable are some of the new dwelling units produced.

In base year 1992 in Harare and Bulawayo, values for the down-market penetration indicator were an affordable 2.7 and 2.6, respectively (see Figure 3). Those ratios were below average values worldwide of 4.4, demonstrating that at least some affordable housing was indeed produced. Down-market penetration values were similar two years later in 1994 in Harare (3.3) and Bulawayo (2.8). This strengthens the assertion that affordable housing can be built and is being built in low volumes in urban centers in Zimbabwe.

To summarize: the formal sector produces very low levels of housing, including low-income housing. Little low-income shelter is produced, even though housing can be built at affordable prices. Those low production levels, coupled with rapid urban population growth, act to worsen the existing housing shortage.

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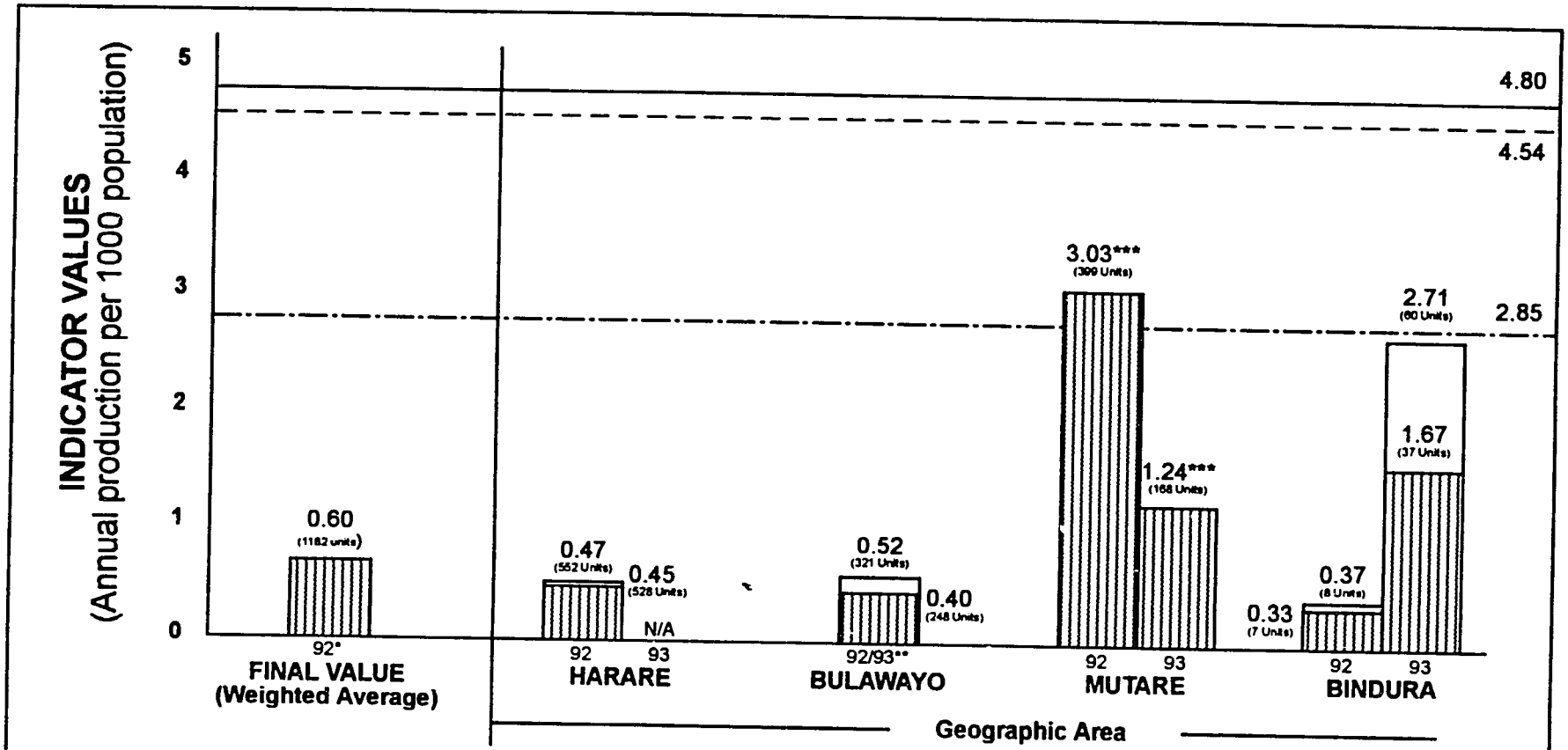
[24] Formal sector construction includes all housing built that complies with the required building, land use, and land subdivision permits.

[25] See Appendix B, worksheet for methodology for estimating those comparative values, as well as sources.

Figure 2



CONSTRUCTION AND BUILDING MATERIALS INDICATOR No. 3:
FORMAL LOW-INCOME HOUSING PRODUCTION
(per 1000 population)

* Includes 92/93 for Bulawayo.
**Housing production for calendar years 1992 and 1993 not available.
***Total housing production not available.

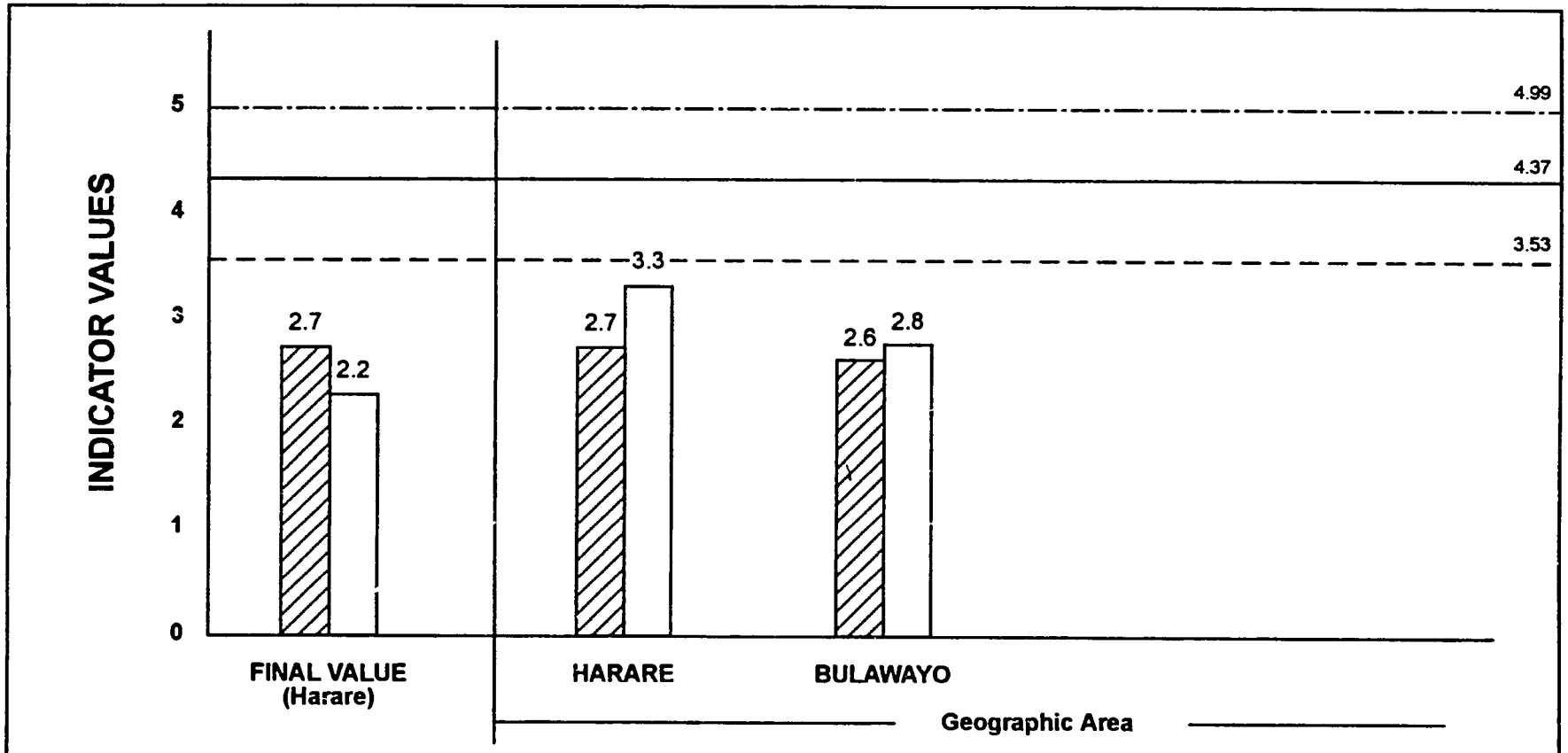
Definition:
Total gross new construction per year of single-family, semi-detached and flats completed (e.g., certificate of occupancy) and in areas defined by local authorities as high density.

——— WORLDWIDE AVG.
– – – – INCOME GROUP AVG.
—·—·— SUB-SAHARAN AVG.

Source: IBRD/UNCHS, 1993 (1991/92 data); Mayo, Stephen, 1994; and PADCO, Inc.

KEY
Total housing production (all areas)
Housing production in high density areas only (indicator value)

Figure 3



CONSTRUCTION AND BUILDING MATERIALS INDICATOR No. 4:
DOWN-MARKET PENETRATION

Definition:
Ratio of the lowest-priced (unsubsidized) formal dwelling unit produced by the private sector (not less than two percent of annual housing production) and the median annual household income.

KEY
- SUB-SAHARAN AVG.
- WORLDWIDE AVG.
- INCOME GROUP AVG.

Source: IBRD/UNCHS, 1993 (1991/92 data)

1992 1994
(Base Year)

3.2 Constraints in Shelter Market[26]

To explain why more affordable housing is not produced, three constraints in the market for shelter are examined below.

3.2.1 Distortions in Housing Finance

For the housing finance sector to be sustainable, lending institutions must be able to earn a reasonable return on their investments in mortgages. A key sign of sustainability is the mortgage-to-deposit difference indicator. This indicator measures the difference between interest rates on mortgages and the interest rate on one-year deposits in the commercial banking system. When choosing between investment options, in addition to considering the expected returns, a lending institution must weigh the risk and uncertainty associated with each alternative. Because mortgage loans in Zimbabwe normally extend for 15-20 years, they involve more risk than shorter-term investments. They should thus offer a slightly higher return than the one-year alternative. For this reason, World Bank economists conclude: "In a well-functioning housing market, the value of [the mortgage-to-deposit difference] indicator should be positive and only slightly higher than deposit rates."[27]

Baseline survey results suggest that the Zimbabwe housing finance sector is distorted and unsustainable, and is becoming increasingly so. From a value of -9.98 in FY 1991/92, the indicator plummeted to -18.17 in FY 1992/93 (see Figure 4). With such negative indicator values, unless one offers special incentives (e.g., government subsidies), lending institutions would have little reason to want to invest in housing mortgages of any type. Results suggest that the mortgage finance market is more distorted in Zimbabwe than in other countries in Zimbabwe's income group (where the median value is +7), and in sub-Saharan Africa (median value: +3).

Survey results reflect the reported goal of the GOZ "...to keep low-income mortgages ...affordable over the Economic Structural Adjustment Program period."[28] In part to keep low-income mortgages affordable, the GOZ has implemented several key policies related to housing finance. First, since 1986, the GOZ has regulated interest rate ceilings on low-income mortgages. These ceilings generally result in mortgage interest rates that are lower than the rates that would otherwise prevail under free market conditions. Second, the GOZ limits the number and types of financial institutions that can offer mortgages. Only building societies are currently authorized to issue mortgages.

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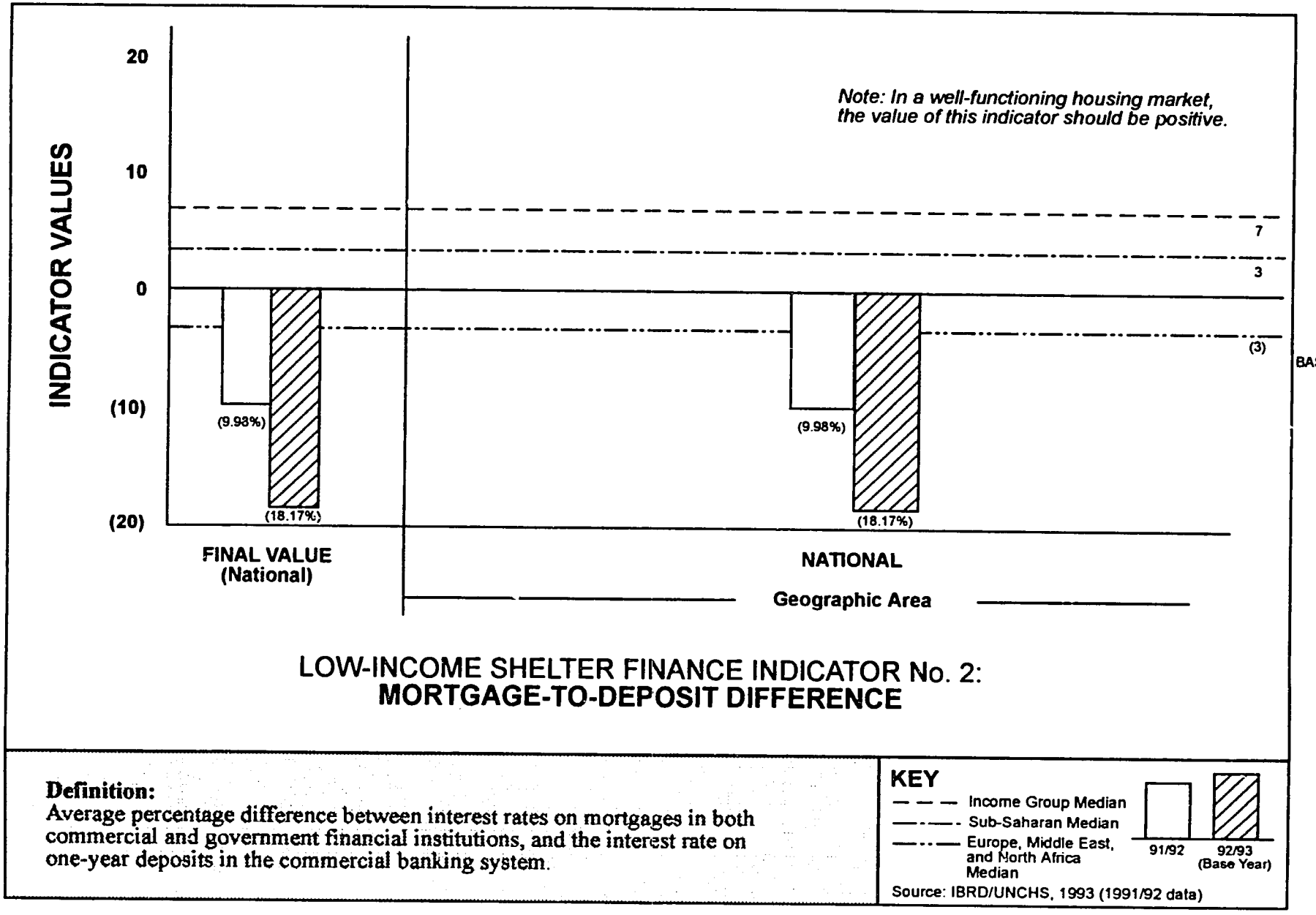
[26] This list of constraints is not intended to be exhaustive, but are rather those that became apparent from analysis of the initial set of 12 PSHP Monitoring and Evaluation System indicators.

[27] IBRD/UNCHS, *The Housing Indicators Program Volume III: Preliminary Findings*, 1992, p. 70.

[28] GOZ/USAID/Zimbabwe, *PSHP Project Paper Annex III: Zimbabwe PSHP Design: Financial Systems Analysis*, March 1992, p. 20.

Figure 4


INDICATOR VALUES
20
10
0
(10)
(20)
Note: In a well-functioning housing market, the value of this indicator should be positive.
7
3
(3)
BASELINE (=0)
(9.93%)
(18.17%)
(9.98%)
(18.17%)
FINAL VALUE (National)
NATIONAL
Geographic Area
LOW-INCOME SHELTER FINANCE INDICATOR No. 2:
MORTGAGE-TO-DEPOSIT DIFFERENCE
Definition:
Average percentage difference 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.
KEY
Income Group Median
Sub-Saharan Median
Europe, Middle East, and North Africa Median
91/92
92/93 (Base Year)
Source: IBRD/UNCHS, 1993 (1991/92 data)

A third key policy of the GOZ is their decision to offer a variety of subsidies as a way to encourage building societies to issue low-income mortgages. Building societies report that the costs of servicing low-income mortgages are considerably higher than for other mortgages. For this reason (and particularly under capped interest rate conditions), without subsidies, few, if any, low-income mortgages would be offered. A key subsidy offered by the GOZ is to allow building societies to issue tax-free, paid-up permanent shares (PUPS). A condition to the issuance of these tax-free PUPS by building societies is that 25% of the issue be devoted to low income lending.[29]

As with most policies, the GOZ's approaches to affordable housing do not exclusively yield benefits but rather involve trade-offs between benefits and costs. The Monitoring and Evaluation System baseline survey illustrates many of those benefits and costs, thus serving as a useful input into future choices between alternative policies. One benefit of current policies is that some (albeit too few) low-income mortgages are indeed offered at affordable prices. Before 1986, virtually no low-income mortgages were offered. In FY 1986/87, building societies began to offer low-income mortgages,[30] with 3147 such mortgages offered in that fiscal year (see Figure 5). The number of low-income mortgages offered subsequently climbed to a plateau of about 5,500 per year between 1988/89 and 1990/91. While these volumes are insufficient to fund more than a fraction of the 66,000 new units per year that the MPCNH has estimated are necessary to eliminate Zimbabwe's housing shortage by the year 2000,[31] some low-income families certainly do benefit from current policies.

