FINAL EVALUATION

ZIMBABWE
LOW-COST SHELTER PROGRAM

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Prepared for

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Table of Contents

List of Tables

List of Figures

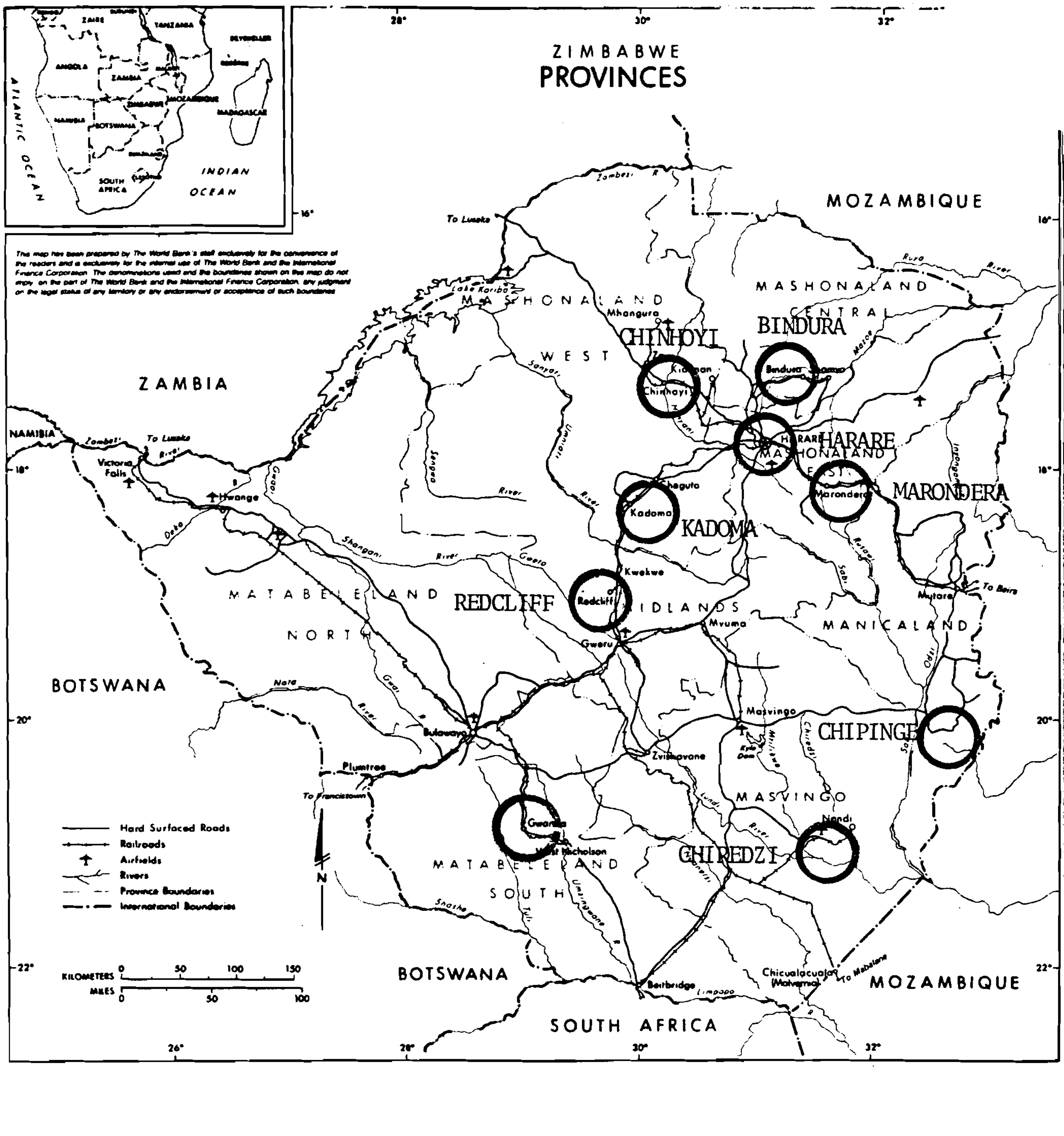
Acronyms

A.I.D.	U.S. Agency for International Development
CDSS	County Development Strategy Statement
GOZ	Government of Zimbabwe
HG	Housing Guaranty
MFEPD	Ministry of Finance Economic Planning and Development
MLGRUD	Ministry of Local Government Rural and Urban Development
MPCNH	Ministry of Public Construction and National Housing
PDP	Project Delivery Plan
USAID	A.I.D. Mission to Zimbabwe
RHUDO/ESA	A.I.D. Regional Housing and Urban Development Office/East and Southern Africa (Nairobi)

Currency

September 1980	US$1.00 = Z$0.625	Z$1.00 = US$1.60
February 1987	US$1.00 = Z$1.67	Z$1.00 = US$0.60
November 1987	US$1.00 = Z$1.65	Z$1.00 = US$0.61

Map of Zimbabwe with Project Cities



I. INTRODUCTION

Zimbabwe's population of over 8.2 million people is growing at an estimated rate of 2.85 percent per year. Like most African countries, Zimbabwe is experiencing rapid urbanization. Between 1969 and 1982, the percentage of the population living in the main urban areas rose from 17.6 percent to 23 percent. The current housing need in these areas is estimated to exceed 100,000 units. A.I.D.'s Country Development Strategy Statement (CDSS) for FY 1987 recalls that one of the aims of U.S. assistance was to help the government "in raising living standards, . . . and increasing employment opportunities." The current CDSS formulates an "employment strategy" as a means to reduce poverty in Zimbabwe. One of the major components of the strategy is to increase employment opportunities in the modern sector of the economy. Housing is one program area to which resources will be directed. More specifically,

> "Activities which improve housing for the growing urban labor force and open up access to home ownership for low income families will receive continued support through the Housing Guaranty Program. Our housing program can make a significant contribution to employment in the construction industry, help provide suitable shelter for the increasing number of households seeking employment in the cities. . ." (CDSS FY 1987, p. 51).

The Government of Zimbabwe (GOZ) embarked in 1982 on a program that would provide appropriate housing to approximately 18,800 low-income households in Harare and several secondary urban centers. A.I.D. supported the program through two Housing Guaranty (HG) loans of $25 million each, and a grant of $750,000 for technical assistance, training, and commodities. With a GOZ contribution of $23 million, the total cost of the program is $74 million and represents by far the largest single housing program in the country since independence.

The Implementation Agreements governing the program record a commitment by the GOZ and A.I.D. to evaluate the efficiency and effectiveness of the projects. Three interim evaluations have taken place prior to this final evaluation, in August 1982, in March 1984, and in October 1985.

By February 1985, all of the HG loans had been disbursed by the U.S. lenders to the GOZ or the U.S. escrow agent. As of November 1987, 82 percent of the $50 million HG loans had been disbursed to the GOZ. All or almost all of three large projects have been completed and one-half to three-quarters of the other three approved projects have been completed. Final disbursements of the HG loan from escrow to the GOZ are forecast to be made by June 1988. Long- and short-term assistance, training, and equipment purchases that were funded by the grant component of the program have been completed. Grant funds were fully expended by the project assistance completion date of June 30, 1987.

The A.I.D. Mission in Zimbabwe (USAID/Zimbabwe) and the A.I.D. Regional Office of Housing and Urban Development (RHUDO/ESA) concluded that in view of the significant physical progress achieved and the completion date of the grant, a final evaluation should take place at this time, with a special emphasis on the projects that are at an advanced stage of implementation in three secondary cities.

As enumerated in the Scope of Work (see Appendix A), the objectives of this evaluation are:

"1. To evaluate the progress toward the attainment of the objectives of the project in the secondary towns.

2. To compare and contrast results obtained in (1) above, with those found in Harare at Kuwadzana through the earlier studies with a view to highlighting the similarities and differences between the two segments of the project.

3. To evaluate problem areas or constraints which may inhibit the progress in this or similar projects."

The evaluation was undertaken by a team comprised of a housing and urban development specialist, a housing economist, and an urban planner. For the implementation of the field surveys, the team was assisted by a RHUDO/ESA contractor.

Prior to arrival in Zimbabwe, the team reviewed all relevant documents made available by the A.I.D. Office of Housing and Urban Programs (PRE/H) in Washington. These included the original Project Paper, the two Implementation Agreements, the interim evaluations, and other reports and studies. At that time also, the team reviewed A.I.D. guidance and methodologies for undertaking evaluations, incorporating relevant portions into the approach ultimately used.

The team spent two complete weeks in Zimbabwe, benefiting the first day by the presence of the RHUDO/ESA Director, who provided important context and direction to the effort. With the full support of the implementing agency, the Ministry of Public Construction and National Housing (MPCNH), the team visited the project sites and met with the responsible local authority representatives for the Kuwadzana project in Harare, the Waverley project in Kadoma, the Chinoyi Stream project in Chinoyi, and the Nyameni project in Marondera. In Harare, the team also met with personnel from MPCNH on several occasions, the Ministry of Local Government Rural and Urban Development (MLGRUD), the Ministry of Finance Economic Planning and Development (MFEPD), the Central African Building Society, and the Beverly Building Society. A complete list of persons interviewed is found in Appendix B.

The team reviewed a substantial amount of program documentation made available by the GOZ personnel as well as USAID/Zimbabwe. A list of those reference materials is found in Appendix C.

In the two months prior to the team's work in Zimbabwe, surveys of beneficiaries, lodgers, and private contractors were designed and carried out in the cities of Kadoma, Chinoyi, and Marondera under the direction of the

RHUDO/ESA contractor. The surveys gathered both facts and opinions from project participants in those cities. The survey methodology is described in Appendix D.

The following section of this report, Chapter II, provides a description of the project. Chapter III presents the findings and conclusions of the evaluation, reflecting an analysis of the several issues grouped by housing policies, housing and community facility production, institutional framework, beneficiaries, program financing and cost recovery, and replicability. Finally, Chapter IV suggests lessons learned and the team's recommendations for future actions.

II. PROJECT DESCRIPTION

A.I.D. has assisted the GOZ's Ministry of Public Construction and National Housing (MPCNH) in meeting the challenge of overcoming the housing shortfall as well as meeting the employment generation and institutional strengthening objectives outlined in the CDSS through a $50 million Housing Guaranty (HG) Program. The goal and purpose of the program are described in Annex A of the Implementation Agreements as follows:

> "1. Goal: to improve living conditions of the urban poor; and
>
> 2. Purpose: to strengthen the GOZ's and local authorities' institutional, technological and financial capacity to administer large low cost shelter programs."

In its final form, the program will have provided 19,360 serviced residential plots, 17,000 house construction loans, and a wide variety of community and commercial facilities.

The first loan (613-HG-001A) valued at $25 million was authorized in FY 1980 and was negotiated between GOZ and the U.S. lender in May 1982. The loan provided financing for two sub-projects. Retroactive financing was provided for 7,680 housing units and associated urban services initiated before independence, in **Chitungwiza**, a satellite town located 25 kilometers south of Harare. The works, valued at $13 million, had been carried out by large-scale private contractors. The scheme qualified for HG funding because the beneficiary households were earning below the median urban household income limit, then set at Z$156 per month. The units consisted of expandable two-room cores on 200m^2 fully serviced plots at an average cost of $1,692 each.

The second sub-project is located at **Kuwadzana**, a new housing scheme situated 11 kilometers west of downtown Harare; initial planning was undertaken just prior to independence. HG funds of $12 million were allocated for this sub-project. The original plan was to replicate the Chitungwiza model, i.e., contractor-built core houses and community facilities on fully serviced plots. Servicing of 4,100 plots by civil contractors began in August 1982. After the resolution of several key policy issues, plot allocations began in February 1984 and were completed ten months later. The instruction program for community facilities is planned for completion in June 1988.

An Implementation Agreement for the second loan (613-HG-001B) of $25 million was signed in November 1982. Little physical progress was made until the resolution of the policy issues referred to above was achieved. However, loan negotiations were finally completed in November 1984 and the loan agreement was signed in January 1985.

This project, designed along the lines of the Kuwadzana scheme, focused on the following four sub-projects:

a) The second phase of **Kuwadzana** consisting of 3,264 units and additional community facilities with HG funds of $12 million.

b) Three schemes in the secondary towns of **Marondera**, **Kadoma**, and **Chinhoyi**. The projects, modeled on the Kuwadzana example, consist of 1,035, 946, and 500 plots, respectively. The total HG contribution is $13 million.

All four projects are at an advanced stage of development, with the municipal government (local authority) in each case being responsible for project management. Plot developers are actively constructing their homes on all four sites. Community facilities are under construction. The schemes are scheduled for completion in June 1988.

The devaluation of the Zimbabwe dollar with respect to the U.S. dollar since November 1984 created a surplus of Z$8 million in the second HG loan. It was therefore agreed to include three additional secondary towns in the program. In July 1986, the local authorities of **Redcliff**, **Chiredzi**, and **Chipinge**, were approved under the loan. Schemes consisting of 800, 300, and 200 units, respectively, have been authorized. Detailed planning of all three is being caried out now. The target completion date of these three projects is June 1989.

In January 1987, A.I.D. and GOZ agreed to apply the interest earned on undisbursed loan funds held in escrow towards the implementation of two additional sub-projects at **Bindura** and **Gwanda**, with 300 and 200 units, respectively.

Table II.1 below summarizes these HG-financed projects. In addition to the HG loan program, A.I.D. provided $750,000 technical assistance to MPCNH, signed in July 1982 and completed in June 1987. Under the Grant, MPCNH and the relevant local authorities received 78 man-months of long-term assistance in the form of a Self-Help Housing Advisor and a Project Planning Advisor. Short-term technical assistance was provided to assist with urban household surveys, a national housing needs assessment, some specific evaluation exercises, and a feasibility study for a National Housing Corporation. Training of project field workers and some Ministry officials, both in Zimbabwe and the U.S., was accomplished. Commodities in the form of vehicles, micro-computers, training equipment, and accounting equipment were supplied. The uses of the grant funds are summarized in Table II.2 below.

Table II.1. Summary - A.I.D. Housing Guaranty Program, Zimbabwe
(613-HG-001A/001B)

HG Loan	Name of Urban Center	Name of Project	Number of Plots	A.I.D. Source (HG)	Zimbabwe Source	Est. Total Cost	Percent Physically Complete 1/
				U.S.$			
001A	Chitungwiza	Seke L, M, N	7,680	13,000,000	0	13,000,000	100
001A	Harare	Kuwadzana I	4,134	12,000,000	13,024,000	25,024,000	98
001B	Harare	Kuwadzana II	3,264	12,513,000	3,760,000	16,273,000	95
001B	Marondera*	Nyameni	1,035	2,848,000	1,550,000	4,398,000	50
001B	Kadoma*	Waverley	946	2,537,000	1,546,000	4,083,000	70
001B	Chinhoyi*	Chiedza II	500	1,955,000	432,500	2,387,500	70
001B	Redcliff	Rutendo extension	800	3,186,000	1,589,000	4,775,000	1
001B	Chiredzi	Tshovani extension	300	1,077,000	619,000	1,696,000	1
001B	Chipinge	Gaza extension	200	884,000	435,000	1,319,000	1
001B	Bindura	Chipadze extension	300	1,098,000	532,000	1,631,000	1
001B	Gwanda	Jahunda extension	200	943,300	363,000	1,307,000	1
Total			19,359	52,041,000 2/	23,850,500	75,891,500	

* Subject of this evaluation.

1/ Estimated, as of 11/87.

2/ This figure includes the interest earned in escrow by the second $25 million HG.

Table II.2. Uses of A.I.D. Grant in Support of GOZ Housing Program
(613-0205)

		Amount (US$)
1.	TECHNICAL ASSISTANCE	
A.	Long Term	
	Project Planning Advisor	228,105
	Self-Help Housing Advisor	187,973
	Sub-total	(416,078)
B.	Short Term	
	Household surveys	19,447
	Interim evaluation	12,719
	Basic Needs Study	36,711
	Builders Study	5,609
	Sub-total	(74,486)
	TOTAL TECHNICAL ASSISTANCE	490,564
2.	LOCAL and OVERSEAS TRAINING	
A.	Courses	
	Kuwadzana training	7,643
	MIT Workshop	2,742
	Berkeley	13,740
	CHF Workshop	4,310
	Sub-total	(28,435)
B.	Conferences	
	9th Conference	1,727
	Contribution to 10th Conference	16,065
	Vienna Conference	8,642
	Sub-total	(26,434)
	TOTAL TRAINING	54,869
3.	COMMODITIES	
A.	Vehicles	
	MPCNH: Peugeot 504, VW Golf:	
	Harare: Cabstar, minibus:	
	Marondera: Cabstar	62,610
	Chinhoyi: Cabstar	15,426
	Kadoma: Cabstar	15,425
	Redcliff: 504 pick-up	12,837
	Chiredzi: 504 pick-up	12,837
	Chipinge: 504 pick-up	12,837
	Sub-total	(131,972)
B.	Other	
	Drawing boards	2,034
	Accounting machines	16,239
	Accounting machines (II)	15,120
	IBM Computer	9,200
	Camera, projecters, etc.	5,811
	Computer disks	847
	Sub-total	(49,251)
	TOTAL COMMODITIES	181,223
	TOTALS	726,656

III. ANALYSIS

A. Housing Policies

The HG Program has had a clearly discernable impact on Zimbabwe's national housing policy, especially regarding policies for lower income families in urban areas. The initial policy dialogue, which began in May 1982 and continued in earnest for some 18 months, succeeded in establishing aided self-help housing as the key strategy for shelter delivery in the country. A follow-up policy dialogue beginning in 1985 and supported with an array of studies helped to move GOZ thinking in the direction of mobilizing private sector housing finance.

