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Low-Income Urban Shelter Projects

An Annotated Bibliography of Research Funded by IDRC-IBRD

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Il existe également une édition française de cette publication.
La edición española de esta publicación también se encuentra disponible.

CONTENTS

FOREWORD

In 1972, the World Bank began to make considerable financial resources available to improve shelter in developing countries through support of "sites and services" and "upgrading" projects. The International Development Research Centre and the World Bank began, in 1975, to collaborate in the evaluation of several of these ongoing Bank-assisted projects in four countries: El Salvador, Zambia, Senegal, and the Philippines. This cooperation continued for several years.

One of the most effective ways to exchange information among the projects' participants was the annual coordinating meetings. The meetings, which took the participants in the project as well as staff of the Centre and the World Bank to San Salvador, Dakar, Lusaka, Manila, Ottawa, and Washington, DC, permitted presentation and discussion of preliminary findings and practical experience.

Over the years, a bulky collection of working papers, connected to the meetings, developed. Although most of these papers are preliminary drafts that were available only to project participants, the main results are included in the final country reports. Because the Centre and the Bank have received frequent inquiries for information and material from the evaluation project, the publication of these papers, even as abstracts, will be of value to interested researchers and practitioners. To these working papers are added the papers prepared by the staff and consultants of the World Bank.

Credit should be given to the staff of the Urban and Regional Economics Division of the World Bank, and particularly to Dr Michael Bamberger, for annotating the entries. Although the Centre is the publisher of this volume, it is joint enterprise of the World Bank and the Centre.

The success of the cofunded evaluation over several years owes much to the sustained interests and efforts of the staff of the two organizations. From the Centre, Dr Aprodicio Laquain, Dr M.S. Rao, Mr Lawrence Hannah, and Mr Gary Costell were responsible at various stages for project management at the Centre. Strong support was provided by Mrs R.K. Zagorin and Dr D.W. Steedman, past and present Directors of the Social Sciences Division, as well as by Mrs Susanne Mowat, Deputy Director. At the World Bank, unflagging support was provided by Mr Edward V.K. Jaycox and Dr Anthony Churchill, past and present Directors of the Urban Development Department, among others. Above all, the researchers and policy planners in the countries concerned deserve the greatest credit in this project -- collaborating with agencies almost half the earth away is not easy. Yet, thanks to their forbearance and understanding, the evaluation efforts bore fruit. Last but not least, the cooperation of the project residents themselves was critical in collecting the essential primary data.

This volume marks the start of a new stage in this pioneering research project. Most of the study results have now been analyzed and written up, and publication and dissemination is now underway. Three of the country reports are in the final stages of completion and will soon be available. Apart from this volume, the World Bank and the Centre are actively preparing similar publications to appear in the future. All this contributes to our expanding knowledge of urban shelter in developing countries.

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INTRODUCTION

This report lists and, in most cases, summarizes the major research outputs of the evaluation supported by the International Research Development Centre (IDRC) and the World Bank (IBRD) of four of the first IBRD-financed low-income urban-housing projects. The projects supported the creation of locally staffed evaluation units to conduct a 5-year evaluation of housing projects in El Salvador (sites and services), Zambia (squatter upgrading and sites and services), Senegal (sites and services), and the Philippines (upgrading and sites and services). The evaluation began in the first three of these countries in 1975 and 2 years later in the Philippines. The evaluation was completed in Zambia and El Salvador in 1980, and it is expected the final evaluation reports will be completed on the other two projects in 1982.

The evaluation exercise had the following four general objectives: to evaluate the effectiveness and efficiency of the innovative new approaches to low-income shelter that the projects introduced; to develop national research capacity; to develop an evaluation methodology that could be applied in other projects; and to suggest guidelines for the development of future shelter projects.

To achieve these objectives, an evaluation unit was established in each country either as part of the project-implementing agency or working in close coordination with this agency. The evaluation staff were all recruited locally and, in most cases, were nationals of the country in which the project was being conducted. In three of the four countries (the Philippines being the exception), an expatriate consultant was attached to the project unit for 1-3 years. Technical assistance was provided through the Urban and Regional Economics Division of the World Bank (DEDRB).[1] This took the form of visits, every 6 months or so, to each country plus communication by mail and telephone. In most cases, considerable assistance was provided in data analysis and in preparation of the final reports. A very effective element of the coordination proved to be an annual conference, supported by IDRC, in which researchers and project managers met to review the progress of the project and the evaluation.

In addition to the research reports referred to in this document, URBOR is completing a set of manuals on the methodology of evaluating urban housing projects. A more general study is also being completed. It reviews the experience of IBRD in the field of evaluation and takes the present evaluation as a case study that is described and analyzed in considerable detail.

This report is organized into five sections. The first four list and, in most cases, summarize the research reports produced by the evaluation teams in each country. The final section summarizes reports that were prepared by staff and consultants of DEDRB and that use the data sets produced by the evaluation. Although all of the reports produced by IBRD are available to any interested readers, many of the reports produced by the national evaluation teams are not easily available. However, inquiries should be addressed to URBOR for information on the status of particular reports. Although their titles are listed, it was not possible to summarize the methodological documents prepared by each research team.

Each entry in the bibliography incorporates the following elements: individual authorship; title; originating organization; publication number; date of publication; number of pages; language. Some of these elements are missing for some entries either because they do not exist or because they are unknown. Where two languages are given,

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[1] As a result of organizational changes within the World Bank, the responsibility for the evaluation of urban shelter projects has now been assumed by the Urban Operations Review and Support Unit (URBOR).

the first is the original language of the documents and the second is that of the translation (by the World Bank).

Abbreviations:

DEDRB: Urban and Regional Economics Division of the World Bank, 1818 H St. N.W., Washington, D.C., 20433, USA

FSDVM: Fundación Salvadoreña de Desarrollo y Vivienda Minima, Apartado 421, San Salvador, El Salvador

HPU: Housing Project Unit, P.O. Box 4586, Lusaka, Zambia

IBRD: International Bank for Reconstruction and Development (World Bank), 1818 H St. N.W., Washington, D.C., 20433, USA

IDRC: International Development Research Centre, P.O. Box 8500, Ottawa, Ont., K1G 3H9, Canada

LHPET: Lusaka Housing Project Evaluation Team, P.O. Box 4586, Lusaka, Zambia

OHLM: Office d'Habitation de Loyer Modéré, B.P. 401, Dakar, Senegal

RAD/NHA: Research and Analysis Division/National Housing Authority, Diliman, Quezon City, The Philippines

URBOR: Urban Operations Review and Support Unit of the World Bank, 1818 H St. N.W., Washington, D.C., 20433, USA

I: EL SALVADOR

1 Theoretical and methodological framework for the evaluation of the FSDVM's programs. FSDVM Methodology Series No. 1. Nov. 1975. 41 pages. Spanish, English.

2 Theoretical and methodological framework for evaluation of mutual help -- "Sensunapan" project. FSDVM Methodology Series No. 2. Sep. 1976. Spanish, English.

3 Introduction to observation methodologies and their application in the evaluation of the FSDVM's programs. FSDVM Methodology Series No. 3. July 1976. Spanish, English.

4 Evaluation design to measure the housing effects on the health of the participants in the FSDVM's programs. FSDVM Methodology Series No. 4. Sep. 1976. Spanish, English.

5 Introduction to sampling theory and its application in the evaluation of socio-economic programs: Part I. FSDVM Methodology Series No. 5. Aug. 1976. Spanish, English.

6 Theoretical and methodological framework for the evaluation of the causes of absenteeism and withdrawal of families from the FSDVM's projects. FSDVM Methodology Series No. 6. Spanish, English.

7 Design and application of the sample for the socio-ecomomic questionnaire in Santa Ana (June-July, 1976). FSDVM Methodology Series No. 7. Sep. 1976. Spanish, English.

8 Theoretical and methodological framework for the evaluation of "La Periquera" project in Santa Ana. FSDVM Methodology Series No. 8. Spanish, English.

9 Theoretical and methodological framework for the evaluation of the process of housing consolidation. FSDVM Methodology Series No. 9. Oct. 1976. Spanish, English.

10 Theoretical and methodological framework for the evaluation of the "Sensunapan" project in Sonsonate. FSDVM Methodology Series No. 10. Oct. 1976. Spanish, English.

11 Theoretical and methodological framework for the evaluation of "El Naranjo" in Usulutan. FSDVM Methodology Series No. 11. Spanish, English.

12 Introducion to sampling theory and its applications in the evaluation of socio-economic development programs. Part II: Stratified sampling. FSDVM Methodology Series No. 12. Sep. 1976. Spanish, English.

13 Evaluation design for the evaluation of housing effects on the health of the participants in the FSDVM's projects (Discussion paper). FSDVM Methodology Series No. 13. Oct. 1976. Spanish, English.

14 Plan for investigating the housing situation in Usulutan. FSDVM Methodology Series No. 14. Oct. 1976. Spanish, English.

15 Evaluation design to measure the housing effects on the health of the participants in the FSDVM's projects. FSDVM Methodology Series No. 15. Jan. 1977. Spanish. (Revision of no. 13 with new appendices.)

16 Program/design for planning Apopa project. FSDVM Methodology Series No. 16. July 1977. Spanish, English.

17 Procedures used in the application of the sample and questionnaires in the study "Plan for investigating the popular housing situations in Usulutan, and its applications to 'El Naranjo' project." FSDVM Methodology Series No. 17. May 1977. With appendices. Spanish, English.

18 The effectiveness of the cooperative program in promoting a process of social change. FSDVM Methodology Series No. 18. July 1977. Spanish, English.

19 A model and action plan for the evaluation of the impact of the FSDVM's programs on the process of social change. FSDVM Methodology Series No. 19. Sep. 1977. Spanish, English.

20 Proposals for studying self-help and social change in the work of the FSDVM. FSDVM Methodology Series No. 20. Mar. 1978. Spanish, English.

21 Design for the continuation of the longitudinal study of the process of change in the 'La Periquera' and 'Sensunapan' projects. FSDVM Methodology Series No. 22 (2 vols.). June 1978. Spanish, English.

22 Evaluation of the causes of absenteeism and withdrawal of families selected for the "La Periquera" project in Santa Ana. FSDVM Report No. 1. May 1976. 30 pages plus 29 tables. Spanish, English.

This study investigated the reasons for absenteeism of families (initially at a rate of nearly 25%) who were selected for the "La Periquera" project in Santa Ana. A total of 169 families were interviewed, of which 80 are classified as "absentees" and the rest as "active participants." The absentees were questioned on their actions and the socioeconomic characteristics of the two groups were compared.

A statistical comparison in the report shows that, as expected, the families who wish to withdraw are poorer than the active participants, as measured by per-capita income, total family income, and household income. The educational levels of the absentees are also lower. No statistically significant differences in family size, marital status, age of applicant, or job stability were detected.

Of the absentee families, about 40% expressed their desire to stay in the project. Their main reasons for being absent or withdrawing were (in order of importance): (a) dissatisfaction with the type of housing offered, especially its small size; (b) the difficulty of participating in mutual aid given relatively high opportunity costs; and (c) unforeseen changes in the household financial situation.

23 Estimation of potential housing demand at different price levels at "La Presita" project in San Miguel: A methodology to help in the planning of the project and to evaluate the selection criteria. FSDVM Report No. 2. July 1976. 52 pages. Spanish, English.

This report provides information on housing programs in "La Presita," San Miguel. Its first two chapters define the potential market for the housing project and describe the socioeconomic characteristics of the population. The third chapter estimates the population parameters that affect potential demand, i.e., the total number of families in any given category. The estimates are based on ability to pay, family size, and current type of housing. From the 18 projections of potential demand at each price level, the six most probable estimates are selected, indicating a total potential demand of about 3000 families distributed according to the following housing price levels: SVC 30 (754), SVC 25 (458), SVC 20 (750), and SVC 15 (979) where 2.47 Salvadorean colons equals U.S. $1. The projections indicate that the potential demand is limited. The last chapter considers the policy implications of the projections.

24 Evaluation of the causes of absenteeism and withdrawal of families selected for the "Sensunapan" project in Sonsonate. FSDVM Report No. 3. Nov. 1976. Spanish.

25 An estimation of the effect of the construction and mutual aid stages on the generation of jobs and income in "La Periquera", "Sensunapan", and "El Naranjo". FSDVM Report No. 4. Sep. 1976. 13 pages plus 7 tables. Spanish, English.

This report provides a preliminary estimate of the effect of project construction on the generation of jobs and income in three of the project sites. The estimate is based on (a) the number of personnel hired (and their wage bill) by subcontractors during the premutual-help stage of the project; (b) the income obtained by the cooperatives for project work; and (c) the credit accumulated by families through their participation in the mutual-help process. The effects on indirect employment (services to the labourers or multiplier effects) are not considered in the report.

It was estimated that an investment of SVC 346-524 was necessary to generate SVC 100 of income for direct labour input. An investment of SVC 605-853 was needed to generate 1 month of employment. The report concludes that this is a useful contribution by FSDVM because almost all of the incremental income and employment would accrue to the low-income population.

26 Progress of the evaluation of mutual help in the "Sensunapan" project in Sonsonate -- June-September 1976. FSDVM Report No. 5. Oct. 1976. 20 pages. Spanish.

27 Progress in the evaluation of the housing consolidation program. FSDVM Report No. 6. Oct. 1976. 11 pages. Spanish, English.

This short paper is a progress report on the evaluation of housing consolidation activities in two FSDVM projects that were not financed by IBRD loans: Plan Piloto and Agua Caliente. A random sample of 52 households was interviewed to provide some information on the postmutual-help phase of housing construction in terms of costs, timing, personnel, and sources of financing. An attempt was also made to determine the degree of the residents' satisfaction with various levels of housing services.

The report indicates that the residents' first priorities in making adjustments in houses were to enclose the unit and to increase the area of construction. Changes in internal distribution of space (number of rooms and finish) came second. Half of the adjustments (48%) were financed by personal savings.

28 First results of the socioeconomic study in Santa Ana, June-July 1976. FSDVM Report No. 7. Oct. 1976. 60 pages. Spanish, English.

This report presents the preliminary findings on the socioeconomic baseline study carried out in Santa Ana. For a complete analysis and further policy implications see No. **31.**

29 Baseline report prepared for the Senegal conference: Comparison between projects in Senegal, Zambia and El Salvador. FSDVM Report No. 8. Oct. 1976. 13 pages plus 24 tables. Spanish, English.

This report includes information on migration, family composition, income, employment, and housing, and provides a basis for discussing comparability among the projects in El Salvador, as well as among the projects in Senegal, Zambia, and El Salvador. The outline for comparative studies includes only data from the socioeconomic baseline study in Santa Ana, with the exception of the chapter on income, which incorporates estimates of income distribution for Santa Ana, Sonsonate, San Miguel, and San Salvador. In each of these cities, 56-67% of the low-income housing families earn less than U.S. $100/year, and 88-97% earn less than $200. Sonsonate has the most low-income families (56% earned less than $100) and Santa Ana has the fewest (only 33% earned less than $100): the two projects in San Salvador -- El Pepeto and San Jose del Pino -- fall between (40% and 37% earned less than $100 respectively). The two previous projects (not IBRD-financed), Plan Piloto and Agua Caliente, probably cater to the lower income level.

In Santa Ana and San Salvador, 62-70% of families come from the 3rd-6th income deciles. In Sonsonate, 60% of the families are concentrated in the 3rd-5th income deciles. Although the projects have difficulty in reaching the poorest families, in all cases at least 12% of the families come from the poorest 20% of the urban population, and at least 62% from the poorest 50%.

30 Socioeconomic study in Santa Ana, Vol. 1. FSDVM Report No. 9. Spanish.

31 Socioeconomic study in Santa Ana, Vol. 2: Results of the survey and implications for the Foundation's policy in Santa Ana. FSDVM Report No. 10. Feb. 1977. 132 pages. Spanish, English. (Published in the IBRD "Monitoring and Evaluation of Urban Development Projects Report Series," No. ME-1.)