One disadvantage of current policies, however, is that at the capped interest rate levels, the demand for low-income mortgages may far exceed supply. Figure 6 shows (in a simplified manner) how the market for mortgages functions. At the capped interest rate, demand (point "c") exceeds supply (point "b"), leading to unmet demand at that rate. Under those conditions, deciding which deserving families actually receive the low-income mortgages available may become problematic. Figure 6 also illustrates another important point: *the market is generally able to provide more mortgages under free-market conditions (point "a"*

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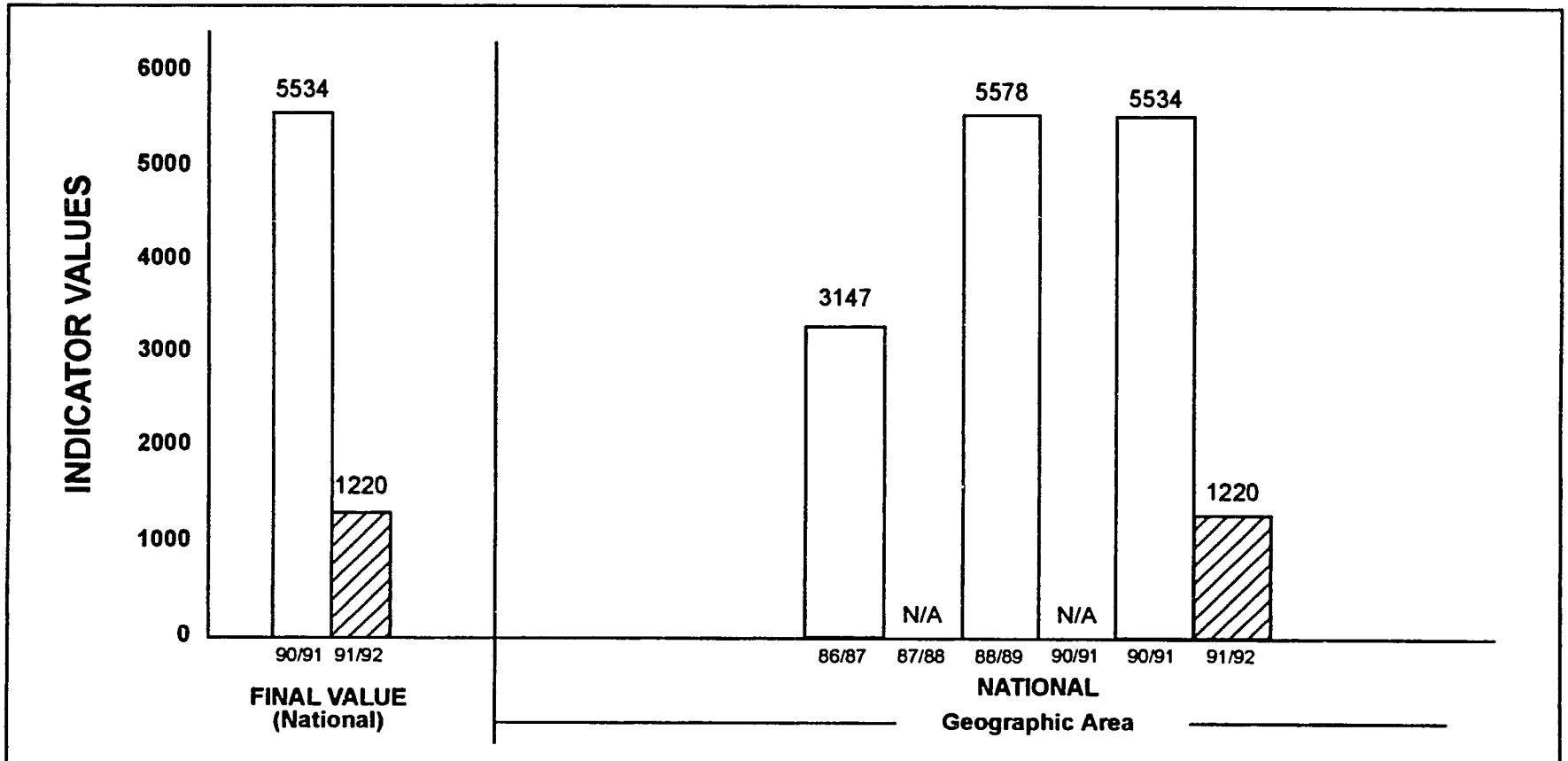
[29] Other subsidies offered in baseyear 1992 by the GOZ in the housing field included, but were not limited to: the three percent top-up interest paid to building societies on their 15.5% mortgages, the tax forbearance in lower (20 percent) withholding rates on interest by building societies, the "perks" tax forbearance on employer related loans by building societies, the below market rates of GOZ advances to the National Housing Fund, and the other than non-full cost recoveries on government sponsored housing projects. (The three percent top-up on low-income mortgage loans has been subsequently eliminated, in 1994.) Source: Bovet, Claude, *Zimbabwe Housing Finance Mobilization Study*, IMCC for USAID/Zimbabwe, 199_, p. 12.

[30] Following the introduction of the Building Society Class C shares in November 1986. For explanation, see GOZ/USAID/Zimbabwe, *PSHP Project Paper Annex III: Financial Systems Analysis*, May 1992, p. 5.

[31] MPCNH, *Zimbabwe: The Facts. No. 12: Housing*, 1993, p. 2.

Figure 5



LOW-INCOME SHELTER FINANCE INDICATOR No. 1:
LOW-INCOME MORTGAGES

Definition:
Number of mortgages that are extended over the life of the Program by financial institutions using Program-mobilized funds, to households of less-than-median income.

KEY

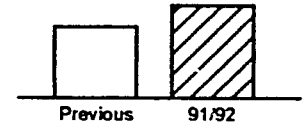
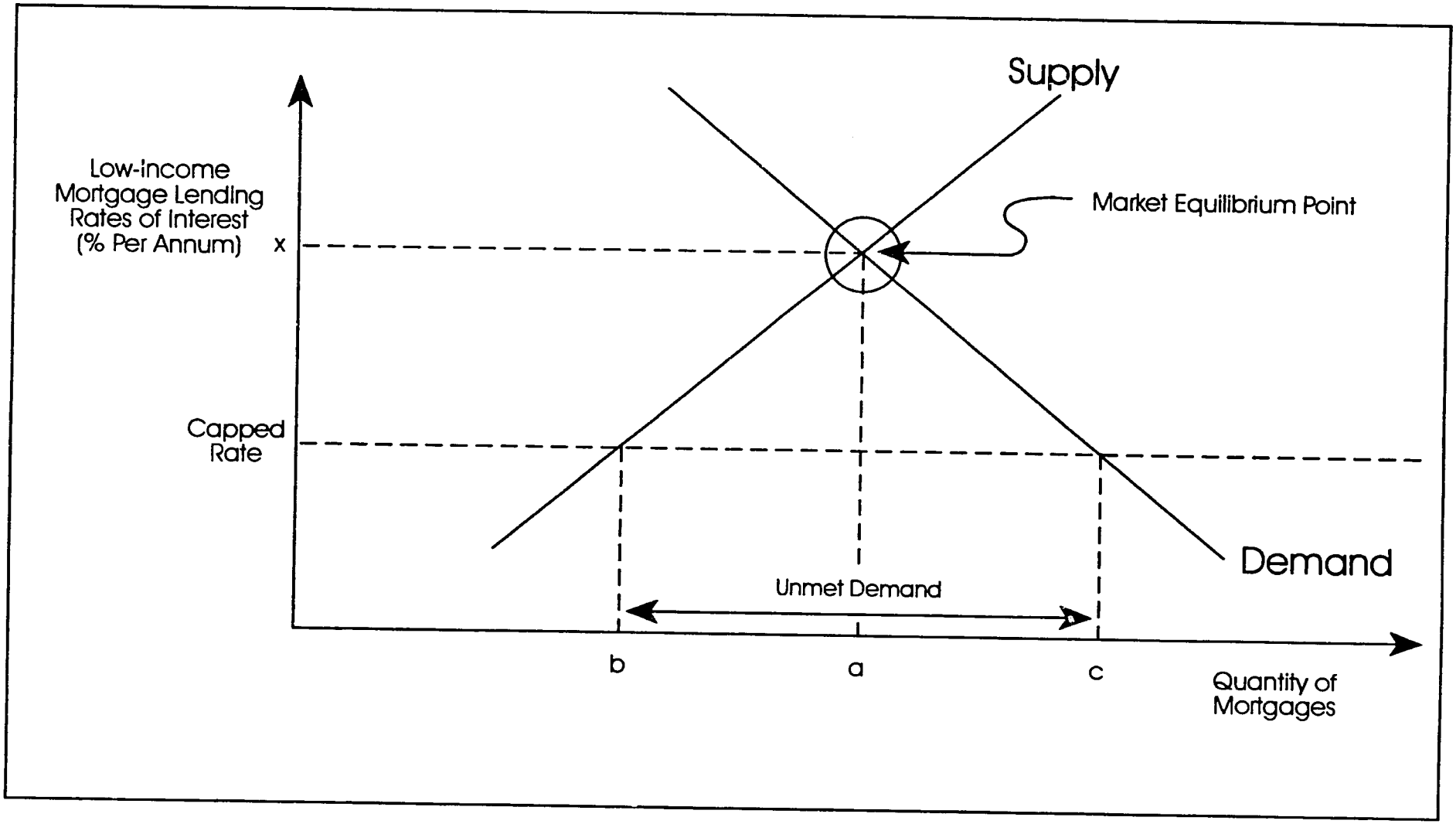


Figure 6
Market for Mortgages
(simplified; not to scale)



at the equilibrium point) than under distorted market conditions with an interest rate ceiling (point "b").[32]

Another disadvantage of Zimbabwe's subsidized system of low-income shelter finance is that mortgage investment in low-income housing may vary substantially from year to year. The reasons for this fluctuation are illustrated in Figure 7. The figure shows a simplified investment choice faced by building societies, based on return, between the effective money market rate and the PUPS deposit rate. When the PUPS rate exceeds the effective money market rate (e.g., before Year 1), building societies will issue more PUPS and offer more low-income mortgages. Otherwise (e.g., between Years 1 and 2), building society resources will flow away from PUPS and low-income mortgages, and into money market deposits. As money market rates vary over time, investment in low-income housing may rise and fall markedly. Thus, the current system is susceptible to external shocks. This disadvantage — sharp fluctuations in the number of low-income mortgages offered — is illustrated by survey results. In FY 1991/92, the number of low-income mortgages sharply declined to 1,220 in 1991/92, about one-fifth the previous year's level (see Figure 5). This abrupt decrease was due to money market deposits becoming more attractive investments than PUPS during 1991/92, similar to the period between Years 1 and 2 shown in Figure 7.

One other major factor arguably depresses the volumes of low-income mortgages provided: the segmentation of the financial sector. Home financing is left almost exclusively to building societies. Those societies cannot be expected by themselves to provide all necessary financing for housing, especially for low-income families.

A final drawback of the current policies should be noted: the cost to the GOZ of subsidizing housing finance. In base year 1992, one economist calculated the total value of all housing subsidies as exceeding Z$ 183 million per year.[33]

To summarize: while Zimbabwe's segmented housing finance system, with its subsidies and interest rate ceilings, does provide affordable loans to a lucky few recipients, it costs the GOZ in lost revenue and may also stifle investment in shelter.

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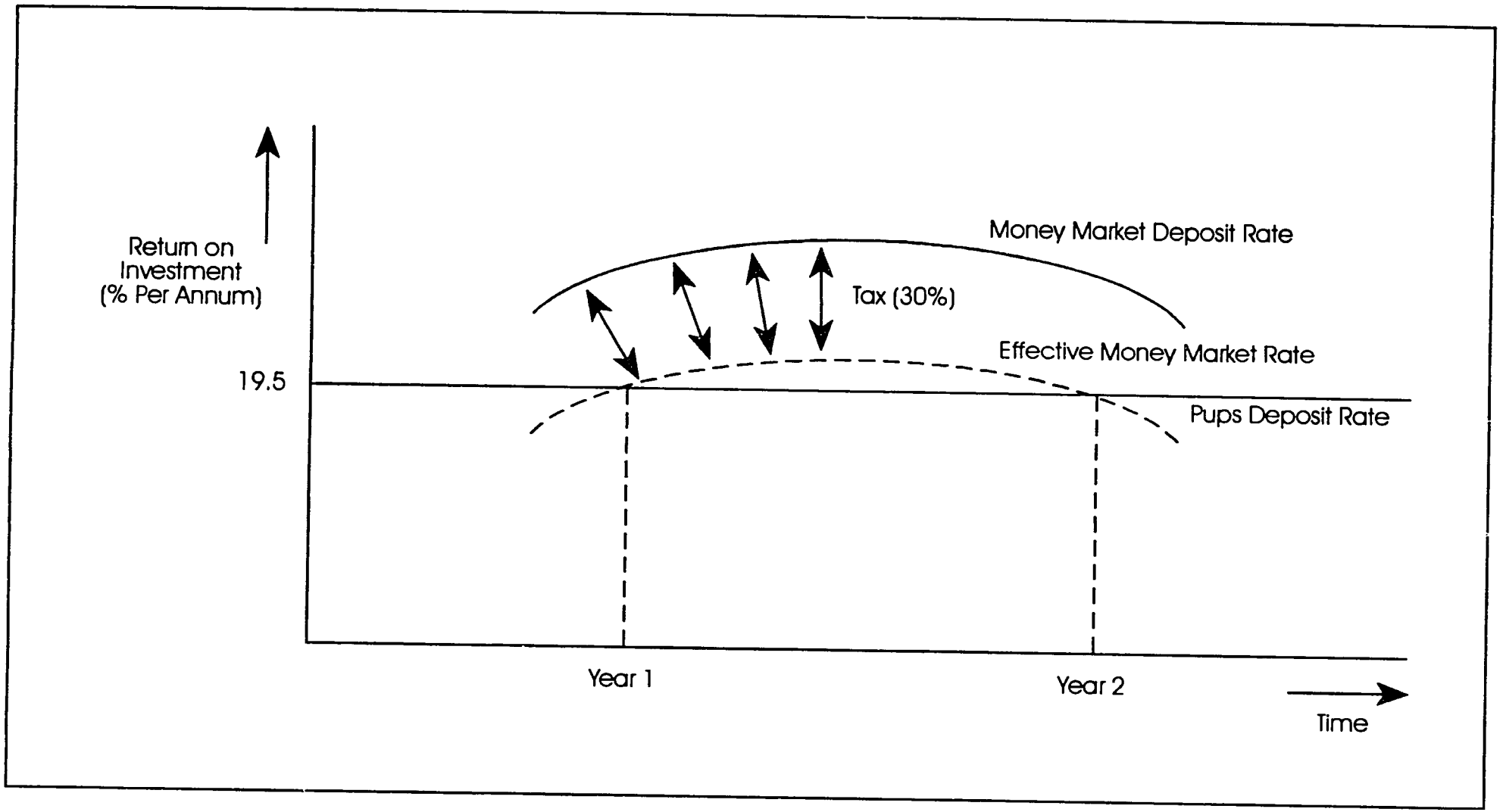
[32] Explained in more detail, Figure 6 shows how a simplified market functions. As with other markets, as the "price" (interest rate) rises, suppliers will be willing to provide greater quantities of "product" (mortgage loans), while borrower demand will simultaneously decline. In an undistorted market, the market solution will occur at the equilibrium point shown. At that point, a certain quantity ("a") of mortgages will be offered at a certain interest rate ("x"). Under the conditions shown, however, demand for mortgages will increase to point "c." Lending institutions will only be willing to provide "b" quantities of mortgages, creating the large, unmet demand shown in Figure 6. Such situations where demand artificially exceeds supply lead to inefficient allocations of resources. Thus, the market is able to provide more mortgages under free-market conditions (point "a") than under distorted market conditions (point "b").

[33] Bovet, Claude, *Zimbabwe Housing Finance Mobilization Study*, IMCC for USAID/Zimbabwe, 199_, p. 12.

Figure 7
Building Societies' Investment Decisions
(simplified; not to scale)



3.2.2 Delays in Land Development Process

Delays in the permitting and titling process in urban centers in Zimbabwe are also severe enough to constrain the production of shelter, especially of affordable housing. In the four urban centers studied, the time required to approve, permit, and title a new, medium-sized residential subdivision in 1992 averaged about three years and four months (see Figure 8). Permitting and titling time varied between three years (Bulawayo) and three years and ten months (Bindura). As the only town council among the four urban centers (the others are cities), the local authority of Bindura probably relies on less institutional capacity than the larger centers, contributing to slightly longer delays. Delays in Harare were about average, at three-and-one-half years.

Delays in the land development process in Zimbabwe are severe compared to worldwide averages. The average delay in Zimbabwe of three years and four months is *three times* the average of 13 months for countries reporting worldwide (see Figure 8). Delays in Zimbabwe are also significantly longer than averages in sub-Saharan Africa and for countries in Zimbabwe's income group.

Figure 8 breaks down the delays in Zimbabwe into four major phases of development: subdivision layout, infrastructure design and construction, cadastral surveying, and building plan preparation. (The individual steps that make up each of the four major development phases are shown in Figure 9.) This breakdown shows that, typically, nearly half of total delays (19 of 40 months) occur during one of those four phases: cadastral surveying. The Department of the Surveyor General, in its *Annual Report* for 1992, reported "severe budget constraints," at a time of "marked increase[s] in land dealings and transaction[s]." Those conditions resulted in a "shortage of staff...[and] extreme hardships due to shortage of vehicles and equipment," etc. As a result, in 1992 "the backlog in approved surveys increased."[34]

It should be noted that delays in cadastral surveying captured by the base year survey, were actually *reduced* by an outside intervention. In mid-1993, the GOZ authorized USAID to finance the short-term hire of a team of professional surveyors who, in several months, greatly reduced the backlog of projects waiting to be surveyed. Delays are typically longer for those projects that did not benefit from that one-time intervention.

Such severe delays in the permitting and titling process exert several related, negative impacts on the shelter market. Delays distort investment decisions; investors inefficiently divert resources to other sectors that offer quicker returns on investment. Delays may also discourage new builders and developers from entering the market. Those few developers who do survive in the sector have legitimate grounds for charging higher prices, to make up for delayed returns, increased risk, and projected inflation. The barrier to entry may also afford developers with some protection from new competition, giving them the opportunity to exact more profits than would be obtained under competitive market conditions (i.e., to earn

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[34] Department of the Surveyor General, *Annual Report 1992*, pp. 1-20.