This section of the evaluation describes the nature of Zimbabwe's policy making process and how the dialogue with A.I.D. helped shape public and private sector attitudes and actions in the shelter sector.

1. Policy Issues

Prior to the establishment of the Ministry of Public Construction and National Housing as a separate ministry in April 1982, GOZ housing policy favored the development of home ownership housing schemes designed on the basis of affordability and constructed by large scale private sector contractors. Even before independence in 1980, the Government was adopting increasingly lower standards of plot size, infrastructure, and house size in an attempt to achieve affordable shelter solutions for the urban poor. The best example of the application of these methods and standards is the development of Chitungwiza, a satellite dormitory town located some 25 kilometers from Harare. In the space of a very few years, several thousand 200m^2 plots with full services and expandable core houses up to 21m^2 were designed by the then-Ministry of Local Government and Housing and constructed by private contractors. The first HG loan initiated in January 1982 provided $13 million in retroactive funding for nearly 8,000 of these units. It also provided $12 million for the first phase of a new scheme at Kuwadzana designed along the same lines.

When in April 1982 Housing was separated from Local Government to become a Ministry of its own, a new team of housing policy officials with new ideas about appropriate shelter solutions was brought in. The new team reflected the ideology of the post-independence Government, rejecting the participation of private sector contractors who were alleged to have made monopoly profits when building Chitungwiza. It rejected the standards of plot and house sizes as being beneath the dignity of the Zimbabwean people. It reacted sharply to the perception that housing policy was being made by technical specialists and merely "rubber-stamped" by the political system.

The Government's alternative approach to low-income housing called for the construction of houses of a minimum of 50m^2 on fully serviced 300m^2 plots by means of public sector construction teams called brigades. Brigades were to construct community facilities as well. Each local authority was to establish a permanent construction capability, funded with long-term loans disbursed by central government, to provide four-room core houses for families on the authority's housing waiting list. The brigade-built houses were supposed to be less expensive than those built by private contractors because they eliminated the profit element.

The new Ministry proceeded to implement this policy and called for the redesign of Kuwadzana in this mold. A.I.D. resisted these attempts by refusing to authorize additional disbursements of HG loan funds held in escrow. Notwithstanding, MPCNH, already servicing Phase I land at Kuwadzana, began servicing plots in Phase II with their own funds in August 1982. In December of the same year they instructed the City of Harare to establish a building brigade to be used to build the core houses and community facilities.

2. Policy Dialogue

By mid-1983 it became clear to MPCNH that HG funds were not to be forthcoming without reaching some agreement with A.I.D. on this difference of approach to low-cost housing. The Ministry entered into discussions with A.I.D. in an attempt to resolve these differences without wishing to let the dialogue affect non-donor assisted projects. The policy dialogue began with a review of what GOZ had agreed with A.I.D. in the two Implementation Agreements of 1982, agreements largely based on the "old" policy principles. Four major issues were the subject of discussion.

First, it was agreed that the beneficiaries of the HG loan had to be households earning at or below the median urban household income level. Secondly, it was agreed that housing standards must be affordable to the beneficiary group and that all costs incurred in the scheme had to be recovered from the beneficiaries. This suggested that not everybody could afford a four-room house, let alone one built by a brigade. The concession made by MPCNH to permit the affordability principle was the agreement that beneficiaries would be able to choose what mode of construction they wished to use to build their house. The choices available included brigades, aided self-help, and cooperative approaches. It was also agreed that no beneficiary would receive a loan greater than that which he/she could repay over 30 years at 9.75 percent interest. MPCNH, however, still insisted that all beneficiaries would have to complete a four-room core house within 18 months of allocation of their plot and that construction of every house would have to begin with the laying of a full four-room slab. A final concession by the Ministry relaxed this last constraint and merely required local authorities to encourage beneficiaries to begin with a four-room slab.

3. Policy Resolution

The results of this policy dialogue were recorded in the Project Delivery Plan (PDP) for Phase I of Kuwadzana and submitted to A.I.D. who duly approved the disbursement of funds held in escrow. The agreed principles were incorporated into the PDP for the second HG loan which was approved in mid-1984. MPCNH fully expected beneficiaries to select the brigade mode of construction because of the assumed cost savings involved with that mode of construction. In fact, the City of Harare brigade priced themselves out of the market and only five of 6,600 plot allottees elected to use the brigade mode. In practice, not a single beneficiary was evicted from any HG-funded scheme for failure to build four rooms within 18 months. The political consequences of such action were too explosive.

Experience in Phase I of Kuwadzana also showed that encouraging households to start with a four-room slab often led to the attempt to complete the four rooms with the frequent result that loan funds were exhausted even before a single habitable room was complete. This situation was rectified in Phase II by requiring loan funds to be used in the first instance for one room and a toilet. The quality and speed of construction exceeded the expectations of most policy makers. Most gratifying of all, evaluation studies revealed that for every dollar of loan funds disbursed, beneficiaries mobilized fifty-cents of their own resources, either in cash or in kind.

4. Follow-up Dialogue

The general result of the Kuwadzana experience was the adoption of the aided self-help principle as a cornerstone of GOZ's housing policy for low-income groups. There is an understanding that limited resources must be used very effectively. From the initial skepticism of GOZ institutions and personnel, the concept of aided self-help housing is now accepted and promoted. Affordability and cost recovery are important elements of this policy.

Several policy statements reflect the lessons learned under the HG program and their sources can be traced to documentation produced by the A.I.D. long-term advisors. Circulars to local authorities calling for the design of aided self-help projects, erection of building materials stores, determination of affordable loan limits, design criteria for dwelling units, introduction of progress reporting and project reviews, and procedures for obtaining borrowing powers all reflect the fruits of the HG experience.

One of the most powerful lessons of the self-help approach was the magnitude of the material contribution of project beneficiaries toward the solution of their own shelter problems. In fact, the construction, siting, and design chosen by beneficiaries produced higher quality units than brigade-built units. MPCNH realized that by providing a serviced plot with security of tenure, a small amount of housing finance and an element of technical assistance and supervision, low-income households had an incentive to mobilize their own physical and financial resources. This realization was to become a key feature of two important studies carried out by short-term consultants under the A.I.D. Grant. The first study, carried out in January 1985, identified the nature and magnitude of the national housing need. It suggested that the annual need for shelter in urban areas alone exceeded 75,000 units per year. With decreasing annual allocations of public sector funding for housing being made by MFEPD, MPCNH was quick to call for the mobilization of private sector funds to supplement public resources. The sources of private finance were assumed to be the building societies and formal sector employers. As a result of the study, it became possible to talk about core housing standards somewhat below those defined earlier by governments as the "minimum." The policy of progressive development toward the minimum four-room core target was strengthened.

The second study, released in April 1985, analyzed the housing finance sector in Zimbabwe. It put into perspective the increased role that local building societies could play if they were allowed to offer savings plans competitive with other financial institutions like the Post Office Savings Bank. In November 1986, MFEPD allowed building societies to offer nine percent interest, free of income tax and payable monthly, on two-year deposits. Within six months, more than Z$86 million flowed into the building societies. Under the MFEPD regulation, one-quarter of this amount must be invested in low-income shelter.

As further evidence of GOZ's commitment to marshalling private sector resources, it co-sponsored with A.I.D. the Tenth Conference on Housing in Africa in Harare in February 1986. The theme of the conference was "Public/Private Partnership in Housing and Urban Development".

The success of the policy dialogue in both its early confrontational stage and later more conciliatory stage resulted in a number of cases of replication of the aided self-help approach to low-income shelter. See Replicability in III.F below.

B. Housing and Community Facility Production

Table III.B.1 illustrates the range of housing solutions and associated community facilities which will be produced under the terms of the second HG loan. To this total must be added the 11,780 plots, 7,680 core houses, and community facilities financed by the first HG loan.

At the time of this evaluation, virtually all but the final 1,800 residential plots in the five additional towns (and 500 plots in Marondera) had been serviced and allocated. All community facilities except Marondera's secondary school and the primary school extensions in the five additional towns were either under construction or in operation. Commercial plots in Kuwadzana and Marondera were being developed by private sector interests.

This section of the evaluation report describes the important processes used to produce the housing and community facilities.

1. Land Planning

Virtually all site planning was carried out by town planners working for MLGRUD. With two notable exceptions, all land was owned by the relevant local authority at the time the project was approved. In Harare, the Kuwadzana site was purchased from a large-scale farmer and in Kadoma part of the Waverley site was purchased from the Zimbabwe National Railways.

During the policy debate in 1982 and 1983, the new Ministry responsible for housing reversed the pre-independence trend for lower town planning standards in a bid to counteract the image of a colonial housing policy associated with the old regime. In particular, plot sizes were increased from $200m^2$ to $300m^2$, and all plots were required to have vehicular access. These policies were adopted for all town plans except Kuwadzana's, for which planning was completed and approved in 1981. This accounts for the overwhelming number of plots in the Harare scheme which are smaller than $299m^2$. When it was discovered during the construction of Kuwadzana Phase II infrastructure that as many as 300 plots had no direct access to the road system, the plot layout was amended with a consequent loss of plots. The plot layout was subject to further amendment when it was discovered that the ground conditions in many areas of the site were not suitable for home construction. As a result, several site locations were abandoned and new "infill" layouts had to be prepared to accommodate the number of plots lost. As site servicing was already underway, this became a tedious exercise that complicated the administration of the civil engineering contracts in progress.

A further problem which delayed the production of serviced plots concerned the cadastral survey of plot boundaries. Under an innovative policy of "partial beaconing" of plots prior to servicing, only the corners of large blocks of plots were surveyed. It was assumed that after roads, water, and sewers were constructed, it would be easy to insert the remaining survey beacons to fully define all plot boundaries prior to allocation. It was thought that this approach would make more efficient use of a scarce resource: registered land surveyors. In actual fact, the civil engineering contractor inadvertently destroyed several of these "skeleton" beacons, and went about replacing them himself, contrary to the regulation of the Survey Act. This caused several months delay in the delivery of serviced plots as a complete verification survey had to be undertaken at considerable expense. As a consequence, the Surveyor General caused the innovative regulation permitting partial beaconing to be repealed. The experiment designed to cope with the shortage of registered land surveyors thus failed, and the issue remains a critical one as long as local authorities insist on full cadastral land surveys before plots are allocated.

In general, the quality of the town plans provided for Marondera and Kadoma was high with good land use profiles in each case. Chinhoyi's layout has a rather inefficient road system. All sites are well located with respect to employment opportunities.

No environmental assessment was made at the time of site selection, contrary to the requirements called for in the A.I.D. Project Paper. Only in Chinhoyi did an environmental problem occur: about a dozen plots were abandoned when it was discovered that they were located on the site of an old garbage dump. The local authority decided to turn the area into a green space. In Kuwadzana the problem of disposal of sewage effluent from waste stabilization ponds has been overcome by using it to irrigate nearby land owned by the city of Harare on which the municipal herd of cattle graze.

2. Infrastructure

Under current housing policy, all low-income housing areas must be served with full water-borne sanitation and indoor plumbing, roads, storm drainage, street lighting, and electrical networks. The design of infrastructure in Marondera and Kadoma was undertaken by the local authorities while in Chinhoyi it was carried out by private-sector engineering contract.

Table III.B.1. Physical Components of Projects, by Town
(613-HG-001B)

acility/Town	HARARE Kuwadzana Phase II	MARONDERA Nyameni	KADOMA Waverley	CHINHOYI Chiedza	REDCLIFF Rutendo	CHIREDZI Tshovani	CHIPINGE Gaza	BINDURA Chipadze	GWANDA Jahunda
otal Area (hectares)	275	89	81	49	40	15	10	25	10
istribution of plot sizes									
Area (m^2)									
less than $199m^2$	324	0	0	0					
$200m^2$ - $299m^2$	2,940	0	0	0					
$300m^2$ - $399m^2$	0	837	896	411					
$400m^2$ - $499m^2$	0	127	19	89					
over $500m^2$	0	71	31	0					
tal number	3,264	1,035	946	500	800	300	200	300	200
n-residential facilities									
Primary schools	3	1	1	1	1	1	1	1	1
Secondary schools	1	1	1	1	0	0	0	0	0
Health centers	1	1	1	0	0	0	0	0	0
Local markets/toilets	2	1	1	0	1	0	0	0	0
Light industrial areas	1	0	0	0	0	0	0	0	0
Admin office complexes	0	1	0	0	0	0	0	0	0

Source: Project Delivery Plan.

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Similarly, most of the infrastructure construction was done by the local authorities of Marondera and Kadoma while Chinhoyi hired a civil engineering contractor.

The only service seriously lagging behind is the provision of electricity. This has occurred as a result of a combination of factors: 1) the scarcity of foreign currency to permit the importation of selected equipment and materials; 2) the recent creation of a single national parastatal body which has taken over the responsibility for provision of electricity supply from the large local authorities; and 3) the high priority given to the electrification of rural areas.

3. Construction Process

The following description of the Waverly project in Kadoma is typical of the process used to identify project beneficiaries, match them with plots and house plans, and assist them with the construction of their own dwelling.

Project beneficiaries are selected from the housing waiting list maintained by the local authority. The Municipal waiting list contains the names of 2,500 heads of households. Households are ranked in a priority order which puts those who have worked longest in Kadoma at the top of the list. Beneficiary households must be earning no more than Z$218 per month as of July 1, 1986, and must not already own a house in Kadoma.

Once selected, beneficiaries then chose a plot. According to the beneficiary survey, some beneficiaries believed they did not have a choice of plots; others selected plots for sound reasons - fertile soil, good size, well located, etc. Nearly 90 percent of the survey respondents of all three sites are satisfied with the size of their plot.

After plot selection, beneficiaries sign an agreement of sale which permits them to take title to the plot after they have paid off the cost of servicing the land and any other loan received from the local authority. The sale price of a $312m^2$ plot is Z$726, paid off in monthly installments of Z$6.47 over 25 years at 9.75 percent interest. Allottees attempt to begin construction of a house within three months of allocation and to complete a four-room core house within 18 months. They are not permitted to occupy the plot until they have completed at least one room and a toilet.

The local authority offers a range of approved house designs to project participants. All house types are single family detached units designed in such a way as to allow progressive development from one room through to a seven-room stage. Plot holders are also free to use their own plans as long as they meet municipal building requirements. The survey revealed that beneficiaries selected certain house designs for sound economic reasons - suitable for taking in lodgers, less costly design, good veranda/courtyard. Nearly 94 percent of respondents are satisfied with their house design.

Participating households have the right to choose how to go about building their dwellings. This principle flows from the related principle that a householder has the right to decide how to spend the funds that he/she borrows. The three "modes of construction" offered are 1) the municipal building brigade, 2) cooperative housing, and 3) aided self-help.

Under the first construction option, a beneficiary can approach the local authority and request that the municipal building brigade build the house. This option requires the beneficiary to pay for the services of the brigade (excluding materials which are financed by a loan) in cash in advance. Local authorities are encouraged to ensure that the full cost of providing brigade services are recovered from the householder and this has tended to make the brigade option the most expensive of the three. In fact, this option was rarely chosen.

Under the cooperative mode, beneficiaries are encouraged to work together in a form of mutual self-help. It is not the GOZ intention that registered housing cooperative societies be formed in urban areas. Rather, it desires to see informal cooperation on the sharing of resources such as transport and labor as a means of lowering costs. Again, beneficiaries did not choose this option.

The third option, known as "aided self-help," was overwhelmingly selected by beneficiaries. This mode requires the beneficiary to take on the responsibility for the construction of his own dwelling with the financial and technical aid provided by the project. In its purest (and most rare) form, it involves the family actually assembling the building with its own labor, using materials and technical advice supplied by the local authority. In its most popular form, it entails the beneficiary organizing the construction process, obtaining materials from the project and hiring and monitoring the skilled labor required to construct the dwelling.

A 1985 survey of beneficiaries' actions in the Kuwadzana revealed that 97.8 percent of all participants hired at least one builder and that only 16 percent actually helped with the physical construction of the dwelling. This finding reflects the fact that project beneficiaries are normally full-time employees in the formal sector. This is no different now for the three secondary cities. The success of the aided self-help mode of construction is attributed to its relative cost-effectiveness compared to the brigade option and to its organizational simplicity compared to the cooperative mode of construction.

Beneficiaries are entitled to take loans in the form of building materials under an optional program of construction credit. Loans, repayable over 30 years at 9.75 percent, are granted on the basis of the beneficiary's ability to afford the monthly repayments. Beneficiaries are not entitled to a loan larger than they can afford to repay, assuming 27.5 percent of their monthly income can be allocated to their total housing expenses. The maximum loan being offered by Kadoma is Z$2,100, sufficient to finance the purchase of materials for a one-room core with toilet and four-room slab. The construction loan program is monitored closely by local authority officials who inspect each house at specified stages of progress. Materials for one stage of construction cannot be obtained from the site depot until a municipal inspector approves the work of the previous stage. Borrowers are given six months' grace before beginning loan repayments. This policy minimizes the necessity for the family to make rental payments for their current accommodation as well as loan repayments on their incomplete house.

In Chinoyi, the pace of construction varies as families improve their homes when their resources permit.

Beneficiaries reported their frustration with delays and shortages of building materials. On the other hand, they recognized the merit of lending in materials rather than cash - almost 28 percent regarded that as a reason for their satisfaction with the program. The municipal stores were well accepted, though beneficiaries complained of problems transporting materials from the stores to their plots.

The local authority procures all materials in bulk from the private sector on the basis of competitive bidding. The only exception to this is the provision of concrete blocks which are produced by the Kadoma production brigade and supplied at minimal mark-up to the project. Economies of scale are obtained in this process, only slightly offset by the local authority handling charge of eight percent for operating the materials store.