The objectives of this study were twofold: (a) to obtain baseline socioeconomic data on project participants and a low-income housing control group in Santa Ana to provide a reference point for measuring changes produced by the project over time; and

(b) to generate a set of hypotheses about the project's effects, to test them, and to analyze their implications as an input into management's policy-planning process. The data base for the study was a questionnaire administered to a random sample of 197 families participating in the project and 327 families from illegal settlements, rented rooms, and shanty towns (the control group).

The analytical portion of the report covers eight topics: economic conditions (income and employment statistics); demographic characteristics of the families (family size, age, and fertility); levels of education; health (mortality rates, causes of child death, and statistical correlations with indices of living conditions); housing (building materials, lot size, and costs); consumption patterns; migration; and social participation and attitudes. The following results seemed most significant.

1. The selection process was successful in meeting the selection criteria of the project planners. Of project participants, 84% fell within or below the low-income target population (17th-61st percentiles). About 8% of these participants came from the poorest 20% of the national urban population.

2. There was concentration (about 50%) of participants in the 5th and 6th deciles of the Santa Ana urban income curve. Participants' incomes were, in general, significantly higher than those of the nonparticipant control group. However, it should be noted that the control group includes the poorest 20% of the population who were not intended recipients as the project was originally conceived.

3. Fewer participants than expected came from illegal subdivisions. This is significant because the FSDVM studies indicated that residents from these subdivisions generally prefer larger land areas and lower service levels.

4. The proportion of all households with female heads in the project (40%) was significantly greater than that among nonparticipants (30%). This has important implications because the incomes of households with female heads tended to be lower and less stable than those with male heads.

5. Participants were more socially mobile than nonparticipants. Also, rough indicators suggested that they had a lower level of sociopolitical awareness than other families.

The report ends with a review of alternative project designs for reducing costs.

32 Diagnosis of the low-cost housing situation in Usulutan and its implications for the "El Naranjo" project. FSDVM Report No. 11. Feb. 1977. 93 pages. Spanish, English. (Published in the IBRD "Monitoring and Evaluation of Urban Development Projects Report Series," No. ME-2.)

Because of the deficient demand in Usulutan for project housing, this study was commissioned by the project management to determine the causes of low demand, whether the case was unique among project sites, and the policy options open to FSDVM. Three main causes for the low level of demand were identified.

1. There was a basic lack of interest in the project because of other cheaper and apparently more desirable housing alternatives (illegal subdivisions) that were readily available in Usulutan. Lots were larger in the illegal subdivisions and were habitable with little servicing because of shallow wells. (These are not squatter settlements -- residents have title to the land from private developers who illegally sold lots without the service levels prescribed by the government planning ordinance.)

2. Even an extensive information campaign would not make a population with high illiteracy rates aware of the project.

3. There were difficulties in participating in mutual help because of substantial opportunity costs. About 40% of the families originally selected for the

Usulutan project dropped out and most gave as a reason the requirement to participate in mutual help. The researchers also concluded that the relative attractiveness of illegal subdivisions may be greater in Usulutan than other urban areas because of the land market.

The report includes an extensive section on recommendations, some of which were subsequently implemented by management to improve demand. As of May 1978, some 200 units had been awarded to families (out of about 400 that were planned).

The study was based on sample surveys conducted in illegal subdivisions and rented rooms, and complemented by FSDVM records and interviews with project drop-outs.

33 Evaluation of mutual assistance and its functions within the process of social change -- The Sonsonate case. FSDVM Report No. 12. July 1977. 78 pages. Spanish, English. (Published in the IBRD "Monitoring and Evaluation of Urban Development Projects Report Series," No. ME-3.)

This study focused on the effectiveness of mutual help as a means of making housing available to low-income groups and also of fostering community development. Three groups, each consisting of about 25-30 families from the project area in Sonsonate, were the subject of intensive study for 6 months. Observation guidebooks, interviews, and the project application files were used to compile a data base.

Mutual held seemed to be fairly efficient as a method of constructing low-income housing, since the houses produced were of a standard comparable to those constructed using contract labour and the cost was about 10% lower. However, because families often had to sacrifice work opportunities to participate in mutual help on weekends, net financial benefits accruing to families were lower than originally expected. Furthermore, the time required for construction of completed units was greater than estimated and varied considerably, depending upon a group's leaders, construction experience, internal discipline, and attendance record.

The study suggested that: (a) because of the opportunity cost of participation, some families should be allowed to join the project without joining in the mutual-help process but substituting other kinds of communal work; (b) labour should be allocated more equitably among groups; and (c) the orientation sessions for participants should provide a better indication of the total costs to be borne by each family.

Working together over a prolonged period seemed to contribute to a higher level of community consciousness. However, there was not enough evidence to conclude that the mutual-help process is the best vehicle for achieving FSDVM's goals of social awareness for the participants.

34 An economic evaluation of sites and services and progressive development as housing production systems for reaching low-income groups, and their potential application as part of a national housing policy. FSDVM Report No. 13. July 1977. 133 pages. Spanish, English.

The economic implications of sites and services projects as part of a national policy to provide housing for low-income families are analyzed in this report. In particular, FSDVM's housing program is compared with the "progressive development" of illegal subdivisions (i.e., development not aided or stimulated by established institutions) in terms of the following issues: (a) accessibility to the low-income target population; (b) relative efficiency in delivering a basic package of urban services; (c) roles in the context of an overall Salvadorean economic development strategy; and (d) roles in the context of a national housing policy (in particular, subsidization options).

The comparative analysis uses cost-benefit methodology extensively to measure discounted differences in the service packages offered by institutional (FSDVM and government) programs and by the illegal subdivisions. It is shown, for example, that the internal rate of return of investing in FSDVM housing is higher than that of the subdivision. However, after the rates are weighted by income distribution factors (each a measure of the degree to which a particular project is accessible to the low-income target population), the rates are virtually equal. Given this and the low value imputed by participants to some of FSDVM's principal benefits (water, electricity, public areas, and community facilities), the report suggests that the relatively low service levels supplied by the subdivisions are a reliable and efficient alternative to the more comprehensive package currently being offered by FSDVM.

The data base included project management estimates of housing costs, existing surveys, and the surveys of project participants administered by the evaluation unit in Santa Ana, Sonsonate, and Usulutan.

35 Synthesis of the principal results of the first 21 months of the evaluation and a definition of research priorities for the next year. FSDVM Report No. 15. Sep. 1977. 29 pages. Spanish, English.

This document reviews the reports and highlights the major findings of the evaluation unit over the first 21 months of its existence. It deals with the evaluation's results regarding the following project components: house and project designs; selection criteria; the mutual-help process; and the self-help process in housing consolidation.

Some of the important results are: (a) based on comparisons with demand for alternative forms of housing, lower levels of services should be considered for project designs; (b) a system of subsidies should be studied to improve access of the lowest 25% of the urban population to the project and to ease the strain on incomes of the poorest participants; (c) mutual help seemed to be an efficient and inexpensive way to build dwelling units but there had been problems in terms of drop-outs and extension of the time required to complete the units because of lost opportunity costs in working during weekends.

36 The effectiveness of the cooperative as a means of social change and definition of the alternatives for action for the program of community enterprises: Vol. I -- Results and recommendations. FSDVM Report No. 17. Dec. 1977. 63 pages. Spanish, English. (Published in the IBRD "Monitoring and Evaluation of Urban Development Projects Report Series," No. ME-5.)

This report presents policy alternatives for the FSDVM's overall economic program. A brief discussion of the macroeconomic situation of the country is followed by an analysis of the difficulties that credit and cooperative programs have in reaching the poorest strata of the urban and rural populations. The lack of employment opportunities combined with an extremely skewed distribution of income and wealth make programs for the very poor critical. However, most of the credit and cooperative programs in El Salvador have been targeted at the middle and lower-middle classes to minimize risk.

Working in urban areas, FSDVM's cooperative programs focused on the marginal urban population. Analyzing the experience of FSDVM over the past 5 years, the report notes the achievements, i.e., the establishment of seven cooperatives, a market and sales centre, an artisan school, savings and loans cooperatives, etc. However, for the economic objectives of FSDVM, the results had limited impact. Although income for cooperative members doubled in some cases, employment generation was negligible. Hopes for large-scale cooperatives were dampened by the lack of administrative and organizational experience of the members.

The cooperative program is reviewed in light of all the FSDVM's social and economic objectives and compared with policy alternatives. A set of recommendations for future action is formulated. Despite the limited economic impact, cooperatives are still placed high on the list of priorities for helping the marginal urban population because of their potential as vehicles for developing social awareness and pressuring for changes in the social structure of the country. Other points of emphasis for the future are to provide credit and technical assistance for small private companies and to continue to research other forms of community enterprises. Alternatives that were studied but rejected were: forming a larger company with international backing managed directly by the FSDVM; providing personnel training and placement services; and moving into small-scale agroindustry. These alternatives appear to demand too many of FSDVM's resources, could be better achieved through other channels, or have moved too far away from some of FSDVM's original objectives. A variety of other actions are recommended, e.g., providing marketing advice, educational programs, and support for research.

37 The Apopa demand study. FSDVM Report No. 18. Jan. 1978. 62 pages. Spanish, English. (Published in the IBRD "Monitoring and Evaluation of Urban Development Projects Report Series," No. ME-4.)

The purpose of this study was to assist FSDVM management in planning its housing project in the Apopa area of the Metropolitan Area of San Salvador (AMSS) by calculating the potential demand for the project. The findings were presented to FSDVM management and are being used in the current design.

The demand for the project is as follows. The target population was defined as all households in the AMSS who live in mesones and tugurios or who are renters in illegal settlements. Based on the 1971 census, this population totaled about 86000 households. Of the target population, demand was defined as those households who were interested (obtained through a sample survey) and who could pay, based on the assumption that a household should spend about 15-20% of its income on housing.

After the number of interested households in the target population was calculated, two estimates of demand were obtained based on different assumptions of payments capacity. The first assumption was that the monthly cost to the project participants included the development charges levied by the FSDVM; if this was the total cost and households spent about 15-20% of their income on housing, potential demand was 29000 households. The second assumption was that the families also have to pay for materials and labour for completing the house, as well as for light and water services; on this basis, housing demand fell to 12000. This result emphasized the importance of the skewed income distribution in San Salvador because even slight changes in monthly costs made significant inroads into the affordability of the project.

The Apopa project was planned for some 6700 lots. The report concludes that the number of households who are interested and can afford the project (12000) may not be large in comparison to the total number of available lots, because some households that expressed interest may drop out.

II: ZAMBIA

Reports prepared by the monitoring unit of the Housing Project Unit (HPU) (No. 41-51) have been abstracted although these reports were not prepared under the auspices of the evaluation team. The evaluation reports prepared by the Lusaka Housing Project Evaluation Team (LHPET) are entries 52-74.

38 Research design. LHPET Methodology Paper. Apr. 1976. English.

39 Survey methodology. LHPET Working Paper No. 6. May 1977. English.

40 Monitoring research design. HPU Metholodogy Paper. 1977. English.

41 John Howard overspill: Resettlement. HPU. 1977. 30 pages. English.

John Howard overspill, in Chawama, was the first area to be resettled as a result of the Lusaka upgrading project. Half of the first 200 families were surveyed about 4 months after they had moved to the site. The survey provided project management with information for future resettlement areas. Some of the findings and recommendations were as follows.

1. About 30% of the participants felt that they had been forced to move, indicating that the briefing process had been inadequate. Briefings, the process of informing the community of the project, should concentrate on individual families as well as on area leaders and should start earlier in the project cycle.

2. Many residents (45%) were dissatisfied with the temporary shelters in which they lived while permanent houses were under construction. Earlier identification of families would allow them to continue to live in their current houses while building in the overspill area.

3. Most participants expressed satisfaction with the project's technical assistance component, which was used primarily for advising contractors on house construction rather than in the context of self-help construction. Because of lack of time or skills, and because of pressure to complete houses before the rainy season, 80% hired labour for house construction.

4. Most participants followed the standard housing plans and began constructing a core unit of three rooms, although the value of the units exceeded the building materials loans. This higher cost occurred both because of the high percentage of participants hiring labour and because 96% chose to build with the most expensive materials, i.e., concrete blocks. The 1975 estimated cost (excluding labour) of a core unit of concrete was ZMK 372 (where 0.86 Zambian Kwacha = U.S. $1) compared to the maximum loan for building materials of ZMK 250. Most respondents felt that the loan should be increased and also allow for labour costs. The report recommends that this be considered, along with its affordability implications, but that other actions be taken to reduce costs through encouraging more self-help labour and the use of cheaper materials.

5. Although most of the participants had previously lived in houses built of sun-dried bricks, most were building their new houses of concrete blocks. A major factor was simply preference for more durable materials than sun-dried bricks; however, 25% of the respondents felt that HPU expected them to construct in concrete. The report suggests that alternative building materials, especially soil-cement blocks, be stocked in the materials store to assess their marketability. Also, it suggests that participants be encouraged to make blocks through mutual-help schemes. (Experiments were carried out in mutual-help block-making, see No. **69**).

6. The operation of the materials store needed review because more than 50% of the respondents expressed dissatisfaction with it. (A major complaint was the waiting period for materials.) There was also need for clearer definition of the roles and responsibilities of HPU, the contractors, and the community, because many participants felt that additional services, such as feeder roads, should be provided by HPU along with basic infrastructure, and were not aware of the community's responsibilities and the role of mutual-help schemes.

7. Overall satisfaction seemed high. Of the resettled families, 87% felt they were getting higher standard housing with minimal dislocation as they were adjacent to their previous area of residence.

42 Technical assistance monitoring report. HPU. Jan. 1977. 5 pages. English.

Several recommendations grew out of this assessment of the upgrading program's technical assistance component. The assessment focuses on the role of the construction advisor and found that both salaries and skill levels varied among the advisors, and that their role was not clearly differentiated from that of the assistant community-development officers. Some suggestions for improvement were: (a) better briefings and on-the-job training for the construction advisors; (b) establishing guidelines on the extent of technical assistance that was needed at each stage of house construction; (c) reviewing the salaries and working conditions of the advisors; and (d) appointing field team leaders as the link between advisors and assistant community-development officers.

43 Monitoring of the service charges and loan repayments in Chawama. HPU. Jan. 1977. 3 pages. English.

The service charges for water in the Chawama overspill area had been fixed at ZMK 1/month/household for the 1st year of operation. The review of the collection rate indicated that 90% of the households paid the monthly charge in the first 6 months and 80% paid during the second 6 months of the year. At the time of the review, the strategy of turning off water for all 25 households sharing a water tap if all had not paid appeared to be effective.

On the other hand, 90% of the households in the area were in arrears with their loan repayments at the time of the review. The main reason given by respondents was a lack of knowledge about when loan payments were due to start. However, the report suggested that the strategy used to encourage loan repayments, namely the threat of eviction, was not effective because it was difficult to enforce. It was recommended that, along with better briefings and possible eviction, occupancy licences be withheld for participants who were behind in payments by 3 months or more. (Collections and their implications for cost recovery have been under review throughout 1977 and 1978. A final paper is forthcoming.)

44 The transfer of overspill plot ownership -- Chawama and George complexes. HPU. Mar. 1977. 9 pages. English.

The transfer of ownership of plots within overspill areas occurred on a small scale during the 1st year of the project (30 plots in George and 43 in Chawama). An investigation of the reasons for these transfers showed that illness, old age, and new jobs in other areas accounted for some changes in ownership. However, the more interesting and important reasons for selling plots were profit and inability to obtain sufficient funds for completion of construction. These reasons are particularly important since they tend to affect people in the low income categories. Information on income was available for 38 of the original owners and of these 23 earned ZMK 50 or less/month. Although it was estimated at the time of appraisal that this group could afford loan repayments and service charges, the difficulty seemed to lie in the initial outlay of capital, especially for labour, required for house construction. This group was less likely to have accumulated savings and was often ineligible for credit from other sources. For example, many of this group were unskilled labourers and therefore were generally disqualified for employers' loans. Of the respondents, 14 indicated that they were unemployed, another indication of insecure jobs and income. Thus, this group often has incentive to sell their lots, especially when profit is involved.