Figure 8

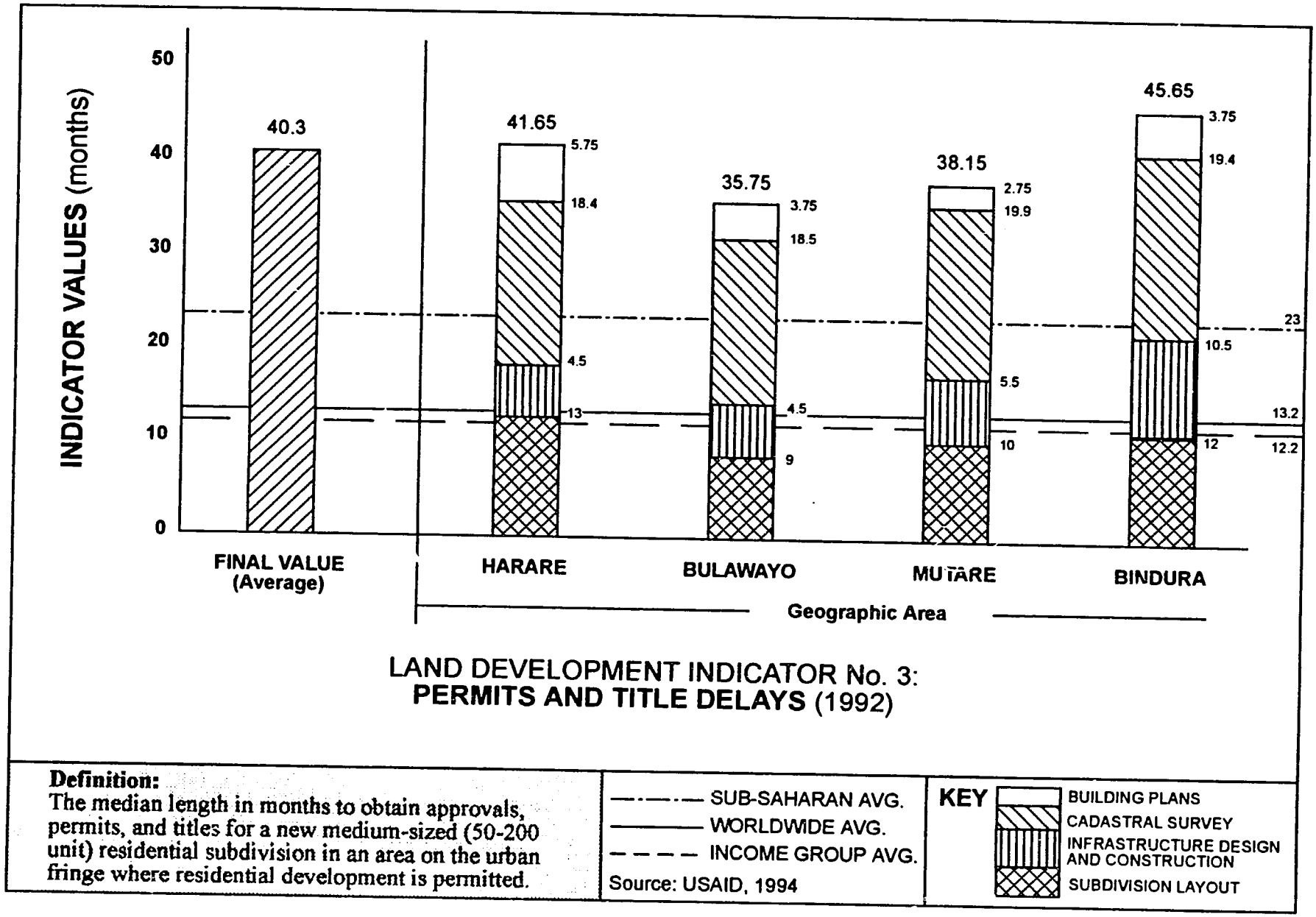
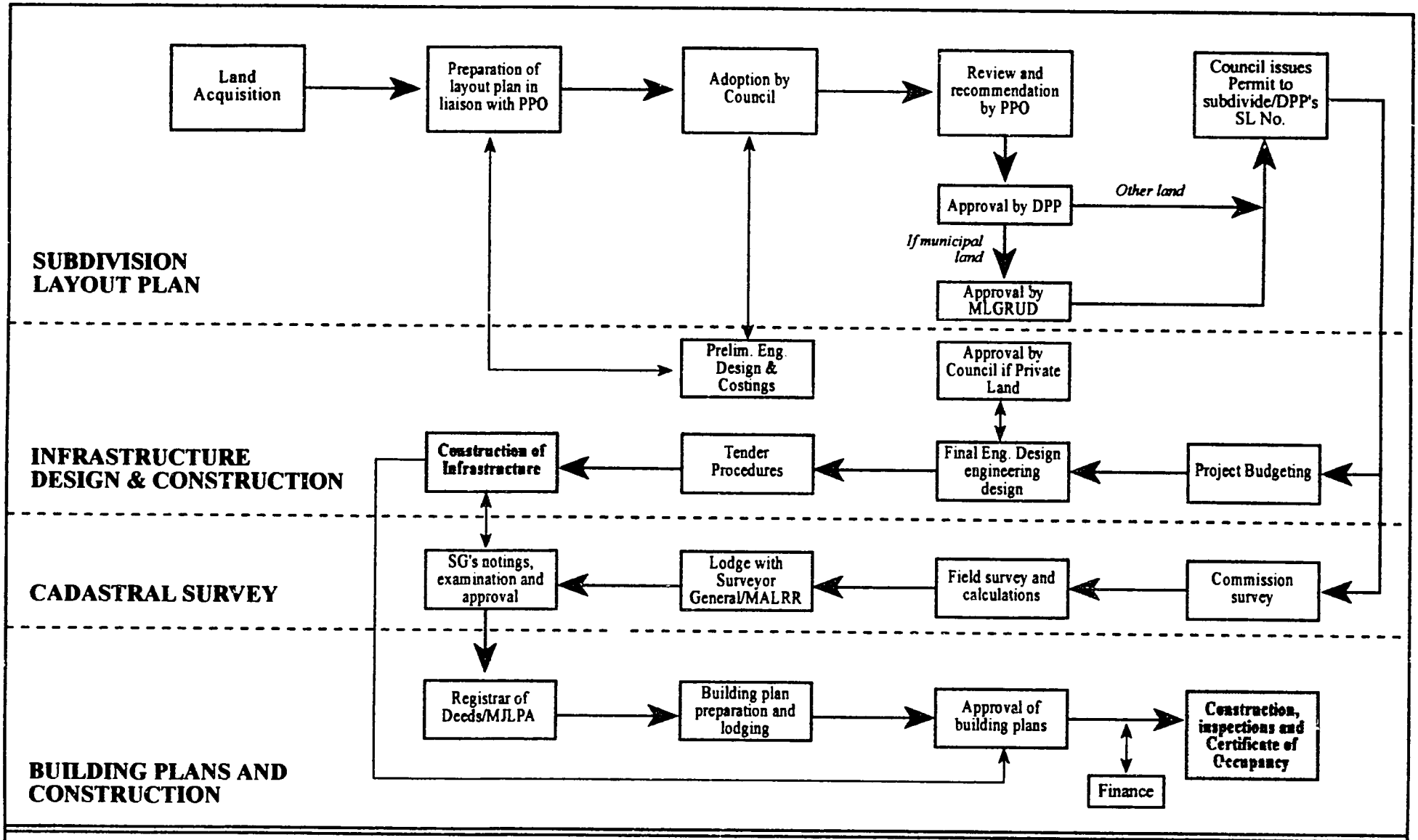

INDICATOR VALUES (months)
50
40
30
20
10
0
40.3
41.65
5.75
18.4
4.5
13
35.75
3.75
18.5
4.5
9
38.15
2.75
19.9
5.5
10
45.65
3.75
19.4
10.5
12
23
13.2
12.2
FINAL VALUE (Average)
HARARE
BULAWAYO
MUTARE
BINDURA
Geographic Area
LAND DEVELOPMENT INDICATOR No. 3:
PERMITS AND TITLE DELAYS (1992)
Definition:
The median length in months to obtain 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.
SUB-SAHARAN AVG.
WORLDWIDE AVG.
INCOME GROUP AVG.
Source: USAID, 1994
KEY
BUILDING PLANS
CADASTRAL SURVEY
INFRASTRUCTURE DESIGN AND CONSTRUCTION
SUBDIVISION LAYOUT

Figure 9
Permitting and Titling Approval Process*



NOTES:
DPP = Director of Physical Planning, MLGRUD
PPO = Provincial Planning Officer, DPP/MLGRUD
MALRR - Ministry of Agric., Lands & Rural Resettlement
MJLPA = Ministry of Justice, Legal & Parliamentary Affairs
MLGRUD = Ministry of Local Govt. Rural & Urban Development
SG = Surveyor General

Indicates desired end-points of development process

* For private or public sector residential developers within a municipal area. (Assumes land is already in ownership of the developer

oligopolistic profits). Together, those impacts result in lower formal sector production and higher prices. Finally, faced with a cumbersome development procedure, some persons will decide to bypass the process altogether and build unauthorized (informal) housing. That housing often causes negative health and environmental side effects. Summarizing such impacts, World Bank economists conclude: "Nothing influences the efficiency and responsiveness of housing supply more than the legal and regulatory framework with which housing suppliers operate."[35]

3.2.3 Builders and Buyers: Organization of Shelter Sector

Housing outcomes are also influenced by the organization of the shelter sector, i.e., the numbers and characteristics of those who supply (and to some extent demand) housing, especially low-income housing. A housing sector dominated by a small number of builders will be more susceptible to external ("exogenous") shocks, and (as noted above) more likely to experience non-competitive pricing. Such conditions may result in lower production and higher prices of housing.

The organization of the low-income housing market in Zimbabwe showed favorable signs of evolving and deepening between 1992 and 1994. In Harare in 1992, the lowest price for a four-room house was reportedly Z$ 37,883 (see Figure 10). This price included a substantial margin that included profit (estimated at 40 percent) over the unit cost of Z$ 27,059. Units were built at that price by a large-scale, non-specialized private builder, for sale to a large enterprise to be used for employee housing. During that period (1992), interviewees reported great demand for construction services in the commercial/office sectors in Harare, which acted as an external shock to the housing sector. In an undeveloped market dominated by a few non-specialized enterprises, builders could with relative ease divert their resources away from the housing sector and into other, more profitable activities. In such circumstances, the offer of a large premium was reported as necessary to attract a housing builder.

The lowest-priced units under construction in 1994 were not built by a large, non-specialized builder as in 1992, but rather by a small-scale indigenous builder who specialized in low-income housing.[36] This suggests that the supply side of the low-income housing market may be deepening, which could lead to more consistently competitive market outcomes in the future. An interview with the small-scale builder revealed that his entry into low-income shelter supply *was directly tied to a corresponding strengthening of the demand side of the market*. Instead of being built for a large employer, the units were constructed for

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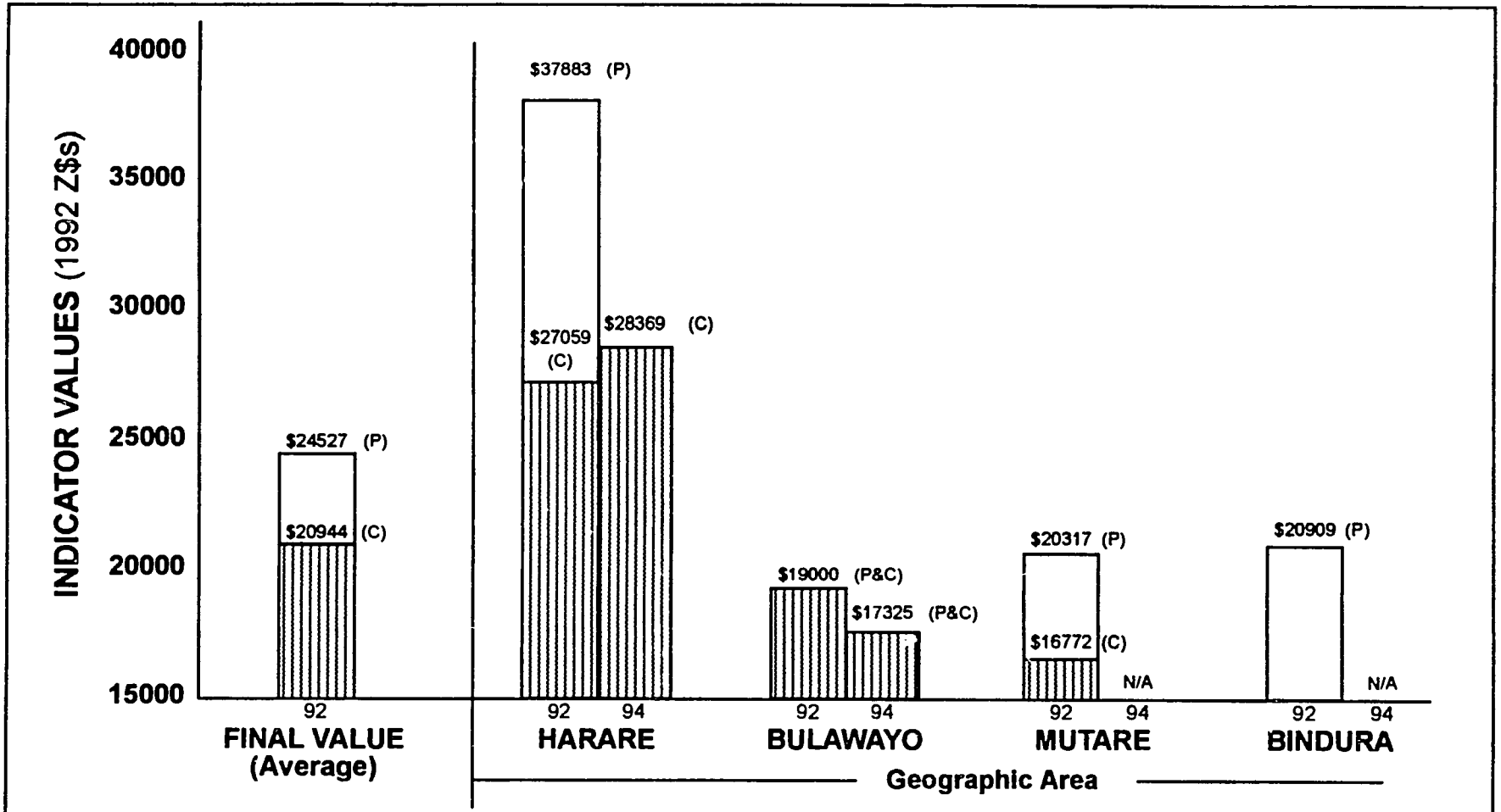
[35] Mayo, Stephen; and Angel, Shlomo, *Housing Enabling Markets to Work*, World Bank Policy Paper, 1993, p. 24.

[36] One small-scale builder interviewed reported construction prices for 1994 that were well below 1992 levels (in constant dollars). Due to time constraints, those prices and costs could not be reconfirmed, and thus are not reflected in final indicator values. Interviews, however, do suggest that the increasing presence of small builders in the shelter sector is beginning to result in more affordable housing prices.

Figure 10



CONSTRUCTION AND BUILDING MATERIALS INDICATOR No. 2:
CONSTRUCTION PRICE AND COST
(per dwelling unit; 1992 Z$)

Definition:
Present price and cost in constant Z$ (labor, materials, infrastructure within stand boundary) of a four-room finished house built to current minimum superstructure and infrastructure standards (total cost).

KEY
PRICE (P)
COST (C)

a new low-income housing cooperative. In circumstances such as in Zimbabwe, where the shelter finance sector is undeveloped, building for a housing cooperative is generally more attractive for a builder than constructing units for individual low-income clients. By building for a cooperative, the builder can achieve greater economies of scale, as well as benefit from a steadier stream of work and income than would otherwise occur. The Zimbabwe housing cooperative movement strengthened during the early 1990s, with more cooperatives reportedly applying to be registered with the Ministry of National Affairs, Employment Creation and Cooperatives.

3.3 Other Findings

Other indicators examined in the baseline survey yielded fewer implications for the shelter sector as a whole. Those indicators were the following (by indicator module).[37]

3.3.1 Land Development Indicators

Number of Low-Income Serviced Stands. While stand servicing is an important part of the land delivery system, unfortunately no comparative information was available to assess performance in Zimbabwe. World Bank economists explain the important of stand servicing: "When infrastructure is adequately provided in response to expanding demand for serviced land...lower housing prices [result]. Underinvestment in residential infrastructure...may, however, result in higher costs of serviced land, delays in housing construction, and higher housing prices."[38] An increase in the low-income serviced stands indicator is therefore desirable.

In base year 1992, a total of 5750 stands were serviced and ready for sale in the four urban centers surveyed. This represents 2.94 newly serviced stands per 1000 population. Between 1992 and 1993, stand servicing levels declined on average to only 1.77 stands per 1000 population.

Performance varied considerably between urban centers. Relatively low levels of servicing were reported in 1992 for Harare and Bindura, with 1.08 and 0.00 stands serviced per 1000 population, respectively. A high level was reported in Bulawayo, with 6.72 stands per 1000 population. Between 1992 and 1993, performance remained relatively constant in Harare, the largest center, while fluctuating sharply in Bulawayo and Mutare.

Price of Low-Income Serviced Stand. This indicator was discussed thoroughly in Chapter 2.

Land Registration Coverage. This indicator was discussed thoroughly in Chapter 2.

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[37] For graphic displays of these indicators, see Appendix D.

[38] Mayo, Stephen; and Angel, Shlomo, *Housing Enabling Markets to Work*, World Bank Policy Paper, p. 24.

3.3.2 Low-Income Shelter Finance Indicators

Credit-to-Value Ratio. The base year indicator value reported for Harare (32.5) is similar to averages reported by the World Bank/UNCHS for Zimbabwe's income group (38), and well above worldwide and regional averages of 17 and 13, respectively. When interpreted in light of other indicators, this relatively high value can be seen as largely due to vigorous discouragement of investment in unauthorized housing, rather than to a well-developed mortgage loan market.