Plot allocations in Kadoma began in May 1986 and were scheduled for completion by June 1987. By the end of September 1987, 572 plots had been allocated, and 324 houses (not all at the four-room stage) were already occupied by their owner-builder families. The total cost of the development is Z$5.85 million. Of this amount, A.I.D. is financing Z$4.5 million, or 77 percent, Z$700,000 is being provided by central and local governments, and beneficiaries are contributing an estimated Z$650,000.

4. Informal Sector Builders

A survey of the informal sector builders employed by project beneficiaries in Marondera, Kadoma and Chinhoyi was undertaken as part of this evaluation. The survey showed that the typical building contractor was in his early thirties, married, with five to eight years of schooling. Most builders had not had any formal training in construction skills and less than one quarter held a recognized qualification in the industry. The average number of people employed regularly by a builder was less than two. Many builders took up residence in the project as a lodger with a few even being project beneficiaries in their own right. At the time the survey was undertaken, approximately 1,800 houses were under construction. Few builders had been involved in more than four or five units suggesting that there was a total of about 350 builders in all three towns.

Only in Marondera were builders given occassional or frequent direct access to the material stores. In the other two towns, material issue procedures required the beneficiaries themselves to receive materials for onward handling to the builders.

The average cost of a builder's services to construct a four-room house in Marondera was Z$1,233, with the lowest being Z$1,100 and the highest Z$1,400. This suggests that the local authority has played a major role in regulating what builders could charge beneficiaries. The corresponding average for Kadoma is Z$810 with a similar range of consistent values. The difference in the two amounts may reflect the fact that Kadoma's units were generally two rooms and not four rooms (despite the survey question being asked of the full four room core). It could also suggest the influence of the local authority in regulating what builders charged. The Chinhoyi average builder cost was Z$1,082 with the lowest being Z$850 and the highest Z$1,600. This suggests a modest regulatory role by the local authority and perhaps less cohesion among the beneficaries as a social group.

Most builders reported that the average time required to construct a four room core was one to two months. Under ideal conditions of weather and material supply, builders reported that they could complete a unit in two to four weeks. This is well within the time frame permitted by MPCNH in terms of its policy of "four rooms in 18 months."

The survey in Marondera revealed the existence of at least one building cooperative composed of 20 beneficiaries who joined forces to build their own houses. Each member contributes his/her special skill in the construction of all the houses. No money changes hands for services rendered. Work is carried out on weekends due to job commitments of the members.

The two most frequent problems mentioned by builders concerned lack of materials at the municipal stores and the irregularity of payments owed by beneficiaries. Some builders complained of the absence of building inspectors during weekends.

5. House Types

MPCNH prepared a series of standard house designs in 1985. This design exercise was in response to the need to have cost-efficient layouts available to progressive development by informal sector building contractors. All local authorities except Marondera have used the MPCNH designs. Marondera has used its own house types. All house plans are single story, constructed of brick or concrete blocks and are roofed with cement asbestos sheets. All construction materials are locally produced except glazing for windows, certain electrical items and the sheet steel from which door frames are made.

6. Community Facilities

If the brigade construction policy could be said to have worked successfully in the HG program, it was in the development of primary schools and secondary schools constructed by MPCNH workers. This can be attributed to the experience gained by the brigade workers with the particular building types which they built at least eight times in a period of three years.

In the secondary towns most of the schools and clinics were constructed more recently by building cooperatives engaged by the councils on a lump sum contract basis. This form of construction organization has replaced the municipal brigade set up in 1983. The brigade was designed to replace the private sector contractor mode of construction so repugnant to the MPCNH at the time. In many respects the current range of building cooperatives represents a closing of the circle except that all coop members benefit equally from the proceeds of their work.

C. Institutional Framework

This section of the evaluation describes the institutional framework within which the HG projects in the secondary towns were implemented. The discussion highlights the achievements and problems which characterized project planning, implementation of infrastructure, assistance to beneficiaries, project administration and A.I.D. support.

1. Project Planning

The preparation of concrete plans for the design and implementation of the three projects in Marondera, Kadoma and Chinhoyi only began some 24 months after the signing of the Implementation Agreement in November 1982. The reasons for this delay, described in III.A above, concerned the policy dialogue which resulted in agreement on key principles of project design.

As with Phase I of the Kuwadzana Project in Harare funded by the first HG loan, the vehicle used to document the proposed execution of each scheme was the Project Delivery Plan (PDP). The genesis of the PDP was a report prepared by the A.I.D. Project Planning Advisor entitled "Approach to Project Planning Design and Management," in October 1983. The format was adopted by MPCNH and the initial Master PDP was finalized in March 1984.

After review and approval by A.I.D., authority to proceed with loan negotiations was given in November 1984.

The Loan Agreement was signed in January 1985, just over two years after the Implementation Agreement was signed. Because of the uncertainty whether or not there would be a second HG loan, MPCNH had refused to officially advise the three secondary towns of the existence of the A.I.D. co-financed schemes until January 1985. It was thus only in mid-1985 when planning of the schemes in the three towns was undertaken in earnest.

The roles to be played by the various ministries, departmental agencies, and local authorities were described in the PDP. MPCNH was responsible for policy guidance, supply of central government funds, and monitoring progress. The three local authorities were responsible for planning and managing the implementation of their respective projects.

The mechanism used by MPCNH to provide technical assistance and monitor project progress was through a series of regular project review meetings held by the local authorities concerned. The meetings became the forum in which problems of a policy or practical nature were discussed and solutions proposed. Each meeting had a standard agenda which followed the contents of the PDP. While the meetings were ideal for communicating between levels of government, they were not very appropriate as vehicles for technical assistance much less technology transfer. Since MPCNH was a policy-making body with few staff experienced in project implementation, it tended to limit its contact with local authorities to these formal meetings. It was not prepared to encourage the close cooperation of its officials with those of the towns in settings outside that of the formal meeting. The only two exceptions to this were the two official training workshops held in November 1983 and October 1987. This unfortunate restriction on technical cooperation was largely a function of GOZ policy on the utilization of expatriate advisors.

2. Infrastructure Services

Two of the three local authorities undertook all of the engineering design of the infrastructure using their own departmental resources. Only Chinhoyi relied on outside consultants. To the extent that A.I.D. advisiors provided insight into the planning design and management of Chinhoyi's project, it was often the consultants who were the main beneficiaries of such insights, the town management being weakened by frequent turnover of often undertrained manpower.

Only Marondera undertook the installation of all the infrastructure departmentally, the other two towns relying on civil contractors selected in a process of competitive bidding. Marondera attempted to minimize capital both by eschewing the use of private contractors and subdividing the project into four phases. This caused delays (e.g., land surveying services were not available when needed at the beginning of each phase) and consequent cost overruns. Had Marondera decided to do all phases at once with the use of a private contractor, it is likely that the final costs of the serviced plots would have been significantly lower and more uniform across the whole site than was the actual case.

The infrastructure service most problematic to all sites was the provision of electricity. While the problems at the three towns have not reached the magnitude of that at Kuwadzana, the supply of electricity has been the most difficult to coordinate. This was not for lack of attention during project review meetings. Rather, the creation in 1986 of a new national corporation for electricity supply coupled with its high priority for servicing rural areas before urban necessarily relegated the electrification of these schemes to a low priority.

3. Assistance to Beneficiaries

One feature that distinguishes the HG program from early domestically funded schemes was the provision of assistance to beneficiaries to allow them to build their own homes under a scheme of aided self-help. The aid came in several forms.

Beneficiary orientation. Potential project participants were briefed before, during and after induction into each scheme. The most successful orientation programs included one or more opportunities for group briefing, i.e., dealing with 20 or more families at once. This collective forum helped overcome problems that affect many low-income urban families who come face-to-face with "the authorities."

Financial assistance. All allottees were eligible for a municipal materials loan repayable at 9 3/4 percent over 20 to 30 years. The procedure was simple and required no extensive approval process. Materials were available on site from a municipally run store.

Technical assistance. Most beneficiaries hired informal sector contractors to build their homes. Each local authority had a cadre of works inspectors, or building liaison officers (BLO). BLOs were responsible for ensuring that construction work met standards before the beneficiary was permitted to draw materials for the next stage of construction. Security for the loan was provided by the fact that the town owned the land until the loan was paid off. Beneficiary actions and attitudes towards these forms of assistance are discussed in III.D below.

4. Administration

The three secondary towns benefitted enormously from Kuwadzana's experience in project administration. The Harare scheme became a reference against which to measure the adequacy of a town's administrative system. Orientation material, cost calculations, legal agreements, inspection procedures and staffing patterns drew heavily on Kuwadzana's management model.

Nevertheless, problems did occur. The recordkeeping experience of the local authorities varied a great deal from the relatively capable Kadoma efforts to the unsystematic Chinoyi efforts. Reporting by the local authorities to the MPCNH was based on specific Ministry requests, particularly those made in person at review meetings. Many of the reporting forms prepared by the resident advisors were used, but those providing information about the allottees were not. Thus, even the vague guidance by the MPCNH about income limits of beneficiaries was easily misunderstood and only casually enforced at times.

Institutional constraints within the MPCNH inhibited project progress. Regular, systematic communication did not exist among the financial, technical, and policy staff. The administrative structure was too compartmentalized. The only person within the Ministry devoted to the project on a full time basis was the A.I.D. resident advisor who, while highly regarded and well utilized, was limited in action by the Ministry. His quarterly reports were vital for project monitoring by A.I.D., but were not institutionalized by the Ministry after his departure. To a great extent, this reflects expected institutional weaknesses - limited numbers of staff, minimal training, and limited continuity.

On the local level, while beneficiary income eligibility guidelines are sometimes only marginally applied, collection problems are generally handled with a combination of prudent business management and wise politically sensitivity. Thus, for instance, loan collection is improved by the threat of cutting off water service, or the initiation of foreclosure procedures.

5. A.I.D. Support

A.I.D. management of this program was undertaken jointly by the Regional Housing and Urban Development Office in Nairobi (RHUDO) and the A.I.D. Mission in Harare (USAID). Coordination between the two offices was good. Through frequent visits to Harare, the RHUDO provided project implementation guidance to the GOZ, to USAID, and to the resident advisors and short term consultants.

The A.I.D. grant was used flexibly and according to MPCNH priorities. It financed short and long-term technical assistance, courses and conferences, and the purchase of vehicles and other commodities. The studies carried out by the short-term consultants were useful, particularly the housing needs assessment. The operational guidance provided by the two long-term advisors was vital during their tenure, but only some of their procedures and methodologies have been institutionalized by the MPCNH and local authorities.

The RHUDO's monitoring role was performed well, often carried out incidental to some other responsibility. The training workshops held in Zimbabwe for local authority officials improved program understanding and flexibility, and increased job enthusiasm. The evaluation team itself served the continuing monitoring function. Even at this stage of project completion, the mere presence of the team and RHUDO representation was an important reminder to the GOZ of outstanding issues.

D. Beneficiaries

This section discusses the demographic and financial characteristics of the beneficiaries, construction costs and affordability, beneficiary attitudes, and the characteristics of lodgers in the projects. Several summary observations on these issues provide a framework for presenting the detailed information. Data are drawn primarily from the beneficiary and lodger survey, the PDP, and interviews with local officials.

- The demographic profile of the beneficiaries in the secondary cities is very similar to that of households in Kuwadzana. These households are generally not from the rural hinterlands but rather, have been living as lodgers or renters in the high density areas surrounding Kadoma, Chinhoyi, and Marondera. Employment is nearly universal, heads of household are quite well educated, and occupations include a wide range of manufacturing and some professional jobs.

- For many households, participation in the program represents an improvement in housing quality. More importantly perhaps, the opportunity to become a homeowner has provided important psychological benefits as well as the opportunity for appreciation of investment. Overall, beneficiaries are extremely positive in their statements regarding the program. Observation of the projects is also convincing about the pride surrounding beneficiary efforts. Furthermore, as discussed in III.E, beneficiaries are well aware of the strong market interest already evident for these properties.

- On average, beneficiaries had completed two and one-half rooms. The cities vary dramatically in this regard, however; financial as well as construction factors appear to play a role in differing expectations regarding completion of four rooms.

- High construction costs are expected to affect the ability of households to complete four rooms within a reasonable time frame and also meet financial obligations. The economic relationships expected to prevail at the time the projects were planned are no longer valid. Housing construction costs have risen dramatically in two years, perhaps by over 60 percent. Incomes have also risen: the survey results suggest that the incomes of approximately three-fourths of the beneficiaries exceed the program target of $218 per month. The combined result of the movement in both costs and income is that the share of the materials loan in overall costs has shrunk and beneficiaries have been required to supply substantial resources of their own.

- The gap in resources may be as high as 40 percent of the official estimated cost of construction of four rooms. Somewhat surprisingly, beneficiary estimates of required resources fall well short of official estimated costs. In any event, it is clear that many beneficiaries will need to provide substantial, additional resources to complete four rooms. It is

A family in Kadoma is preparing for additional construction to its house, while garden crops and flowers are already growing in front.

not clear to what extent this will slow completion rates. Many beneficiaries probably have sufficient income to adopt a "pay-as-you-go" approach. Also, competition among informal sector builders may allow beneficiaries to shift some of the burden; full payment may not be made until well after work has been completed.

There is cause for concern, however, since arrears are already a major problem. Overall, approximately one-fourth of beneficiaries have missed payments; in Chinhoyi, however, this number reaches one-third, and the majority of these beneficiaries have missed more than one payment.

- Finally, lodgers are less prevalent than the Kuwadzana experience would suggest. Less than 20 percent of the beneficiaries now rent rooms to lodgers; about 35 percent eventually expect to do so. Those households that currently have lodgers, have lower incomes, smaller families, and are more likely to be female-headed. They have also utilized more of their own funds in the building process.

1. Beneficiary Characteristics

Beneficiary profiles in Marondera, Chinhoyi, and Kadoma are remarkably similar to each other (see Table III.D.1) and as well as to Kuwadzana. Households average about five persons, are preponderantly male-headed, and are relatively young. Heads of household are 34 years old, on average; only 3.4 percent are over 50. This is a slightly younger group than in Kuwadzana in 1985, where the average age was 38 and 11 percent were over 50. Household size is similar, however, averaging 5.27 persons in Kuwadzana and 5.12 in the combined cities. Households in Kadoma are on average slightly larger (5.46 persons).

The majority of beneficiaries have received more than a primary education, particularly in Marondera and Chinhoyi. Employment by the head of household is nearly universal and, on average, 24 percent of households also have a second wager earner. (The proportion of households with a second wage earner is higher in Marondera; correspondingly, median income is higher. See Table III.D.1.) Occupations cover quite a broad spectrum. Generally, beneficiaries are urban workers (there are almost no farmers) with a high concentration of jobs as factory workers, builders, and general laborers. Smaller numbers are teachers, clerks, or hotel or transport workers. This distribution is quite similar to that for Kuwadzana with one exception: municipal and national government workers account for 13 percent of jobs in Kuwadzana.

Prior to joining the project, over 80 percent of beneficiaries lived primarily in the high density areas of their own town while much smaller numbers lived in employer compounds or low density areas; only four percent came from farms. (See Table III.D.2.) The majority were lodgers (48 percent) or renters (30 percent) although the distribution varies somewhat across cities. (Not surprisingly, there was only one prior owner in the survey sample.) Most beneficiaries did not lack access to sanitation facilities in their prior residences. However, major changes in the quality of their housing will include private facilities and the presence of indoor plumbing. In Marondera, only 16 percent of the households had piped water inside their prior dwelling. The number of persons per room may not be greatly affected; in their previous residences, the average was 1.7 persons per room. Since a somewhat greater infusion of lodgers is expected in the secondary cities as the projects mature, crowding is likely to continue.

2. Affordability

Tables III.D.3 and III.D.4 and Figures III.D.1 to III.D.4 provide a profile of construction progress, beneficiary incomes and housing burden, and construction costs.

Between mid-1985 and mid-1987, construction costs rose by over 60 percent. Yet loans to beneficiaries have remained at the levels originally programmed. The obvious question then is whether beneficiaries can complete construction of their selected house designs within a reasonable time frame.

Two different cost estimates have been used throughout the analysis of affordability. The first is the beneficiaries' own estimate of total funds

Table III.D.1. Beneficiary Household Characteristics

VARIABLE	COMBINED CITIES	MARONDERA	CHINHOYI	KADOMA
Household Size				
Average	5.12	4.95	4.82	5.46
# Persons: 1-2	10.2%	14.5%	10.5%	6.6%
3-4	29.0%	30.7%	31.6%	26.3%
5-6	38.6%	45.1%	42.1%	36.8%
7+	12.0%	9.7%	15.8%	30.2%
Age of Household Head	34.3	33.6	34.4	34.8
Years of Education				
Average	7.3	7.8	7.5	6.8
#Years: 0-6	22.2%	19.0%	10.8%	30.6%
7	34.1%	22.4%	46.0%	37.5%
8-9	29.4%	37.9%	29.7%	22.2%
10+	12.0%	19.0%	11.0%	9.7%
Male Head of Household	91.5%	90.7%	87.0%	96.1%
Days Worked Per Month	22.6	21.9	23.3	21.8%
Percent with Second Wage Earners	23.5%	37.0%	18.0%	21.0%
Occupation*				
Factory Worker	24.6%	11.5%	42.1%	10.5%
Laborer	10.3%	11.5%	11.8%	5.3%
Builder	8.6%	9.8%	6.6%	10.5%
Clerk	5.7%	4.9%	5.3%	7.9%
Transport	5.1%	3.3%	5.3%	7.9%
Teacher	2.3%	6.6%	6.6%	----
Hotel Worker	4.0%	1.6%	6.6%	2.6%
Sample Size	176	62	38	76

*Only categories with over 5 percent representation in any city are listed.