45 Analysis of the bricklaying industry in Chawama (draft). HPU. Mar. 1977. 4 pages. English.

In response to a need to establish standardized fees for construction and to register contractors, information was collected on 19 informal-sector building contractors in the Chawama overspill area. Of the sample, 45% had trade school or vocational training, about the same had received on-the-job training, and 10% had not worked previously as bricklayers. The average charges for the construction of foundations and walls were computed by room and by number of days needed to complete the work. For example, a three-room house required about 2 weeks to complete, at an average labour cost of ZMK 75. Prices varied somewhat and seemed to be influenced by social factors, such as personal relationships between contractors and clients. A follow-up report (see No. **46**) provided more detailed information on the employment characteristics of the contractors.

46 Bricklaying industry in the upgrading area: Informal sector. HPU. Apr. 1977. 7 pages. English.

This report expanded on the information collected for the previous report (No. **45**) on the bricklaying industry. It was found that bricklaying was an important source of income for the contractors in the upgrading area because more than 50% had previously been unemployed and about 30% had only part-time work. During peak periods, a bricklayer could earn about ZMK 200/month, but the seasonal nature of the work caused problems for the contractors. Moreover, homeowners often failed to honour credit agreements. Of the 20 contractors, 19 indicated that they would prefer another type of employment with potential for more stable income.

With regard to the prices charged, they tended to be equivalent to, and in-line with, what the community considered reasonable. To reduce costs, members of the client's family often worked with the contractors to provide general assistance.

47 Stores operation report. HPU. Apr. 1977. 4 pages. English.

An assessment of the efficiency of the operation of the stores that disburse construction materials was conducted through: a questionnaire administered to participants queueing at the stores; a budget survey done by the evaluation team; and observation of the stores. The total time in serving residents averaged 2.5-3.5 hours/visit, although initial waiting time and obtaining delivery often took much

longer. During a 1-week period, a household could spend up to 25 hours in obtaining building materials with household members operating a shift system to maintain their place in the queue. Several factors contributed to this problem: irregular store hours, shortages of staff to handle high-volume periods, shortages of building materials necessitating rationing, and inadequate transport services. The participants who were questioned rated the general operation of the stores as very poor.

Short-term measures that are recommended are: (a) giving resettled households priority over participants with house-improvement loans; (b) placing a moratorium on new invoices until the backlog was cleared; and (c) making daily announcements about the materials currently available.

Some of the long-term measures that the report suggests are: (a) to develop a system of direct delivery to plots; (b) to reduce the number of plot allocations per week and thereby the volume in the stores; (c) to encourage more self-help block-making; and (d) to streamline the paper-work system in the stores.

48 Monitoring report on markets in the upgrading areas. HPU. May 1977. 7 pages. English.

As part of the upgrading scheme, provision was made for the construction and improvement of up to 12 markets in targeted urban areas. Markets in Lusaka faced a number of problems due to poor management, e.g., accounts were not kept in many. Also, conflicts stemmed from the dual market system, one of which was organized by the Lusaka City Council and the other by local Party leaders.

The report recommends a reorientation of the market system toward a cooperative form. Among the recommendations are: (a) drawing up a lease and mortgage agreement with a specific provision for accounting and auditing; (b) establishment of guidelines with regard to minimum membership and provisions for the occasional users of stands; and (c) clarification of the roles and responsibilities of the cooperative members, the Party, and the City Council. By 1981, these recommendations had not been adopted.

49 Monitoring the improvement loan process. HPU. undated. 4 pages. English.

Because the home-improvement loans (ZMK 100 each) were not being applied for in the Chawama area, an investigation was conducted to identify the reasons. Of 50 house owners who were surveyed, 15% were using other sources of credit, such as employers' loans, and 55% did not know about the HPU loans. As the current level of the loans did not, in many cases, cover the needs of residents, it was recommended that the amount be increased. Also, publicity through posters, briefing meetings, and other available channels of communication was emphasized as means of increasing awareness of the availability of this source of credit.

50 Monitoring report on suggested administrative improvements for HPU stores. HPU. Apr. 1977. 4 pages. English.

This report assesses the effectiveness of the recommendations made in a previous report (No. **47**) to improve the efficiency of the materials stores. Queues of participants had been reduced because the backlog of invoices had been eliminated and the time for writing invoices had been reduced. Also, a system of direct delivery of concrete blocks to groups of five participants had been devised; service had been suspended to recipients of house-improvement loans in favour of resettled households; and the stores were operating on more-regular schedules.

51 Monitoring report on the operation of housing project unit stores, Chawama experience. HPU. undated. 13 pages. English.

The study focused on the role of the staff of building materials stores and ways to improve operational efficiency. Both poor record keeping and inefficient staffing, e.g., too many personnel during nonpeak periods, were contributing to the general inefficiency of the stores. Also, the staff did not have a clear understanding either of the goals of the program or of the expectations for their own performance.

The report suggests: (a) better briefings for staff; (b) reallocation of excess staff to other stores; (c) hiring a clerk specifically for record keeping; (d) closer liaison with the accounts section of the HPU; and (e) several other improvements in the record-keeping system. The experience in these building materials stores provided the basis for a set of standards for setting up new stores.

52 Study of plot use in sites and services schemes and a squatter area in Lusaka. LHPET Working Paper No. 1. May 1976. 58 pages. English.

This was a small-scale study of plot use for two sites and services schemes (Chunga and Kaunda Square I), one overspill area (John Howard), and one squatter area (George) that was undertaken during April and May 1976. The use of plots, basic socioeconomic characteristics of the households, and the attitudes and degree of satisfaction of participants were analyzed as a background study to the second urban project in Zambia.

In John Howard and Chunga, one household occupied each site, but, in Kaunda Square I, 2 of 15 houses had been divided into two dwellings. In George, there was an average occupancy of 1.47 households per building. In some cases, buildings with no resident owner were being occupied by squatters and, in two cases, by relatives.

The two sites and services schemes attracted a better-educated, higher-income population than the other areas. Chunga residents, with the highest mean income, were satisfied with the higher standards of services and larger plots. The population of Kaunda Square I was similar to that of Chunga, but had a slightly lower mean income. This development, with its relatively small plots and high density, provoked the most unfavourable reactions in terms of space for outdoor activities, especially gardening. Residents of the John Howard overspill were satisfied with all aspects of life in the overspill area, and viewed provision of basic services, such as piped water supply and road access, as the highest priority. Only after these needs had been met did they aspire to higher standards of servicing, such as waterborne sewage disposal and electricity. George's residents recognized the area's deficiencies, particularly the lack of basic services -- roads, water supply, and drainage, which were being built. These needs took priority over waterborne sewage disposal and electricity.

The findings suggested that the design of low-income housing projects should take into account a number of plot-use categories, such as vegetable and decorative gardening and outdoor living space, although this would depend on the opportunity cost of land and its economic utility to occupants. For example, projects located at or near a city's outskirts should probably provide (as an option) plots with adequate space for market gardening. In more central locations, this would more probably be a waste of valuable land. Other options, such as providing rental and commercial space for an individual household, were more difficult because of city zoning regulations.

53 Observations of a pilot mutual help scheme in Nyerere (Chawama complex): Case study no. 1. LHPET Working Paper No. 3. Mar. 1977. 21 pages. English.

The main objectives of the study were to identify factors that may influence the

degree of success or failure of a mutual-help scheme, and to present recommendations concerning the organization, administration, and implementation of mutual help. The report is based on observations by a member of the evaluation team who visited the work site and interviewed managerial and community development staff of the Housing Project Unit (HPU), Party officials, and residents in Nyerere.

The study concluded that the Nyerere pilot mutual-help scheme, which involved digging trenches for 2300 m of water mains, was a qualified success; the digging started well and, despite many problems, was completed. The success was due to the leadership of the Party, which organized the trench digging and encouraged participation in the scheme, and to the decision to use the project's earnings for a clinic that would benefit the entire community. (By 1979, a pre-natal clinic had been constructed in Nyerere.) On the negative side, HPU did not involve the participants in the initial planning stages, thereby leaving the impression that the scheme belonged to HPU and that the participants only had a supporting role. Further, some residents found that briefing meetings did not always provide precise responses to their questions and felt that the contractor did not offer a reasonable fee for the residents' trench digging.

Several implications came from the study: (a) mutual-help schemes should be discussed with local leadership at all stages; (b) the local leadership should organize and mobilize the community so that the community, rather than HPU, initiates the schemes; (c) the role of HPU should be to give guidance and assistance when needed; and (d) briefing sessions should be made more systematic and written materials should be supplied to residents. Also, although women were expected to participate in digging, little was done to encourage their full participation during briefing meetings. It was felt that "double mutual help" should be avoided, (i.e., a program where residents undertake a second mutual-help scheme because the money from the first is insufficient to complete the projected project). Delaying the delivery of benefits from the first scheme might dampen enthusiasm and motivation to participate in the second.

The issues that were identified as meriting attention in future evaluations of mutual-help schemes were: (a) whether the task of trench digging is suited to mutual-help schemes and what other types of tasks could be carried out by mutual help; (b) what are the rates of return to the residents for each type of work; and (c) whether there are opportunity costs of people's involvement in mutual help.

54 George 1976: Initial results of the first primary sample survey. LHPET Working Paper No. 4. May 1977. 77 pages. English.

This paper reports the major findings of the 1976 socioeconomic baseline study of the George upgraded area and makes some comparisons with an earlier study carried out in 1973. The results of the study were based on a questionnaire that was administered to the occupants of 6% of the buildings in George.

Major findings of the study were: (a) educational attainment had increased significantly between 1973 and 1976 with a sharp decrease (from 43% to 21%) in the proportion of those with no education; (b) the proportion of the population with a secondary education increased from about 3% to almost 8%; (c) regarding housing improvement, although over 60% of the owner-occupiers had upgraded their homes, only 15% had actually rebuilt them -- for both categories, very little credit was used.

In the absence of any significant change in building space, coupled with an increase from 1.10 to 1.58 in the occupancy rate of households per building, housing density had increased rapidly. For the same period, mean household size decreased from 5.1 to 4.4 and was reflected in the increasing proportion of single-person households. As a result of the increase in density of households, sanitation had deteriorated. In 1976, 40% of the latrines were shared by at least three households, compared to 1.76 households in 1973.

The other interesting findings of the study were:

1. The proportion of tenants increased sharply from 23% in 1973 to almost 46% in 1976. In 1973, 70% of the tenants paid ZMK 4-6 for monthly rent, and 27% over ZMK 6. In 1976, 39% paid ZMK 1-6 and 50% paid over ZMK 6 for rent.

2. For the same period, there was no change in the modal (most frequently stated) income of ZMK 40-49 although a larger proportion of heads-of-household earned over ZMK 100/month (20% in 1976 compared with 7% in 1973). According to this study, in 1976, 17% of the individuals in the informal sector were earning less than ZMK 20, compared to 3% in the formal sector, although there were some instances of very high income in the informal sector.

3. Between 1973 and 1976, the proportion of households who were engaged in subsistence agriculture had increased. In 1976, over 30% of the households were engaged in subsistence agriculture, although the distance of gardens from home had increased considerably.

Regarding employment, the study found that, in 1976, 73% of the labour force were wage workers; 15% self-employed; about 1% unpaid family workers; and 11% unemployed. Of the working males, the majority (86%) were in the formal sector compared to only 25% of the working females. The informal sector consisted of self-employed (81%), employees (18%), and full-time unpaid family workers (2%). Of the unemployed, almost 50% wanted to find a job in the production sector, especially as drivers or skilled construction workers. The next most popularly aspired to occupations were stenographers and clerical workers.

55 Supplement to George 1976 report: Operational and policy implications. LHPET. Apr. 1978. 13 pages. English.

This supplement is intended to broadly outline the policy implications of the information given in the previous working paper (No. **54**). In response to the increase in density of households and in the proportion of tenants, it was recommended that the policymakers pursue a middle approach, by permitting the lease of rooms within an owner-occupied house but allowing an individual to own only one house. It was noted that, if strict controls on renting were imposed, both potential tenants and some low-income households who could have benefited from the additional income would be penalized. On the other hand, in the absence of any control, a few individuals might exploit the market for low-cost rental accommodations. The report also noted that, because of the steady increase in household density, there would be a growing need for satisfactory, cheap sanitation systems using relatively simple technology for construction and maintenance.

Regarding employment, the supplement emphasizes that, since many previously self-employed individuals expressed the desire for formal-sector work, and due to the relatively low incomes of most informal-sector workers and the decrease in the relative importance of informal-sector employment, the informal sector's potential for expansion should be further investigated before investing in programs designed to encourage its growth. (In 1979, a survey on the informal sector was underway.)

The report confirms the trend of a slow rate of growth of income in relation to the exponential rise in the cost of living and recommends that low-income families be allowed to supplement their food supply in all possible ways. Gardening should be encouraged with provision for a year-round water supply coupled with timely agricultural advice and easily available, inexpensive fertilizer.

56 Chaisa complex: Some population statistics. LHPET Working Paper No. 5. May 1977. 4 pages with tables. English.

This report is based on a socioeconomic baseline survey of three squatter areas

comprising the Chaisa complex before upgrading operations started. The survey was carried out in November and December 1976. Its purpose was to identify the squatter population and the number of households in the area, and to estimate the number of businesses that might be involved in the informal sector in Chaisa.

The findings showed that Chaisa had the largest total population (23280) and the greatest number of households (5791), followed by Chipata (population of 18840 and 4584 households) and Garden (population of 15244 and 3691 households). The mean household size (about 4.0) was similar for the three areas, but the average number of households per building was 2.27 in Chaisa and only 1.50 for Chipata and Garden. Chaisa and Garden, the oldest areas, had a higher proportion of tenant households, 58 and 44% respectively; 32% of Chipata's residents were tenants. The Chaisa complex was compared with George (another upgrading area) and it was found that the modal income group was about the same (ZMK 40-49/month). The secondary peak was ZMK 60-69 in George, but in the Chaisa complex it was lower (ZMK 50-59).

Chipata, the area furthest from the town centre, had the largest proportion of self-employed people (27%), whereas Chaisa, the area closest to the centre and industrial activities, had the smallest proportion of self-employed (19%). Garden was between the two both physically and with 21% of the population self-employed. The study did not provide a breakdown by urban and semirural occupations. The labour force participation rate was lower in Chipata (19%) compared with other parts of the complex (25%), but the study did not explain the reasons for the difference.

57 George essential resettlement: The "drop-outs". LHPET Working Paper No. 7. July 1977. 8 pages. English.

This paper analyzes the 1976 socioeconomic baseline questionnaire that surveyed households choosing not to move to the overspill plots (the "drop-outs") compared with the overall population of George. Major findings were as follows.

1. The "drop-out" rate was roughly 31% of the 152 households that needed to be resettled. Some reasons given for "drop-out" were illness, temporary residence, and intention to move out of the area.

2. The "drop-out" households tended to be smaller than average (3.0 versus 4.4 persons), to have a larger proportion of single heads-of-household (44 versus 20%), to include a larger proportion of self-employed (36 versus 18%), and to be households with no apparent source of income or a relatively low, insecure income. This last condition applied particularly to female household heads (18 versus 9% in George as a whole). "Drop-out" households occupied smaller dwellings than the population of George (1.54 versus 2.02 rooms), and a larger proportion were tenants than in the whole area (74 versus 46%).

58 A week in the life of John Phiri: The George time budget surveys. LHPET Working Paper No. 8. July 1977. 31 pages. English.

Time budgets were studied in 70 households before and after resettlement in George to test the participants' assertion that they did not have time for self-help housing and to assess the shadow value of self-help labour based on an estimate of the time spent in construction by the family. A daily record was kept for each adult in the sample. The main findings were as follows.