The credit-to-value ratio for Bulawayo was a surprisingly high 130 percent, showing that the value of mortgage loans issued exceeded total investment in housing. Several factors appear to have contributed to this anomaly. Many mortgage recipients apparently used the loans to buy existing houses rather than construct new units. Some persons may have additionally used the funds to purchase housing outside the City of Bulawayo, or even (illegally) for non-shelter investments. Building in Bulawayo was reportedly stagnant during the base year because of famine conditions.

3.3.3 Construction and Building Materials Indicators

Construction and Infrastructure-Related Employment. This indicator was discussed thoroughly in Chapter 2.

Price-to-Income Ratio. This indicator was discussed thoroughly in Chapter 2.

CHAPTER 4
POLICY IMPLICATIONS:
TOWARD AN ENABLING STRATEGY FOR SHELTER[39]

4.1 Enabling the Shelter Sector

Many governments are concerned about a basic need of their citizens: the need for shelter. Faced with housing shortages, many nations have traditionally tried to directly provide shelter. Many governments have learned reluctantly that such strategies by themselves do not solve the problem. Resources are never sufficient. Despite concerted efforts, housing shortages and overcrowding often just increase when such an approach is exclusively pursued.

Confronted with that reality, many governments have begun to formulate new strategies. World Bank economists elaborate that, in the 1990s, "Governments have retreated from ambitious public housing programs that demanded heavy yet unsustainable subsidies..." Instead, some governments have begun to adopt "...an *enabling role* of managing the housing sector as a whole." Economists warn that "this fundamental shift [in strategy] is necessary if housing problems are to be addressed at a scale commensurate with their magnitude.[40]

This approach was generally embraced by the General Assembly of the United Nations when it adopted the *Global Strategy for Shelter to the Year 2000*. The U.N. *Strategy* acknowledged that, "Most Governments have by now experienced the painful realization that there are serious limitations to the quantity...of housing that they can produce directly." The solution lies primarily in adopting an enabling strategy, whereby governments establish "...legislative, institutional and financial frameworks that will enable formal and informal business sectors, non-governmental organizations and community groups to make optimal

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[39] This Chapter does not attempt to offer a comprehensive strategy, but rather suggests the need for adopting a more complete enabling strategy for the shelter sector. The Chapter selectively addresses certain themes related to baseline data collection. It does not treat such important topics as policies towards squatter settlements, supply of building materials, promotion of innovative construction techniques and materials, etc. Nor does the Chapter address the implementation or phasing aspects of a shelter strategy.

By the end of 1994, the World Bank plans to release a methodology that will permit a more systematic evaluation of a country's shelter policy environment, using a regulatory audit and "enabling indices." A more comprehensive enabling strategy could rest upon the results of such an evaluation.

[40] Mayo, Stephen; and Angel, Shlomo; *Housing Enabling Markets to Work*, World Bank Policy Paper, 1993, p. 19 and p. 1.

contributions to development."[41] Governments should work to stimulate the actions of others, in addition to directly providing shelter when appropriate.[42]

The Government of Zimbabwe has shared with other governments a concern with shelter provision for low-income families. The GOZ is acutely aware of the growing size of the housing shortfall in Zimbabwe. The Ministry of Public Construction and National Housing's current strategy to address this shortage contains both traditional and new, enabling elements. Continuing a traditional approach of direct housing provision, the Ministry plans to expand its construction and provision of dwelling units through a turnkey approach, as well as to continue direct production of building materials. Complementary to this direct approach, the MPCNH has also promoted and adopted more affordable house designs, minimum building standards, and minimum stand sizes. The GOZ has also implemented aided self-help schemes in Harare (e.g., Kuwadzana, Budiriro, etc.), that have encouraged the participation of small-scale contractors in the shelter sector. All those activities are example of an enabling approach.[43]

The GOZ/USAID Private Sector Housing Program signals a willingness by the GOZ to consider embracing a more comprehensive enabling strategy for the shelter market. USAID PSHP Project Officer Michael Enders explains that the PSHP "...concentrates on supporting the Government of Zimbabwe policy changes that should assure the establishment of an environment in which the private sector will be able to meet the nation's housing needs"[44] — an enabling approach. As suggested by the name of the Program, the PSHP seeks to enhance the private sector's role: in financing low-income mortgages, in constructing shelter, and in providing building materials. The GOZ's Inter-Ministerial Committee for the PSHP would offer decision makers an appropriate, high-level mechanism through which to formulate, approve, and implement a more comprehensive enabling strategy for the shelter sector.

It should be emphasized that an enabling strategy is not *laissez-faire*. For the GOZ to move toward a more comprehensive enabling strategy would not mean abandoning a vital role in the shelter sector. On the contrary, *enabling* the shelter sector calls for a vigorous, ongoing role of leadership by government. An enabling strategy requires "...co-ordinated action at the highest national level on a considerably broader range of issues than simple

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[41] U.N. Centre for Human Settlements (Habitat), *The Global Strategy for Shelter to the Year 2000*, 1990, p. 8.

[42] Governments define under what conditions it is appropriate for them to directly provide housing. For example, a government may decide to directly enter the housing market when the private sector is unable or unwilling to assume responsibilities, or only when the public sector is forced to compete on a level playing field with the private sector.

[43] Letter from Eng. P.M. Kodzwa, Secretary for Public Construction and National Housing; to Dr. M. Enders, USAID Regional Housing and Urban Development Officer; 25 November 1994; and MPCNH, *Zimbabwe: The Facts. No. 12: Housing*, August 1993, pp. 4-5.

[44] Enders, Michael, *USAID Programs in the Housing Sector*, USAID/Zimbabwe, p. 3 and p. 7.

public housing production." Leadership must be exerted "...to devise coherent and well-thought-out shelter strategies that will enable all the various actors to move in unison..."[45]

In moving toward a more comprehensive enabling strategy for shelter, a government would naturally want to demonstrate improvement in the shelter sector as a result of changed policies. Unless well monitored, improvements brought about by policy change can seem less demonstrable than, for example, construction of an apartment building. The PSHP Monitoring and Evaluation System, however, was designed in part to help the GOZ track and quantify improvements in the shelter sector as a whole. The baseline survey established conditions in 1992, before the GOZ adopted such enabling policies as the reduced minimum stand size. Thus, improvements captured by such indicators as formal low-income housing production, number of low-income mortgages, etc. would allow the GOZ to quantifiably demonstrate the positive gains that would accrue from adoption and vigorous implementation of further elements of an enabling strategy for shelter.

In addition to existing enabling policies, results of the PSHP Monitoring and Evaluation System baseline survey suggest that the GOZ should follow at least three additional lines of action[46] in attempts to stimulate the private sector production of shelter, as follows.

4.2 Make Housing Finance More Sustainable

As established above, the current shelter finance system provides an insufficient number of mortgages, does not create a steady stream of mortgage loans, prevents potential mortgage providers from offering housing finance, and costs the government an excessive amount of lost revenue. The underlying problem is primarily structural, and not a "lack of finance" as has been maintained in the past.

Making housing finance (especially for low-income families) more sustainable requires developing, embracing, and implementing a strategy and phased action plan. The various phases in such a plan could be embarked upon as the GOZ met certain structural adjustment and economic growth targets. Such a plan could include actions such as: opening up the housing finance sector to new providers of low-income mortgages, reapportioning subsidies so as to better target and meet the needs of deserving beneficiaries, establishing a secondary mortgage market, and eventually bringing the interest rates on mortgages more in line with interest rates on deposits in the commercial banking system. Studies commissioned by USAID, including the *Zimbabwe Housing Finance Mobilization Study* and *Financial Systems Analysis*, contain recommendations for both transitional and long-term strategies for making the shelter finance system more sustainable. Those recommendations should be reviewed in light of current conditions and incorporated into a comprehensive strategy and action plan.

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[45] U.N. Centre for Human Settlements (Habitat), *The Global Strategy for Shelter to the Year 2000*, p. 8.

[46] As noted above, does not constitute a comprehensive plan of action.

4.3 Streamline the Land Development Process

As established above, the permitting and titling process takes on average about three times as long in Zimbabwe as in other countries. Those excessive delays may act to reduce the production of low-income housing and increase its price.

While a backlog of projects in the overtaxed Surveyor General's Office accounts for a substantial amount of the delay, it would be a mistake to simply call for more government resources to be channeled toward that Office. While such measures may indeed turn out to be appropriate, the land development process as a whole first merits a thorough examination. To date, such an analysis has not occurred.[47] A quick visual comparison of the permitting and titling process in Zimbabwe (see Figure 9) with the land subdivision process in Thailand (see Figure 11) suggests that the Zimbabwe system could in fact be streamlined. Compared to lengthy delays in Zimbabwe described above, the World Bank reports, "...in Bangkok [Thailand] the entire process of seeking approval for subdivision, building, and land titling takes approximately 100 days."[48]

A comprehensive analysis could suggest ways to streamline the land development process. Officials could eliminate certain steps, establish distinct process flows for different types of projects, and/or coordinate offices so that parallel actions could proceed simultaneously. Under government supervision, some tasks could possibly be contracted out to private sector and non-governmental agencies. Under certain circumstances, developers might be willing to pay higher fees in return for a more accelerated process. More rapid procedures found elsewhere in southern Africa could offer appropriate models for speeding up the development process in Zimbabwe.

Streamlining the permitting and titling process, economists believe, leads to better outcomes in the shelter market. This conclusion is supported by cross-country comparisons. Continuing with the example of Thailand, World Bank officials state, "Estimates of housing supply parameters in Thailand, where regulation is simple and efficient, suggest that supply is more than 30 times as responsive to shifts in demand, as is the case in either the Republic of Korea or Malaysia, where regulation is complicated and cumbersome."[49]

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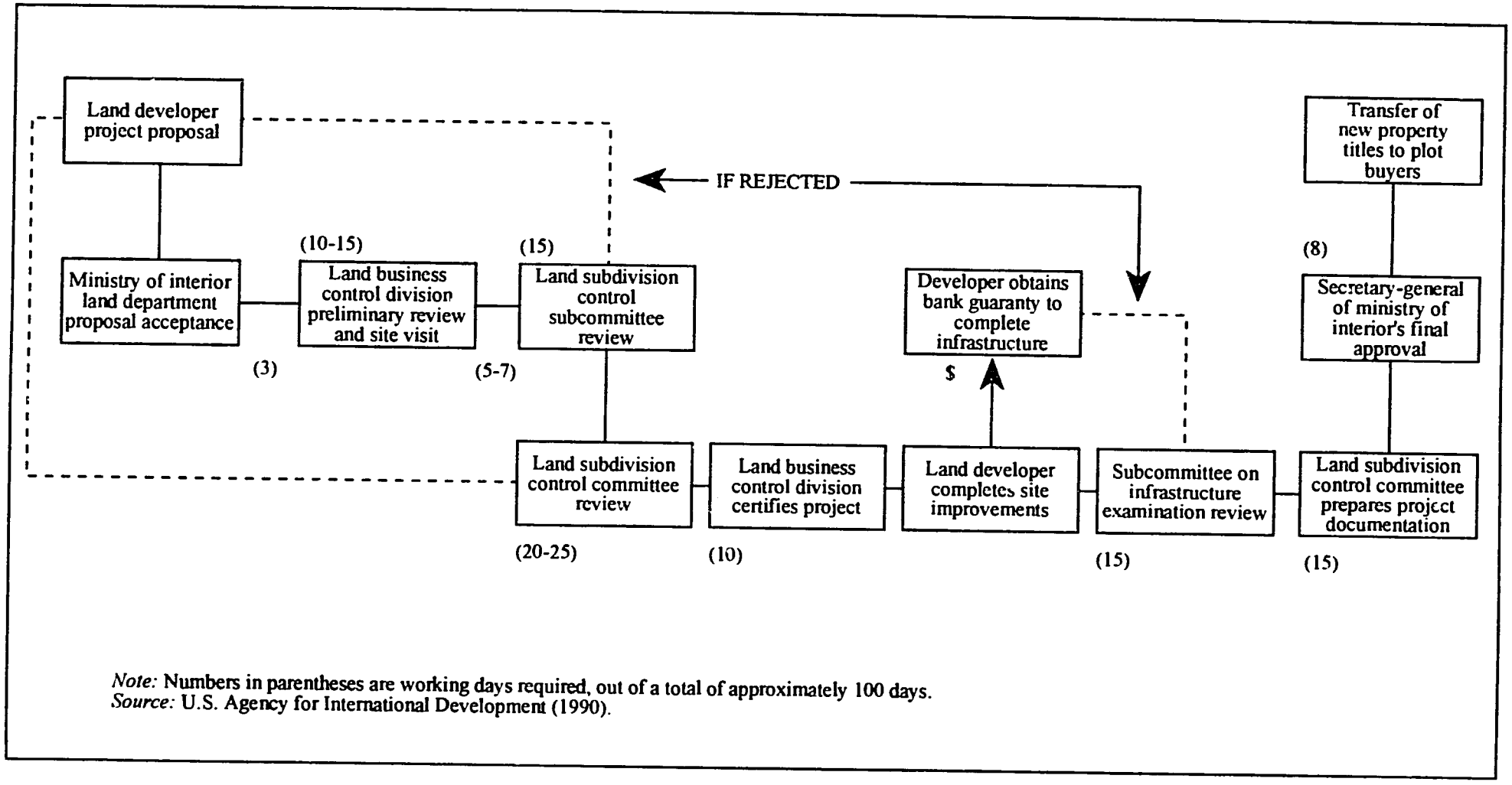
[47] Such an analysis is outside the scope of this study. A partial analysis with recommendations is provided in *Constraints on the Development and Successful Operation of Housing Cooperatives in Zimbabwe*, prepared by Abt Associates, Inc. for USAID/Zimbabwe, May 1994. Additionally, the PSHP will "finance a management study of the Department of the Surveyor-General and the Registrar of Deeds..." (*vide* Enders, Michael, *USAID Programs in the Housing Sector*, USAID/Zimbabwe, p. 5).

[48] Mayo, Stephen; and Angel, Shlomo, *Housing Enabling Markets to Work*, the World Bank, 1993, p. 85.

[49] *Ibid*, p. 24.

Figure 11
The Land Subdivision Process in Thailand



Note: Numbers in parentheses are working days required, out of a total of approximately 100 days.
Source: U.S. Agency for International Development (1990).

4.4 Improve Market Competitiveness

As discussed above, small-scale builders increase competition in the shelter sector, which in turn exerts downward pressure on prices. Under current circumstances, housing cooperatives appear to encourage the entry of small-scale builders into the sector. For those reasons, an enabling strategy should support the development of the housing cooperative movement and the entry of small-scale builders into the sector.

A recent study commissioned by USAID/Zimbabwe, *Constraints on the Development and Successful Operation of Housing Cooperatives in Zimbabwe*,[50] offers a detailed analysis of the policy, legal, and regulatory constraints that housing cooperatives currently confront, with proposed solutions. Such recommendations should be considered as part of an enabling strategy for the shelter sector. PSHP-funded efforts to strengthen administration of cooperatives and small contractors should also be continued.

Implementation of the PSHP offers further opportunities to increase the market share of small-scale builders and strengthen the housing cooperative movement. To participate in the PSHP, local authorities could be required to show evidence of a policy environment that supports housing cooperatives, such as by responding to the land allocation requests of cooperatives whose housing plans have been underwritten.[51] Participation of small-scale builders in the PSHP could likewise be encouraged and tracked via the PSHP Monitoring and Evaluation System.[52]

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[50] Prepared for USAID/Zimbabwe by Abt Associates, Inc., May 1994.

[51] For this and other local policies that would favor housing cooperatives, see "Alternative Solutions to the Land Allocation Problem," in *Constraints on the Development and Successful Operation of Housing Cooperatives in Zimbabwe*, Abt Associates, Inc. for USAID/Zimbabwe, May 1994, pp. 17-22.

[52] See *Zimbabwe PSHP Monitoring & Evaluation System Preliminary Data Collection Plan*, Final Draft, September 1994, pp. 34-5.

APPENDICES

APPENDIX A
INDICATOR DEFINITIONS

LAND DEVELOPMENT INDICATORS

1. NUMBER OF LOW-INCOME SERVICED STANDS

   Number of stands that are serviced and sold or ready for sale to households of less-than-median income per year.

2. PRICE OF LOW-INCOME SERVICED STAND

   Price of an unsubsidized serviced stand that meets current minimum standards where the primary/bulk infrastructure is in close proximity to the site and where the terrain of the site is not extraordinarily constrained.

3. PERMITS AND TITLE DELAYS

   The median length in months to obtain 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.

4. LAND REGISTRATION COVERAGE

   The percentage of an urban area covered by a land registration system that allows for buying, selling, long-term leasing, and mortgaging of land.

LOW-INCOME SHELTER FINANCING INDICATORS

1. NUMBER OF LOW-INCOME MORTGAGES

   Number of mortgages that are extended per year by financial institutions to households of less-than-medium income.

2. MORTGAGE-TO-DEPOSIT DIFFERENCE

   Average percentage difference 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.

3. CREDIT-TO-VALUE RATIO

Ratio of mortgage loans for housing to total investment in housing (in both the formal and informal sectors).

CONSTRUCTION AND BUILDING MATERIALS INDICATORS

1. CONSTRUCTION AND INFRASTRUCTURE-RELATED EMPLOYMENT

Number of person-years of employment generated annually by formal sector, low-income superstructure construction and infrastructure provision, and their multiplier effect on allied services and industries.

2. CONSTRUCTION PRICE AND COST

The present price and cost in constant Z$ (labor, materials, infrastructure within stand boundary) of a four-room finished house built to current minimum superstructure and infrastructure standards.

3. FORMAL LOW-INCOME HOUSING PRODUCTION

Total number of new single-family, semi-detacheds and flats approved per year by local authorities (e.g., certificate of occupancy) and in areas defined as high density.