Table III.D.2. Prior Housing Characteristics of Beneficiaries

VARIABLE	COMBINED CITIES	MARONDERA	CHINHOYI	KADOMA
Prior Residence				
High Density Area	81%	73%	82%	87%
Low Density Area	5%	2%	5%	7%
Employer Compound	7%	19%	3%	---
Farm	4%	7%	3%	3%
Prior Tenure				
Renter	30%	29%	18%	36%
Lodger	48%	44%	56%	51%
Employer Housing	11%	19%	5%	8%
Average Number of Rooms	1.7	1.7	1.8	1.6
Presence of Toilet				
Shared	42%	45%	55%	32%
Communal	46%	45%	32%	54%
Private	12%	10%	11%	15%
None	1%	---	3%	---
Presence of Bath				
Communal	43%	40%	24%	54%
Private	54%	58%	66%	45%
None	3%	2%	11%	1%
Presence of Electricity	74%	68%	79%	78%
Availability of Water				
Inside	32%	16%	43%	40%
Nearby	67%	82%	57%	60%
No water nearby	1%	2%	--	--

required to complete a four-room core unit. This estimate averaged Z$4,717. The second estimate is an update of estimates prepared for the most current Project Delivery Plan; this "official" estimate for a four-room core unit is Z$7,773. Because those estimates are so far apart, both are used in this analysis. As will be discussed, project finances differ fairly dramatically from initial assumptions.

Construction. Marondera has made substantial progress toward completion of four-room cores. Nearly three-fourths of the beneficiaries have completed their houses; one-half of the households indicated that it took (or will take) only five months. (See Figure III.D.1) In Chinhoyi and Kadoma, where allocations began about six months after Marondena, beneficiaries have completed on average 2.3 and 1.7 rooms, respectively. The estimates of expected completion time are longer, however, especially in Kadoma where one-half the beneficiaries expect to take more than 16 months to complete their houses. Financial considerations, including the amount of beneficiary loans and beneficiary income and other resources, have certainly played a role in determining progress.

Beneficiary Income. Since the projects began allocation, beneficiary incomes have risen above the eligibility target. Median income for the combined cities is now Z$310 and the average is Z$377; approximately 73 percent of the households have incomes exceeding the revised Z$218 target. (See Table III.D.3.) (The target has not been updated currently, however. Thus, many more households would have met the target at the time of allocation.) By way of comparison, average income in Kuwadzana in 1985 was Z$171; only 25 percent of the beneficiaries exceeded the target, then Z$156.[1]

Material loans average about Z$2,600. However, there are substantial differences between Marondera and Chinhoyi, on one hand, where loans are about Z$3,000, and Kadoma, on the other, where loans average only Z$2,100.[2] Since loan schedules have not been modified, the housing burden for loan and service charges averages about 14 percent; this is substantially lower than the 27.5 percent used for planning for affordability. Indeed, nearly one-quarter of the beneficiaries have loan and service burdens of less than ten percent of income; only 13 percent have service burdens exceeding 20 percent. From this perspective, housing is indeed very affordable.

As construction costs have risen, however, material loans have covered less and less of required resources. The share of the loan in beneficiary estimates of total required costs averages 57 percent. The share is only 51 percent in Kadoma. The share of the loan in the official cost

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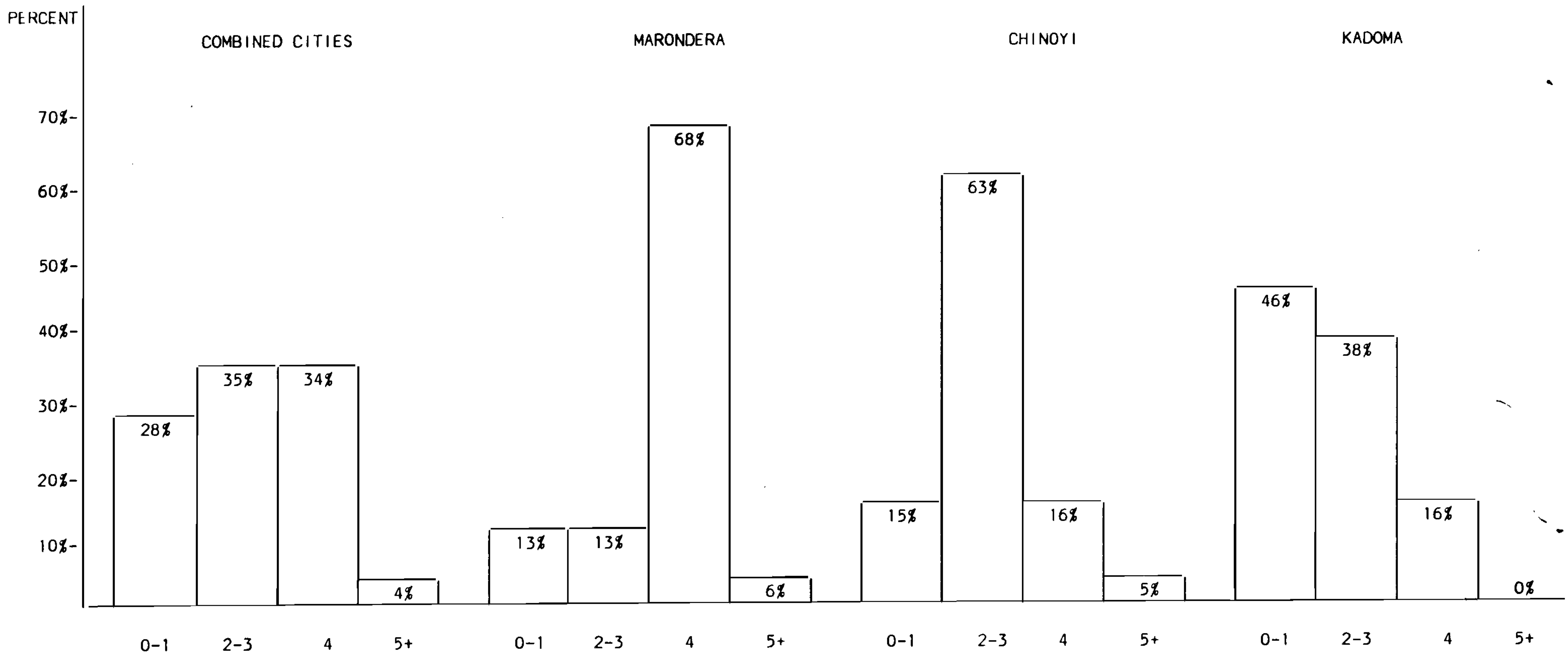
[1]A number of households in Chinhoyi report monthly incomes exceeding Z$1,000, whereas none do in Kadoma or Marondera. Thus, average income is very high in Chinhoyi and greatly exceeds the median.

[2]In Marondera 25.8 percent of loans are between Z$2,100 and Z$3,000 and 74.2 percent over Z$3,000. In Chinhoyi, 18 percent have loans of Z$2,000 and 82 percent loans of Z$3,000. Kadoma's loans are much lower: 11.8% up to Z$2,000 and 88.2 percent between Z$2,000 and Z$2,100.

Figure III.D.1. Number of Rooms Completed



Number of Rooms Completed.

	Combined Cities	Marondera	Chinoyi	Kadoma
• Average Number of Rooms Completed	2.45	3.50	2.29	1.67
• Date Allocations Began		October 1985	June 1986	May 1986
• Beneficiary Estimate of Number of Months Required to Complete Four Rooms (Median)	10	5	9	16

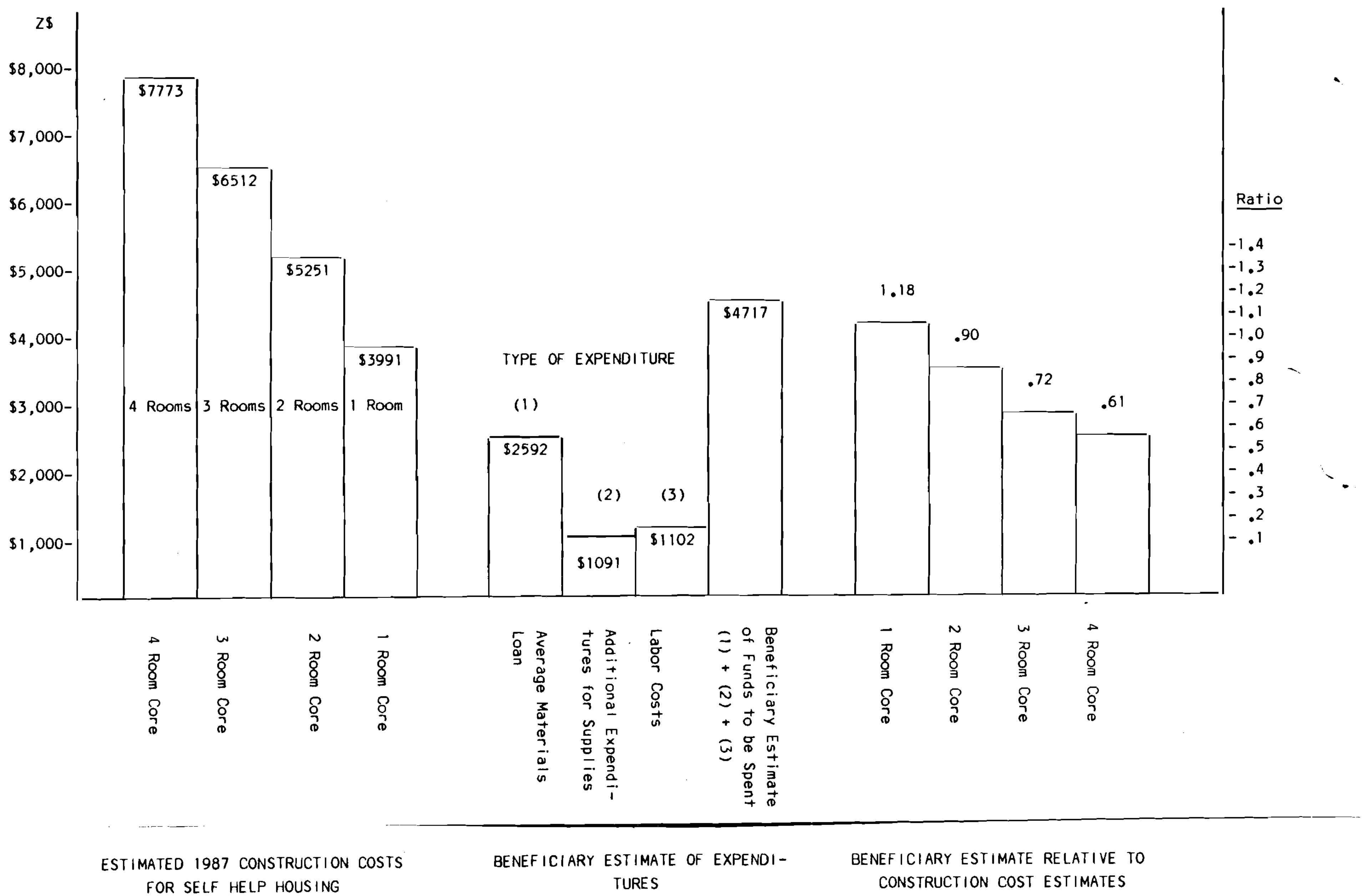
Table III.D.3. Beneficiary Financial Characteristics

VARIABLE	COMBINED CITIES	MARONDERA	CHINHOYI	KADOMA
Total Monthly Family Income				
Mean	Z$377	Z$368	Z$468	Z$317
Median	Z$310	Z$324	Z$305	Z$310
Service on Material Loans & Other Service Charges	Z$40.39	Z$38.87	Z$38.82	Z$42.45
Housing Burden				
• Loan & Service Burden Relative to Income:				
mean	.14	.14	.12	.15
median	.14	.13	.12	.14
• Loan & Service Burden in Prior Residence	.09	.10	.08	.09
• Estimated "Total" Current Housing Burden				
mean	.22	.23	.22	.21
median	.21	.21	.21	.20
Average Material Loan	Z$2,592	Z$2,816	Z$3,044	Z$2,069
Savings and Other Beneficiary Funds	Z$1,176	Z$1,258	Z$1,361	Z$ 893
Share of Material Loans in Beneficiary Cost Estimates	57%	57%	64%	51%
Share of Material Loans in Official Construction Estimates for 4 Rooms	33%	36%	39%	27%
Hypothetical Monthly Income Required to Finance Estimated Official Construction Costs at a Burden of 27.5 percent				
1 Room Core	Z$177	Z$174	Z$171	Z$186
2 Room Core	Z$216	Z$214	Z$211	Z$225
3 Room Core	Z$256	Z$253	Z$250	Z$265
4 Room Core	Z$295	Z$293	Z$289	Z$304
Hypothetical Monthly Income Required to Finance Estimated Official Construction Costs at a Burden of 20.0 percent				
1 Room Core	Z$243	Z$240	Z$235	Z$256
2 Room Core	Z$297	Z$294	Z$280	Z$310
3 Room Core	Z$351	Z$348	Z$344	Z$364
4 Room Core	Z$406	Z$405	Z$398	Z$418

Table III.D.4. Construction Cost Estimates and Beneficiary Expenditures

VARIABLE	COMBINED CITIES	MARONDERA	CHINHOYI	KADOMA
Beneficiary Total Cost Estimates (Funds spent or to be spent)	Z$4,717	Z$5,220	Z$4,996	Z$4,231
• Average Material Loan	Z$2,592	Z$2,816	Z$3,044	Z$2,069
• Additional Expenses for Supplies	Z$1,091	Z$1,205	Z$701	Z$1,352
• Labor Costs	Z$1,102	Z$1,199	Z$1,271	Z$917
Total Funds Spent to Date	Z$3,835	Z$4,030	Z$4,779	Z$2,954
• Material Loan	Z$2,422	Z$2,629	Z$2,974	Z$1,854
• Labor & Additional Materials	Z$1,413	Z$1,401	Z$1,805	Z$1,100
Percent of Funds Spent Relative to Beneficiary Total Cost Estimate	81%	77%	96%	70%
Additional Funds to be Spent	Z$810	Z$1,030	Z$146	Z$1,289
Official Estimated Construction Costs				
1 Room Core	Z$3,991	Z$3,991	Z$3,991	Z$3,991
2 Room Core	Z$5,251	Z$5,251	Z$5,251	Z$5,251
3 Room Core	Z$6,512	Z$6,512	Z$6,512	Z$6,512
4 Room Core	Z$7,773	Z$7,773	Z$7,773	Z$7,773
Ratio of Beneficiary Total Cost Estimates and Official Estimated Construction Costs				
1 Room Core	1.18	1.31	1.25	1.06
2 Room Core	.90	.99	.95	.81
3 Room Core	.72	.80	.77	.65
4 Room Core	.61	.67	.64	.54

Figure III.D.2. Current Construction Costs and Beneficiary Estimates of Total Expenditures (Combined Cities)



estimates ranges from 39 percent in Chinhoyi to only 27 percent in Kadoma. Beneficiaries have responded by generating substantial funds of their own, averaging Z$1,176 for the three cities. Approximately 95 percent of beneficiaries have generated additional resources, primarily savings (50 percent had saved over Z$500 and 30 percent over Z$1,000).[1] Other resources include employer assistance (29 percent) and sale of assets (7 percent).

In order to calculate a more realistic level of beneficiary housing burden, a hypothetical expenditure/income ratio has been estimated which accounts for beneficiary resources as well as the material loan and service charges. If it is assumed that the full amount of the beneficiary's own resources are amortized under the same terms as the material loan, then the burden is approximately 22 percent of income.[2] Indeed, it is likely that actual burden even exceeds 22 percent. As discussed below, substantial additional resources appear to be required by many beneficiaries; much of the shortfall will come from current income.

Construction Costs. As indicated above, two estimates of required construction costs have been used in the analysis. Beneficiaries have estimated that required funds will total Z$4,717 (see Table III.D.4 and Figure III.D.2.). This figure includes the materials loan, personal funds already spent on building supplies and labor, and additional funds for supplies and labor needed for completion.[3] (Again, Kadoma appears to differ; since beneficiary loans are lower, the total estimate is lower even though the combined estimate for additional supplies and labor is in line with the other cities.)

Estimates for costs of completing one to four room core dwellings were also developed for the Project Delivery Plan. These estimates, which pertained to December 1986, have been slightly revised to make them current as of mid-1987. The materials component was increased by a factor of 8.72 percent, the increase in the construction price index for the first half of 1987. No change was made in labor costs, which are based on informal sector assistance. The results indicate that required costs of one to four room core houses range from Z$3,991 to Z$7,773. Clearly, the beneficiary estimate falls quite short of official estimates for the three and four room core units. Depending on the site, beneficiary estimates range from 54 percent (Kadoma) to 67 percent (Marondera) of the official estimates for four rooms. In addition, the average beneficiary estimate is not even as high as the 1985 Kuwadzana beneficiary estimate of Z$4,844. If Z$4,844 and Z$7,773 are both used as official cost estimates, costs for a four-room core have risen by 60 percent.

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[1]In contrast, in Kuwadzana, only 13 percent had saved over Z$1,000.

[2]Since most of the funds were saved, not borrowed, opportunity cost is a better notion than current burden.

[3]One fourth of the estimates exceed Z$5,300 while one fourth are less than Z$3,800; the median, Z$4,615, is close to the mean.

This is also consistent with differences between original and revised estimates calculated by project officials during site visits.

It is possible that the official estimates of construction costs are too high. It may not have been necessary, for example, to increase material prices for the first six months of 1987 since goods may have been stock-piled. One may also wish to exclude the cost of electrical fittings. Nevertheless, these changes do not eliminate the fundamental discrepancy.