1. Respondents indicated that less time was spent on work, social activities, and resting in the "after resettlement" survey. The report suggests that the reduced working week was probably due more to the country's economic difficulties than to the project. However, social activities of newly resettled households were curtailed as they spent more time on housebuilding and obtaining building materials, the latter

taking the most time.

2. The first 1 or 2 weeks after resettlement were used for clearing and leveling plots, and digging pit latrines and foundation trenches. This unskilled work was shared fairly evenly between the men (mean 54.8 hours in the month) and women (48.6 hours). As construction progressed, it became necessary for most households to hire skilled labour to complete the job, confirming the hypothesis that lack of skills rather than lack of time was the determining factor in the use of hired labour.

3. The shadow value of self-help labour was to be computed as an element of total investment in housing. However, because only five of the houses had been completed at the time of the survey, there were still not enough data to establish an average self-help labour input into house construction. (In 1979, shadow values for self-help labour were being studied in both El Salvador and Zambia.)

59 The applicants for serviced plots. LHPET Working Paper No. 9. July 1977. 10 pages. English.

This study described the socioeconomic characteristics of the 10017 applicants for the 2000 serviced plots intended for occupation in April 1977. The plan was to use application forms as the data base to compare the characteristics of settlers on serviced plots with the general population of applicants (the demand factor).

Most applicants (95%) were male heads-of-household aged 20-49 years. More than half (56%) lived in squatter areas; 20% in other sites and services areas; and 17% in high-density residential areas. It appeared that many applicants from squatter areas (some of which were being upgraded) envisaged the sites and services schemes as being similar to overspill areas. Thus it seemed possible that they would drop out when they realized that financial commitments implied by sites and services schemes were much greater than those entailed in moving to an overspill area. Information on the cost of sites and services schemes had not been included in either preliminary publicity or in the application forms.

Tenants made up 60% of the applicants. The mean dwelling size was 2.5 rooms and most applicants lived with 4.5 persons/room. In squatter areas, the great majority of people shared the communal standpipes; and 82% of the families shared sanitation facilities. There was no water-borne sanitation.

60 Community development and change: The community development process in Chawama and George. LHPET Working Paper No. 10. Sep. 1977. 67 pages. English.

This report is concerned with the process of community development in the first two squatter areas to be upgraded (Chawama and George). The existing political party organization was a vehicle for communication along with community development workers, most of whom were trained specifically for the upgrading project. They, together with construction advisers and materials stores personnel, formed a field team.

The community development process was to include four steps: first, briefing with Party officials and residents on the objectives of upgrading, film shows, and tours of previously upgraded areas; second, participation of the community (through a road-planning group) in decision-making on routes for internal roads, location of community facilities, and identification of houses to be razed; third, briefings for affected families (those required to resettle in the overspill area adjacent to the upgraded area) and for families with the option of resettlement; and fourth, continuous promotion of community consciousness through briefings on environmental and house improvements, mutual-help projects, maintenance of physical infrastructure, and responsibility for payments of service charges and loan repayments.

A questionnaire administered in George focused on the first two steps of this process. Most respondents (76%) had heard about the briefing meetings, but only 40% had attended one. Of the respondents who had attended, 91% felt that they had fully understood the briefing and 90% rated it very good or good. Questions on information that residents actually remembered indicated that recall reflected their priorities, e.g., provision of piped water and good roads, or their concerns regarding resettlement and getting loans for materials. Overall response to upgrading emerged as a positive one. In responses to open-ended questions, advantages of upgrading were mentioned a total of 502 times, compared to only 84 mentions of disadvantages.

61 Application, allocation and briefing procedures for the serviced plot programme. LHPET Working Paper No. 11. Sep. 1977. 25 pages. English.

This report investigates the reasons for the slow take up of sites and services plots up to July 1977 and recommends improvements in the application, allocation, and briefing procedures. Among the changes recommended are simplification of application forms and the use of more common local language. Inclusion of information on costs in both advance publicity and application forms are considered important. A reason often cited by applicants for dropping out was that they could not afford the scheme.

A goal of the program was to allocate 50% of serviced plots to households with an income of less than ZMK 70/month. Almost 50% of the successful applicants for the first sites fell within this guideline but only 28% of those who paid deposits by mid-October did. This finding, and a 61% increase in the consumer price index for the low income group since 1973, seemed to show that the income guideline was no longer appropriate. Minimum and maximum incomes related to the cost of the scheme and household size were recommended (a minimum of ZMK 70 for households with fewer than five members and a maximum of ZMK 200). It was also recommended that, in the light of increases in the cost of building materials, the value of building material loans should be reviewed.

62 George overspill house consolidation: Preliminary results. LHPET Working Paper No. 12. Oct. 1977. 45 pages. English.

This study was a first attempt to assess the process of house building, i.e., rate of construction achieved, investments of time and money in house building, program of technical assistance, etc. Preliminary results of a questionnaire administered to 88 participants in the first resettlement group from George showed that the average delay between plot allocation and the start of construction was 3 weeks. About 70% of participants built temporary shelters to live in while building their permanent houses. The cost for these was minimal and they were occupied usually for only 1-4 months after which the shelter was demolished and the permanent house was occupied.

Most participants (79%) constructed a two-room concrete-block core house relatively rapidly, using their building materials loan (ZMK 340) from HPU. Only three participants in the sample received credit from other sources. Of the participants, 85% hired labour, generally a bricklayer, at an average cost of ZMK 54. The vast majority of participants were satisfied with the technical assistance provided since it helped the contracted bricklayers build with higher standards. The mean investment in the houses in the sample, some still incomplete, was ZMK 357; this included labour, which represented about 10% of the total cost. Of these participants (85% of the total), 87% had constructed two-room houses.

63 Observations of a mutual help scheme in Desai (George complex): Case study no. 2. LHPET Working Paper No. 13. Nov. 1977. 13 pages. English.

This follow-up report on mutual help (see No. **53**) is based on observations of community participation in trench digging in Desai, George. Compared with the previous project, this scheme was much less successful. There was a less-established local leadership in Desai and this hindered planning and coordination of the work. However, the biggest difference was in the level of community motivation. Although, in Nyerere, people worked on weekdays as well as weekends and the project progressed fairly quickly, in Desai fewer people participated and usually only on weekends. One observation was that community members did not seem to have a clear idea of how digging trenches could benefit them or their families. The idea behind these schemes was to have the community take over part of a project, which would normally be contracted out, and with the money accruing from this work establish other community projects. The Desai mutual-help scheme was organized for the purpose of building a branch office of the National Party (UNIP). Given a lack of understanding of the project's purpose and thus the lack of motivation, work was carried out half-heartedly and took 3 months. Also, the money accruing to the community was not significant.

The experience in Desai was not a marked success. However, the report does not conclude that mutual-help schemes are impossible or undesirable. As had been shown in Nyerere, they can provide better economic returns to the community, and their value is not solely economic. Mutual aid was meant also to build community pride and cohesion. Recommendations include choosing better environments for mutual-help schemes by identifying areas with strong, active local leadership. Also, better briefings of both branch officials and residents are essential to successful mutual-aid schemes.

64 Employment generation study: First report. LHPET Working Paper No. 14. Nov. 1977. 16 pages. English.

This report reviews formal and informal sector employment and income generated by the squatter upgrading and sites and services project.

In the formal sector, HPU let four infrastructure-installation contracts in 1976. Available data for December of that year indicated that 614 people were employed and income of ZMK 30976 was generated. Of the employees, 66% actually lived in areas being upgraded during the project and earned 48% of the income generated.

Of the 13 informal-sector bricklayers interviewed, all had primary level education, seven possessed trade certificates of some kind, seven worked full time in the formal construction sector and built houses in the overspill area in their spare time, three considered this construction work as full-time occupation, and three were doing it while looking for formal-sector employment. Most worked by themselves or with the help of an unskilled labourer. None had any intention of forming a larger, more-formal business in the future. Contracts were generally obtained through informal networks, and prices varied from ZMK 50 to ZMK 100 for a standard two-room house.

65 Report on the de-densification process. LHPET Working Paper No. 16. 1977. 20 pages. English.

This report reviews the experiences of HPU with de-densification and highlights the lessons learned in Chawama and George. Its purpose was to aid in the development of an approach for Chaisa, the settlement with the highest housing density (61 structures/ha).

In Chawama, the selection of houses for demolition had been decided within the community by residents and section leaders. Some discontent was registered regarding the objectivity of the selection process. Therefore, in George, high-density areas were identified from aerial photographs and "de-densification walks" were arranged. Armed with maps and the photographs, HPU officials, Party leaders, and any interested residents walked throughout the sections being considered for de-densification. They

looked at houses built close together and their condition and usually reached a consensus on which houses were good candidates for demolition. Later, families were recontacted for consultation regarding resettlement.

Up to the time of the report, the program had not made much progress. Residents were generally reluctant to move. Some of the reasons given were: (a) doubts about the capacity of the building materials stores to cope with optional resettlement in addition to essential resettlement; (b) concern with the lack of facilities in the newly developed overspill area; and (c) financial problems related especially to the expected loss of income by self-employed participants. It was felt that incentives over and above the "option" to resettle would be needed to move the program forward.

Absentee landlords and residents owning more than one house, and their renters, presented special problems. The President of Zambia issued a strict policy on landlordism that stated that a family could own only one structure, the one in which they were living. It was not always easy to comply with this policy because owners of more than one house could nominally "give" a house to a friend or relative and continue collecting rent. Also, it was not easy to contact absentee landlords. If rented house were demolished, the tenants were put in a difficult position because they were not eligible for resettlement plots.

Among the recommendations for future de-densification schemes were: (a) the standardization of loans for the de-densification and the essential resettlement sites; and (b) giving renters the option of the resettlement program. Although, in Chawama, the loans for both types of resettlement were the same, in George the essential resettlement loan was ZMK 350 and the loan for optional (de-densification) resettlement was ZMK 250. Therefore, more personal funds would be required of those families selected through the de-densification program. Renters were not eligible for immediate resettlement if they were affected by de-densification, rather they were required to wait and apply for a separate renters' resettlement program.

66 The Chaisa/Garden community development process. LHPET Working Paper No. 17. Apr. 1978. 35 pages plus 6-page briefing paper for residents. English.

The community development process, seen as an on-going program that begins with the dissemination of information to Party leaders and residents on upgrading and moves through various mutual-help schemes, was reviewed for January 1977-January 1978. The briefing process in the Chaisa and Garden squatter areas was of particular interest because Garden was the first area in the Chaisa complex to be upgraded and Chaisa presented some concerns because the resettlement areas were 6 km north of the compound. Both areas were very popular residential sites because of their proximity to the centre of the city and residents were reluctant to move, despite the high density.

HPU personnel were involved for much of the year in briefing the leadership of the National Party (UNIP) and residents of the areas. The complexity of the political organization of the area, the large number of residents, and delays in implementing the physical components of the project due to such difficulties as acquiring land for resettlement caused this initial information stage to take much longer than it had in other areas. For example, in Chaisa, there were six branch meetings, two joint branch constituency meetings, three joint branch meetings, and 30 sections meetings held over the months. Seminars were used to provide information to branch and section leaders of the Party, but were also meant to encourage greater participation and cooperation of the party hierarchy. Based on previous experience, HPU did not want to rely solely on the Party mechanism to pass on information to the residents; thus the agency took on the responsibility of holding meetings with residents as well. At meetings with the residents, written briefing materials were distributed and films were shown.

HPU staff were attempting to involve residents in the decision-making process, yet faced the problem that many budgetary and construction decisions had been made before community meetings started. A number of the resolutions from the meetings, e.g., requests for another materials store and more preschool places, appeared impossible to

honour because funds were insufficient. However, it was hoped that residents would be represented by a road-planning group that evolved as the community's representative body on matters such as location of schools, clinics, and other community facilities, as well as deciding on the appropriate routes for roads in the areas.

67 Lusaka housing project unit: The collection system (first report). LHPET Working Paper No. 18. Mar. 1978. 38 pages. English.

This report analyses the structure and the performance of the collection system in light of the payment records for service charges and loan repayments of individual households in George and Chawama overspills and Site 1. Information for the study was obtained from HPU records, observations of the collection committee, and informal interviews with participants.

According to the findings of the study, during the period April 1977- February 1978, an average of 49% of Chawama participants, 78% of eligible George participants, and 58% of Site 1 participants had paid their service charges. In Chawama, 11% of the households in the overspill area and 19% in the upgraded area were in arrears by at least 4 months. The loan repayment record, the study concluded, was considerably worse than the record for service charges. During the same period, 4% of the households in the Chawama overspill, 27% in George overspill, and 64% in Site 1 made loan repayments.

In an attempt to identify the causes for nonpayment, household payment records for loan and service charges in the Chawama overspill area were cross-tabulated against household size, income, sex, marital status, length of Lusaka residence, educational level, and employment status of the household. Interestingly, the socioeconomic characteristics of households were not significantly related to their payment records. The report concludes that, although such a relationship might emerge in the future, the payment records to date seemed to be related to the level of effectiveness of sanctions and incentives and the participants' attitudes towards payment.

68 Draft report on observation of mutual help block-making in Garden overspill. LHPET. Apr. 1978. 13 pages. English.

This short paper reviews block-making through mutual help in Garden, and assesses its contribution to the reduction of building costs. Block-making in this area had been motivated by the desire to save money to buy pipes and taps needed for individual water connections. At a meeting of Garden residents, 50 families expressed interest in the project and formed into working groups of four or five families. Based on interviews with selected households, it was found that much of the work was done during the week by women. Participants acquired materials with their loan cards and when a sufficient amount of materials were available, families were called together for 3- to 4-hour working sessions. Due to shortages of materials at the materials stores, the bricks that could be produced were usually insufficient to complete a house and participants had to buy more ready-made bricks. However, the quality of the mutual-help bricks was considered equal to those that were bought ready-made.

Some general observations were that participants did not find the task difficult to learn despite early misgivings. The atmosphere of the working sessions was generally cordial, although some participants were disappointed in the level of motivation of some of the members of the working group as time went on. Through this method residents were able to make about 600 of the 800 concrete blocks needed for a two-room core house at about 50% of the cost of store-bought bricks.

69 Chawama overspill: Abandoned plots. LHPET. Apr. 1978. 14 pages. English.

This study reviewed 101 plots that had been abondoned in the Chawama overspill area to identify characteristics of the residents who left and the reasons. Most of the plots had been allocated through the renter's program rather than as a result of resettlement of homeowners from the original area. The level of housing consolidation of the plots varied: 44% had not development at all, 11% had stored materials but no construction, and the rest were in various stages of construction. Only one house had been completed. One common phenomenon seemed to be misuse of building materials. Of the 101 plots, 41% had acquired building materials through loans but had not constructed on the allocated sites, and the materials were not stored for future construction.

Some of the characteristics of the households were: (a) 84% had been tenants; (b) 10% had female heads-of-households; (c) 21% were single, widowed, or divorced; and (d) 18% were self-employed. Income did not appear to play a major role in the abandonment of plots since only one household fell into the lowest income group and the mean income was higher than that for a sample of the rest of the overspill area (ZMK 107 versus ZMK 81). Some of the guesses regarding reasons for dropping out of the program were: (a) low and irregular incomes for some of the participants; (b) single women abandoning plots upon marriage; (c) overambitious construction that caused inability to afford completion of the house; and (d) absconding with building materials. The drop-outs related to misappropriation of building materials were being controlled by a system of checking each stage of housebuilding before approving further withdrawals of materials from HPU stores. To further reduce the abandonment of plots, the report suggests more careful counseling of applicants with regard to project costs and more careful screening of applicants for their ability to pay.

70 A descriptive summary of the physical resettlement process. LHPET Working Paper No. 24. Aug. 1978. 6 pages. English.

This short paper describes the standard process in relocating to overspill sites the families affected by the installation of infrastructure. A nine-step process is followed.

1 -- After individual contacts, up to 120 families are called to a general meeting to inform them of the reasons for resettlement and the availability of loans and technical assistance.