4. DOWN-MARKET PENETRATION

Ratio of the lowest-priced (unsubsidized) formal dwelling unit produced by the private sector (not less than two percent of annual housing production) and the median annual household income.

5. PRICE-TO-INCOME RATIO

5.1 HOUSE SUPERSTRUCTURE PRICE-TO-INCOME RATIO

Ratio of the median price of a house superstructure and the median annual household income.

5.2 HOUSEHOLD DWELLING UNIT PRICE-TO-INCOME RATIO

Ratio of the median price of a household dwelling unit and the median annual household income.

APPENDIX B
INDICATOR WORKSHEETS

Land Development Module

Low-Income Shelter Finance Module

Construction and Building Materials Module

1 INDICATOR : Low-Income Serviced Stands

1.1 Base Year

1.1.1 1992

1.1.2 Most recent year thereafter (1993)

1.2 Geographical Coverage in Base Year

1.2.1 Harare, Bulawayo, Mutare, Bindura

1.3 Sources

1.3.1 Local Authorities, Director of Works (Special Projects), City Engineers

1.3.2 Private developers

1.3.3 "Census 1992, Zimbabwe Preliminary Report"

1.4 Results

1.4.1 Harare

PROJECT AREA	NO. STANDS	YEAR
Budiriro 4	1 273	1992
Budiriro 3	1 090	1993

1.4.1.1 Total population in Harare in 1992 was 1,184,169 and the housing waiting list stood at 72,000 units. Therefore, the number of stands serviced in 1992 represented a low 1.08 stands per 1000 people or only 1.8% of the housing waiting list.

1.4.1.2 Population in Harare in 1993 was estimated 1,221,733 (1992 population x 1.0313); therefore, 0.89 stands per 1000 people.

1.4.2 Bulawayo

PROJECT AREA	NO. STANDS	YEAR
Nketa 9	2506	1991/92
Nkulumane 12 (Phase 2)	386	1992
Nkulumane 12 (Bldg. Brig)	1005	1992
Nkulumane 12 (Contractor)	278	1992
Subtotal 1992	4175	
Emganini 1	300	1992/93
Emganini (USAID + Bldg Brig)	791	1993
Emganini 1 (CABS/ZNA)	414	1993
Emganini 1 (Hsg Coops)	25	1993
Subtotal 1993	1530	

1.4.2.1 Total population in Bulawayo in 1992 was 620,936 and the housing waiting list stood at 35,000 units. The number of newly serviced stands in 1992, although three times that in Harare, still only represented 6.7 stands per 1000 people or only 11.9% of the housing waiting list.

1.4.2.2 Population in Bulawayo was 640,371 in 1993 (1992 pop. x 1.0313), yielding 2.39 stands per 1000 pop.

1.4.3 Mutare

PROJECT AREA	NO. STANDS	YEAR
Portion of Nyamahuru Phase 1	302	1992
Chikanga Phase 2	950[1]	1993

1.4.3.1 This represents a delivery of 2.29 stands per 1000 people in 1992 and 6.99 stands per 1000 people in 1993.

1.4.4 Bindura

PROJECT AREA	NO. STANDS	YEAR
--	0	1992
Aerodrome (prelim. work begun)	0	1993

1.4.4.1 The last servicing of stands in Bindura was undertaken in 1989.

1.5 Comments

1.5.1 The definition calls for stands serviced and allocated (i.e., available for transfer) to families of **less-than-median** income during life of Program. In May 1992, USAID/Zimbabwe assessed the median income as Z$ 800 per month and Z$ 1,004 per month in 1994. The information provided by the local authorities is with respect to stands serviced and allocated in **high density suburbs**, i.e., not all allocations may have been to less-than-median income families. There is no way to collect this refinement in the data for the baseline year, but the financial monitoring system of the HG Program will track this indicator more precisely in future years.

[1] Chikanga Phase 2 comprises a total 2 700 stands of which 950 had been serviced and allocated by late 1993.

2 INDICATOR: Price of Low-Income Serviced Stand

2.1 Base Year

2.1.1 Mid-1992

2.1.2 Most recent year thereafter (in 1992 Z$ prices)

2.2 Coverage in Base Year

2.2.1 Harare, Bulawayo, Mutare, Bindura

2.2.2 Average selling price per typical stand size and an estimated average price per square meter.

2.3 Sources

2.3.1 Actual project costs used by local authorities to calculate selling prices (City/Town Treasurers or Valuation Officers).

2.4 Results

2.4.1 Harare

Project area =	Budiriro 4 (1992) and	Budiriro 5 (1993)
No. of stands =	1280	3650
Residential stand size ≈	300m²	300m²

Component	1992	1993
Land[2]	$2 50/m^2	$3 00/m^2
Contract price[3]	$10,909,373	$23,043,902
Finance charges[4]	10-20%	10-20%
Professional fees[5]		
TOTAL	$23.79/m^2	$22.46m^2

I.e., in **1992 prices**, the selling price/servicing cost of a 300m^2 stand in Harare was Z$ 7137 in 1992 and Z$ 6738 in 1993.

2.4.2 Bulawayo

Project area = Nkulumane 12 Joint Venture—Phase 2
No. of stands = 386 stands
Typical residential stand size = 300m^2 (average 345m^2)

[2] Cost of the unimproved land is based on recovering the original purchase price and tends to fluctuate. The Budiriro area was purchased in the mid-1980s.

[3] Incorporating survey costs, off-site, and on-site infrastructure (roads and stormwater drainage, water supply, and sewerage).

[4] Either the costs at which money is borrowed in the open market — 10-20% p.a. or the opportunity cost of tieing that money up in infrastructural development.

[5] For senior management costs, e.g., City Valuer, City Treasurer, City Engineers and Planners, etc. Private developers can charge up to 15% for this; the City's charge is discretionary but tends to be around 5%.

Component	1992 Total	Per 300m² Stand
Land	33,465	75
Administration costs[6]	56,234	127
Local roads, swd	853,608	1924
On-site water & sewerage	384,874	868
Off-site infra	0 charged to project	
Interest[7]	230,187	519
Other		
TOTAL	1,558,368	3513

I.e., in 1992 figures, the servicing costs were Z$ 6.44/m² or Z$ 3513 per 300m² stand.

2.4.3 Mutare

Project area = Chikanga	Phase 1 and	Phase 2
No. of stands =	1,489	2,700
Typical residential stand size = 300m²		300m²

[6] Town planning fees, contract supervision, cadastral survey, etc. charged at 10% of contract price.

[7] GOZ interest rates at time of project were 10.5% p.a. prior to 1/7/92 and increased to 11.0% p.a. from 1/7/92.

Component	1987	1993
Land[8]	2,030,045	3,618,200
Town plg.[9]	52,115	94,500
Cadas. al survey	158,000	174,000
Eng. design	453,000	600,000
Local roads, swd	553,598	3,060,767
On-site sewerage	293,469	1,643,100
On-site water	241,477	1,249,701
Off-site infra.	1,864,000	0
Street lighting	1,602,000	1,935,000
Other:		
- Contingencies	65,868	574,434
- Basic cost increases	185,889	4,287,129
- Extra-ord. financial	0	3,218,188
- Preliminary and general	259,679	867,681
TOTAL SELLING PRICE EXCLUDING LAND AND TOWN PLANNING	5,677,000	17,610,000

I.e., Z$ 10,452 per 300m² stand (1992) prices in Chikanga 1, excluding land and town planning fees or Z$ 34.84 per sq. meter Z$ (1992) #5174 per 300m² stand in Chikanga.

2.4.4 Bindura

No stands were serviced in 1992 or 1993. The following are preliminary design costs for the aerodrome area where work is expected to commence in late 1994.

Project area = Aerodrome
No. of stands = 734
Typical residential stand size =

[8] Z$ 0 charged, estimated value at Z$ 2.50 per sq. meter in 1992 prices.

[9] No charge made in reality; assume Z$ 35 per stand.

Component	1994/95 (Est.)
ILV and survey	350,000
Town plg.	0
Eng. design	
On-site services	4,500,000
Subtotal	4,850,000
Off-site infrastructure	2,513,000
Subtotal	7,363,000
Administration charges (10%)	736,300
TOTAL	8,099,300

2.5 Comments

2.5.1 Need to pre-select projects

2.5.2 If no charge in project (e.g., land), put $0 initially and then estimate real cost later.

3 INDICATOR : Permits and Title Delays

3.1 Base Year

3.1.1 Mid-year 1992

3.1.2 Time permitting, 1994

3.2 Coverage in Base Year

3.2.1 Harare, Bulawayo, Mutare, Bindura

3.2.2 Try to get data on two projects — possibly the same as were subsequently sold (Indicator 2)? One private and one public sector developer.

3.3 Sources

3.3.1 Planning — City Planners, PPO, DPP, MLGRUD (S160)

3.3.2 Infrastructure — City Engineers, Consulting Engineers

3.3.3 Cadastral Survey — private surveyors, SGs, Registrar of Deeds

3.3.4 Building plans — Building inspectorate, architects

3.4 Results

3.4.1 Write in months on the boxes on Figure 1

3.4.2 Sum the boxes

3.5 Comments

3.5.1 Keep Land Acquisition as a separate question. Identify if it was an issue at the time of the specific project being tracked. If so, who dealt with it? What was the length of time?

3.5.2 It is not practically possible to track the projects identified in Indicator 1 all the way through, given the long approval times involved. Also the results of tracking only one project is not a sound sample as it may have peculiarities that other projects may not experience. Therefore, for approvals that are lodged on a regular basis (e.g., cadastral surveys, subdivision permits) about 8-10 different projects were examined and the average length of time calculated.

3.5.3 The Surveyor General's office uses a waiting list for approvals — first lodged, first approved. Therefore, all approvals within the Eastern half of the country and all within the western half of the country (irrespective of the actual town or city) will have the same average approval time.

4 INDICATOR : Land Registration Coverage

4.1 Base Year

4.1.1 Mid-1992

4.1.2 Last quarter 1994, if possible

4.2 Coverage in Base Year

4.2.1 Harare, Bulawayo, Mutare, Bindura

4.3 Sources

4.3.1 Planners to get municipal boundary and % CBO, industrial, low-density residential, etc.

4.3.2 DHCS to get numbers of high-density residential not yet transferred.

4.4 Results

4.4.1 Harare

a) Total municipal area = 630 sq. km

b) Land covered by registration = 491.4 sq. km

c) b/a * 100 = 78%

4.4.2 Bulawayo

a) Total municipal area = 457.9 sq. km

b) Land covered by registration = 269.73 sq. km

c) b/a * 100 = 60.5%

4.4.3 Mutare

a) Total municipal area = 16,700ha

b) Land covered by registration = 3691ha

c) b/a * 100 = 22.1%

4.4.4 Bindura

a) Total municipal area = 2875ha

b) Land covered by registration = 1075ha

c) b/a * 100 = 37.39%

4.5 Comments

4.5.1 Question the usefulness of this indicator particularly given the gross margin of error in calculating the baseline figure.

LOW-INCOME SHELTER FINANCE MODULE

1 INDICATOR : Low-Income Mortgages (Output)

1.1 Definition: The number of mortgages that are extended over the life of the Program by financial institutions using Program-mobilized funds, to households of less-than-median income.

1.2 Base Year

1.2.1 1991/92

1.2.2 Most recent year thereafter

1.3 Coverage: National

1.4 Intermediate Values: None

1.5 Method of Calculation and Results

New Mortgages by Building Societies

YEAR	1990/1991	1991/1992
Building Society 1	2725	638
Building Society 2	1656	246
Building Society 3	1244	336
Building Society 4	-	-
TOTAL	5534	1220

1.6 Sources

CABS — Mr. Maruta, Company Secretary, CABS, Northridge Park, Borrowdale, Harare. Telephone 883823.

FOUNDERS — Mr. Philips, Assistant General Manager (Mortgages), Founders, Founders House, George Silundika Avenue, First Street, Harare. Telephone 732480/9.

BEVERLEY	Mr. Ruturi, Senior Manager (Mortgages), Beverley Place, 7 Selous Avenue, Harare. Telephone 705001.
Z B S	Mr. Nhema, General Manager, Fidelity House, Corner Baker Avenue/Julius Nyerere Way, Harare. Telephone 730167.

Comments

The building societies do not distinguish their mortgages according to the less than medium income. They distinguish high-density loans from low-density loans. Among high-density loans, they may distinguish according to whether the loan is less than $35,000 or more. Since this statistic is not calculated regularly by the building societies, there is a need to give them adequate time to calculate it. Also note that the Zimbabwe Building Society was not operating during the base year.

2 INDICATOR : Mortgage-to-Deposit Difference

2.1 Definition: Average percentage difference between interest rates on mortgages in both commercial and governmental financial institutions, and the interest rate on one-year deposits in the commercial banking sector.

30 JUNE 1992

LENDER	TOTAL MORTGAGES	NON-RESIDENTIAL	RESIDENTIAL	SOURCES
Building Society 1	1,083,366	276,852	806,514	BS4 forms from Registrar of Bank. Subtract non-residential mortgages from total mortgages.
Building Society 2	326,407	36,645	289,762	
Building Society 3	607,882	124,495	483,423	
NATIONAL HOUSING FUND	383,334	N/A	383,334	
TOTAL			1,963,033	

30 JUNE 1993

LENDER	TOTAL MORTGAGES	NON-RESIDENTIAL	RESIDENTIAL	SOURCES
Building Society 1	1,158,767	318,252	840,515	BS4 forms from Registrar of Bank. Subtract non-residential mortgages from total mortgages.
Building Society 2	331,160	54,235	276,925	
Building Society 3	645,793	124,713	521,081	
NATIONAL HOUSING FUND	436,334	N/A	436,334	
TOTAL			2,074,855	

MORTGAGE RATES

	JULY 1993	30 JULY 1992	AVG	SOURCE
BUILDING SOCIETIES	15.5% - 22.25%	15% - 17%	17.44%	BUILDING SOCIETIES
N H F	11%	11%	11%	N H F (MR. VUSHE)
a) 12 MONTH NCD RATE	34% - 38%	30% - 35%	34.25%	RBZ QUARTERLY REPORT
b) WEIGHTED MORTGAGE RATE =	436,334(11%)+ 1,638,521(17.4%) / 2,074,855 2,074,855		16.08%	

MORTGAGE RATES

	JUNE 1991	30 JUNE 1992	AVG	SOURCE
BUILDING SOCIETIES	13% - 14%	15% - 17%	15%	BUILDING SOCIETIES
N H F	10.5%	10.5%	10.5%	N H F (MR. VUSHE)
a) 12 MONTH NCD RATE	13% - 16%	30% - 35%	24%	RBZ QUARTERLY REPORT
b) WEIGHTED MORTGAGE RATE =	3,883,334(45%)+ 1,579,690(15%) / 1,963,033 1,963,033	14.02%	14.02%	

CALCULATION:

BASE YEAR: Mortgage-to-Deposit Difference = b - a
= 14.02% - 24%
= (9.98%)

MOST RECENT YEAR: = b - a
= 16.08% - 34.25%
= (18.17%)

COMMENTS

— Financial system is unsustainable given the negative rate.

— Need to remove controls on mortgage rates and deposit rates in the long-term.

3 INDICATOR : Credit-to-Value Ratio

3.1 Definition: Ratio of mortgage loans for housing to total investment in housing.

3.2 Base Year: 1992/1993

3.3 Coverage: Harare, Bulawayo

3.4 Calculations

Intermediate Values

3.4.1 **TOTAL MORTGAGE LOANS FOR HOUSING**

	HARARE	BULAWAYO
Building Society 1	$55.5m	$8.9m
Building Society 2	$30m	$4.3m
Building Society 3	$20.3m	$4.3M
Building Society 4	-	-
TOTAL	$105.8m	$17.5m

Sources

CABS Mr. Maruta, Company Secretary, CABS, Northridge Park, Borrowdale, Harare. Telephone 883823.

FOUNDERS Mr. Philips, Assistant General Manager (Mortgages), Founders, Founders House, George Silundika Avenue, First Street, Harare. Telephone 732480/9.

BEVERLEY Mr. Ruturi, Senior Manager (Mortgages), Beverley Place, 7 Selous Avenue, Harare. Telephone 705001.

Z B S Mr. Nhema, General Manager, Fidelity House, Corner Baker Avenue/Julius Nyerere Way, Harare. Telephone 730167.

3.4.2 Housing Investment

3.4.2.1 HARARE

	Price Range (A)	No. of Housing Units (B)	Middle Price (C)	Investment in Housing (B) x (C)
Squatter/Informal	$2000 - $5000	1000	$3000	3,000,000
Westwood	$120,000 - $150,000	16	$140,000	2,240,000
Kambuzuma	$100,000 - $140,000	24	$120,000	2,880,000
Marimba Park	$130,000 - $150,000	236	$140,000	33,040,000
Mabvuku	$30,000 - $40,000	36	$35,000	1,260,000
Hatcliffe	$40,000 - $70,000	216	$55,000	11,880,000
Waterfalls	$13,000 - $200,000	1,444	$165,000	238,260,000
Greendale	$250,000 - $400,000	22	$325,000	7,150,000
Avondale	$250,000 - $400,000	2	$325,000	650,000
Marlborough	$220,000 - $300,000	1	$260,000	260,000
Mount Pleasant	$300,000 - $500,000	2	$400,000	800,000
Borrowdale	$300,000 - $500,000	58	$400,000	23,200,000
				324,620,000

Sources: Mr. Lucas Magorimbo, CMC Estate Agents, Selous Avenue, Harare, interviews 25 July 1994; 1 August 1994. On house prices. Telephone 722471/737460.

Mr. Rukasha, Department of Works, Town Planning, Master and Local Plans, Room 216, Cleveland House: Telephone 726021, Computer printout.

Information on squatter and informal housing is based on the Walter Garaba and Partners Report for the World Bank "Housing Indicators Program in Zimbabwe." The report says there were 12,831 shacks growing at a rate of 8% per annum. This translates to about 1,000 units per year. We have assumed 8% to be the national average growth rate of informal housing.

3.4.2.2 **BULAWAYO**

1992/1993	No. of Certificates of Occupation Issued	Estimated Value
Formal Housing	321	$13,305,142
Informal Housing	51	$153,000
TOTAL		$13,458,142

Source: Mr. Shah, City Architect, Bulawayo.