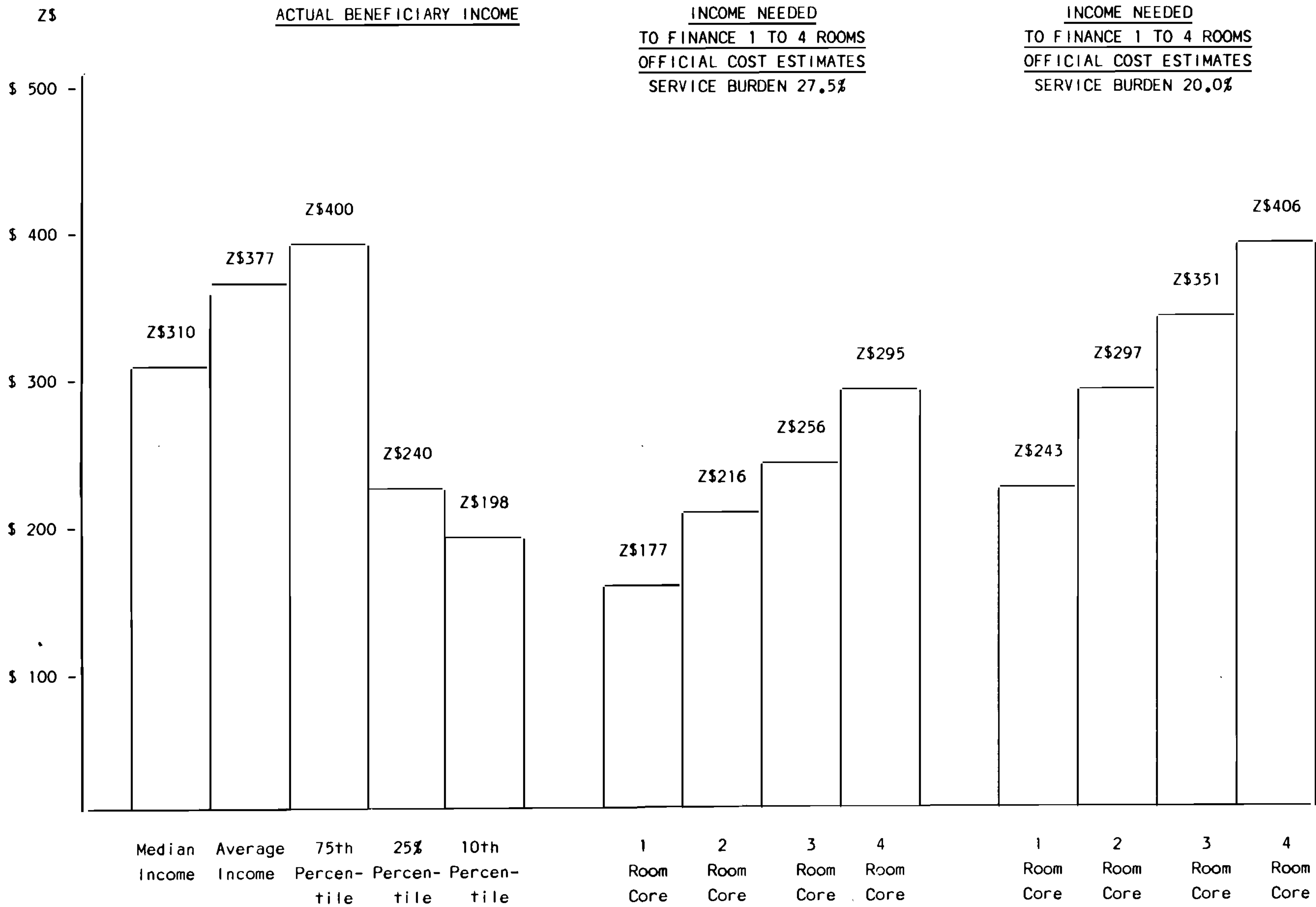
It is more plausible that beneficiary estimates are too low. For example, beneficiaries may have assumed very little for current labor payments. Conversations with site officials and casual discussions with beneficiaries suggest that the building construction workers are not paid on time. Competition is sufficient to encourage them to complete as much work as possible without full remuneration, trusting that they will be paid eventually. In addition, in Chinhoyi and especially in Kadoma (where only 1.7 rooms have been completed on average), beneficiaries may simply be underestimating the resources needed to complete four rooms because of lack of experience.

In any event, currently available funds are largely spent (81 percent on average) while only 60 percent of the (four) rooms have been completed. If the official estimate is accepted at face value, about Z$3,000 more is needed. If we "split the difference" because of possible misestimates of both figures, then Z$1,500 more is required on average. It is not clear whether beneficiaries have more savings. However, even if the full Z$3,000 amount were borrowed, some beneficiaries have sufficient income to service this debt. Figure III.D.3 indicates the hypothetical income needed to complete one to four room cores.[1] Assuming the official housing burden level of 27.5 percent, more than one-half of the beneficiaries can afford to borrow the necessary funds. If a possibly more realistic burden ratio of 20 percent is used, however, more than half the beneficiaries could not afford the extra resources.

Finally, if we "split the difference" between estimates, as discussed above, the picture clearly looks brighter. Under this scenario, about 75 percent can afford the four-room core at a burden level of 27.5 percent. At a burden level of 20.0 percent, about one-half could afford to borrow the needed funds. Presumably, therefore, if the funds can be borrowed, delays in completion will be less. If the extra resources are taken from current income and construction is done on a pay-as-you-go basis, completion

[1]The incomes were calculated as follows. For the combined cities, it was assumed that beneficiaries had savings and other resources of Z$1,176 (the actual average). This was subtracted from estimated costs to get estimated remaining need. This figure was amortized by the debt factor used in actual material loan calculations (.00859). Infrastructure and service charges (Z$24.49) were added. Two burden levels, 27.5% and 20% were used to solve for income. Required income is somewhat higher in Kadoma because beneficiaries, on average stated a lower level of savings.

Figure III.D.3. Beneficiary Financial Characteristics (Combined Cities)



of four rooms will probably take longer than currently estimated by the beneficiaries.

Figure III.D.4 summarizes the relationships among the number of completed rooms, the number of months expected to complete four rooms, and funds that have been or may be used to complete construction: the material loan, beneficiary savings and other resources, and total income.[1] The influence of beneficiary resources on the ability to complete four rooms is even more important than project planning anticipated. The level of beneficiary income is also an important factor in the construction process and will probably play an increasing role in the future.

In summary, there are at least two reasons to suggest that many beneficiaries will try to secure the necessary funds. First, as described below, their level of satisfaction with the project and with being homeowners is very high. Second, based on their own estimates of potential sales price (see III.E), the expected return on investment is exceptionally high. Thus, whether the money can be borrowed from friends and relatives or must be slowly saved, the ultimate success of the projects is not likely to be threatened. Arrears may become an increasing problem, however (again, see III.E).

3. Beneficiary Attitudes

Beneficiary survey responses clearly indicate very strong positive attitudes towards the project and towards self-help (see Table III.D.5.). Over 90 percent are positive about self-help. This suggests that some beneficiaries who were not positive (9 percent) or only partly positive about self-help (11 percent) when the project began, are now pleased with the process. The opportunity to become a homeowner is overwhelmingly offered as the best feature of the project: 64 percent stated this as first choice. Other very important features are space and privacy, provision of housing for the poor, and the feeling that the loan is fair.

Overall, the beneficiaries in Marondera, Chinhoyi, and Kadoma share similar views about self-help and about why the project is a success. It should be noted, however, that respondents in Kadoma appear to be somewhat less positive (85 percent as compared with 95 percent in Marondera and 100 percent in Chinhoyi). Also, far fewer Kadoma residents state that they have no problems (8 percent as compared with 30 percent and 24 percent respectively). Several factors may influence this difference. As discussed above, the average material loan in Kadoma was about 30 percent less than in the other towns. Consequently, the pressure on beneficiary resources is greater; as discussed below, more Kadoma residents cite financial troubles as their major problem. And, for financial as well as other reasons, construction progress in Kadoma lags behind Marondera and Chinhoyi.

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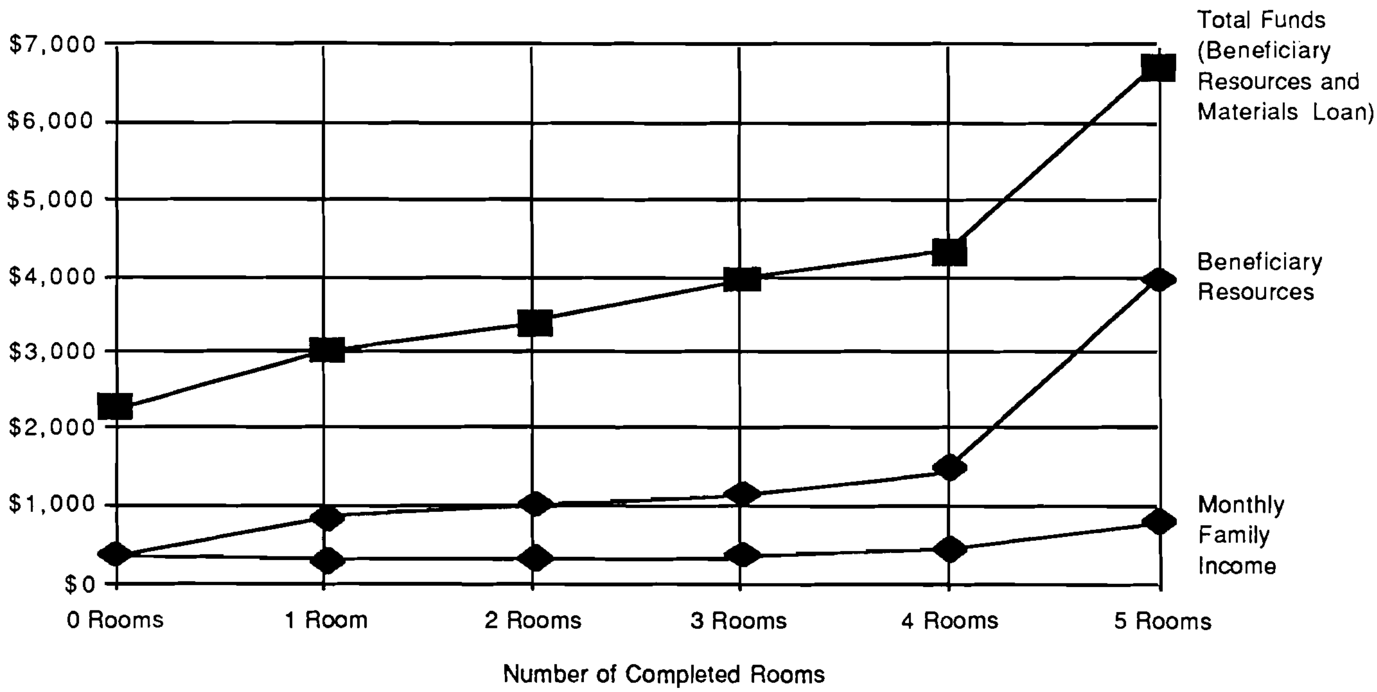
[1]The graphs represent the mean value of each of these financial variables for those households that have completed the indicated number of rooms or taken the indicated number of months to complete.

Figure III.D.4. Beneficiary Funds and Construction Progress



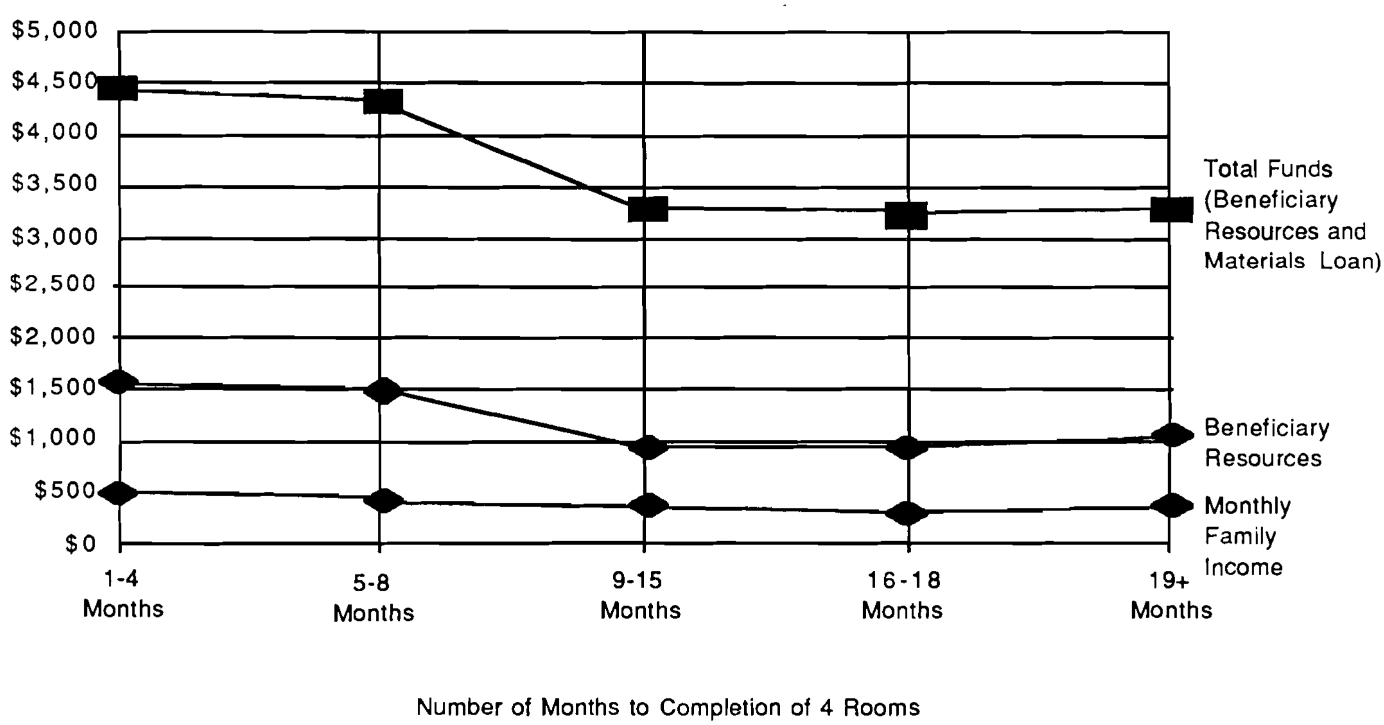
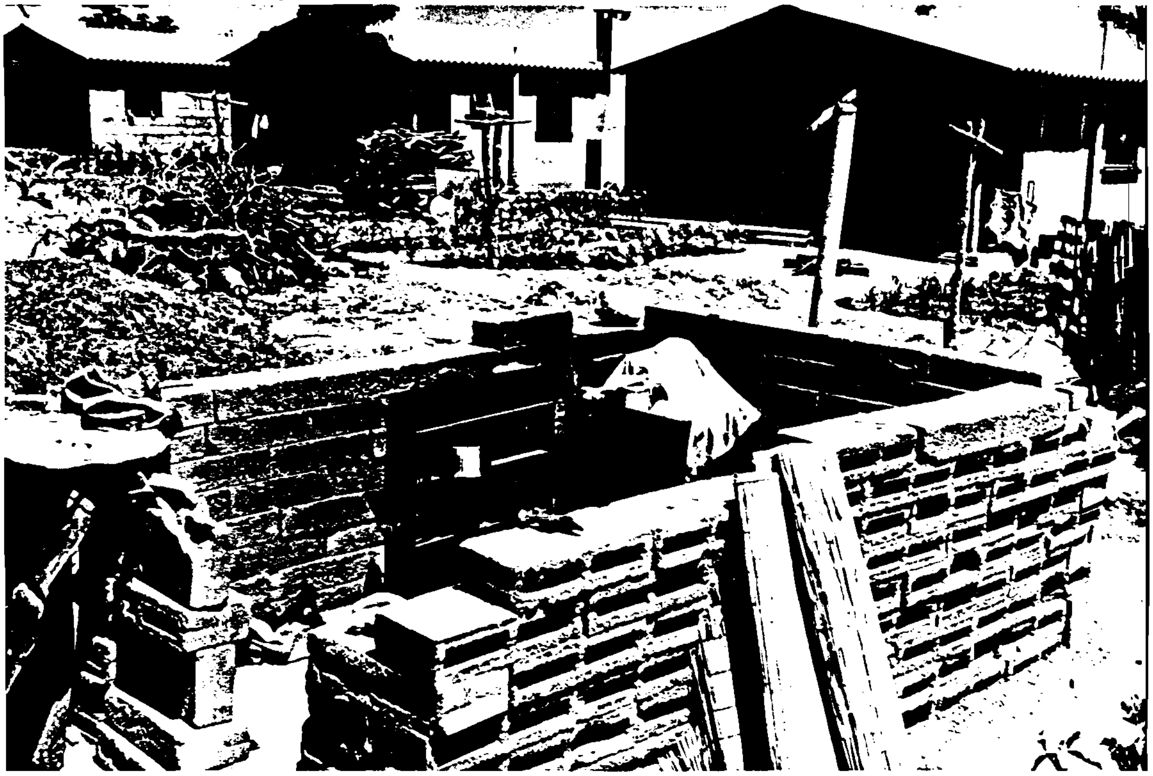


Table III.D.5. Beneficiary Attitudes

VARIABLE	COMBINED CITIES	MARONDERA	CHINHOYI	KADOMA
Prior View of Self-help				
• Very happy	79.0%	84.0%	76.0%	78.0%
• A little happy	11.0%	12.0%	11.0%	12.0%
• Not very happy	9.0%	5.0%	13.0%	10.0%
Current View of Self-Help				
• Positive	91.0%	95.0%	100.0%	85.0%
• Not positive	9.0%	5.0%	------	15.0%
Most Important Problems				
• No problem at all	19.0%	30.0%	23.7%	7.9%
• Financial	36.0%	26.7%	36.8%	42.1%
• Shortage of supplies	23.0%	13.3%	23.7%	30.3%
• Transporting materials	8.0%	3.3%	7.9%	11.8%
Second Mentioned Problems				
• Financial	16.7%	35.0%	-----	15.0%
• Shortage of supplies	42.3%	25.0%	66.7%	40.0%
• Transporting materials	21.8%	10.0%	16.7%	30.0%
Third Mentioned Problems				
• Financial	25.9%	28.6%	-----	31.3%
• Price of materials	11.1%	28.6%	-----	6.3%
• Transporting materials	7.4%	14.3%	-----	6.3%
• Hard to find a builder	7.4%	-----	25.0%	6.3%
Best Things About Project				
• Being a homeowner	64.2%	58.8%	57.9%	71.2%
• Loan is fair	8.6%	9.8%	15.8%	4.1%
• Space and privacy	8.0%	11.8%	7.9%	5.5%
• Housing for the poor	4.9%	3.9%	5.3%	5.5%
Next Best Things About Project				
• Loan is fair	25.0%	20.0%	-----	40.0%
• Space and privacy	18.8%	20.0%	-----	20.0%
• Housing for the poor	12.5%	20.0%	-----	-----

While its house is being completed, a family has created a temporary kitchen in the rear of its plot in Marondera.