2 -- In a second general meeting, families are divided into groups of 25, a block chairman is selected, the groups are assigned block numbers, and specific questions are answered.

3 -- A tour of an occupied overspill site is arranged so that new families can discuss resettlement issues with overspill residents.

4 -- At group (block) meetings, numbers for individual plots are assigned randomly and the concept of self help is introduced. Even at this point, participants do not know which block and plot they will be assigned specifically.

5 -- One or two weeks after plot selection, when blocks are serviced, the groups of families are allocated plots. This entails physically demarcating each of the 25 plots in the block as the number and respective names are called out.

6 -- At this time, complaints regarding the conditions of the plots, e.g., too rocky, are reviewed and the plots are changed if necessary.

7 -- Participants are required to clear the plots using their own tools and labour. They are paid if the plot has extraordinary difficulties and might have required a contractor for leveling, etc.

8 -- Participants physically move as soon as their loan card (prepared by HPU) is ready and at that time transport is made available. All useable materials from the old house are transported to the new site along with the family's belongings.

9 -- The old house is demolished within 2 days to prevent new people from taking up residence. This is largely done by the families themselves, although, in some cases, staff from the materials stores can help during nonpeak hours.

71 Garden mutual-help study. LHPET Working Paper No. 20. Aug. 1978. 9 pages plus tables. English.

This report covers the third study on mutual help (see No. **53** and No. **63**). Unlike the previous studies, which employed a methodology of weekly visits and informal interviews, this study sampled 104 out of about 800 participants in the Garden mutual-help project, using a structured questionnaire. Two important demographic characteristics of the participants were noted.

1. Participants tended to come from larger households: 75% of the participants were from households of four or more members with almost 40% from households of more than five people. This seems to indicate that larger households are either more interested, or more able to participate since at least one household member can be free for the few hours involved in the trench-digging scheme.

2. Although about 50% of the households in the entire community are owner-occupied, the rate of participation of home owners was 95%. This high rate of participation seemed to suggest that home owners were more likely to be involved in the community, and therefore in a mutual-help scheme, than tenants.

The project, which lasted about 3 months, required each participant to dig a section of a trench 1 m long and 0.75 m deep. On average, participants worked 2 days for 3 hours/day. When asked about benefits that they would receive from the project, almost half specifically mentioned a clinic or a school -- the services discussed in briefing meetings. Other mentioned various other services such as roads and piped water. When asked about problems or complaints, the participants most frequently mentioned lack of organization and poor cooperation of the community. A few respondents stated that they had forfeited some money by participating in the mutual-help scheme: the average income loss was estimated at ZMK 16 for men and ZMK 4 for women.

72 Five Lusaka markets: Part one. LHPET Working Paper No. 25. Sep. 1978. 29 pages. English.

The purpose of this study was to gather information on market activity in Lusaka as part of an analysis of the informal sector and its role in the employment of project participants. Five markets were studied, three of which were located in project areas. This report covers the demographic data collected from those markets. A subsequent report (not listed here) will analyze the economic data.

A random sample of 453 marketeers was surveyed, of whom more than half (62%) were females. The most important finding was that marketing is a full-time job for heads-of-households rather than a part-time, supplementary job. Most vendors come regularly (82% every day and 11% at least 3 days/week) and 95% spent all day selling. For a high proportion of the respondents, vending was their sole income source. As more than 75% of the sample were married and an even higher proportion had children to support, the economic importance of vending to the household was evident. Most the vendors were well established in Lusaka. Although the majority were born and brought up in villages, 65% came to Lusaka between 1960 and 1973. Only 17% could be considered "newcomers," having arrived in Lusaka in the past 5 years.

The reason most often given (45%) for working in a particular market was its proximity to the home of the vendor. For the new markets in project areas (Chaisa, Chawama, and Lilanda), proximity to the vendors' homes and the market potential in the project areas seem to have been the key to their initial development and prosperity.

The major operational question is whether HPU should actually create market sites or allow this process to occur spontaneously as it has in these project areas. Two issues need further study before a more concrete policy can be formulated. First, whether employment is generated by a new market, or whether marketeers are just redistributed, i.e., drawn away from existing markets. If the former is true and new jobs are created, some thought must be given to the number of new markets that can be initiated before the demand is filled. (At this time, all the markets in the project areas are expanding and improving their facilities so it appears that market potential has not been exhausted.) Second, if marketeers are simply moving from an existing market to a new one, whether this has a detrimental effect on the older markets must be determined. Since those markets grew through a self-help process into cooperatives, undermining their economic viability would be contrary to the principles and stated policies of HPU.

73 Preliminary comparisons of primary surveys I and II and some operational and policy implications. LHPET Working Paper No. 21. Sep. 1978. 33 pages. English.

Data from the second application of the longitudinal survey had not yet been completely processed, thus the results presented in this report are preliminary. Data from the 1976 survey of the upgraded area (a random sample of 617 households), from a small sample of the overspill area (nonrandom), and part of the data from the 1977 survey of the upgraded area were reviewed for this report. Although some data inconsistencies are still to be resolved, the results of this preliminary analysis indicate areas for further investigation with regard to the effects of the project on housing density and the costs and affordability of house construction.

Among the findings were that average number of households per building increased in the upgraded areas from 1.5 to 1.6 in the year between the two surveys. Although density is increasing only slightly, this is contrary to the primary project goal of de-densification. The data suggest that the proportion of renters has increased in the upgraded area and are being accomodated in extensions of existing buildings. (New structures are not allowed, but existing buildings can be extended.) In the overspill area, the project design of 25 families per 25 plots in a block has remained constant; there was only one household per structure at the time of the 1977 survey.

Costs are a major concern of project managers and two areas that deserve careful attention in the future are the choice of building materials by project participants and the use of contract labour in house construction because these are essential ingredients of total housing costs. Given the small sample of the overspill area (only 58 households), it is difficult to draw conclusions about the pattern that is being followed by the participants. (Also, many of the houses had not been completed at the time of the survey.) Only about half of the overspill sample had completed the walls of their houses, but most of those families were building with concrete blocks. In contrast, in the upgraded area, 71% of the houses were constructed of the cheapest building materials, i.e., sundried blocks, and only 23% had concrete walls.

With regard to the use of paid labour, the report notes that 53% of households in the overspill area were contracting out work on parts of their houses, despite the emphasis on self-help construction. This appeared to be a means of accelerating house construction because participants were living in uncomfortable temporary quarters. However, a high proportion of the self-built houses in the upgraded area also used contract labour for the roof, plastering the floor or walls, or for several of these tasks. Also, of the households that indicated that they had made improvements, only 26% indicated that it was totally a self-help effort. Therefore, other considerations such as technical skills may be the primary reasons for contracting out work.

At the time of the survey, the households in the overspill area had relied almost exclusively on the HPU loan of ZMK 340 for their building materials. Only 27% of the respondents indicated that they had used extra cash for materials, on the average ZMK 158. Almost 50% said they had not spent cash to pay for labour and, of those who did, the average cost for labour was ZMK 57. (In 1979, the statistical analysis of the

two primary sample surveys had not yet been completed.)

74 An attempt at assessment of project affordability. LHPET. 1979. English.

Income distribution data for Zambia are not reliable. Studies were conducted in a typical upgrading project (George), a normal sites and services project (Lilanda), and a more expensive sites and services project (Matero). When the income distributions of families in each project were compared with the best available estimates for Lusaka, 70% of families in George were estimated to come from the bottom 30% of the Lusaka income distribution. In Lilanda, the proportion was 55% and in Matero, which caters to a slightly higher-income group, there were still 30% of families drawn from the bottom 30%. These figures show: a) the upgrading and normal sites and services projects are accessible to the lowest-income groups; and, b) each project caters primarily to a different sector of the income spectrum so that, between the three types of programs, they offer attractive options to the lowest 50-60% of the city income distribution.

Although the project is accessible to the lowest-income groups, one of the major problems encountered has been the poor performance on cost recovery. In March 1980, 99% of families in Chawama (upgrading) were in arrears of more than 1 month with service charges, with 13% in arrears of over 1 year. In George, 62% were in arrears. The situation was even worse for loan repayment with 63% of families in Chawama and 38% in George in arrears of more than 1 year. The situation was better in sites and services projects where over 60% of families were up to date with service payments in three of the four projects. Originally, it had been assumed that the high default rates were due to families' inability to pay, but a more careful analysis suggests that this is not the case. Studies showed that many of the defaulters had been paying much higher monthly rents before entering the project. The difference was that previously they had a private landlord who would evict them if they did not pay. The main problems seem to relate to a lack of will to collect the money and to difficulties in establishing effective collection mechanisms. The attempts to use group pressure and political influence to encourage payment have not been effective and, in many cases, have had the opposite effect. Politicians have more incentive to intervene on behalf of families to exempt them from payments than they have to lose popularity by pressuring the families to pay. Cost recovery continues to be a serious problem and affects the ability of the projects to demonstrate their economic viability to public authorities in other cities who might wish to adopt similar programs. The high default rates have also seriously affected the provision of services as the council does not have the financial resources to maintain services such as garbage collection.

III: SENEGAL

75 Research model for evaluation of the impact of the sites and services project on health. OHLM Methodology Paper. Dec. 1976. 45 pages. French, English.

76 A report on the first housing survey -- The present living conditions of the candidates for the sites and services project. OHLM. July 1976. 15 pages including 8 tables. French, English.

This survey of 300 candidates for the sites and services (primarily from the areas of Medina and Grand Dakar) reviewed present living conditions, previous construction experience, reasons for moving, and plans for building and financing the new houses. A typical household had an average of 7.6 people in one or two rooms, 9% had no sanitation facilities whereas over 50% had only rudimentary ones. Of the houses, 58% were built of permanent materials and about the same proportion had electricity. In general, living conditions of these candidates seemed to be better than in other areas.

A very high priority for new housing was more living space and about 30% of the respondents stressed running water. The foremost reason for moving a wish to own, rather than rent, a house. Most of the candidates (90%) had absolutely no experience in building or repairing houses yet had high expectations regarding the size and time for construction of their new houses. Of all respondents, 94% planned to build four or five rooms, a large increase from the average size of houses in the surveyed areas.

Because at least 50% of the respondents had no idea of how much a new house would cost or what financial arrangements were available, there was a strong possibility that their expectations were not realistic. It seemed likely, therefore, that many candidates would find it necessary to wait longer to build or to lower their initial expectations.

77 A survey of the employment and family budget conditions of the target population for the sites and services project. OHLM. Aug. 1976. 13 pages. French, English.

This report describes a budget survey (which was still in progress at the time) of a random sample of three control groups of nonapplicants in Grand Dakar, Medina, and Pikine Irregulier. Its purpose was to understand the credit capacity of residents in those areas by focusing on regular household income and expenditures, e.g., rent, transport, education, etc., in relation to the costs envisioned for resettlement. The preliminary results, available only for Grand Dakar, showed that only about 50% of the respondents could be classified as employed in the formal sector and, in most cases, the head-of-household seemed to be the sole income earner. (There was some question whether other incomes were difficult to measure and therefore not reported.) Most respondents rented rather than owned their houses and average rent was about 10% of total household income, although many paid a much higher proportion of income as rent. Food expenditures averaged 33% of monthly income and education expenses were minimal.

In general, the report is a methodology as it treats problems of measuring expenditures and income and highlights some of the cultural influences that bias these measures.

78 Second housing survey - The control group from Grand Dakar. OHLM. Aug. 1976. 4 pages plus 4-page questionnaire. French, English.

Based on a survey taken at the same time as the budget survey (see No. **77**), this short report focuses on migration, noting that Grand Dakar was an important receiving point for migrants from Senegal's rural areas and from other countries. On the average, families had been in Grand Dakar for over 6 years and had a much smaller average household size than originally expected. Although households had been estimated at close to 10 persons, family size in Grand Dakar averaged 5.3. This report also summarizes prevailing housing conditions -- that is: presence of running water supply; percent of households with electricity, courtyards, and attached kitchens; conditions of floors and roads; the quality of drainage in the area; etc.

79 The baseline survey. OHLM. Sep. 1976. 30 pages. French, English.

This report provides a good summary of the historical land-use patterns in the Dakar area and the growth of shanty towns, which are the target areas for the sites and services project. However, the primary focus of the report is methodological because it reviews the feasibility of plans to use data from the application procedure for selecting "control subjects." Originally, controls were to be taken from the pool of rejected candidates (borderline cases). However, due to delays in the interviewing schedule and the still somewhat-variable selection criteria, a decision was made to use noncandidates from three types of districts as control groups.

80 The potential for community development in housing projects. OHLM. Sep. 1976. 12 pages. French, English.

The focus of this report is the experience of OHLM in the creation of associations of buyers for project sites, and the role that the associations had played up to that time. Some associations were formed in as little as 3 months, but most were not in operation for at least 6-8 months after the leaders had been identified. The major responsibilities assumed by the associations were handling members' fees for plots and in drawing lots. (As soon as a series of sites or a tranche was ready, lots were selected at random from candidates ready to move to the project.) The expectation of OHLM was that the associations would play an important role as the construction progressed by organizing and providing leadership for mutual-help activities.

81 The target population of the sites and services project: Part One - Profile; Part Two - Effect of the selection process on some social and economic variables. OHLM Series 2, No. 1. July 1977. 55 pages. French, English.

This analysis provides the basic demographic and socioeconomic profile of the target population, the applicants for sites and services in Dakar. Questionnaires were given to applicants during two periods: the first covering 1575 applicants of whom 698 were selected for site allocations; and the second, a group of 3601 applicants of whom 1607 were selected. The profile covered migration history, household composition, education levels, age distribution, and other relevant social characteristics of the applicant population as a whole. This profile was then compared with that of the households selected for participation in the project. The second part of this report focuses on selection criteria (income levels and size of household) and the difficulties of determining real income for applicants in some categories such as self-employed. The results of this study were incorporated into a larger, revised report (see No. **85**).

82 Employment in households participating in the sites and services project. OHLM Series 2, No. 2. July 1977. 36 pages. French, English.

This report focuses on the structure of employment and the numbers of wage earners and of dependents in households to better estimate the ability of potential occupants of the sites and services project to meet required payments. The study was primarily a planning tool for the executing agency and the most interesting findings were incorporated into the report on the socioeconomic baseline study (see No. **85**).

83 Housing conditions. OHLM Series 2, No. 3. July 1977. 20 pages. French, English.

The particular emphasis of this survey was the current housing conditions of selected applicants before moving to new sites in the project. It focused on their land-tenure arrangements, housing density, the availability of sanitary facilities, the materials of which houses were constructed, and current housing expenditures as a basis for comparison at a later date with project housing. Findings from this study were incorporated into a larger report (see No. **85**).

84 Housing construction in Guediawaye and Grand Yoff (the control groups). OHLM Series 2, No. 4. July 1977. 64 pages. French, English.

This report is based on a survey of the income and expenditure patterns during housing construction of about 200 households in Guediawaye and Grand Yoff, two neighbourhoods in the Dakar metropolitan area that have characteristics similar to the main project areas. Because there was a great deal of housing construction and upgrading activity in these two neighbourhoods, this study was conducted to provide a basis for comparison with the project area, where there had been very little construction up to that time. The data collected covered basic demographic information, income and expenditure patterns, and physical and financial construction data.

The report indicates that the families in Guediawaye and Grand Yoff were able to afford their homes without resorting to credit and to build within a relatively short period (2 years). The report suggests three principal reasons for affordability without credit.

1. Most families seemed to have more resources to draw upon than expected. Once supplemental earnings (presumably from secondary jobs) and contributions from other working household members were taken into account, the average monthly income for households was CFAF 63183 (CFAF 200 = U.S. $1), as compared with the average earnings of the heads-of-household, which was CFAF 29218.

2. The families chose to build in stages. First, a complete provisional structure of wood was built, of which one or two rooms were rented; then a core unit of concrete was started. This "evolutionary" process of construction relieved the family of having to pay rent before the concrete house was completed and also brought in rental income from the larger provisional structure.