Interview with Mr. Job Ndebele, Deputy Town Planner City of Harare. Assuming that informal housing is growing at a rate of 8% per annum.

3.5 Results

3.5.1 Harare

$$\text{Credit-To-Value-Ratio} = \frac{\text{Mortgages}}{\text{Housing Investment}} \times 100$$

$$= \frac{\$105,800,000}{\$324,620,000} \times 100 = \underline{32.5\%}$$

3.5.2 Bulawayo

$$\text{Credit-To-Value-Ratio} = \frac{\text{Mortgages}}{\text{Housing Investment}} \times 100$$

$$= \frac{\$17,500,000}{\$13,458,142} \times 100 = \underline{130.0\%}$$

Comments:

a) The indicator for the City of Bulawayo is abnormally high at 130.0% for the year 1992/1993. This is because the indicator has been calculated in a year where there was a devastating drought in that part of the country. Building activities were thus minimal. Most of the mortgage finance was therefore used to purchase existing houses and units. Furthermore, the drought resulted in a serious decline in real disposable incomes which reduced the funds for personally financed building activities. The City of Bulawayo does not maintain statistics on informal housing.

b) The indicator for Harare is consistent with the average for other low-mid income countries.

c) As more mortgage funds become available in the building societies, the indicator for Harare may increase.

CONSTRUCTION AND BUILDING MATERIALS MODULE

1 Construction and Infrastructure-Related Employment

(Note: "Infrastructure-related employment" refers to infrastructure within-stand boundary.)

1992

1.1 Total numbers

	Stands	Houses
Harare	1273	528
Bulawayo	4175	248 *
Mutare	302	399
Bindura	0	7

* 1992/93. Figures for calendar year 1992 were requested but not received.

1.2 Infrastructure Employment

Annual average wage = 546 x 12 = Z$ 6,552

((numbers x costs/unit) x 0.2) / Z$ 6,552 =

	Stands		Cost/Stand
Harare	1273	x	Z$ 7,137
Bulawayo	4175	x	3,513
Mutare	302	x	10,452
Bindura	0	x	na

Employment

Harare	277
Bulawayo	448
Mutare	96
Bindura	0

1.3 Superstructure Employment

(in high-density areas)

((numbers x costs/unit) x 0.33) / Z$ 6,552 =

	Units	Cost/Unit
Harare	528	27,059
Bulawayo	248 *	19,000
Mutare	399	16,772
Bindura	7	17,886 **

---

* Value is for 1992/93. Value for calendar year 1992 was requested but has not yet been received.

** Estimated; average of values for Bulawayo and Mutare.

Employment

Harare	719
Bulawayo	237
Mutare	337
Bindura	6

1.4 Multiplier Effect

(superstructure construction employment / 1.6)

Harare	449
Bulawayo	148
Mutare	211
Bindura	4

Source: Average monthly wage rate in construction sector from PSHP Project Paper and Annexes.

2 Construction Price and Cost

2.1 Conversion factors (constant 1992 Zimbabwe $s)

June 1992	1.000
June 1993	1.2606
June 1994	1.5584

Source: Reserve Bank of Zimbabwe, Economics Division, T: 796241, Ms. Sally Shaparatza, telephone interview, 28 July 1994.

2.2 Harare

1992

John Sisk & Son, 220 units in Hatcliffe for CABS, staff housing, including 4RM units.

A 50sqm, includes electricity and capitalized interest. "Dwelling selling price" Z$ 40,518.

1.566% of this represents interest.

40,518 x .98434 = 39,883 - 2,000 electricity = Z$ 37,883. Price

"Est. 40% profit"
37,883/1.4 = 27,059 cost

Divided by 50sqm
758/sqm price
541/sqm cost

Source: M. Beresford, CABS, Telephone interview, 28 July 1994, t:883823/59.

1994

Z$ 40,000 cost for four-roomed core built by housing cooperatives.

1.41 conversion factor
= Z$ (1992) 28,369 (in 1992 Z$s)

Source: Colleen Butcher, fax, 29 November 1994; interviews with Kilian Munzwa (Housing by People) and Barney Masanzo (City of Harare).

(NOTE: Due to time constraints, the consultant was unable to confirm the cost and status of units being built by Claudius Margolis for Kugarika Kushinga Cooperative. In future years, this builder and other small, independent contractors may be able to achieve lower prices and costs than current levels.)

2.3 Bulawayo

1992

Z$ 19,000/50= $380 per square meter. Source: Mr. Shah, City of Bulawayo, Housing, interview 22 July 1994. "Between 18,000 and 20,000; finished, no plaster" sold at cost.

1994

27,000. Source: Mr. Shah. "Between 26,000 and 28,000."
divided by 1.5584 = Z$(1992) 17,325, or 347/sqm

2.4 Mutare

Late 1992/Early 1993

Z$ 23,925, for a 58.6sqm 4RM unit.

Price: 23,925 - 1,576 elect = 22,349, in Z$(1992): $20,317
Cost: 20,025 - 1,576 elect = 18,449, in Z$(1992): $16,772

conversion factor 1.1

in sqm:
$347/sqm (p)
$286/sqm (c)

Source: Mr. Nyamutsita, Jopa, 73 houses for Zimbabwe National Defence Force, Dangamuvura T: 64639/7.

2.5 Bindura

Late 1992/Early 1993

Z$ 23,000 (without electricity) 25 units 8m x 6.6m = 52.8m "price to worker" Founders Building Soc.

1.1 conversion factor
= Z$(1992) 20,909 / 52.8 = 396sqm

3 Formal Low-Income Housing Production

3.1 Harare

3.1.1 High-Density Areas

Area #	Units '92	Units '91	Increase 92 over 91
1x	4831	4831	
2x	7130	7130	
4x	5197	5197	
5x	97	81	16
6x	2482	2458	24
7x	492	256	236
8x	7479	7479	
9x	8630	8630	
10x	8630	8630	
11x	8635	8635	
12x	8020	8020	
13x	8144	8144	
14x	7128	7128	
15x	7128(?)		
16x	5843	5807	36
17x	3304	3304	
18x	972	756	216
27x	950	950	
SUBTOTAL			528

3.1.2 Medium-/Low-Density Areas

	'91	'92	
3	441		
3	613		
19	2530		
20	476		
21	361		
22	888		
23			
24	748		
25	693		
26	411		
28	347		
29	585		
30	835	[ ]	
31	6643		
32	312		
33	626		
34	378		
35	1647		
36	463		
37	714		
38	299		
39	3052		
40	2862	2884	22
41	1981	1983	2
42	3707		
43	2036	2037	
44	2500	2502	
45	3699	3757	
SUBTOTAL			24
TOTAL HOUSING PRODUCTION			552

Source: Mr. Rukasha, Department of Works, Town Planning, Master & Local Plans, Room 216, Cleveland House T:726021, computer printout; and PADCO, Inc.

NOTE: Certificates of Occupation may not have been issued for some units built by the GOZ/MPCNH. This information was requested by letter from the MPCNH on 15 June 1994 but has not yet been made available.

Population: 528/1184.169 = 0.45

Source: Census 1992, Zimbabwe Preliminary Report, p.128.
Harare 1992: 1184169

3.2 Bulawayo

Note: Housing production for calendar 1992 requested but not yet received.

July 1992 - June 1993

248 units in west (high-density area)
Source: Memo to: D/D H&CS, 28 July 1994, City of Bulawayo
"Occupation Certificates issued 1992/93" "RSM"

Population: 620,936 for 1992. Source: Census 1992 Zimbabwe: Preliminary Report.

248/620.936 = 0.40 per 1000 persons.

73 units low density = 321 total = 0.52 total housing production per 1000 population.

Note: City of Bulawayo officials maintain that Occupation Certificates are issued for all houses built by either the public or private sector.

3.3 Mutare

1992
302 Dangawvura
97 Chikanga Phase I
Total = 399

1993
51 Chikanga, Phase I (WB/GOZ)
42 Dangamvura
75 (estimated) Council
168

NOTE: The City of Mutare was invited to review estimate for 1993, but no comments have been provided to date.

Source: City of Mutare, "Report by the Director of Housing & Community Services, Submission to the Community Services, Housing, Health and Education Committee" Monthly reports, December 1993 and January 1993; and telephone interview, Mr. Nyatoti, Deputy City Engineer, 28 July 1994.

Population: 1992 Census
Mutare (urban) 131,808.

399/131.808 = 3.03 per 1000 population
168/131.808 x 1.0313 = 1.24

NOTE: Total housing production was not available for Mutare.

3.4 Bindura

	Low Income	Medium/High Income	Total
'92	7	1	8 dwelling units
'93	37	23	60 dwelling units

Population: 1992 Census 21456
1993 (projection) x 1.0313 = 22128

per 1000 Population		
'92	0.33	0.37
'93	1.67	2.71

Source: Bindura Building Inspector's Office.

3.5 Estimation of Comparative Worldwide Values

3.5.1 "Housing Production" indicator (includes both formal and informal sector)

(A)	Worldwide	6.4
	Low-Mid Income Countries	7.10
	Sub-Saharan Africa	6.62

Source: IBRD/UNCHS, The Housing Indicators Program Volume III: Preliminary Findings, pp. 16-17.

3.5.2 Percent of total housing that is authorized (i.e., formal sector)

(B)	Worldwide	75%
	Low-Mid Income Countries	64%
	Sub-Saharan Africa	43%

Source: Ibid, pp. 34-5.

3.5.3 Authorized housing production (A factored by B)

Worldwide	4.8
Low-Mid Income Countries	4.54
Sub-Saharan Africa	2.85

Methodology suggested by Mayo, Stephen, IBRD Housing Indicators Program, telephone conversation, 17 August 1994.

4 Down-Market Penetration

4.1 Harare

1992
25sqm unit. "A-1" $25,852, of which 1.566% is interest.
$25,447, includes electricity.

25,447/9,600 = 2.7

Source: M. Beresford, CABS, T: 883823/59, Telephone interview, 21 July 1994.

1994
$40,000 / (1,004 x 12) = 3.3
12,048

Source: Colleen Butcher, fax, 29 November 1994.

4.2 Bulawayo

1992
Beginning of 1992: $25,400
800 x 12 = 9,600
25,400/9,600 = 2.6

Glenkara

1994
Super Glenkara
$34,000 @65 sqm. home. Are currently building 275 units, 80 or 90 now completed, 150 to roof height.

Divided by $12,048 = 2.8

Source: Mr. Liasos Karasava, Businessman, 38 Park Road, Suburbs, Bulawayo, T (w) 64351, P.O. 1224-Bulawayo. Interview, 22 July 1994. Glenkara Homes Pvt., Ltd.

[calculation by sqm:
25,400/61.3 = 414.4/800 = 0.518
34,000/65 = 523.1/1004 = 0.521]

NOTE: Indicator values were not calculated for Mutare and Bindura because median household incomes (an intermediate value for this indicator) for cities and towns of the size of Mutare and Bindura often vary greatly from median incomes in a country's largest one or two cities. Source: Mayo, Stephen, IBRD/UNCHS Housing Indicators Program (HIP). Telephone interview, 17 August 1994.

5 Price-to-Income Ratio

5.1 Harare

1992

Type	(A) #	(B) % Stock	(C) Price Rge	(D) #Dwel	(E) Pric Rge/Dwel	(F) Wtg	(G) %Dwl
Squatter	100	0.079%	—	3.4	—	0.27	0.10
Hostels	8868	6.98%	—	1	—	6.98	2.55
Hi Dens							
2RM (02%)	1518	1.20%	25-45000	2	12500-22500	2.40	0.88
4RM (39%)	29597	23.31%	40-65000	3.4	11765-19118	79.22	28.95
Ext (59%)	44775	35.26%	50-135000	3.4	14706-39706	119.88	43.81
[Total]	75890						
Low Dens	40249	31.70%	avg215000	2	—	63.4	23.03
Flats	1548	1.23%	80-180000	1	—	1.23	0.45
Instit.	315	0.25%	—	1	—	0.25	0.09
TOTAL	126970	100%				W=273.63	100

House Superstructure Price-to-Income Ratio:

$$50000 \div \frac{(50-31.57)(85000)}{35.26} = 94428/9600 = 9.8$$

Household Dwelling Unit Price-to-Income Ratio:

$$14706 \div \frac{(50-32.48)(25000)}{43.81} = 24704/9600 = 2.6$$

[800 x 12 = 9600]

1994

Type	(A) #	(B) % Stock	(C) Price Rge	(D) #Dwel	(E) Pric Rge/Dwel	(F) Wtg	(G) %Dwl
Squatter	100	.077%	—	3.4	—	0.26	0.09
Hostels	5183	4.00%	—	1	—	4.00	1.44
Hi Dens							
2RM (02%)	1589	1.23%	25-45000	2	12500-22500	2.46	0.89
4RM (39%)	30991	23.95%	40-65000	3.4	11765-19118	81.43	29.35
Ext (59%)	46884	36.23%	60-150000	3.4	17647-44118	123.18	44.39
[Total]	79464		25-150000				
Low Dens	40967	31.65%	avg225000	2	—	63.30	22.81
Flats	3365	2.60%	90-200000	1	—	2.60	0.94
Instit.	342	0.26%	—	1	—	0.26	0.09
TOTAL	129421	100%				W = 277.49	100

House Superstructure Price-to-Income Ratio:

$$60000 \div \frac{(50-29.26)(90000)}{36.23} = 111{,}521/12048 = 9.3$$

Household Dwelling Unit Price-to-Income Ratio:

$$17647 \div \frac{(50-31.77)(26471)}{44.39} = 28518/12048 = 2.4$$

Notes:

A: Housing Quarterly Statistical Returns as at 30 June 1994; Harare Combination Master Plan (for Low Density in 1989), p.26; Housing Units by City District for 1986-1992 (printout), from Mr. Rukasha, City of Harare Department of Works.

B: PADCO, Inc.

C: Lukas Magorimbo, CMC Estates Agents, interview, 25 July 1994.

D: GOZ/USAID/Zimbabwe PSHP Households' Incomes/Expenditures Survey Report of Findings, March 1992, p.12 extrapolated. Number of dwelling units assumed to equal number of households per structure, up to number of rooms in structure (Source: Mayo, Stephen, IBRD/UNCHS Housing Indicators Program, telephone interview, 17 August 1994.)

E: C/D

F: B*D

G: (F*100)/W

(Institutional is State-owned; does not include council houses.)

5.2 Bulawayo

1992

Type	(A) #	(B) % Stock	(C) Price Rge	(D) #Dwel	(E) Pric Rge/Dwel	(F) Wtg	(G) %Dwl
Squatter							
Hostels	2537	2.41%		1		2.41	1.53
Low Cost/ Hi Dens							
2RM est.	8326	7.93%	18000	1.6	11250	12.69	8.08
4RM est.	66614	63.41%	38-50000	1.6	23750-31250	101.46	64.58
Extended est.	8327	7.93%	60-90000	1.6	37500-56250	12.69	8.08
[Total	83267]						
[+Tangwenas	638]						
Flats	2538	2.42%	72-132000	1	—	2.42	1.54
Medium Density	8495	8.09%	90-150000	1.6	56250-93750	12.94	8.24
Rural/Low Density (includes secondary units)	8216	7.81%		1.6		12.50	7.95
TOTAL		100%				W =157.11	100

House Superstructure Price-to-Income Ratio:

$$38000 + \frac{(50-10.34)(12000)}{63.41} = 45505/9600 = 4.7$$

Household Dwelling Unit Price-to-Income Ratio:

$$23750 + \frac{(50-9.61)(7500)}{64.58} = 28441/9600 = 3.0$$

NOTE: Institutional included in with high density.

SOURCES: Bulawayo Master Plan Revision, Town Planning, 1994; Interview with Job Ndebele, Deputy Town Planner, 22 July 1994; and interview with John Pocock Sr., and John Pocock, Jr., John Pocock & Company (Pvt.) Ltd., 22 July 1994.

Assumptions: One-half of flats/hostels category is flats, other half hostels. Assumed average of 1.6 households per dwelling unit for all types of housing, except flats and hostels (GOZ/USAID/Zimbabwe PSHP Households' Incomes/Expenditures Survey Report of Findings, March 1992, p.12).

1994

Type	(A) #	(B) % Stock	(C) Price Rge	(D) #Dwel	(E) Pric Rge/Dwel	(F) Wtg	(G) %Dwl
Squatter							
Hostels	2500	2.13%		1		2.13	1.35
Low Cost/ Hi Dens							
2RM est.	9490	8.09%	20000	1.6	12500	12.94	8.22
4RM est.	75932	64.78%	38-50000	1.6	23750-31250	103.65	65.83
Extended est.	9490	8.10%	60-90000	1.6	37500-56250	12.96	8.23
[Total	94912]						
[+Tangwenas	638]						
Flats	2500	2.14%	60-110000	1		2.14	1.36
Medium Density	9000	7.68%	110-180000	1.6	68750-112500	12.29	7.81
Rural/Low Density	8300	7.08%	200-500000	1.6	125000-312500	11.33	7.20
(includes secondary units, cottages, and staff quarters: 20,000)							
TOTAL with tangwenas and secondary	137,850	100%				W = 157.44	100

House Superstructure Price-to-Income Ratio:

$$38000 \div \frac{(50-10.22)(12000)}{64.78} = 45369/12048 = 3.8$$

Household Dwelling Unit Price-to-Income Ratio:

$$23750 \div \frac{(50-9.57)(7500)}{65.83} = 28356/12048 = 2.4$$

SOURCES: See calculation for 1992, above.

APPENDIX C
SOURCES OF COMPARATIVE INDICATOR VALUES

As listed in the Figures, comparative worldwide indicator values were obtained from two distinct sources, as follows.

WORLD BANK/UNCHS HOUSING INDICATORS PROGRAM

In 1991/92, the Housing Indicators Program collected values for more than 25 housing indicators from more than 50 countries worldwide. This survey focused on one major city, in many cases the capital, in each country. The results were presented in two volumes:

- *The Housing Indicators Program Volume II: Indicator Tables*, revised October 1993, and
- *The Housing Indicators Program Volume III: Preliminary Findings*, April 1993.