Kuwadzana residents had been asked similar questions regarding self-help in 1985. Interestingly, they were less positive than beneficiaries in the secondary cities; only 69 percent gave positive responses. Among the reasons for a negative attitude toward self-help in Kuwadzana were difficulty in building a house and difficulty for low-income households. The small sample of negative responses regarding self-help in the secondary towns did not focus on a particular reason.

Beneficiaries have encountered problems, however, since obtaining their plots. Of the 80 percent who indicate that they do have problems, the majority cite financial difficulties. This result is certainly consistent with concerns expressed above: the apparent gap between beneficiary estimates of needed resources or the official cost estimates, and the large share of overall expenses to date paid out of beneficiary resources. Also, as discussed below in III.E, over 25 percent of beneficiaries are in arrears. Other expected problems cited include shortage of supplies, difficulty in transporting materials, and the price of materials.

In summary, respondent attitudes towards the project overall are extremely positive. This view is also shared by the evaluation team. Conversations with beneficiaries during site visits corroborate their generally positive feelings. Appearance of the projects suggests that beneficiaries are not only satisfied but thoroughly invested in making the projects successful. Whether or not completed, the houses are generally well kept, have attractive yards, flower, or vegetable gardens, and offer numerous instances of innovative changes and additions to the basic designs that indicate a sense of personal concern.

4. Lodgers

It is not yet clear how major a role lodgers will have in Marondera, Chinhoyi, and Kadoma. At the present time, only 17 percent of the beneficiaries have lodgers. (See Table III.D.6.) The number of completed rooms is a key factor; thus 25 percent of beneficiaries in Marondera have lodgers, followed by 18 percent in Chinhoyi, and 10 percent in Kadoma. Even after completion of their houses, however, the majority of households do not wish to have lodgers: only 25 percent in Marondera and roughly 40 percent in Chinhoyi and Kadoma indicate that they will have lodgers.[1]

Unfortunately, no data exist to allow an updated comparison with Kuwadzana. However, observations at Kuwadzana indicate a more widespread prevalence of lodgers; during the 1985 survey of Kuwadzana, 78 percent of the sample indicated that they wished to take in lodgers.

Lodgers can represent an important element in the economic lives of many project beneficiaries. For beneficiaries that now rent or plan to rent, a surprising number - over one-half - plan to rent more than one room. Since average rent per room is Z$25, some beneficiaries clearly more than cover their monthly loan and service charges. For beneficiaries that now rent or plan to rent, the expected total rent is Z$58.

Beneficiaries now renting to lodgers appear to do so for economic reasons. As indicated in Table III.D.7, their incomes are lower than households without lodgers, and they have spent more of their own resources on construction. In addition, their households are smaller and they are somewhat more likely to be female-headed households. The picture is less clear for those that will rent in the future. Only for beneficiaries that wish to rent one room is income lower. Those that wish to rent two or more rooms, however, have substantial income.

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[1]A higher evidence of lodgers already living in the projects had definitely been expected. The original plans for the lodger survey would have interviewed only those lodgers living with beneficiaries (see Appendix E). However, so few beneficiaries had rented rooms that it was necessary to interview lodgers not residing with sample beneficiaries; 65 interviews were obtained.

Table III.D.6. Beneficiary Plans Regarding Lodgers

	ALL CITIES	MARONDERA	CHINHOYI	KADOMA
Rooms Currently Rented to Lodgers:				
None	83%	75%	82%	90%
1	13%	19%	13%	7%
2	4%	5%	3%	3%
3	1%	--	3%	1%
Rooms Currently or in the Future Rented to Lodgers				
None	65%	75%	61%	58%
1	15%	13%	16%	16%
2	9%	7%	16%	7%
3+	12%	5%	8%	20%
Average Rent Per Room for Currently Rented Rooms	Z$25	Z$24	Z$31	Z$23
Total Rent Expected to be Received	Z$58	Z$45	Z$54	Z$66
How Lodgers Obtained a Place				
Looking on their own	69%	86%	71%	38%
Friend of beneficiary	17%	7%	14%	38%
Relative of beneficiary	7%	7%	--	13%
Introduced by a friend	7%	--	14%	12%

Table III.D.7. Characteristics of Beneficiaries With and Without Lodgers

	Rooms Rented Now			Other Rooms that will be Rented			
	None	1	2	None	1	2	3
Monthly Family Income							
Average	Z$390	Z$320	Z$299	Z$408	Z$284	Z$343	Z$329
Median	Z$310	Z$286	Z$300	Z$310	Z$236	Z$316	Z$315
Household Size	5.3	4.5	4.0	5.2	4.9	5.4	4.7
Percent Female Headed	6.8%	22.7%	0	8.8%	7.7%	6.6%	5.3%
Beneficiary Funds	Z$3541	Z$4328	Z$4366	Z$3810	Z$3287	Z$3552	Z$3550
Total Funds (Beneficiary and Material Loan)	Z$4745	Z$4606	Z$4660	Z$4854	Z$4487	Z$4631	Z$4234
Sample Size	145	22	7	107	25	14	18

Lodgers differ in interesting ways from beneficiaries. (See Table III.D.8.) They are younger, have smaller households, and are much more likely to be female-headed. Lodgers are less likely to be working than beneficiaries (79 percent as compared with 98 percent). Their educational and occupational profiles are similar, however, with the exception that more lodgers state that they are housewives. In fact, 18 percent report having no income, suggesting an absentee spouse. Average income for the entire sample is Z$273.

The lodgers' prior housing seems as least as good as the prior housing of the beneficiaries. Also, lodgers apparently had more space in their prior houses. Like the beneficiaries, most lodgers come from nearby high density areas and most were previously lodgers. Their satisfaction with the projects appears to be only moderate. The major factor appears to be a desire to be homeowners themselves: 58 percent have already applied for a plot and 20 percent would like to do so.

E. Program Financing and Cost Recovery

One of the major principles of project design agreed between A.I.D. and GOZ concerned the full recovery of costs incurred in executing the project. The current PDP calls for the recovery of allocable costs from those who benefit from the project. Allocable costs were deemed to include site preparation and servicing costs of both public and private land, home construction loans, off-site infrastructure costs, the cost of some community and commercial facilities, and project administrative costs not normally provided for in central and local government recurrent budget estimates. Allocable costs are to be recovered through loan repayments, rates (or supplementary charges), utility charges, rents, and user fees. Project costs which are not allocable to project beneficiaries are to be recovered from central and local government revenue. These items are few and include the development cost of secondary schools and an element of the recurrent costs of health care delivery. Table III.E.1 identifies the components and sources of recovery of all project costs, excluding contingencies. Z$52.09 million, or US$31.47 million, can be recovered.

1. Program Financing

Under the Urban Councils Act, it is the responsibility of the Ministry of Local Government Rural and Urban Development to monitor the fiscal health of all urban local authorities. MLGRUD must approve all local authority borrowings for development projects. Local authorities are required to submit a formal application for borrowing power giving full details of the proposed project, its development and recurrent costs, and the proposed methods of cost recovery. Projects financed by the National Housing Fund managed by the MPCNH are loaned at 9.75 percent interest over 25 or 30 years. Repayments are scheduled on a semi-annual basis. Only in rare cases can a local authority apply to MPCNH for a moratorium on capital and interest repayments.

Table III.D.8. Lodger Characteristics

LODGER CHARACTERISTICS		CHARACTERISTICS OF PRIOR HOUSING	
Household Size		Prior Residence	
Average	2.8	High Density Area	62%
Number of Persons: 1-2	55%	Low Density Area	11%
3-4	33%	Communal Area	9%
5+	12%	Town Center	9%
Average Age of Household Head	27	Prior Tenure	
		Lodger	46%
Male Head of Household	77%	With Family	29%
		Employer Housing	9%
Currently Working	79%	Renter	8%
		Owner	6%
Days Worked Per Month	17.1		
		Average Prior Number of Rooms	1.7
Occupation:			
Factory Worker	13%	Prior Presence of Toilet	
Builder	10%	Shared	39%
Army	10%	Communal	29%
Housewife	8%	Private	24%
Transport	7%	None	6%
Average Years of Education	7.7	Prior Presence of Bath	
		Communal	27%
Monthly Family Income		Private	61%
Average	Z$273	None	11%
		Prior Availability of Electricity	62%
Monthly Rent (including services)			
Average	$32	Prior Availability of Water	
		Inside	32%
		Nearby	55%
Number of Rooms Rented		Not Nearby	12%
1	89%		
2	6%	Why Decide to Live Here	
3+	5%	Had to Leave Prior Residence	23%
		Close to Work	12%
Satisfaction with Project		Work Transfer	12%
Very Happy	55%	Readily Available	11%
Satisfied	23%		
Not Very Happy	21%		
Application for a Plot			
Have Applied	58%		
Would Like to Apply	20%		
Can't Afford	11%		
Don't Want to	9%		

Table III.E.1. Summary Cost Recovery Plan (Excluding Contingencies)

COMPONENT	COST (000)	METHOD OF RECOVERY
A. Land Acquisition & Surveying		
Private Land	Z$637	Plot Charges
Public Land	Z$159	Supplementary Charges
B. Primary Infrastructure	Z$2,758	Supplementary and Utility Charges
C. Site Preparation & Servicing		
Private Land	Z$9,927	Plot, Utility and Supplementary Charges
Public Land	Z$2,481	
D. House Construction	Z$25,800	Material Loan Repayments
E. Community Facilities		
Primary Schools	Z$4,871	Local Authority Revenue
Secondary Schools	Z$2,692	School Fees
Health Centers	Z$635	User Fees
Admininistrative Offices	Z$120	Supplementary Charges
Markets and public toilets	Z$410	Rental Income
Demonstration Houses	Z$68	Rental Income
F. Technical Assistance	Z$1,530	Plot and Supplementary Charges
TOTAL COST RECOVERY	Z$52,088	

Source: Project Delivery Plan

Table III.E.2 compares original and current cost estimates for those projects financed under the second HG loan. The increase in total project costs from Z$38,880,000 to Z$59,763,000 was caused by the following:

- The devaluation of the Zimbabwe dollar with respect to the US dollar generated an additional Z$5.6 million used to add Redcliff, Chiredzi, and Chipinge to the program.

- The generation of US$2 million in interest earned on undisbursed loan funds in escrow was used to add Bindura and Gwanda to the program, valued at Z$3.4 million.

- The addition of the five towns listed above called for an additional GOZ contribution of Z$5.6 million for contingencies and the rental housing component not funded by HG.

- The inclusion of a rental component in each of the first four towns called for an increased GOZ contribution of Z$6.3 million.

2. Financial Cost Recovery

Land, Infrastructure, Site Preparation, and House Construction. Project costs which are allocable to project beneficiaries include land acquisition, primary infrastructure, site preparation and servicing, materials, and house construction. These items account by far for the largest share of program costs, and of these, recovery of material loans is the most important factor. Thus, the record of success in beneficiary payments, which include material loan repayments and service and infrastructure charges, largely dictates the success of financial cost recovery. Unfortunately, arrears in beneficiary payments are a serious problem.

Two sources of information were used to reach this conclusion: data on overall cumulative arrears which were specially supplied by project officials and beneficiary responses to survey questions. Tables III.E.3 and III.E.4 present this information. Although it is clear that a large group of beneficiaries face financial problems, the overall project data are far more revealing in understanding the actual magnitude of the problem.

Officials at Kuwadzana indicated that arrears had been an extremely important problem, especially in the earlier stages of the project, and suggested that this topic be carefully addressed in Marondera, Chinhoyi, and Kadoma. Current information on cumulative arrears should be available from the monthly project reporting forms. However, these forms were either not completed in a timely manner, as was the case in Chinhoyi, or they utilized definitions of arrears that did not appropriately measure the problem, as was the case in all the secondary towns. Project officials were asked to prepare revised information on arrears from their records, following the definition and approach used by Kuwadzana. Under this approach, potential monthly

Table III.E.2. Comparison of Estimated Total Project Costs Under Second HG Loan

PROJECT	ORIGINAL ESTIMATE October 1983	CURRENT ESTIMATE February 1987	DIFFERENCE	PERCENT DIFFERENCE
Kuwadzana II	24,524	25,900	1,376	5.6
Marondera	6,019	7,000[1]	981	16.2
Kadoma	5,639	6,500	861	15.2
Chinhoyi	2,698	3,800[2]	1,102	40.8
Redcliff	--	6,900	6,900	--
Chiredzi	--	2,700	2,700	--
Chipinge	--	2,100	2,100	--
Bindura	--	2,700	2,700	--
Gwanda	--	2,163	2,163	--
	38,880	59,763	20,883	

1/ Marondera has revised its project budget to a figure slightly in excess of Z$8,000,000. The increase was mainly caused by delays in servicing land owing to a shortage of land surveyors. This increase was approved and financed by MPCNH in October 1987.

2/ Chinhoyi was reportedly seeking additional funds in the amount of Z$300,000 to cover the cost of increased house construction loans. The increase from Z$2.7 million to Z$3.8 million was caused mainly be adding a secondary school and rental housing component.

Source: A.I.D. documents and PDP.

revenues are compared with actual revenues: the shortfall comprises arrears and the figure is recorded on a cumulative basis.[1]

As indicated in Table III.E.3, arrears are somewhat of a problem at all projects. However, the problem at Chinhoyi is quite serious, where cumulative arrears are nearly five times monthly revenue potential. Arrears per allocated stand are nearly Z$120, which is over three times the average monthly charge for each beneficiary. The disturbing factor in Chinhoyi is that difficulties in project administration appear to have prevented officials from instituting policies that give them either early warning or quick follow-up.

In contrast, although arrears are also a problem in Marondera, project officials have now implemented procedures that do provide them with early recognition. Beneficiaries are quickly informed of being in arrears. Failure by beneficiaries to pay after notice of being in arrears is then followed by some incentives, such as turning off the household's water. This appears to be effective since the ratio of monthly arrears to monthly revenue potential fell from .43 to .07 between June and September, 1987.

The magnitude of the problem is somewhat less in Kadoma, where arrears per plot represents about 30 percent of an average beneficiary's monthly payment. Interestingly, cumulative arrears as a percent of revenue potential (46.6 percent) is about the same magnitude as for Kuwadzana (44.3 percent) during a similar time phase in that project's history. Two sets of data were analyzed for Kuwadzana: the 1985-1986 period is more comparable to the current stage of the secondary towns' projects.[2] Kuwadzana has recently made a concerted effort to reduce arrears and has achieved a sizeable reduction in the amount relative to revenue potential.

Beneficiary information regarding payment problems more or less reflects the relative magnitudes of the arrears problem at Chinhoyi, Marondera, and Kadoma. (See Table III.E.4.) Chinhoyi has the highest incidence of beneficiaries in arrears and many more of them have been in arrears for three months or more. Even so, the incidence does not seem commensurate with the cumulative magnitude of the problem. It may be the case that beneficiaries misunderstood the question (for example, their payment was late but not missed) or do not wish to report being in arrears.

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[1]Data were supplied by Kadoma during the field visit. Existing monthly accounts already kept by Kadoma could be easily manipulated to measure arrears. Marondera and Chinhoyi supplied specially prepared information subsequent to the field visits. Chinhoyi record keeping did not appear to be adequate and, indeed, the poor results regarding arrears were a surprise to project administrators.

[2] Kuwadzana officials felt that in the initial stages of a project, administrators are faced with numerous duties and arrears are more likely to get out of hand.

Table III.E.3. Comparison of Overall Arrears

VARIABLE	MARONDERA	CHINHOYI	KADOMA	KUWADZANA
Cumulative Arrears	Z$15,315	Z$52,131	Z$7,295	Z$82,273 Z$69,600[1]
Cumulative Arrears as a Percent of Monthly Revenue Potential	129.0%	479.4%	46.6%	27.5% 44.3%[1]
Arrears per Allocated Stand	Z$30.15	Z$119.84	Z$12.75	Z$12.98
Arrears per Allocated Stand as a Percent of Monthly Charges	78%	309%	30%	N.A.
Date of Analysis	Sept. 87	Sept. 87	Oct. 87	Oct. 87 April 85[1] to March 86
Number of Allocated Stands	508	435	572	6,337

[1]Kuwadzana's arrears were also analyzed for the period April 1985 to March 1986 to increase comparability of stage of project development. The figure represents the average for that period.