3. The residents of the two communities seemed to place a higher priority on living space at the expense of service levels. Only 3% of the households had running water and 16% chose to install electricity.

In marked contrast, the project site was being occupied much more slowly, as families chose to complete their concrete dwellings before occuping them.

85 Socio-economic baseline study: Its affordability implications. OHLM. July 1977. 91 pages including 35 tables. French, English.

Major findings from three earlier reports (No. **81, 82, and 83**) were incorporated into this report thus providing the basis for the following analyses on the affordability of the sites and services project to the target population.

Although the target group was being reached, there was a tendency to select applicants from the higher income levels. Female heads-of-household, self-employed workers, and large families were not selected in proportion to their numbers of applications, perhaps because they often fell into the lower income categories.

When all costs were taken into account (mortgage and utility payments, purchases of building materials, and current rent), it appeared that candidates with average incomes could not afford the housing project. Although the guidelines were that households should not spend more than 20% of income on housing, the total of the above costs represented 35% of the monthly earnings of the target population in the middle brackets. It should be noted, however, that estimates of income were based only on the income of household heads. (In a previous survey in Guediawaye and Grand Yoff, it was shown that household income is often much higher than expected due to contributions of other family members, income from rented rooms, etc., see No. **84.**)

Housing expenses of participants could be substantially reduced if families moved to the sites immediately. However, most planned to complete the permanent structure before moving, thus requiring the additional expense of rent for their current houses. The preference to stay in present homes was explained, in part, by the lack of many vital services at the project sites, such as access to markets and public transport.

Affordability was also affected by the high, and often unrealistic, expectations of participants. Over 90% had expressed the desire to build larger houses (at least four rooms) than they had been living in. The cost of some building materials had increased dramatically since 1977, e.g., a 70% increase in the price of cement, and most participants wanted to build with concrete blocks.

Credit mechanisms were still not functioning smoothly and those families not building seemed to be the group most in need of financial assistance because their incomes were irregular and moderate compared with families who were already constructing houses.

86 Housing construction on the serviced sites in Dakar. OHLM. Oct. 1977. 34 pages. French, English.

The purpose of this study was to identify factors that inhibited or facilitated construction of houses. Almost 400 questionnaires were administered to households, about half of whom had begun the process of housing consolidation. The study also assessed costs of construction in comparison with alternative methods, and the use of mutual aid and technical assistance. With the analysis, it became clear that only households with higher incomes had been able to begin construction. (This problem had been foreseen as early as July 1976; see No. **76.**) There was still considerable difficulty in obtaining construction loans, thus lower-income families could not begin as early as they wished. Delays in beginning construction were caused in part by administrative problems. Over 50% of the households had to wait over 6 months between the time of selection and the signing of the contract for their lots. Further delays were caused by the need for households to accumulate savings, shortages of construction materials, especially cement, and a very few respondents mentioned the lack of transport or labour.

As predicted in the first housing survey, 90% of the households were building permanent structures from the start, using concrete blocks. Only 4% had put up

temporary wooden shelters, which were used for storage rather than living. Only 35% of the households opted for the maximum repayment period of 10 years and almost 20% purchased their lots for cash. At the time of the report, only about 10% of the houses were at a stage of construction that would allow families to move in.

Most households employed contractors because they did not have the time to build their houses (74% stated this reason) and labour costs amounted to about 35% of the total investment. The extent of participation of residents in house building was usually limited to making cement blocks.

87 Study of selection criteria in relation to income, sex, family size and sector of employment of selected families in serviced sites in Dakar. OHLM. Jan. 1978. 25 pages. French, English.

Based on an analysis of incomes, sex, family size, and sector of employment of families for the Dakar project, some serious biases appeared. About 13% of those selected had incomes higher than the maximum set in the selection criteria and the remaining 87% tended to be within the upper limits of the income criteria. Also, a consistent bias was detected against female heads-of-households. Size of household and employment in the formal versus informal sectors did not seem to significantly affect the selection process. These generalizations held true for the five stages of selection that had occurred in the project. With regard to the tendency to select families within the higher income brackets, it was noted that these families were the ones who were able to begin development of their plots. Changes in the administration of the project, e.g., reviewing eligibility criteria for construction loans and streamlining administrative procedures, were seen as necessary for facilitating the construction by lower-income families.

88 Socio-economic and housing construction information on three families living in the Dakar sites. OHLM. Feb. 1978. 13 pages. French, English.

Along with gathering data on construction, the purpose of this study was to gather attitudinal information on satisfaction with the sites and neighbourhood and what participants thought prevented other purchasers from moving to the sites.

The most pressing problems still faced by the residents were lack of electricity and security (there was great concern about crime), and inadequate transport service to employment areas and markets. The reasons given for other people not moving to the sites were that they could not afford to and because of the continuing lack of such services as electricity.

89 Socio-economic profile of Fass Paillotte squatters: Feasibility criteria for improvement of the area. OHLM Series 3, No. 1. Mar. 1978. 44 pages including 3 tables. French, English.

The purpose of this study was to explore the possibility of upgrading Fass Paillotte, a squatter settlement in central Dakar. Both the willingness and the ability of the residents of this squatter settlement to pay for upgrading were to be assessed in relation to the master plan prepared by the Secretariat des Missions d'Urbanisme et d'Habitat (SMUH). Land tenure was an important item on the agenda as, legally, all land was state-owned, yet many residents claimed ownership dating back decades and 75% of the population had lived in Fass Paillotte for at least 10 years.

With regard to interest in upgrading, a random sample of 102 households provided a consensus on its desirability. Of all the households, 75% expressed willingness to

participate in the project and to bear the cost of installation of infrastructure. Nevertheless, serious questions about the ability of the population to pay for upgrading were raised once average income was calculated. The monthly charge would have required at least 30% of the income of 65% of the residents of the area. The evaluation unit's report, therefore, recommended lowering the upgrading standards set out in the master plan and focusing more on income-generating programs to make the upgrading option affordable to the majority of the residents of Fass Paillotte.

The commitment within the area to the idea of upgrading was explained not only by the poor living conditions, but also by the strong attachment of the residents to their neighbourhood. In the survey, most respondents said they would not move even if a serviced site were available in a different area. The stability of the community and the area's proximity to work places were among the reasons that residents favoured a program of improvement rather than relocation.

90 Study of the impact of selection criteria in the first six awards as regards income, sex, household size and employment sector. OHLM Series 3, No. 2. Aug. 1978. 31 pages. French, English.

This report was prepared by the evaluation unit to supplement and clarify the previous report prepared on selection criteria (see No. **87**). The previous report was based on the applicants selected in the first five lot award whereas this analysis was based on complete information on all six awards made between January 1974 and May 1978. Also, information became available on the different selection techniques and criteria used in the first five allotments of serviced sites, which has been incorporated into this report as well. The findings were based on analysis of the characteristics of total applicants (8956), those who were selected (44% or 3946 applicants), and the reasons for rejection of the remaining applicants. One finding of importance was that fewer people in the lowest income brackets applied in the final rounds of lot awards than in the first ones (Table 1).

Table 1. Percentages of applicants by income level.

Income (CFAF)	Round of lot awards		
	All	1	6
10-20000	13	29	6
21-25000	11	17	7

This suggested that low-income households have become discouraged, despite the fact that the minimum applicant income was lowered from CFAF 17331 (used for the first three awards) to CFAF 15000 for the last awards. It should be noted that the maximum income was raised from CFAF 35000 to CFAF 55000, which opened up applications to a much larger number of higher-income households.

The study found that female applicants were at a disadvantage. Of those selected, 13% were women, whereas they represented 21% of total applicants. Lower-income levels put them at a disadvantage as well as a selection criteria that bars applicants with a property-owning spouse. Given that Senegal is a polygamous society and that many women, although married, maintain a separate household, this selection criterion introduces a systematic bias against women. Among the recommendations was one to drop the property status of the spouse from consideration in selection.

The report notes that the tendency to select formal- over informal-sector workers seemed to be corrected in the fifth and sixth awards, although income levels of those in the informal sector were still relatively high. On the whole, incomes of those

selected fell within the middle ranges and it was recommended that greater emphasis be placed on selecting applicants from the lower-income groups, through better publicity and promotion campaigns and elimination of the weighting for household size. The distribution of all those selected by income level is shown in Table 2.

Table 2. Distribution of selected applicants by income level.

Income (CFAF)	% of selected
10-20000	6
21-25000	10.5
26-30000	20
31-35000	21.5
36-40000	19
41-45000	11
46-50000	8
Over 50000	4

The main grounds for rejection of applicants is reported to be high income or low income, although high income was the more usual factor in the sixth award. Other frequent reasons for rejection were being a property owner or "spouse is owner," the latter being a problem especially for women, as noted above.

91 Study of purchasers of serviced lots who have not begun construction of their houses (reasons for the delay and proposals). OHLM Series 3, No. 3. Sep. 1978. 22 pages. French, English.

This study reviewed the characteristics of 148 purchasers of serviced lots who had not yet begun house construction and compared them, statistically, to the general population of purchasers.

The average monthly household income proved to be the most significant variable differentiating heads-of-household who were constructing and those who were not (average incomes of CFAF 59000 versus CFAF 40000). The key factor appeared to be lack of financial resources since 72% of the respondents attributed delays in beginning construction to some problem with financing. Two factors that seemed to contribute to this situation were the tendencies of participants to choose more expensive lots and terms of payment with higher initial outlays of capital. Although 46% of the respondents purchased the least expensive lots (CFAF 95000), the rest of the participants chose the more expensive options (Table 1).

Table 1. Distribution of purchasers by lot price.

Lot price (CFAF)	% of purchasers
95000	46
115000	26
165000	12
185000	10
197000	3
216000	3

With regard to terms of payment, only about 50% of purchasers chose the minimum downpayment of 8%, whereas 18% made of downpayment of 50% of the lot price, another 12% paid 33-66% of the lot price, and 10% paid for their lots in a single payment.

Constructing temporary shelters, which is a cheaper alternative to initiating construction of a permanent house, was not being done by this group of participants. A large number of the respondents (38%) said that they did not know that this was an option and 30% of those households indicated that they would try to build a temporary shelter. The majority, however, indicated that they would not build shanties giving reasons of financing or lack of interest. The latter reasons suggested that there might be social pressure involved in those decisions, e.g., "everybody is going to build permanent homes."

Among the recommendations to help alleviate this situation were to encourage the poorer participants to make the minimal downpayment of 8% and to purchase the least expensive lots. Also, the loan system needed to be revised in two ways: first, to make loans available for temporary shelters for the poorest participants as well as for core construction of a permanent house; and, second, to review the amount of loans for core construction based on a family's minimum needs for shelter, which might be more than two rooms for large households. The report concludes that much greater emphasis must be put on staged construction for all participants if this is to become the main home-building strategy for the project.

92 Study of the socio-economic situation of families living on the site. OHLM Series 4, No. 1. Mar. 1979. 9 pages. French, English.

Of the 56 families living on the site in March 1979, 45 were interviewed to determine their socioeconomic characteristics, the type of house being constructed, and the problems encountered.

Of household heads, 89% were men and about 50% were self-employed. Average household income was about CFAF 39000/month (U.S. $200). The average house had four rooms, cost CFAF 1.5 million (U.S. $7500), and took 11 months to build. The biggest problems encountered were in transport and lack of public services.

Information is also included in the report on the status of the families' payments to the OHLM and their reasons for not having moved to the project earlier.

93 Study of house construction in the sites and services project. OHLM Series 4, No. 2. Mar. 1979. 17 pages. French, English.

In August 1978, a sample survey was conducted with 90 families who had either occupied their project house or started construction. The study examined the socioeconomic characteristics of the families, the effects of the delays in house construction on present living conditions, construction methods, and the type of plot purchased, and included a final section of recommendations.

Only 3% of families put up a temporary shelter and all of the others had begun work directly on a permanent house. Very few families were using the progressive development model in which an initial structure of one or two rooms was occupied, and 75% proceeded directly with the construction of a larger, complete dwelling. Of all households, 47% used their own labour for at least part of the construction whereas 53% used exclusively hired labour. The technical assistance was well organized and only 3% of families claimed not to have been visited by one of the advisers.

The average house cost CFAF 1.33 million of which CFAF 0.85 million was spent on materials, CFAF 0.38 million on labour, and the remainder on the plot (Table 1). Construction was financed almost exclusively from OHLM loans or personal savings. The

latter were, in most cases, limited and this lack of finance was one of the main reasons for the slow rate of construction.

Table 1. Distribution and costs of the plots.

Area (m^2)	Services	Cost (CFAF)	% of plots
150	no water	95000	57
150	water	185000	28
150	no water (corner lot)	115000	11
160	water	195000	4

94 Study on the use and impact of construction loans. OHLM Series 4, No. 3. Apr. 1979. 16 pages + 2 annexes. French, English.

A randomly selected sample of 63 families who had received construction loans was interviewed (Feb.-Mar. 1979) to determine the impact of the loans on the speed and method of construction, the income level of the groups receiving the loans, and the prospects of loan repayment.

Income of loan beneficiaries was similar to that of all project participants, suggesting that the loan allocation process was not favouring any particular income group. The loans achieved the goal of accelerating the construction process with 48% of loans used to complete construction and 21% to complete the two-room model. Only 17% of loans were used to start new construction and 13% to advance an existing construction.

The monthly expenditure pattern of a typical family with a mean monthly income of CFAF 40000 was estimated to be CFAF 34833, made up of: food, 19091; rent, 3255; water and light, 1117; transport, 3772; clothing, 4928; and health and education, 2700.

Loan repayment averaged CFAF 3800/month over 10 years or CFAF 6000/month over 5 years. The report points out that families will have to control their expenses very carefully if they are to be able to make the repayments on time. It is recommended that a careful study should be made before taking any decision to increase the amount of the loans.

95 Study of the progressive development construction system (2 rooms). OHLM Series 4, No. 4. May 1979. 14 pages. French, English.

A sample of 45 families who had completed or who were in the process of constructing a two-room house were interviewed. The study showed that the two-room system had considerably accelerated the rate of house construction. During the 6 months following the introduction of the system, the number of houses completed or in process of construction had increased from 488 to 754. However, the impact was much less on the rate of house occupation with only about 10% of the two-room units being occupied at the time of the study.

Loans for "two-room" construction were given to families whose income was slightly lower than the average for all participants who had begun construction (CFAF 36100 for two-room compared with CFAF 37600 for all habitable houses and CFAF 43600 for all occupied houses). However, a relatively small number of loans went to families working in the informal sector. The importance of the loan is reflected in the fact that 95% of "two-room families" had obtained one. Only 39% had been able to cover all costs of the two-room house with the loan; 49% had been able to cover only material costs and the remaining 12% had not been able to cover all materials. The process of

loan approval was also slow and produced additional delays of 2-3 months. However, the report stresses that, as the two-room system had only been in operation for 6 months, it was too early to make firm judgments.

The report identifies the following three reasons for the low occupation rate of the two-room houses: (a) the construction process was slower than expected and, in some cases, it would take as long as 6-8 months to complete the construction; (b) on-site infrastructure was lacking; and (c) the toilet was not completed or the wall had not been built.

Four recommendations to speed up the rate of construction and occupation are made: (a) reduce the time required for construction; (b) increase the amount of the loan; (c) accelerate the installation of basic infrastructure; and (d) inform families of the requirement to occupy the two-room house within a certain period.

96 Study of purchasers of serviced lots who have not yet begun construction (reasons for delay and proposals). OHLM Series 4, No. 5. Nov. 1979. 26 pages. French, English.

This was a follow-up study to the September 1978 report (see No. **91**). A sample of 150 purchasers of serviced lots who had not begun construction was interviewed. A socioeconomic profile is presented in the report and compared with families who had occupied their houses or who were in process of construction. Although there were no differences among the three groups ("living on site," begun building," and "not begun building") in terms of level of education, other parameters did show differences (Table 1) particularly the proportion involved in the informal sector: 20% for those who had not begun to build versus 49% of those on site and 42% of those building. The report does not present all of the information available from the study. The most important finding was that there are four types of nonbuilders.