In analyzing survey results, 11 countries were included in a group described as sub-Saharan Africa: Côte d'Ivoire, Ghana, Kenya, Madagascar, Malawi, Nigeria, Senegal, South Africa, Tanzania, Tunisia, and Zimbabwe.

Ten "low-middle income" countries were surveyed with reported per capita incomes of US$ 500-1220 (in ascending order of GNP per capita): Indonesia, Egypt, Senegal, Zimbabwe, Philippines, Côte d'Ivoire, Morocco, Ecuador, Colombia, and Thailand. *Volume III* listed Zimbabwe's GNP per capita as US$ 650.

USAID HOUSING GUARANTY PROGRAM

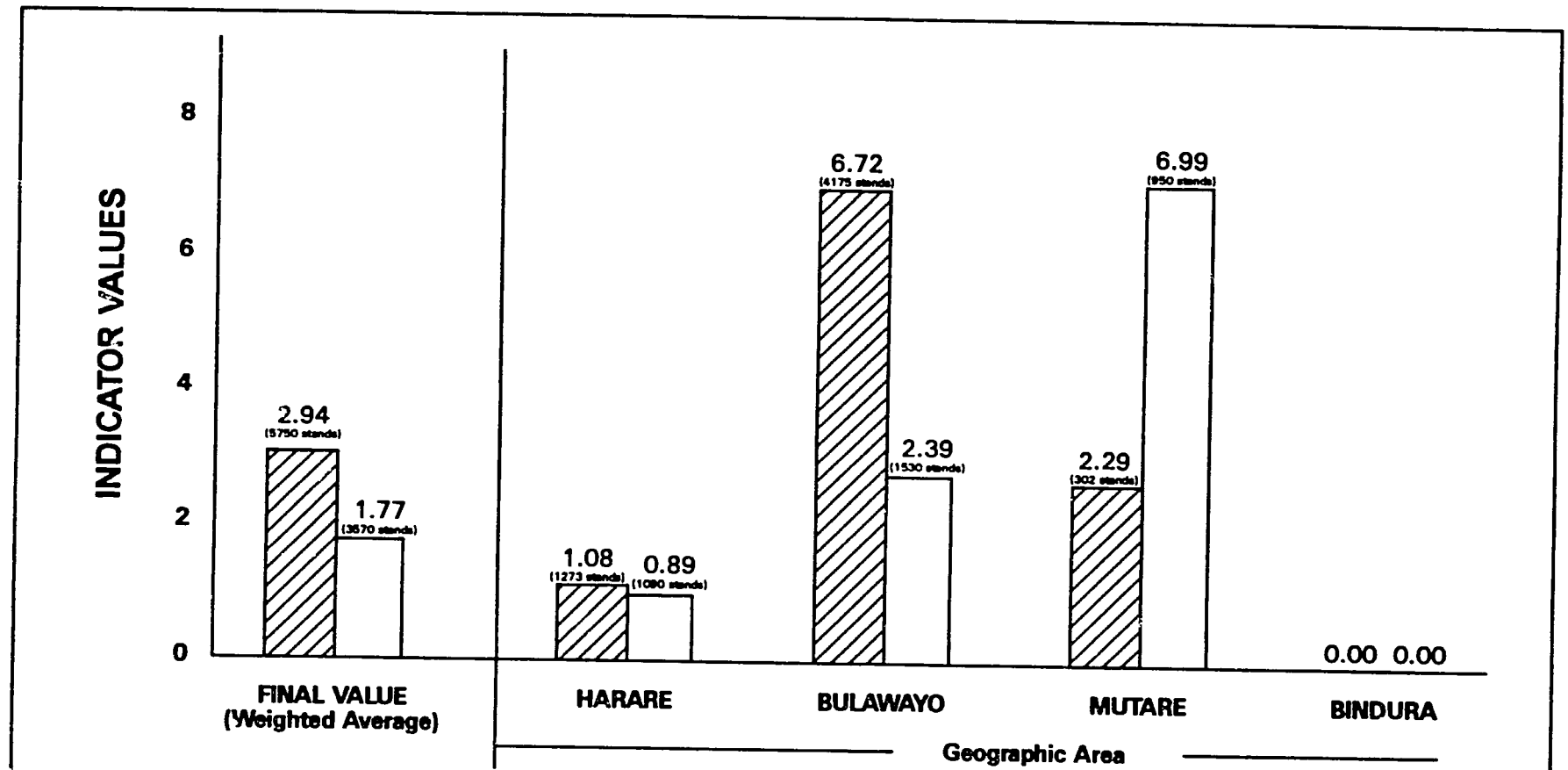
For monitoring purposes, the USAID Office of Environment and Urban Programs (formerly Office of Housing and Urban Programs, PRE/H) conducts an annual survey of housing and urban development indicators in countries with Housing Guaranty (HG) programs or activity. The FY 1993 survey collected data in 20 individual countries and one region (Central America). Results were presented in two volumes:

- Kehew, Robert, *The USAID Housing Guaranty Program: Housing and Urban Development Indicators Survey (FY 1993)*, PADCO, Inc. for USAID Office of Housing and Urban Programs, working paper, May 1994, and
- Kehew, Robert, *Housing and Urban Development Indicators: Preliminary Findings*, PADCO, Inc. for USAID Office of Housing and Urban Programs, unpublished draft, June 1994.

Two countries were surveyed in sub-Saharan Africa: Côte d'Ivoire and Kenya. Six countries and one region were counted as "second lowest income countries," with per capita incomes of US$ 501-1000. Those areas were (in ascending order of per capita income): Honduras, Indonesia, Côte d'Ivoire, the Philippines, Bolivia, Guatemala, and Central America (average of five countries).

APPENDIX D
GRAPHIC PRESENTATION OF FINDINGS FOR SIX INDICATORS

Figure D-1



LAND DEVELOPMENT INDICATOR No. 1:
LOW-INCOME SERVICED STANDS
(per 1000 population)

Definition:
Number of stands that are serviced and sold or ready for sale to households of less-than-median income during the life of the Program.

KEY

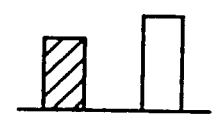
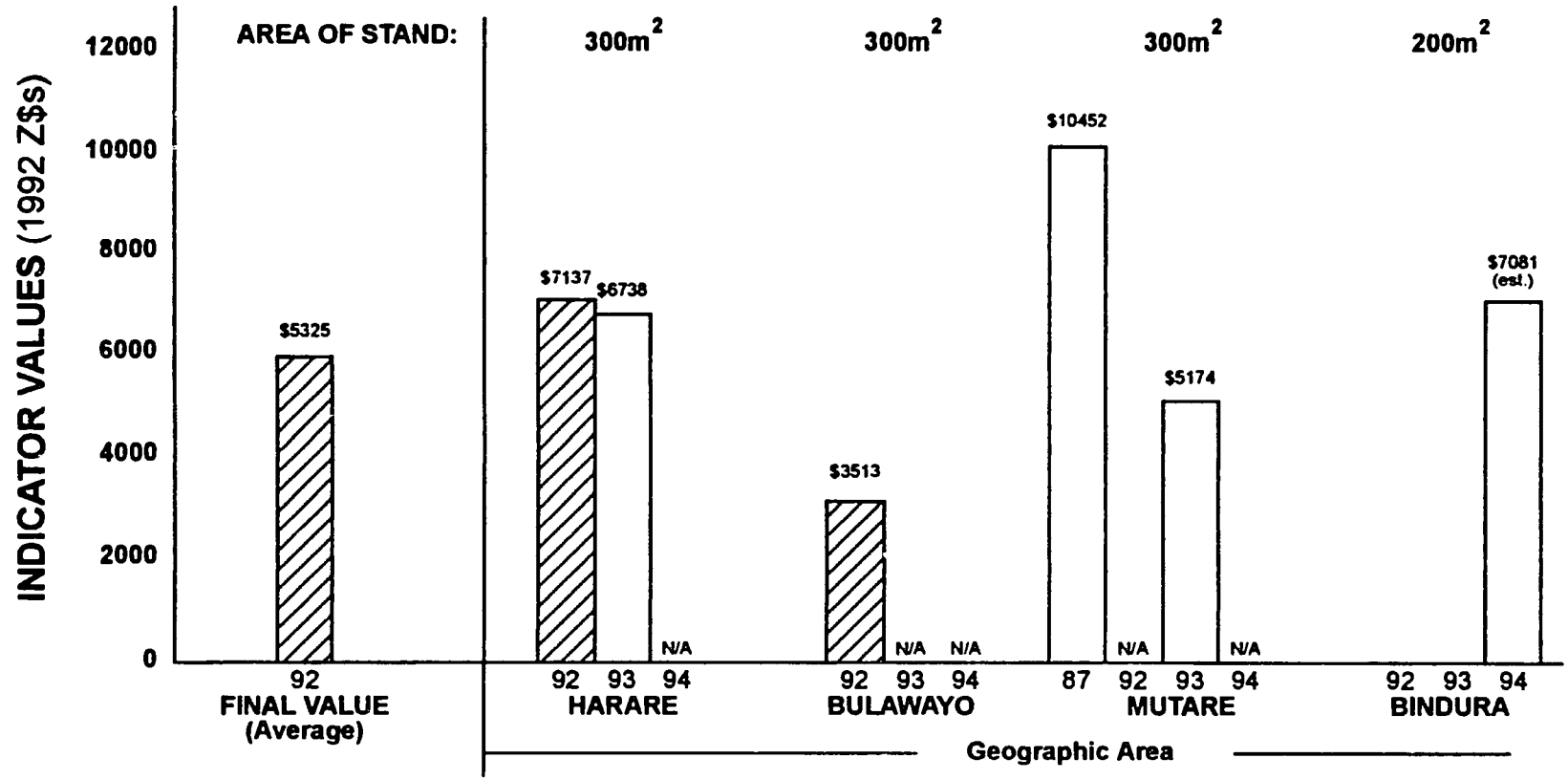


Figure D-2



LAND DEVELOPMENT INDICATOR No. 2:
PRICE OF LOW-INCOME SERVICED STAND
(in 1992 constant Z$s)

* No stands were serviced in year shown.

Definition:
Price of an unsubsidized serviced stand that meets current minimum standards where the primary/bulk infrastructure is in close proximity to the site and where the terrain of the site is not extraordinarily constrained.

KEY

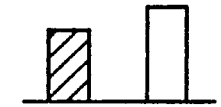
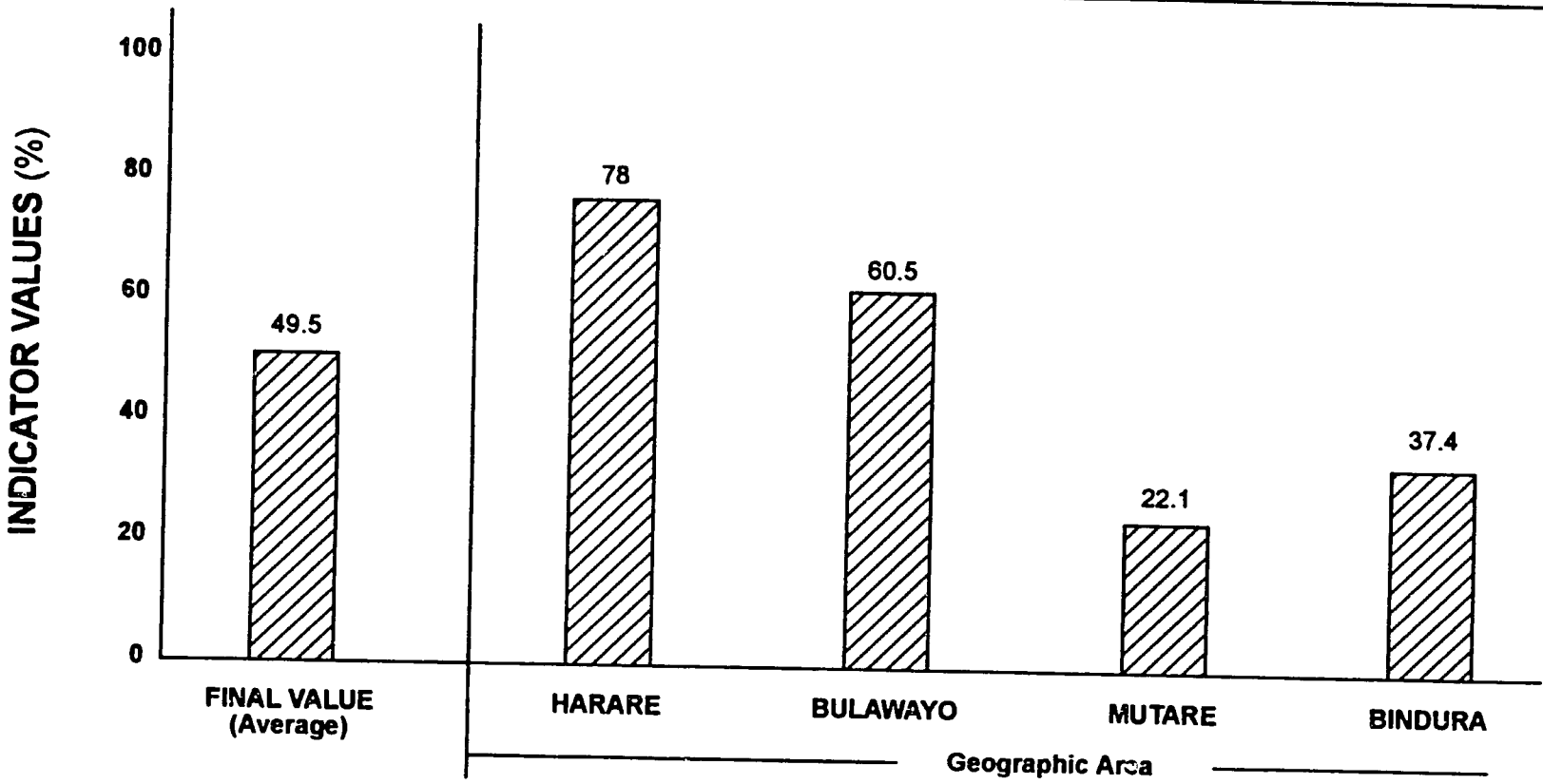


Figure D-3



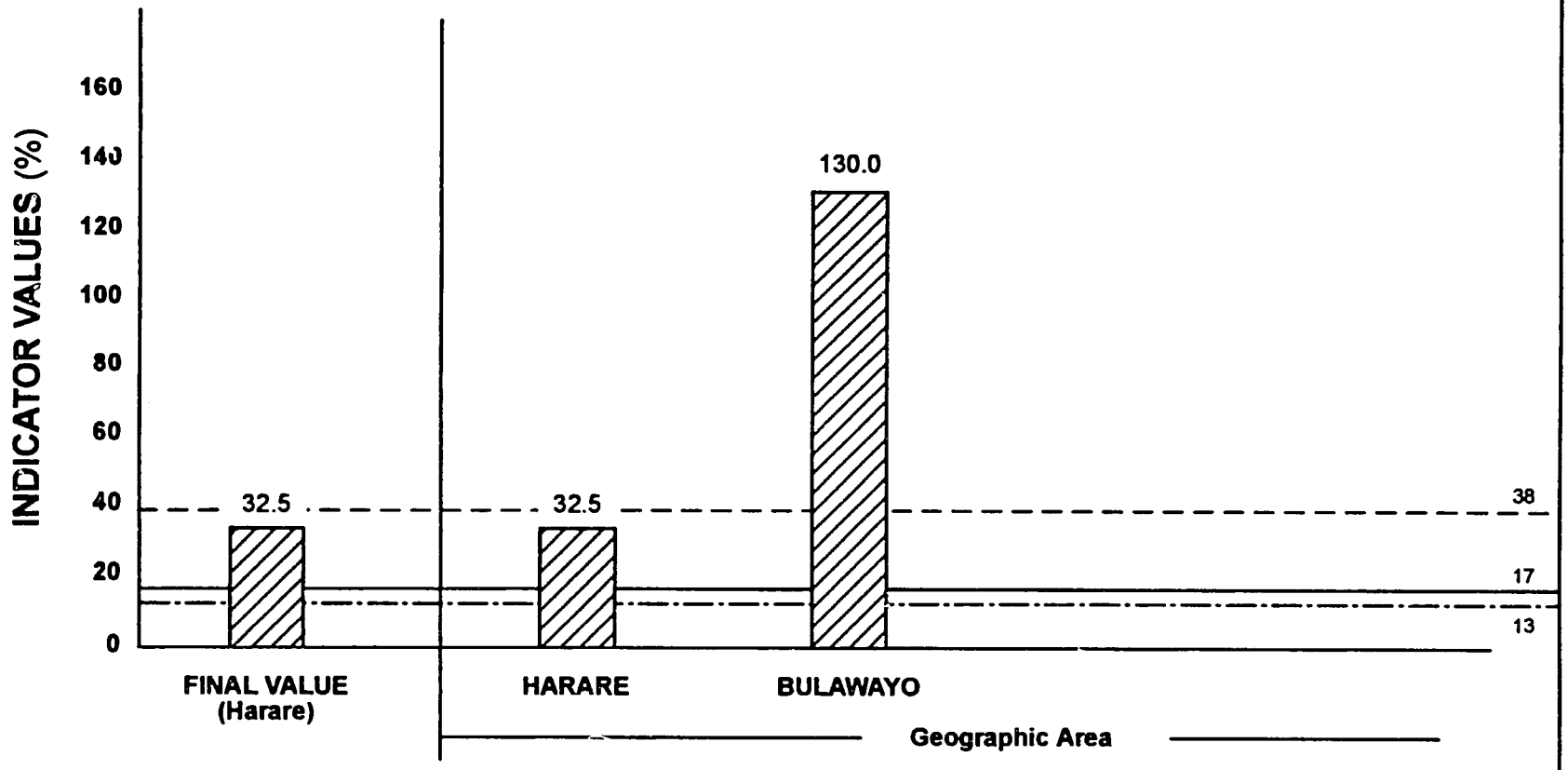
LAND DEVELOPMENT INDICATOR No. 4:
LAND REGISTRATION COVERAGE (1992)

Definition:
The percentage of an urban area covered by a land registration system that allows for buying, selling, long-term leasing, and mortgaging of land.