Table III.E.4. Beneficiary Arrears and Payment Problems

VARIABLE	ALL	MARONDERA	CHINHOYI	KADOMA
Missed any Payments	27%	28%	32%	23%
Number of Payments Missed[1]				
One	43%	27%	25%	71%
Two	25%	40%	25%	12%
Three or more	32%	33%	50%	17%
Had a Problem Making Payments	37%	39%	29%	39%
Type of Problem				
Too little income	24%	20%	30%	24%
Needs cash to build	12%	15%	30%	3%
Family also needs money	10%	---	20%	14%
Confused about repayment terms	9%	15%	10%	3%
Double rent	7%	---	---	14%
Too many debts	7%	5%	10%	7%
Effect of Monthly Payment on Money Left for Other Things. Is Beneficiary Spending:				
Same as before	20%	27%	17%	17%
Less than before	79%	70%	83%	83%
More than before	1%	4%	---	---

[1] Calculated as a percentage of those in arrears.

In order to understand what causes some beneficiaries to be in arrears while others are not, associations were tested between being in arrears (and number of months in arrears) and a number of financial and other variables. Some obvious hypotheses are that a beneficiary is more likely to be in arrears the lower the family income, the more is spent of available resources, the more rooms that are completed, the greater the amount of the beneficiary's own funds relative to the material loan, the longer the time after allocation before moving on site (double rent), and so forth. Surprisingly, none of these hypotheses was supported.[1] These results suggest either that "everyone gets behind from time to time", or that being in arrears is more an administrative than economic phenomenon. If beneficiaries perceive that administration of payments is lacking, some may choose not to pay. This suggests that accurate record keeping, timely warnings, and enforcement of penalties will be successful in reducing arrears.

Logic still suggests, however, that some beneficiaries have, or will, encounter financial problems. Over one-third of the beneficiaries report having problems making payments and nearly 80 percent indicate that they now have less money to spend on items other than housing. This is certainly to be expected. However, given that beneficiaries have exhausted most of their currently available funds; that few have completed four rooms; and that a large gap apparently exists between beneficiary and official estimates of costs, it is clear that arrears will continue to be a major problem.

Other Facilities. While the mechanisms for recovery of costs for on-site services and building material loans are relatively simple, cost recovery for community facilities is more complex. This complexity occurs for two reasons: a) the benefits generated by these facilities are distributed as a public good across a large number of households; and b) the level of the charges is subject to approval by central government in a process with a clear political dimension.

> Primary schools: It is government policy that primary school education is free and that local authorities are responsible for the construction of all new primary school facilities. This poses the question of how local authorities repay loans used to build new schools under a policy of free primary school education? The lack of an acceptable answer to this question threatened to delay the construction of schools called for in the HG program. When the number of project beneficiaries who were actually resident in their newly constructed core houses reached significant levels in each town, the local authorities in Marondera, Kadoma and Chinhoyi constructed primary schools with the proceeds of the HG loan. In Marondera and Kadoma, the schools began operation in January and December 1987, respectively.

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[1] An economic analysis of arrears appears to require multivariate analysis. Individual correlations were so low (and often of a sign contrary to hypothesis) that they did not even suggest what is happening.

In Chinhoyi, the school buildings completed to date are being used as site offices and a building materials store. In all cases, loan repayments on the funds invested are now due to MPCNH. Despite pressure from local authorities on central government to make a policy decision concerning the raising of revenue to pay for schools, the Ministries responsible for Local Government, Education, and Finance have only agreed that revenue must be raised but have left it to the local authorities to decide how. The options include: a) levying a building fee on each household whose children attend the school; and b) levying a school tax on all households in the local government area, including those residents who do not have children at the school. Most local authorities have chosen the first alternative. Consider the following example:

A typical 28-classroom school in Kuwadzana cost Z$810,000 in 1985. If each classroom accommodates 45 pupils and the monthly debt service is Z$9 per Z$1,000 borrowed, the monthly cost recovery per pupil is Z$5.78, or Z$23.12 for a trimester. In cases where "hot seating" is practiced, i.e., two shifts of pupils per day, the per capita monthly charge drops to Z$2.89, or Z$11.56 per trimester. The recurrent cost of teachers' salaries is paid for by the Ministry of Education.

Secondary schools: The capital cost of construction of secondary schools is financed by the Ministry of Education with funds appropriated from the Treasury. School fees are charged but revenue raised in this manner is used to recover in part recurrent costs of teachers' salaries and general operating expenses.

Clinics: The HG program financed the construction of three clinics, one each in Kuwadzana, Marondera, and Kadoma. Kuwadzana's clinic is complete, but is not operational for want of electricity. Kadoma's health center is being used as a temporary site administration office. Only Marondera's is functioning as a health care facility. It is Ministry of Health policy to reimburse local authorities for a portion of the recurrent costs of operating its clinics, including municipally hired health care workers. Clinics are otherwise expected to recover operating costs by means of user fees levied on patients whose incomes exceed Z$150 per month.

Material Stores: In those towns where a special material store has been constructed on site (all towns except Chinhoyi), an element of the construction cost is recovered through a mark-up on the price of materials, either sold for cash or disbursed as loans "in kind."

The administrative costs of running the stores are also recovered from the mark-up. Marondera is charging five percent, which suggests a very efficient operation or (more probably) an element of under recovery. Kadoma and Chinhoyi are charging ten percent. In the case of Kadoma, its 900 loans of Z$2,100 represent revenue of Z$189,000 over a period of 36 months, or Z$5,250 per month. This compares favorably to their estimated costs of operation; the stores employ three people, have reportedly minimal stock losses owing to frequent stock checks, and minimal transportion expenses. Moreover, when the construction of the initial core houses is complete, the material store will be converted into a municipal workshop providing services for the maintenance of infrastructure in the project area. Likewise, the slab on which concrete blocks are now being produced will become the floor slab for a administration office. At that time, the health clinic, currently being used as a project administration center, will revert to its planned use. Cost recovery for all these structures with changed uses will be continued under appropriately amended accounts.

3. Market Values and Economic Subsidy

As indicated above, full cost recovery was one of the major features of the project design. An important distinction must be made between financial and economic costs, however, and between financial and economic cost recovery. Financial cost recovery occurs if project financial costs are repaid. Economic costs represent the full opportunity cost of the resources utilized in the project. Many types of economic subsidy may be present, such as land acquisition at below cost or no cost, failure to consider off-site infrastructure in service charges, failure to account for administrative costs, or subsidized interest rates.[1]

It is not the purpose of this evaluation to assess the extent of economic subsidy inherent in this program. One feature stands out clearly however. Currently, MLGRUD regulates the sales price of raw land at Z$0.30/$m^2$, a policy established in 1979 to allow local authorities to accumulate funds for the purchase of new, raw land for servicing. Although the market value of land in the projects and in similar areas is not known, a price of Z$0.30/$m^2$, clearly represents a tremendous subsidy. Data are available from Kuwadzana for actual sale prices of project units. These data give at least a rough idea of the joint market value of the serviced land and the dwelling. The figures are surprisingly high.

During 1986, a substantial number of repossessed plots were sold at auction in Kuwadzana. The dwellings include those in which no rooms were

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[1]See Stephen K. Mayo and David Gross, "Sites and Services - and Subsidies: The Economics of Low-Cost Housing in Developing Countries," World Bank Economic Review, Vol. , No. 2, Jan. 1987.

completed to fully completed units of a varying number of rooms. Auction prices have ranged from Z$2,000 to over Z$10,000. In most cases, the sum of the outstanding balance on the building loan, the balance for land and improvements, arrears, administrative charges, and advertising costs was considerably less than the sale price realized. This yielded a substantial refund to the defaulter. Indeed, the size of the refunds was so high that auction sales were discontinued in the fall of 1987.

Another source of information on market value is beneficiary expectation of sales price in Marondera, Chinhoyi, and Kadoma. Table III.E.5 summarizes these data. Beneficiaries were asked what they thought the sales price of their house was now and what it would be when fully completed. Similarly, they were asked what rent could be obtained currently and what they could rent the house for when completed. The average sales price for completed units is nearly Z$17,000 and the median price is Z$15,000; this is twice the official estimate of construction costs for a four-room core (Z$7,773). Note also that rents for completed units (the median is Z$175) are consistent with estimates of value.

Beneficiary expectations are only an approximation of market value; other evidence is certainly required. In any event, it is hard to conclude that the share of serviced land is only Z$891, the price to beneficiaries of a 300m^2 plot. Thus, a sizeable economic subsidy exists here. One implication is that the local authorities are foregoing an important source of revenue.

F. Replicability

The demonstrated success of aided self-help housing on publicly serviced land under the HG program has led to several attempts to both replicate the approach in other projects and to use it as a base for other forms of public/private partnerships in housing.1.

The replication of the approach itself has occurred in three different contexts. Firstly, the increased availability of local currency under the loan program allowed the inclusion of five additional projects totalling 2,300 units. These have been designed in the same ways as the projects at Kuwadzana, Marondera, Kadoma, and Chinhoyi.

Secondly, the approach has been replicated outside of the HG program but in a HG-assisted city, Harare. The Department of Housing and Community Services has implemented three schemes which have as their main mode of construction the aided self-help approach, Warren Park D, Hatcliffe, and Dzivaresekwa. The maximum loan available to each beneficiary is Z$2,500 obtained in the form of five Z$500 disbursements in cash. Beneficiaries make their purchases of materials from the material store located at Kuwadzana.

Thirdly, there is at least one example of replication in a non-HG assisted town, Bulawayo. Zimbabwe's second largest city has combined the brigade and self-help approach in its shell house project. In this scheme, brigades construct a four-room shell house which is completed on a self-help

Table III.E.5. Beneficiary Estimates of Sales Price and Rent

VARIABLE	COMBINED CITIES	MARONDERA	CHINHOYI	ADOMA
Sales Price if House Sold Now:				
mean	Z$7,200	Z$7,250	Z$8,280	Z$6,225
median	Z$5,000	Z$6,000	Z$6,000	Z$4,500
Sales Price if House Sold When Completed:				
mean	Z$16,974	Z$17,667	Z$14,008	Z$18,804
median	Z$15,000	Z$17,000	Z$12,500	Z$16,000
maximum	Z$40,000	Z$35,000	Z$35,000	Z$40,000
Rent Obtained if House Rented Now:				
mean	Z$59	Z$59	Z$76	Z$47
median	Z$60	Z$60	Z$75	Z$39
Rent Obtained if House Rented When Completed:				
mean	Z$169	Z$156	Z$151	Z$190
median	Z$175	Z$150	Z$173	Z$180

basis by purchasers. All finishes, doors, windows and partitions are completed by the beneficiary using materials obtained from the city stores.

Another form of the aided self-help approach differs from the original only as to the source of funds for the construction of the dwelling unit itself. Recall that the definition of self-help as practiced in Zimbabwe implies the mobilization of some form of private sector resource whether it be "sweat equity", household savings, informal borrowing, building society loans or salary advances from employers. As the main bottleneck in the housing delivery system came to be identified as a scarcity of serviced land and as public sector housing finance became smaller relative to the demand for loans, GOZ modified its strategy. It would now lend public funds to local authorities for the servicing of land while calling for the totally private financing of the housing units themselves.

In an attempt to generate additional private sector financial resources for shelter, the GOZ has taken an important step to improve the effectiveness of local building societies as mobilizers of domestic funds. By granting the societies a means of attracting savings that provide tax-free interest earnings to depositors, it is hoped that funds will flow to the building societies for investment in housing for all income groups. One-quarter of the funds generated this way must be directed to approved low-income housing schemes. Within six months of initiating this program, building societies are reported to have attracted nearly Z$70 million in two-year deposits. In the short-term at least, it cannot be said that lack of capital is a constraint on the housing delivery system. It is more accurate to say that the lack of an effective mechanism to channel mortgage funds to low-income borrowers is a constraint.

IV. RECOMMENDATIONS AND LESSONS LEARNED

The specific combination of shelter concepts, forward project planning, and long-term institutional strengthening utilized in the Zimbabwe Housing Guaranty Program has offered the evaluators a rich field for thought. The opportunity to observe program replication in three secondary cities has provided a perspective on communications and management at the central level and between the MPCNH and local authorities, as well as at the local level itself. Success and problems alike suggest a number of areas for further action. Some of the lessons learned are important for A.I.D. programs in Zimbabwe and elsewhere; others point to GOZ actions in shelter project implementation, whether HG or not.

Overall, the projects in Marondera, Kadoma, and Chinhoyi, as well as in Kuwadzana, are quite successful. This is certainly the case from the viewpoint of the beneficiaries. A simple tour of the sites offers ample evidence of the energy and resources that beneficiaries have invested in their homes. Given the chance to become homeowners, beneficiaries not only contributed an impressive amount of their own funds, but also assumed a much higher housing burden (that is, the share of current income devoted to housing). This was, of course, an integral part of the underlying concept. However, delays in project implementation, attended by large increases in construction costs, forced beneficiaries to rely on their own resources to an even greater extent than anticipated.

Overall, the project is also viewed as a success from the perspective of RHUDO and USAID interactions with the Government of Zimbabwe. Both the policy dialogue and the achievements in project implementation have influenced the evolution of housing policy in Zimbabwe. Government authorities now understand the willingness and ability of urban low-income households to contribute to the resolution of their own shelter problems, given suitable assistance in the form of credit, technical assistance and, perhaps most importantly, access to serviced land. A great deal has been learned about dwelling unit designs that are both affordable and feasible within an aided self-help context. Finally, the government has recognized the importance of private sector participation in the process, whether it be in the manufacture of building materials, the servicing of land, the construction of dwellings, or the provision of finance.

Within this constructive framework, the evaluation has suggested a number of recommendations. The following comments reflect five key dimensions of the program's design and implementation.

A. Project Concept

As has been discussed, the overall approach of aided self-help has been successful in the Zimbabwe HG. Beneficiaries have positive attitudes toward self help, and particularly praise the opportunity to become home-owners. However, affordability, cost recovery, and ultimately, private sector replicability are extremely sensitive to several aspects of project design.

1. The relationship between beneficiary financial character-stics, both current income and savings, and the ability to

complete their units in an efficient and timely manner is probably even more important than initially realized. Given the delays in project implementation, the original relationships among construction costs, material loans, and beneficiary incomes, were no longer valid by the time the project began. Construction costs had risen dramatically; the share of the material loan of total estimated costs had correspondingly shrunk. Fortunately, incomes had also risen; had this not been the case, completion rates would be markedly lower and/or arrears even higher.

A thorough review of overall affordability relationships, including costs, construction loans, and repayment listings, should be implemented. Furthermore, the body of research on the "willingness-to-pay" of low-income households is growing. The ability/willingness to pay is found to vary by level of income and level of development. These important program parameters should be carefully considered in project design.

2. One subsidy that is provided to project beneficiaries in Zimbabwe is in the cost of land. As documented earlier, the market value of land is simply not considered in plot pricing. Yet, the land that the beneficiary purchases is relatively valuable and increasing in value. A realistic land value should be considered in project planning. Even if the subsidy remains part of the project design, consideration must be given to valuation of plots when they are sold or repossessed and transferred to another beneficiary. At Kuwadzana, for example, the practice of auctioning repossessed plots was discontinued when the extent of windfall profit accruing to the beneficiary was realized. Private sector developers, without benefit of this type of subsidy, cannot replicate the project with the same assumptions about target groups and affordability.

B. Project Planning

The strong role of the RHUDO in forward project planning and the flexible and well-targeted use of grant funds in technical assistance and training are an important component of the program's success. The experiences at Kuwadzana were fairly effectively utilized in the secondary cities, although not evenly so. A number of lessons can be learned from specific issues or problems that arose, however.

3. A thorough orientation is as important to project implementation staff as it is to project beneficiaries. Such an effort was quite successful in Kuwadzana where orientation materials were well prepared and well used in a systematic way during many beneficiary meetings. This model has been emulated rather well in Kadoma. It is obvious that without the understanding, cooperation, and participation by the beneficiaries, these projects are unlikely to succeed. It

is recommended that the Ministry provide appropriate guidance to each local authority, assisting them in taking advantage of the orientation experience of Kuwadzana.

4. In the selection of sites and design of projects little attention was given to environmental considerations. The consequences thus far have fortunately been minimal: only one small area of one project was found to have been a refuse dump, causing a minor design change. Nevertheless, A.I.D. and the GOZ should ensure that proper environmental impact assessments are carried out as part of the site selection process. Expensive site redesign during infrastructure installation can be avoided if the Ministry and local authorities analyze site conditions before designing detailed site layouts. Such environmental reviews can be tied to plan approvals and disbursement reviews.

5. The concept of affordability of housing by beneficiary families is promoted by A.I.D. and increasingly accepted by governments. Calculations of affordability depend on current income distribution data. This issue becomes discussed, studied, and negotiated, sometimes delaying project implementation, frequently even becoming contentious. One of the consequences of this situation is that project implementors, in this case the MPCNH, are unable to present a consistent and coherent beneficiary income procedure to local authorities. A review of income data should be called for at a given interval, say one year, in Implementation Agreements, and undertaken at that time. It does not necessarily need to be the kind of elaborate analysis that was made for A.I.D.'s Project Paper, but could be a reasonable up-date based on inflation and wage data. But it should be undertaken, regularly and jointly by A.I.D. and the appropriate ministry.

6. One of the identified constraints to the functioning of the plot allocation system is the time required to establish cadastral information. In fact, much of the delay is attributed to a shortage of land surveyors. The Ministry should examine alternative methods of land surveying that would be legally and professionally acceptable and serve to expedite land allocation to beneficiaries.