Type 1: Families with average monthly income above CFAF 45000. This group does not wish to start by building two rooms but would prefer to build the complete house at one time because they consider their household needs a larger number of rooms before they move to the site. This group represents 42% of nonbuilders.

Type 2: Families with a monthly income of CFAF 30000-45000. Many of these families are in favour of constructing an initial two-room dwelling. The group represents about 33% of all nonbuilders.

Type 3: Families with an average monthly income below CFAF 30000. This group does not consider that they have sufficient funds to build a two-room house or even, in many cases, a temporary dwelling. They represent about 17% of nonbuilders.

Type 4: The remaining 8% of nonbuilders consists of people who possess very limited information on the project and have not been able to make up their minds as to which option they prefer.

Of all nonbuilders, 83% live near either the town centre or the industrial zone and 60% had lived in their present house for more than 5 years. The central location, with the relatively high standard of their present housing, makes many of the families unwilling to move until the project reaches a higher stage of development.

Information is given in the report for nonbuilders on date of award of lots, types and prices of lots, terms of payment and arrears, information on the type of house that can be constructed, and attitudes towards construction.

Two main recommendations to encourage building are proposed: stronger sanctions against families who do not begin to build; and stronger encouragement to construct a two-room unit. In addition, the study recommends priority loans for the poorest families.

Table 1. Information presented on the comparisons among all selected families, and those who have begun to build or not begun to build.

	All selected	Begun building	Not begun building
Sample size			
Number	5425	998	4427
%	100	18.5	81.5
% living in Grand Dakar	29	35	34
Family size (persons)	-	-	7.5
Head-of-household			
% males	-	-	89
% married	74	94	86
Mean age (years)	-	40	42
% literate	-	31	49
% distribution of wage earners			
Public sector	-	-	37.5
Private sector	-	-	42.0
Informal sector	-	42.0	20.0
% Unemployed	-	-	5.0
Household income (CFAF)			
Average	31300	-	42900
Female-headed households	-	-	44700
Distribution by household income range (%)			
Below CFAF 35000	50	-	38
CFAF 35000-50000	48	-	48
Above CFAF 55000	2	-	14
Characteristics of house			
Built of permanent materials (%)	60	-	71
Number of rooms	1.6	-	2.0
Water in house (%)	28.0	-	39.5
Electricity in house (%)	-	-	63.5

97 Study of informal employment among purchasers of serviced lots. OHLM Series 4, No. 6. Jan. 1980. 12 pages + 2 1-page annexes. French, English.

Because 30-40% of participants in the project work in the informal sector, their characteristics are obviously important for project planning. A sample of 135 families from the informal sector was interviewed.

Of the household heads in the informal sector, 30% are women as compared to only 10% in the project as a whole. Most informal sector participants live and work in the centre of the city in Grand Dakar and Medina. They also obtain most of their raw materials and clients in the central city areas. The largest group are traders (40%), followed by services (carpenters, dress makers, etc.). Over 60% work alone and have no employees.

Most (79%) indicated that they intended to transfer their business to the project when they moved because of the advantage of having the house and business in one place, or of being able to own the business premises rather than having to rent.

98 Study of the impact of construction costs on occupation of the serviced sites. OHLM Series 4, No. 7. Apr. 1980. 11 pages. French, English.

A sample of 55 was selected from among families living on the site. Virtually all household heads were married males with 90% working in the formal sector. Average family income was CFAF 47000 of which CFAF 35000 came from the head's salary and the remainder from secondary earners or gifts of money or in kind.

Labour was hired by 95% of families for at least part of the construction. An OHLM construction loan was used by 92% with 69% complementing this from savings or earnings. The house was occupied by 59% before it was completed, and 90% used progressive development construction.

An analysis of family budgets suggested that, on average, a family can only allocate about CFAF 7300/month to construction. The average construction cost was CFAF 600000. The OHLM loan represented slightly more than 50% of this and covered building materials. Labour costs, which are now three times as high as expected by the DPA (Département des Parcelles Assainies), represented an average of CFAF 240000. On average, it would take a family 32 months to save sufficient money to cover this.

The report suggests the OHLM should prepare a roster of recommended workers and contractors whom families should hire. This might make possible more effective control over prices and quality.

IV: THE PHILIPPINES

99 Reports on the reblocking process in the Tondo Foreshore area. RAD/NHA. Oct. 1977, Oct. 1978, Oct. 1979. 30 pages each year. English.

These are annual reports of the progress of "reblocking" in the Tondo Foreshore upgrading area. Reblocking is the term used to describe one approach to upgrading and involves, among other things, the provision of roads and water and sewerage connections, plot alignment and the resolution of land-tenure problems, and the building of community facilities. Initially, physical progress was designed to proceed on a block-by-block basis. The reports use project records and informal interviews with project team members and community leaders.

The first report (Oct. 1977) describes in detail the actual process and was, as an example, the development of Block I. A series of 12 stages was developed by project management: (1) block identification; (2) information campaign; (3) visual structural survey; (4) census verification and interview (to determine legality of the structure); (5) verification of eligibility; (6) planning of alternative designs (with varying degrees of dislocation within each block); (7) approval of designs by the project manager; (8) community discussion of block plans (the community chooses the amount of realignment of structures); (9) preparation of final subdivision plan; (10) movement into assigned plots; (11) preparation of certificates of award; and (12) awarding of certificates. By the time of this first report, one block had undergone all 12 stages and another 18 were in the process. Among the issues discussed are: the extent of community participation in the process and why communities tended to choose the design option that involved the greatest amount of realignment through regularized plot lines; the problems of block design; initial information on methods of self-help construction; and community attitudes about the project.

The second report (Oct. 1978) describes the reblocking efforts during the previous year in the Tondo Foreshore area. The program, designed as a 60-day process, experienced a number of delays due to unforeseen technical difficulties and a major fire that required priority attention in the affected area. A major change in approach was developing reblocking plans based on superblocks rather than individual blocks. The superblock approach allowed teams more flexibility; if delays occurred in one block, the teams were able to continue work in other blocks until difficulties were resolved. At the time of the report, 31 of the 44 superblocks had started reblocking activities. Of the 18 blocks designated as priority blocks, moves had been completed in five, five other were in the process of completion, and moves had been started in six others. The materials loans programs had begun for those household (587) that had moved to reblocked areas.

Of the issues noted in the report, the need for increased community participation and questions of affordability are highlighted. With regard to the latter, an estimated 27% of the households affected by reblocking, may not be able to afford the smallest lot size provided (48 m^2). (A detailed discussion of the question of affordability is provided in "A study of income and expenditure patterns of households in the Tondo Foreshore, see No. **101.**) One suggestion was to provide sections of a block with 36-m^2 lots to minimize the risk of default.

The second report also suggests that community participation could play a much greater role in resolving questions of affordability if cost analyses were included with the initial block designs. In choosing between various options for superblocks, votes could shift if a more detailed picture of cost implications were provided.

By the time of the writing of the third report (Oct. 1979), reblocking had been

started in all superblocks. Of the 166 blocks, only 35 needed to be designed. Aside from reporting on the physical aspects of the work, this report also presents a case study of how the whole process was carried out, including a description of what went on at the community meetings.

There will be a fourth reblocking study expected to be ready by October 1980 (see No. **110**). At that time, the four studies will also be integrated into one volume (see No. **113**) to form a comprehensive history of this innovative project.

100 A study of demand for serviced sites in Dagat-Dagatan II. RAD/NHA. Sep. 1978. 47 pages. English.

A survey was conducted to determine the level of demand of various options offered in the second phase of the Dagat-Dagatan resettlement program. A sample of target families who might be relocated due to upgrading in the Tondo Foreshore area, and another sample of low-income families in the Metro Manila area (optional resettlement), was presented with a series of options that varied in terms of tenure, cost, size, and level of plot development.

Almost all respondents from both samples chose options that provided for a freehold system although the costs were higher than for those with leasehold options. A strong desire to secure tenure outweighed many other considerations. The target group families tended to choose the smallest lot sizes with the lowest costs, while the Metro Manila families chose more costly options. This finding coincided with affordability assumptions since, in general, the Dagat-Dagatan target families have lower incomes. (The options presented to the two groups varied somewhat, with a larger number of low-cost options offered to the target group; also, higher subsidies were applied to the target group's options, lowering costs even more.)

For the purposes of the study, the original affordability assumption (20% of monthly income) was used. According to this criterion, less than 10% of the sample of the target population chose options that cost more than 20% of their incomes. However, the report noted that affordability calculations might have to be reassessed in light of findings from the income and expenditure study (see No. **101**), especially for the population below the 30th income percentile. Families from both samples tended to choose fairly high levels of plot development. This finding indicated that the original mix of options planned might have to be reevaluated, i.e., there appeared to be higher demand for more completed units than the numbers projected in the Dagat-Dagatan plan.

101 A study of income and expenditure patterns of households in the Tondo Foreshore area. RAD/NHA. Oct. 1978. 41 pages. English. (Published in the IBRD "Monitoring and Evaluation of Urban Development Projects Report Series," No. ME-6.)

The purpose of this study was to analyze the patterns of household income and expenditures, monitor changes in budgets resulting from project participation, and assess project affordability based on household income. A stratified random sample of 98 households was asked to record daily cash receipts and expenditures for a 1-year period (Aug. 1977-July 1978).

One of the most important results was in terms of affordability. Although most households could afford the monthly development charges, it appeared that about 28% would have difficulty paying the charges for the smallest lot offered (48 m^2) and about 20% might not even be able to afford a 30-m^2 lot. One assumption was that savings accruing from the infrastructure components of the project would enhance the ability of households to pay for development charges. However, the poorest 25% of the population's "before movement" expenditures on water and electricity were much lower than the monthly development charges for the smallest lots. The implications of the report were that a

proportion of prospective project beneficiaries were poor risks unless the levels of income could be raised through other project components.

The household budgets were compared for three periods, before, during, and after movement. (The reblocking or period of movement was defined as a 3-month period that included the month of movement and the months that preceded and followed it.) A hypothesis was that the period of movement was a potentially stressful one and that household budgets would reflect that stress. The period of movement was characterized by a substantial increase in average monthly expenditure levels; for those 3 months, households spent 170% more than during the "before movement" period, largely for construction and repair of structures.

In general, households were able to increase incomes to meet these increased expenditures, both from regular sources (employment, sales, etc.) and from extra-regular sources (gifts, bonuses, winnings, etc.). The latter category of income as a percentage of total income increased from 10.7% before movement to 19.6% during the 3-month reblocking period. Gifts in cash from friends and relatives increased during this period to augment existing resources for movement and repair. (It is interesting to note the importance of these income sources in general: in the before-movement period, about 36% of the households depended on these extra-regular sources of income to maintain their expenditure levels.) However, increased income did not cover total expenditures in this period, and most households had to resort to borrowing. During that period, households spent on the average, 109% of their monthly income.

102 A study of the impact of the project on the physical environment of Tondo. RAD/NHA. Oct. 1979. 46 pages plus 2 annexes (A-17 tables; B-3 pages). English.

This study report is an assessment of changes observed in the physical environment of the upgrading area over a 1-year period. Because the project has not progressed enough to allow for significant changes, the report should be viewed primarily as a methodological document that attempts to grapple with many of the measurement problems involved in the use of a quasi-experimental design, i.e., the use of control groups, and in the selection and quantification of variables (dependent and intervening) for determining impacts.

Changes in seven basic characteristics of houses and plots were used as the dependent variables. These were the quality of construction materials and of plot surface, floor additions (vertical expansion), and service levels for water, electricity, toilet facilities, and drainage. Three communities in Metro Manila were used for control samples and similarities and differences between the project and control groups were measured. Intervening variables, such as type of tenure, household income, type and use of structure, etc. were controlled through covariance analysis.

103 An evaluation of the housing materials loan program of the Tondo Foreshore--Dagat-Dagatan development project. RAD/NHA. Oct. 1979. 40 pages. English.

A sample of 139 households that received project loans for building materials was interviewed for this study. The expenditure on repairs and rebuilding of structures was PHP 5905 (about U.S. $790). The loan ceiling of PHP 3500 (about U.S. $470), therefore, could not meet all the building needs of the loan applicants. Also, only a few applicants were able to secure the maximum loan amounts because loans were calculated on 10% of total monthly income. Many of the respondents would have liked to secure larger loans and would have been willing to repay them over a longer period (the loan period is currently less than 5 years).

In terms of total need for financing the project area, it was estimated that the housing materials loan program would only be needed for about 4% of the repairs and

rebuilding because residents were generally able to secure financing from other sources. However, the program had not yet reached even this small percentage of the population, apparently due to inadequate publicity. There was a general lack of awareness of the program.

With regard to the materials stocked in the stores and the processing procedures, there were a number of complaints. First, the types of materials that were most needed by residents, e.g., cement and hollow blocks, were not available through the stores. Also, the quality of the materials that were stocked was not always of the highest standard. Second, the processing period caused delays in building. This was due for the most part to initial requirements that residents had to meet to be eligible for loans. In addition, the three-release procedure, which required residents to take materials in increments, caused some interruptions in the building process. The procedure had been instituted as a security measure to ensure that building materials were used properly.

104 A profile of three sites in the current upgrading program in Metro Manila. RAD/NHA. Oct. 1979. 36 pages. English.

This report was prepared to assist in making preproject estimates of affordability for three areas that were designated for the Zonal Improvement Program (ZIP) in Metro Manila. Information on household incomes and current expenditures is the focus on the analysis for Navotas, Barrio Escopa, and Bagong Barrio. When available, information is also presented on land tenure, types of materials used in construction, employment characteristics, etc.

In the case of Navotas, 15-20% of household income was considered a tolerable monthly expenditure for housing. Ability to save was also considered in this analysis. Given the available data, it seemed that affordability problems could occur in Escopa where the average expenditure on housing was only 8.5% of household income, and in Bagong Barrio where the poorest 15% of the local population would have trouble meeting payments for project charges.

105 General review of the Tondo project: A government innovation in housing the urban poor. RAD/NHA. Oct. 1979. 23 pages. English.

This report provides a general description of the housing problems in Manila and the upgrading approach being used in the Tondo Foreshore--Dagat-Dagatan project.

The process being used in the Tondo area is called "reblocking" and entails the subdivision of blocks into ordered lots and the realignment of structures. Three alternative block plans are prepared and presented to residents who are able to choose one and to make modifications. The plans range from very little movement of structures (Plan A) to realignment of 50-75% of the structures (Plan C).

The report also includes a description of components, such as the housing materials loans program, and general observations on experiences with project implementation. At the time of the report, almost 3000 structures had been moved or were in the process of being realigned. One observation was that Plan C was most frequently chosen by residents despite the high degree of disruption it entailed. The more equitable lot sizes and regular appearance of the blocks seemed to outweigh the difficulties and costs involved in moving so many structures.

The desire for secure tenure appeared to be the key to the successful mobilization of the Tondo residents. Cooperation among neighbours and relatives was much in evidence during the movement period. Housing quality in reblocked areas showed a marked improvement as people invested in durable materials for repairs and rebuilding. Other less tangible benefits were frequently mentioned by residents, such

as a decrease in the crime rate, better maintenance of the areas, and spontaneous efforts at beautification of houses and lots.

106 A study of Tondo commercial establishments. RAD/NHA. Oct. 1979. 35 pages plus annexes. English.

This study was part of a much larger one on the effects of the upgrading project on the employment of Tondo residents. The project design included the establishment of an industrial estate, skills training in construction, and credit and technical assistance to small businesses. This report focuses on the characteristics of the businesses in the Tondo area and some of the implications of the reblocking process for small commercial establishments.

Staff in over 200 establishments, stratified by six sectors (sari-sari stores, manufacturing, trading, personal services, industrial services, and agricultural production) were interviewed in 1978. They were to be reinterviewed 3 months after reblocking. At the time of this report, only 16 establishments had actually moved and only 10 were interviewed. Therefore, the observations on the effect of reblocking are still preliminary.