KEY

1992
(Base Year)

Figure D-4



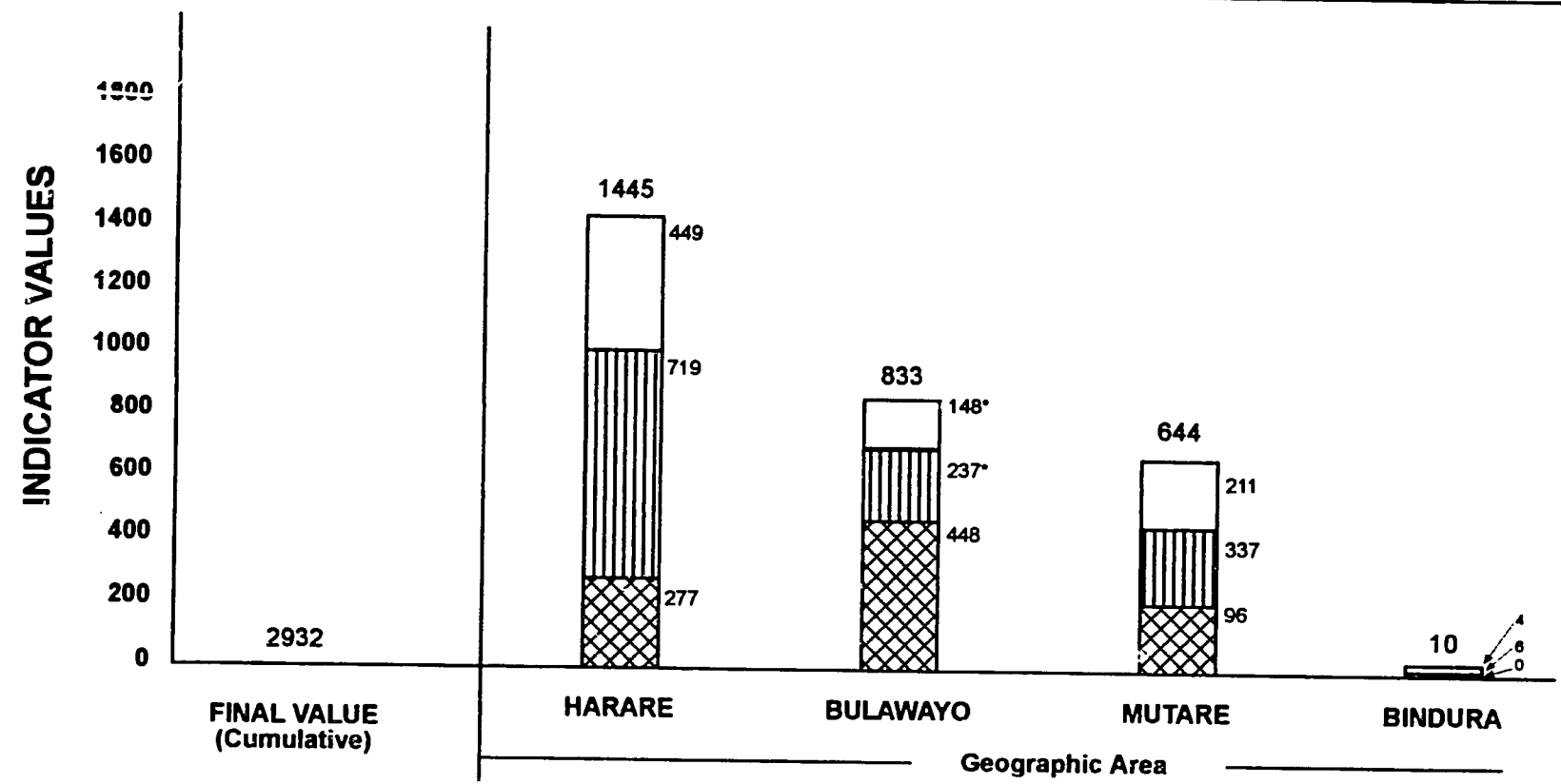
LOW-INCOME SHELTER FINANCE INDICATOR No. 3:
CREDIT-TO-VALUE RATIO (1992/93)

Definition:
Ratio of mortgage loans for housing to total investment in housing (in both the formal and informal sectors).

KEY
- INCOME GROUP AVG.
- WORLDWIDE AVG.
- SUB-SAHARAN AVG.

Source: IBRD/UNCHS, 1993 (1991/92 data)

Figure D-5



CONSTRUCTION AND BUILDING MATERIALS INDICATOR No. 1:
CONSTRUCTION AND INFRASTRUCTURE-RELATED EMPLOYMENT
(LOW-INCOME HOUSING)

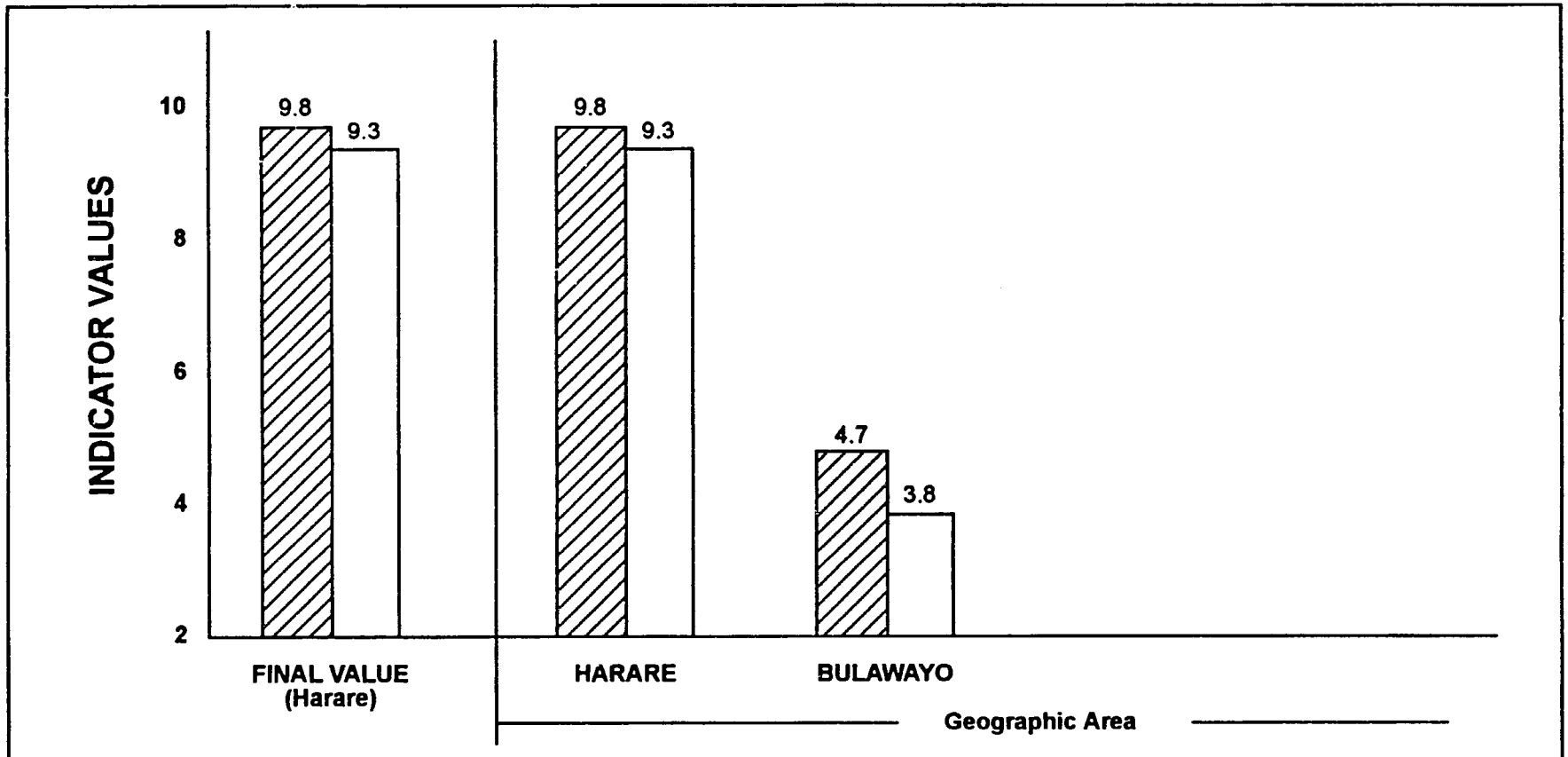
* Estimate is for FY 1992/93, information for calendar year 1992 not available

Definition:
Number of person-years of employment generated annually by formal sector, low-income superstructure construction and infrastructure provision, and their multiplier effect on allied services and industries: total per year.

KEY
- Allied services and industries
- Construction
- Infrastructure

1992 (unless otherwise shown)

Figure D-6



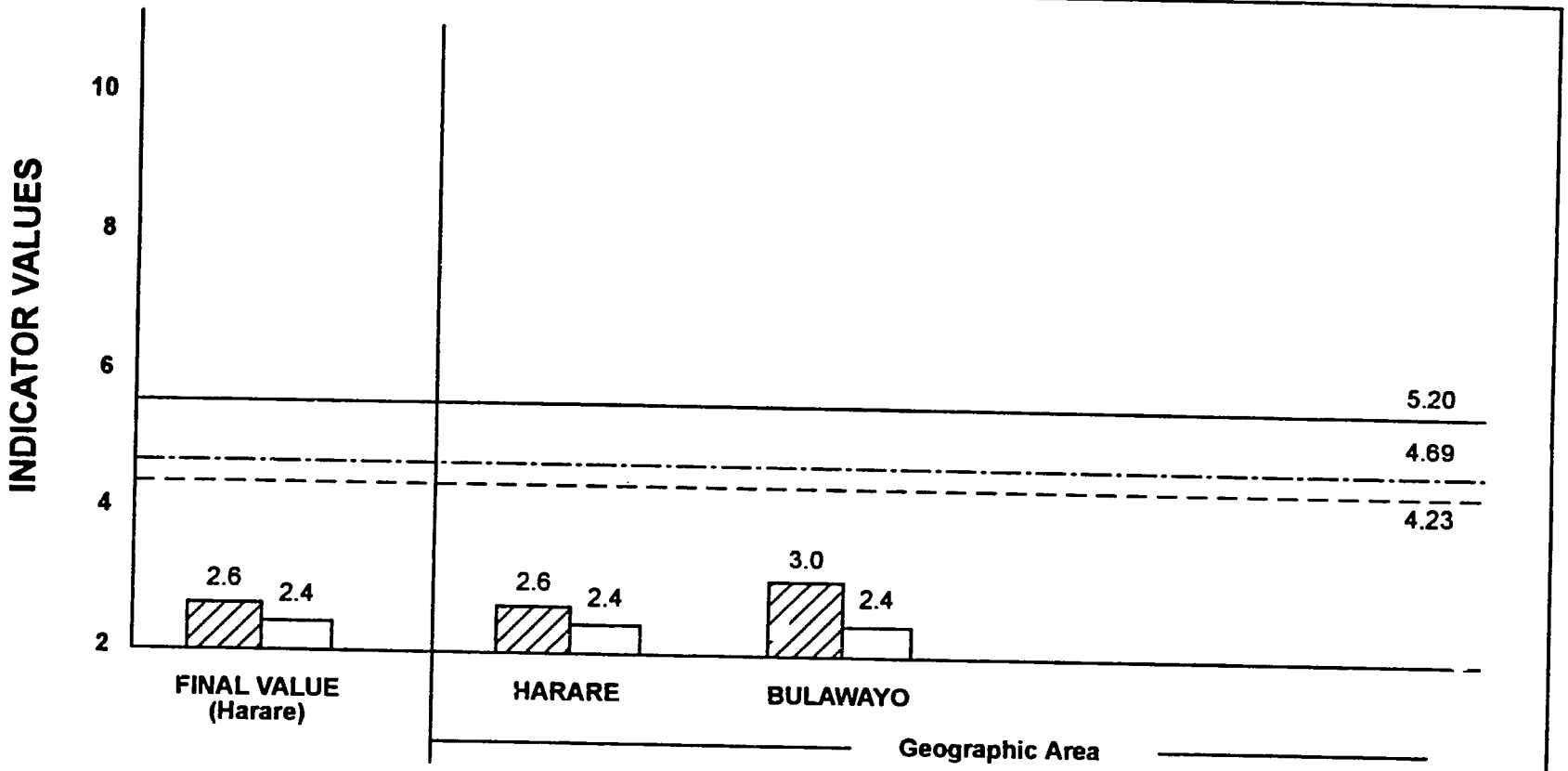
CONSTRUCTION AND BUILDING MATERIALS INDICATOR No. 5 (i):
HOUSE SUPERSTRUCTURE PRICE-TO-INCOME RATIO

Definition:
Ratio of the median price of a dwelling unit and the median annual household income. (Each household is generallly assumed to occupy one dwelling unit.)

KEY

1992 (Base Year) 1994

Figure D-7



CONSTRUCTION AND BUILDING MATERIALS INDICATOR No. 5 (ii):
HOUSEHOLD DWELLING UNIT PRICE-TO-INCOME RATIO

Definition:
Ratio of the median price of a dwelling unit and the median annual household income. (Each household is generallly assumed to occupy one dwelling unit.)

KEY
Worldwide Average
Sub-Saharan Average
Income Group Average
Source: IBRD/UNCHS, 1993 (1991/92 data)

1992 1994
(Base Year)

APPENDIX E
FORM FOR USAID G/ENV/UP ANNUAL INDICATORS SURVEY

HOUSING FINANCE

DATE: 30 Sept. 94

Market Interest Rates

Evaluation: (circle appropriate response)

Constraint	high	medium	low
Situation	improving	no change	worsening
HG Concern	program	sector	no

Indicator: MORTGAGE TO DEPOSIT DIFFERENCE

Period	Previous	Current
Year	1991/92	1992/93
Value	-9.98	-18.17

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)

Rationale: Indicates administrative costs, profits and/or interest rate subsidies in housing loans.

Geographic Area: National **Source:** PADCO, Inc.

Funds Mobilization

Evaluation: (circle appropriate response)

Constraint	high	medium	low
Situation	improving	no change	worsening
HG Concern	program	sector	no

Indicator: CREDIT TO VALUE RATIO

Period	Previous	Current
Year		1992/93
Value		32.5

CREDIT TO VALUE RATIO (ratio of mortgage loans for housing last year to total investment in housing, both formal and informal)

Rationale: Indicates the basic extent to which formal housing finance is used for all types of housing construction.

Geographic Area: Harare **Source:** PADCO, Inc.

PRIVATE SECTOR HOUSING

Developer Provision of Low Income Housing

Evaluation: (circle appropriate response)

Constraint	high	medium	low
Situation	improving	no change	worsening
HG Concern	program	sector	no

Indicator: DOWN MARKET PENETRATION

Period	Previous	Current
Year	1992	1994
Value	2.7	3.3

DOWN MARKET PENETRATION (lowest priced unsubsidized formal dwelling unit produced by the private sector in significant quantities and median annual household income).

Rationale: Indicates the ability of private developers to build speculative housing units for lower income families.

Geographic Area: Harare **Source:** PADCO, Inc.

Affordability

Evaluation: (circle appropriate response)

Constraint	high	medium	low
Situation	improving	no change	worsening
HG Concern	program	sector	no

Indicator: HOUSE PRICE TO INCOME RATIO

Period	Previous	Current
Year	1992	1994
Value	2.6	2.4

HOUSE PRICE TO INCOME RATIO (median free-market price of dwelling unit to median annual household income). Relatively low values reflect high number of households per structure (see report).

Rationale: Indicates the general affordability of housing markets and how well housing prices match household incomes.

Geographic Area: Harare **Source:** PADCO, Inc.

HOUSING AND URBAN DEVELOPMENT INDICATORS

HOUSING AND HOUSING FINANCE

DATE: 30 Sept. 1994

INSTITUTIONAL FRAMEWORK

Standards

Evaluation: (circle appropriate response)

Constraint	high	medium	low
Situation	improving	no change	worsening
HG Concern	program	sector	no

Indicator: TENURE REGULARIZATION

Period	Previous	Current
Year		
Value		

LAND DEVELOPMENT CONTROLS (percentage of regularized informal land development)

Rationale: indicates Government determination to enforce development standards based on feedback from actual and affordable land development. Dialogue with low income population may lead to more realistic standards.

Geographic Area: _____ Source: _____

Procedures

Evaluation: (circle appropriate response)

Constraint	high	medium	low
Situation	improving	no change	worsening
HG Concern	program	sector	no

Indicator: PERMITS DELAY

Period	Previous	Current
Year		1992
Value		40.3

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.)

Rationale: indicates a basic idea of problems in administrative procedures. In particular, private developers will not build housing for low income families with long or uncertain delays in the permitting process.

Geographic Area: Average of four urban centers. Source: PADCO, Inc.

Regulations

Evaluation: (circle appropriate response)

Constraint	high	medium	low
Situation	improving	no change	worsening
HG Concern	program	sector	no

Indicator: COMPLIANCE

Period	Previous	Current
Year		
Value		

COMPLIANCE (ratio of building permits issued to new housing starts in both formal and informal sectors during the past year)

Rationale: Greater compliance with regulations and procedures facilitate infrastructure programming and development and cost recovery, particularly in low income areas.

Geographic Area: _____ Source: _____

Evaluation: (circle appropriate response)

Constraint	high	medium	low
Situation	improving	no change	worsening
HG Concern	program	sector	no

Indicator: LAND REGISTRATION COVERAGE

Period	Previous	Current
Year		1992
Value		49.5

LAND REGISTRATION COVERAGE (percentage of area covered by a land registration system that enables buying, selling, long-term leasing, and mortgaging of urban land)

Rationale: Government ability to register land in timely fashion and provide formal tenure gives households greater security, recognized assets and financial flexibility.

Geographic Area: Average of four urban areas Source: PADCO, Inc.