7. It is of course obvious that a project's size reflects a town's population and the size of the housing waiting list. But, planners should as well consider the institutional capacity of the local authorities to implement such projects.

8. One of the reasons offered for the lack of electricity at Kuwadzana and other sites is the unavailability of foreign exchange required to purchase necessary electrical components. This situation can be avoided in future HG programs in Zimbabwe or any other country subject to limited foreign

exchange. The HG Loan and Implementation Agreements should designate an amount of money, or at least identify the use of money, which will be required in foreign currency for project implementation.

C. Ongoing Project Management

Generally, the quality of pre-project planning and early implementation has exceeded that of ongoing management in the secondary cities. Local authorities have not always turned their attention quickly enough to the management needs of more mature projects. Also, monitoring of local authorities by the Ministry and reporting by the Ministry to A.I.D. has suffered since A.I.D. technical assistance was completed.

9. Despite the good intentions of A.I.D. and MPCNH, the semi-annual progress reports required for submission to A.I.D. have not been forthcoming since the departure of the resident advisor. They are important not to fill a bureaucratic requirement, but rather for effective program management by MPCNH, reflecting information from the PDP. It is recommended that, even at this date, A.I.D. request a current report. Similarly, it is recommended that the Ministry request up-to-date status reports from participating local authorities.

10. The Project Delivery Plan, as conceptualized and prepared, provides a wealth of program information that each actor in project implementation should understand. The PDP has served as an effective planning and monitoring tool for A.I.D. and senior MPCNH officials with program responsibility. It should serve a much wider purpose. The preparation of the document itself provides an opportunity for the otherwise weak coordination among MPCNH policy, programming, finance, and operational personnel. The PDP can help develop the consensus and agreement within the Ministry. Its dissemination - particularly in an organized way to each local authority - will establish vital common understandings and references. The PDP does not even have to be as thorough and detailed as early versions, as long as it is an accurate reflection of MPCNH policy and used frequently with local authorities and Provincial Operations Officers. The PDP would also serve A.I.D. reporting requirements.

11. As projects mature, they require somewhat different management responses. Attention in Kuwadzana, for instance, is now properly focused on regular payments and maintenance and provision of services, rather than plot and design selection, and construction and materials. The MPCNH and each local authority should recognize the evolution of project implementation and consequent changes in management requirements. In general, it does not appear that the secondary cities have refocused their management attention quickly enough.

12. One consequence of inadequate management is that arrears can become a problem rather quickly; this has already happened in Chinhoyi. Early attention to the arrears problem and progress toward its resolution in Kuwadzana might have avoided the problems there. It is also recommended that cost recovery for community facilities be addressed in the secondary cities. There is no clear monitoring of cost recovery on the part of MPCNH nor MFEPD.

13. The A.I.D.-funded workshops were a valuable part of project preparation and long term institutional strengthening of local authorities. More than anything else, the workshops brought together several local authorities in a format in which they could help and be helped by each other. It is recommended that these workshops be held at least annually. Specifically, a) town clerks and project officials from participating towns should attend; b) MPCNH representatives should attend, with a senior Ministry official in at least one overall session; c) skill-building in basic problem solving and forward provided planning should be provided; and d) MPCNH should follow the workshops with special attention to individual towns in putting their planning and implementation procedures in place.

14. The de-facto policies and procedures of the MPCNH are reflected in circulars to local authorities, internal documents, laws and regulations, etc. Clear, consistent, and rational procedures and policies will improve the performance of the Ministry and each local authority. Toward this end, the Ministry has made significant progress in compiling and organizing relevant documentation up to December 1986. The MPCNH should complete this undertaking, preparing a current record for distribution to its staff and local authorities, and for use in its communication and workshops with all project implementation personnel.

15. Some of the program's problems can be attributed to the communication weaknesses between the traditionally strong, centralized Ministry and the less capable local authorities. Future A.I.D.-financed technical assistance should be directed not only at the local authorities, but at the responsible provincial offices within the Ministry itself.

D. Public/Private Cooperation

As indicated above, Government shelter policies increasingly rely on and welcome participation with the private sector. Project experience with small scale and informal sector contractors was generally favorable. Garnering private financing for land and/or shelter development for low-income households has proved difficult, however.

16. The local authorities have been relatively efficient in disbursing central government resources for housing construction credit. The MPCNH should now examine ways to link those local authorities with private sector financial resources, notably building societies.

17. Experience to date on other donor-assisted programs suggests that there needs to be a more effective way of bridging the gap between the low-income borrower who has little knowledge of sophisticated lending systems and the building societies which have traditionally served the middle and upper income groups in Zimbabwe. Aside from streamlining the existing mortgage lending system to better meet the needs of low-income borrowers, the possibility of introducing appropriate intermediaries should be explored. One such intermediary could be the local authorities who would channel funds from a single loan to individual borrowers. Borrowers would then make monthly repayments directly to the building society. Another possibility would be to form housing cooperatives which would act as intermediaries between their members and the building societies. Finally, a proposed National Housing Development Corporation could also fulfill this function.

18. The production of serviced land can be encouraged by both public and private sectors in a number of ways. It is hoped that the recently created Urban Development Corporation will facilitate this process particularly among the smaller local authorities. Granting building societies the right to own and develop land, a right currently denied them under the Building Societies Act, might also increase the amount of serviced land. As with housing finance, the basic resource is there; it remains to create the right range of mechanisms to utilize it to best effect.

APPENDIX A: SCOPE OF WORK

ARTICLE I - TITLE

Zimbabwe Low Cost Shelter Project
Project No. (690-0206.13)

ARTICLE II - BACKGROUND AND OBJECTIVE

A. BACKGROUND

The Government of Zimbabwe (GOZ) embarked in 1982 on a project to provide appropriate shelter solutions to approximately 18,800 low-income households in several urban centers. A.I.D. is providing material support for this project in the form of (1) financial guarantees for loans totalling $50 million and (2) a program of technical assistance including commodity support and training valued at $750,000. The total cost of the project, including a GOZ contribution of $23 million, is $74 million and represents by far the largest single shelter project in the country since independence.

The goal of the project as stated in the implementation agreement dated November 26, 1982, is to improve the living conditions of the urban poor. The purpose of the project is to assist the GOZ in the development of its technological, institutional, and financial capacity to provide low-income shelter and related urban services to economically disadvantaged households in selected urban areas in Zimbabwe. As such, the objectives of the project are to:

1. increase the production of low-income shelter in selected urban centers;

2. strengthen the capacity of the national and local authorities to administer large-scale low-income housing projects; and

3. continue to support shelter programs and policies of the GOZ that promote affordable shelter and services for the urban poor.

The implementation agreement governing the program records a commitment by both the GOZ and A.I.D. to evaluate its efficiency and effectiveness. A.I.D. is responsible for conducting the evaluation program, in close consultation with GOZ, and GOZ is responsible for providing data concerning the project as A.I.D. may request.

To date, three evaluations have been carried out. The first interim evaluation of the project was carried out by RHUDO/ESA in August 1982. A second interim evaluation was undertaken by PRE/H in March 1984. RHUDO/ESA sponsored a detailed evaluation of several aspects of the Kuwadzana sub-project in Harare in mid-1985. In particular, the attitudes and actions of participating households were examined, as was the role of the small scale informal construction sector. A study was also carried out to determine the rate of house construction under the policy conditions governing the project. Data were also collected on the institutional arrangements which were established to implement the project.

As of June 30, 1987, 82 percent of the $50 million HG loan had been disbursed. Disbursements are forecast to continue until June 1988. The PACD for the grant project was June 30, 1987. Long-term technical assistance has been completed and grant funds have been fully expended. In view of the significant physical progress achieved so far and the expiry date for the grant, USAID/Zimbabwe and RHUDO/ESA wish to undertake a final evaluation of the project with special emphasis on the schemes being implemented in the secondary towns.

B. OBJECTIVES

The objectives of the proposed evaluation study are:

1. To evaluate the progress toward the attainment of the objectives of the project in the secondary towns;

2. To compare and contrast results obtained in (1) above, with those found in Harare at Kuwadzana through the earlier studies with a view to highlighting the similarities and differences between the two segments of the project;

3. To evaluate problem areas or constraints which may inhibit the progress in this or similar projects.

ARTICLE III - STATEMENT OF WORK

The evaluation team will be required to undertake the following activities:

1. Familiarize itself with all relevant project documents and the results of previous evaluation exercises;

2. Prepare a detailed plan for the evaluation study, including the proposed methodology, procedures, and logistics. The plan is to be approved by the Ministry of Public Construction and National Housing;

3. Mobilize a group of field researchers and/or other resources required for data collection, implementation of surveys, and processing and analyzing the data;

4. Conduct a 2-4 day project implementation workshop for project implementation teams from the secondary towns. Summarize and analyze the implementation issues identified in the course of the workshop;

5. Prepare a draft report for submission to AID/Zimbabwe and RHUDO/ESA within two weeks after conclusion of field work. (A partial or complete working draft could be left at the conclusion of field work);

6. Prepare and submit the final evaluation report within four weeks of receiving mission and RHUDO/ESA comments.

The following evaluation topics should be given priority:

A. Beneficiary Attitudes and Actions

1. Was the target income group served in each sub-project?

2. What were the impacts of the specific program requirements on beneficiary achievements, e.g., the required construction of four rooms in 18 months?

3. What were the costs of construction?

4. How were the construction loans used?

5. How do beneficiaries view loan disbursement procedures?

6. What other sources of funds are tapped for construction?

7. How long does it take to build a four-room house?

8. What is beneficiary reaction to house designs?

9. What is beneficiary reaction to plot size and level of services?

10. How effective was the orientation program?

11. What support do beneficiaries receive from project management staff?

12. How effective is the material loan system?

13. Overall, how do beneficiaries feel about the program?

14. Characteristics of "drop-out" applicants and reasons for leaving project/declining to accept offer of a plot.

15. How much are participants paying (as percentage of income) for housing? To what extent are they dependent on rental income or second jobs to afford this? What has been the impact of housing expenditure on other household expenditures, e.g., food, clothing?

B. Lodging and Rental Income

1. To what degree have beneficiaries accommodated lodgers in their houses?

2. What is the incidence of absentee landlordism?

3. How are lodgers selected?

4. What are the socio-economic characteristics of lodgers?

5. How do lodgers perceive themselves in terms of permanent or temporary residency of their respective towns?

C. Private Sector Involvement in the Project

1. What is the level of informal and formal private contractor involvement on site?

2. What are the characteristics of private contracting firms?

3. How have private contractors operated on site?

4. Are beneficiaries satisfied with private contractors?

5. Are contractors satisfied with their involvement in the project?

6. To what extent are beneficiaries obtaining private housing finance?

7. Why do beneficiaries seek private housing finance?

8. How does the construction of "employer-assisted" housing units compare in terms of costs, speed of construction, target group served, etc.?

D. Assessment of Institutional Arrangements

1. What was the assignment of roles/responsibilities among the various institutions and individuals?

2. What were the coordinating mechanisms used in project implementation?

3. How well did these mechanisms work? Where there differences between various towns and, if so, did some approaches work better than others? Could they be replicated elsewhere?

4. How has capacity of institutions changed since the project began.

5. What institutional changes are recommended for future projects?

E. Evaluation of Constraints

1. What resources (i.e. material, financial, manpower) affected the efficiency of project implementation?

2. What changes in project design or implementation procedures could be adopted to minimize the effect of these shortages?

F. Impact of Project Policy

1. To what extent have specific conditions made part of the housing policy dialogue been met as evidenced by government decrees, rules, policy announcements or actual practices?

2. To what extent has the project demonstrated the appropriateness of current government policy on low income shelter?

3. What does the project suggest about the right or wrong ways of carrying out successful policy dialogue?

G. Project Replicability

1. Has the project already been replicated in non-project towns?

2. How do public and private entities involved in the program plan to continue and/or improve on this type of project?

3. Have any groups who did not participate in the program been attracted to develop low-income shelter projects? If so, how and why?

APPENDIX B: LIST OF CONTACTS

Ministry of Public Construction and National Housing

Mr. E. Ambrose, Deputy Secretary, Administration and Finance
Mr. W. T. Vengesayi, Deputy Secretary, Operations
Mr. H. Magdon-Ismail, Former Deputy Secretary, Operations
Mr. S. M. Ishemunyoro, Chief Executive Officer (Building)
Mr. I. Kanyangarara
Mr. E. Tafanmombe, Assistant Secretary, Strategic Planning
Mr. T. Zinyandu, Under Secretary, Housing and Offices
Mr. B. B. Sakhe, Assistant Secretary (Urban)
Mrs. J. Tichagwa, Senior Administrative Officer
Mr. O. S. Chiyanja, Senior Administrative Officer
Mr. A. M. Ndlovu, Deputy Secretary, Housing and Offices

Ministry of Local Government Rural and Urban Development

Mr. J. Moyo

Central African Building Society

Mr. Hollick, General Manager

Beverley Building Society

Mr. R. Key, General Manager

Central Statistics Office

Mr. Mziti

City of Harare

Mr. Masanzu, Director Housing and Community Services
Mr. M. Beresford, Senior Assistant Director
Mr. D. Morrison, District Officer, Kuwadzana
Mr. G. T. Mujeni, Deputy District Officer, Kuwadzana
Mr. G. Chasokela, Administrative Officer, Kuwadzana

City of Marondera

Mr. J. O. Musuwo, Deputy Town Clerk
Mr. M. B. Masimbarase, Deputy Town Treasurer
Mr. H. M. Makombe, Director of Housing
Mr. T. Tapererwa, Works Comptroller

City of Kadoma

Mr. D. Priddy, Town Clerk
Mr. F. Gonese, Deputy Town Clerk
Mrs. Chigwiza, Deputy Director, Housing

City of Chinhoyi

Mr. M. Mattias, Acting Town Clerk
Mr. Kkamunga, Building Supervisor
Mr. Z. S. Mhendurwa, Town Engineer
Mr. A. S. Chikono, Housing Officer
Mr. C. Nyereyemhuka, Director of Housing
and Community Services

USAID/Zimbabwe

Ms. Allison Herrick, Mission Director
Ms. Pamela Hussey, Deputy Mission Director
Ms. Lucretia Taylor, Program Officer
Ms. Mercia Davis, Assistant Program Officer

RHUDO/ESA

Mr. Fredrik Hansen, Director
Mr. Peter Feiden, Regional Housing Officer
Mr. Stephen Giddings, Regional Housing Officer
Ms. Mary Joel Holland, Consultant
Mr. Fred Fisher, former Regional Training Advisor

APPENDIX C: REFERENCE DOCUMENTS

Evaluation Guidance:

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APPENDIX D: SURVEY METHODOLOGY

Because limited funds were available to conduct the survey, it was determined that one weekend of interviewing would be undertaken in each of the three secondary towns. Given this time frame the sample size per town was estimated: a maximum of 100 beneficiary interviews, 50 lodger interviews, and 10 private builder interviews each in Kadoma, Chinhoyi, and Marondera. The methods for selecting respondents and conducting interviews are discussed below.

Beneficiary Survey. In the case of project beneficiaries, each of the towns provided lists of beneficiaries who had been allocated plots as of September 1987. In Kadoma, this list included 523 beneficiaries; in Chinhoyi and Marondera, the lists included 279 and 466 beneficiaries, respectively. One hundred names were randomly selected from each list, for a total sample size of 300.

Prior to the start of the beneficiary survey, the records of each beneficiary in the sample were reviewed, and some key pieces of information were recorded, including the date of allocation, plot size, loan amount, and whether the beneficiary was in arrears. This information was to be verified during the fieldwork.

Beneficiaries were notified in advance by letter of the date and approximate time that the interview would occur. Upon arriving at a plot, the interviewer asked to speak to the owner/head of the household. If the household head was at home and willing to be interviewed, then the interview began. If the household head was not present, an effort was made to determine from someone living at the house or at adjacent houses when the household head would most likely be at the plot.

In most cases, three attempts were made to contact the household head at his or her plot. In cases where two unsuccessful visits were made to the plot and it appeared that the household head was not residing at the project as yet, an effort was made to contact the beneficiary at his current residence. Also, if the household head was not present on the third attempt, and a spouse was available to answer questions, the interview was conducted with the spouse.

In all, 215 interviews were obtained with beneficiaries - 77 in Kadoma, 76 in Chinhoyi, and 62 in Marondera. Over all three sites, the response rate was 72 percent.

Lodger Survey. In the course of the beneficiary interviews, respondents were asked whether any lodgers were presently residing with them. If the beneficiary responded affirmatively, an effort was made to meet with all of the lodgers living on the plot upon the completion of the beneficiary interview. With a few exceptions, interviews were obtained with all of the lodgers who were residing with beneficiaries in the sample.

It was originally planned that only those lodgers who resided with beneficiaries included in the sample would be interviewed. However, the first day of interviews at Kadoma indicated that relatively few beneficiaries in the sample had rented rooms to lodgers as yet. In order to increase the number of lodger interviews, it was decided to try to obtain interviews with some lodgers who were not residing with beneficiaries. To do this, project staff in each town were requested to identify plots where lodgers were in residence.

In all, 65 lodger interviews were obtained - 20 in Kadoma, 20 in Chinhoyi, and 25 in Marondera. These figures are considerably lower than the 50 per town that was originally estimated. However, they do reflect the relatively small number of lodgers currently in residence at each of the projects.

Private Builder Survey. Each of the local authorities was asked to identify ten builders to be interviewed. Where possible, the councils were requested to select builders who had worked at the project for some time and/or had built a number of houses at the project. All 30 builders who were initially identified by the local authorities were interviewed.