The report includes a detailed set of characteristics of Tondo businesses, e.g., the amount of working capital, numbers of workers, monthly profits, tenure, etc. A number of policy implications are evident. For example, many of the businesses were not licensed and therefore not eligible under current procedures for the project's small business loans. Another question was raised regarding the ability and willingness of many owners to pay higher development charges once they were relocated to the commercial strip (frontage lots on designated primary roads). Higher charges for businesses were meant to provide a cross-subsidy for residential areas involved in reblocking.

Most of the owners felt that reblocking would be disruptive to their businesses. There seemed to be an indication that they were more optimistic after reblocking, based on the responses of the 10 who had moved.

107 A study of the community participation process in Tondo. RAD/NHA. Oct. 1979. 52 pages. English.

Because the Tondo area was known for its strong, even militant, community groups, project management tried to open direct communication channels with local leaders. The leaders of the barangay (local political unit) were expected to be the primary disseminators of information at the neighbourhood level. The focus for community involvement was the alternate schemes for block redevelopment that were to be presented to residents at community meetings, modified if desired, and approved by block residents. The purpose of this study was to review the interactions among project (NHA) personnel, the local leaders, and residents.

Separate surveys of barangay leaders and residents were taken. Weaknesses were apparent in the communications between the NHA and the leaders. About 50% of the leaders apparently did not know that the reblocking schemes were open to modification and many were confused about different aspects of the alternate schemes. Overall, the position of the leaders seemed to be relatively weak; the leaders expressed dissatisfacton with their role, and both the residents and the leaders perceived the NHA as having the most authority in decision-making. The interactions between the NHA and the residents were considered very positive by the residents, and, in fact, most of the information about the project seemed to come directly from project personnel rather than through the local leaders. Residents were well informed about the alternate plans and knew that they were able to choose among them. However, like the barangay leaders, they were not aware that they were able to propose modifications.

108 Interim report: Tondo Foreshore--Dagat-Dagatan development project. RAD/NHA Report Series 80-1. 1980. 60 pages. English.

This report reviews the status of the Tondo Project at the end of 1979. The table of contents is:

A. Background of the project
B. Administrative issues (constraints on design and on implementation)
C. Affordability
D. Housing consolidation
E. Income-generating components
F. Health components
G. Effects of the project on the nonhousing environment
H. Summary and conclusions.

109 House consolidation study. RAD/NHA Report Series 80-2. 1980. 77 pages including 10 tables. English.

The report is based on a panel study of 100 households that were interviewed before the reblocking began and again 3 months after reblocking. At the time of the report, only 48 households had been reblocked. In addition to the small sample size, it is also important to note that the study ended 3 months after reblocking so that only short-term effects can be observed.

The following are some of the main conclusions:

1. The project tended to equalize plot sizes by reducing the area of the largest plots and by enabling smaller plots to acquire extra land. In this way, the average plot size dropped to 54 m^2 (range of 33-88).

2. There was a significant improvement in the quality of housing, particularly in the use of stronger materials for exterior walls.

3. By the end of the 3-month period, 25% of the structures in the sample had already added an extra floor; 40% of structures without a toilet had already installed one; and there had been a 10% increase in the space available for renting.

4. Households had invested an average of U.S. $700 in house improvements. Even most of the poorer households were able to mobilize investments although at a slower rate.

5. About 85% of the investment was in building materials with only 15% being used to pay labour. There was considerable use of household labour.

6. About 66% of housing investment came from household savings and about another 10% from gifts. Only 25% of households used a housing-materials loan.

7. There was a more rational use of available space so that, in most cases, the living area increased, even when there had been a reduction of plot size.

110 Fourth technical report on the reblocking process. RAD/NHA Report Series 80-3. 1980. 52 pages. English.

This is the fourth annual report on the status of reblocking (see No. **99** for a summary of the three earlier reports). The findings of this and the three earlier reports are presented in Report 80-7, The reblocking process: An integrated report (see No. **113**).

111 Preliminary estimates of project turnover. RAD/NHA Report Series 80-4. 1980. 19 pages plus 7 tables. English.

The purpose of this report is to provide preliminary estimates of turnover rates among renters and owners in the project. The report was prepared before data analysis was completed on the annual longitudinal surveys conducted in 1979-1981 with a sample of over 100 households; thus the results presented are preliminary. The following are the main findings and hypotheses.

1. Before reblocking began, the turnover rates in Tondo were very similar to those in other squatter areas of Manila.

2. As a result of reblocking, there appears to have been a process of population stabilization with less movement out by owners, and less movement into unreblocked areas.

3. Initially, there was a relatively high turnover rate as unregistered families were gradually forced to leave the project. The precise numbers of households who were forced to leave is difficult to estimate. Once these households had moved, the rate of turnover, at least for owners, was very much lower than in the control areas.

4. Relatively high turnover rates continued for renters in the reblocked areas. In some cases, renters were forced out to permit owners to move back into the area and establish their title rights. In other cases, it is hypothesized that some of the renters may have been forced out to permit increases in rent.

5. After the initial reorganization, it was estimated that the turnover rate for owners was only about 4% per year.

112 A preliminary evaluation of the small business loan program. RAD/NHA Report Series 80-5. 1980. 38 pages plus 37 tables. English.

The purpose of the report was to provide a preliminary evaluation of the Small Business Loan Program (SBLP). The SBLP, with capital of PHP 5 million was intended to provide loans of up to PHP 0.1 million for small businesses in the Tondo project area. The survey was based on a sample of 100 small businesses and a review of SBLP records.

The report concludes that a loan program of this kind was needed because about 20% of all structures included some type of small business of which only about 30% were using any types of loan.

Despite the potential need, at the time of the study (June 1980), only 199 loans had been granted and about 20% of the capital used. The following are some of the causes of the relatively small impact of the program.

1. Initially, the decision had been made to process loan applications only from reblocked areas. The delays in reblocking produced parallel delays in the loan program. Despite the delays, the evaluation felt this was an appropriate decision to limit the program in this way so as to avoid decapitalization when some structures were demolished during reblocking.

2. A major barrier was the lack of colateral of many potential borrowers and their inability to find a loan guarantor.

3. There were delays of up to 1 year in the processing of loans and many applicants became tired of waiting and withdrew their applications.

4. Very little technical assistance was provided to borrowers as project staff were instructed to concentrate on finding new borrowers rather then helping existing ones. Also, the methods for providing information on the project were inadequate.

5. Only a small amount of employment was generated as a result of the project; the 199 loans had generated only 18 jobs.

113 The reblocking process: An integrated report. RAD/NHA Report Series 80-7. 1980. 160 pages. English.

This report integrates the findings of four earlier annual reports (see No. **99** and No. **110**). The central objective of the reblocking approach is to achieve maximum upgrading of structures and services with minimum dislocation and maximum retention of structures.

The approach consists of an integrated team working at the level of the superblock (a merging of several blocks) and with maximum community participation in the decision-making and implementation process.

Despite delays in implementation, the reblocking process was generally successful. The aim of maximum retention of structures was achieved, as shown by the fact that only 1.6% of households had to move to another block. Also, there was a high level of satisfaction of participants with the plots and the types of services provided.

Although the reblocking process in general has been successful, a number of difficulties were identified.

Substantial delays were encountered in comparison with the original timetable. In addition to unforeseen problems, such as a major fire in part of Tondo, one of the main causes of delay was the unexpectedly complicated process of defining titles and plot boundaries.

Some initial communication problems arose among the NHA, the barangay leaders, and the community, which meant that families were not well briefed on the different reblocking options.

Although the reblocking process went quite smoothly, it involved an average expense of PHP 1300/household ($160). It was not, however, clear from the report of whether many households had problems in raising this amount.

The report suggests that about the poorest 25% of households might have problems in meeting the monthly loan repayments. However, at the time of writing the report, loan repayments had not begun so the magnitude of this problem (if it exists) could not be determined.

The housing-materials loan programs was less successful than hoped. Only about 25% of families applied for these loans to help with the expenses of house improvement. One problem with the loans was that the amount was too small (maximum of PHP 3500) and another was that many of the most-used materials (cement, hollow-blocks, and steel) could not be acquired with the loan.

114 **Reforma, Mila and Obusan, Ricci.** Monetary and non-monetary transfers among low-income households in Manila. DEDRB Urban and Regional Report No. 81-22. 1981. 45 pages. English.

This report summarizes the findings of an anthropological study of the survival strategies of some of the poorest households identified in the income and expenditure panel. Case studies were conducted with 25 of these households to determine their sources of income. It was found that an active system of interhousehold support networks operates, and that, through these networks, families give and receive money, goods, and services. The case studies presented in the report give examples of network support being used in times of crisis (for example, when a house is burned down or

someone needs an operation), to provide regular maintenance, to help people move to areas of better educational and job opportunities, and to generate capital for investment in housing or a small business.

There is reference to the concepts of utang na loob, which refers to a reciprocal exchange in which a person or his family feels an obligation to repay a debt, sometimes even one or two generations later; and malasakit, which refers to the situation in which help is given to a needy person with no expectation of repayment.

The conclusion of the study was that a much fuller understanding of these support networks was required to be able to obtain true estimates of project affordability.

V: URBAN AND REGIONAL ECONOMICS DIVISION OF THE WORLD BANK

115 **Keare, Douglas and Jimenez, Manny.** Affordability, income and housing consumption. DEDRB. Nov. 1980. 50 pages. English.

Using evidence from the evaluations in Zambia, the Philippines, and El Salvador, but particularly the latter, this paper presents evidence on the proportion of income that households are prepared to pay for housing and related services. A behavioural model is developed to show that the proportion of income that households are prepared to pay varies according to such factors as total income, household composition, sex of household head, and tenure status.

116 **Lindauer, David and Kaufmann, Dani.** Basic needs, interhousehold transfers and the extended family. DEDRB, Urban and Regional Report No. 80-15. Sep. 1980. 61 pages. English.

Using data from the El Salvador evaluation, the contribution of interhousehold transfers to the total household income of families at different income levels was analyzed. It was found that 34% of the households living in the informal sector of Santa Ana (the second largest city) received transfers from other households. Among the lowest decile of the earnings distribution of the city, 58% of the households were transfer recipients and the transfers represented 66% of total income. Among the second lowest decile, 48% received transfers representing 25% of total income.

It is argued that transfers must be taken into account in estimating project affordability and that the transfers may also affect estimates of the ability of households to generate resources for investment in housing.

The study also demonstrated that there is a tendency for transfer income to be "earmarked" in that households receiving a high proportion of income in the form of transfers also tend to spend a higher-than-average proportion of their income on the satisfacton of basic needs.

117 **Jimenez, Manny.** The economics of self-help housing: Theory and some evidence. DEDRB, Urban and Regional Report No. 80-16. Nov. 1980. 173 pages. English.

Using data from the El Salvador evaluation, this paper examines the factors that determine the decision of a family to use their own or hired labour to build their house. Using a conceptual approach based on utility maximization and time allocation, the study showed that, as the opportunity cost of household labour increases, the mix of household and hired labour changes. The model questions some of the assumptions of self-help housing projects relating to the preference of families for using household labour.

118 **Jimenez, Manny.** The value of squatter settlements in developing countries. DEDRB, Urban and Regional Report No. 80-17. Nov. 1980. 18 pages. English.

Using data from the Philippines evaluation, independent estimates of the value of squatter housing were obtained from an architect, a real estate appraiser, a contractor, and from neighbours. The comparisons showed that the different estimates were relatively consistent and also that the value of the housing in this squatter area was much greater than is often assumed (the average value was about U.S. $1800 or about twice the average annual earnings of households in the area).

Detailed information was also collected on the quality of the structures and this was used to conduct an hedonic price analysis and to estimate the value coefficients for each component of the housing package. The report suggests that this technique might be useful in planning the design of future housing projects as it provides and approximate indicator of households' willingness to pay for different components of a housing project.

119 **Lindauer, David.** Longitudinal analysis and project turnover: Lessons from El Salvador. DEDRB. Sep. 1979. 36 pages. English.

The longitudinal panel surveys in El Salvador were used to estimate turnover rates among project participants in two cities and to compare these rates with turnover in other low-income areas. It was found that, after families had occupied their houses, annual turnover rates were around 8% in one project and 6-12% in the other. The turnover rates dropped to significantly lower levels once families were established and, after 2 years in the project, the rates were often below 3% per year. These figures compare with annual turnover rates of 12-25% in other low-income areas and suggest that the project has significantly increased population stability.

120 **Quigley, John.** The distributional consequences of stylized housing programs: Theory and empirical analysis. DEDRB, Urban and Regional Report No. 80-18. Aug. 1980. 85 pages. English.

Using the El Salvador evaluation data, hedonic price coefficients were estimated for the different attributes of low-income housing. These were used to calculate a utility function to estimate the additional utility participants derived from their move to the project. The form chosen was the generalized constant elasticity of substitution (GCES) function. It was estimated that, in 1979, the average amount that could be subtracted from participants to leave them as well off as they were in 1976 was about 2.5% of total income or about 20% of average rent paid in 1979. The amount of additional utility was not found to be systematically related to income or household size.

121 **Bamberger, Michael.** Quasi-experimentation in an urban context. DEDRB, Urban and Regional Report No. 81-5. July 1981. 56 pages. English.

This report reviews the experience of the evaluation program in the application of quasiexperimental designs, based on longitudinal panel data, in evaluating the impact of urban shelter programs. Each of the research designs was evaluated in terms of Campbell and Stanley's list of "Threats to Validity." It was concluded that, with the application of the appropriate statistical techniques, it is possible to obtain a reasonable approximation to a quasiexperimental design in most cases.

122 **Hinh, Dinh, Sanyal, Bish, Valverde, Nelson, and Bamberger, Michael.** Housing subsidies in the public sector in Zambia. DEDRB, Urban and Regional Report No. 81-6. July 1981. 36 pages. English.

This study, based on a survey of a sample of government and parastatal organizations, estimated the quantitative importance of different types of housing subsidies in the public sector in Zambia. The study showed that the main beneficiaries of the subsidies are the middle- and upper-income employees and that the subsidies have the effect of producing a more regressive distribution of total employment benefits than that found from a simple comparison of earned income.

The implications of the findings for the development of a low-income housing strategy are considered.

123 **Fernandez Palacios, Marisa and Bamberger, Micheal.** Economic analysis of low-cost housing options in El Salvador. DEDRB, Urban and Regional Report No. 81-4. 1981. 160 pages. English.

The Squire-van der Tak approach to cost-benefit analysis was applied to nine low-income housing options in El Salvador. The options include public housing, the FSDVM sites and services projects, and housing provided through the informal housing market. The comparison of the projects was made in terms of both efficiency and social analysis. A new innovation was the estimation of the private costs and benefits to the individual household. It was found that progressive development models, both sites and services and upgrading, had the highest rating on both efficiency and social analysis. However, in terms of private costs and benefits, the ranking of public housing projects improved due to the considerable subsidy elements. The findings suggested that present policies for housing finance are producing an inefficient allocation of resources by encouraging households to buy or rent public housing that has a low cost effectivity from the point of view of the nation.

124 **Bamberger, Michael, Gonzalez-Polio, Edgardo, and Sae-Hua, Umnuay.** Evaluation of the first El Salvador sites and services project. DEDRB, Urban and Regional Report No. 80-12. Sep. 1980. 244 pages. English.

This is the final report on the El Salvador evaluation. The table of contents is:

125 **Sanyal, Bish, Valverde, Nelson, and Bamberger, Michael.** Evaluation of the first Lusaka upgrading and sites and services project. DEDRB, Urban and Regional Report No. 80-13. May 1980. 250 pages. English.

This is the final report on the Zambia evaluation. The table of contents is:

126 **Keare, Douglas and Parris, Scott.** Monitoring and evaluation of shelter programs for the urban poor: A report on the final IDRC-IBRD annual conference. DEDRB. June 1982. 139 pages. English.

This report summarizes the main findings and conclusions of the evaluation program. The main sections of the report are:

INDEX