

PD-AY-960

sn-60077

EVALUATION OF UMOJA II
AN EXPERIMENTAL HOUSING
PROJECT IN NAIROBI

Marja C. Hoek-Smit

Prepared for

Regional Housing and Urban Development Office/East and Southern Africa

U.S. Agency for International Development

January 1989

Abt Associates Inc.
4250 Connecticut Avenue, N.W.
Suite 500
Washington, D.C. 20008

Delivery Order No. 25
IQC PDC 0000-I-00-6187-00

The opinions expressed in this report are those of the author and do not necessarily reflect those of AID or Matrix Development Consultants.

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY.....	i
2. CHAPTER 1: Background.....	1
3. CHAPTER 2: Scope and Methodology.....	3
1. Beneficiary surveys.....	3
2. In-depth interviews.....	4
3. Records.....	4
4. CHAPTER 3: Project Overview.....	5
5. CHAPTER 4: Umoja II in the Context of the Nairobi Housing Market.....	13
6. CHAPTER 5: Umoja's Innovative Design Standards.....	20
7. CHAPTER 6: Project Costs and Cost Recovery.	26
8. CHAPTER 7: Institutional Development.....	30
9. CHAPTER 8: Project Management.....	33
10. RECOMMENDATIONS.....	39
APPENDIX I: List of People Contacted	
APPENDIX II: Terms of Reference Umoja Evaluation Draft	
APPENDIX III: Standard Chart	
APPENDIX IV: Computation of Sales Prices	
APPENDIX V: Construction Price Index	
APPENDIX VI: Lay-out Plans	
APPENDIX VII: Questionnaires	
APPENDIX VIII: Report on the Survey of Beneficiaries by Sara Wakeham	

EXECUTIVE SUMMARY

Background and context for the evaluation: Umoja II is the second phase of a housing and community facilities project developed by the Nairobi City Commission (NCC) and financed through the United States Agency for International Development (USAID). The project had two main goals; the production of affordable housing for owner-occupation combining full cost-recovery with non-reliance on sub-letting, and the strengthening of NCC's capacity to develop and manage low-income housing projects.

This evaluation covers both a quantitative analysis of the beneficiaries of the project and an institutional analysis of project managerial and institutional issues.

Project Overview: The project was authorized in 1979 and the implementation and loan agreements were signed in 1982 and 1984 respectively. Several substantial delays occurred and the finalization date is expected to be May 1989.

The shelter component of the project featured the innovative condominium concept. This allows several households to share a plot on a condominium ownership basis. Five or six housing units are constructed around a common courtyard. The occupants are the sole owners of their unit and the private open space and share in the ownership of the common areas. Each household has its own combined shower/bathroom and watertap in a shared splash-area. This concept had a tremendous impact on increasing the densities and lowering the costs of infrastructure per unit.

A small proportion of units consists of core houses for slightly higher income groups and a small number of completed core houses which will be sold for market price. The project design included a full range of community facilities.

Other project components provided for the provision of a full range of community facilities, employment generation activities and institutional development inputs to enhance the technical and financial capacities of the NCC/HDD.

Project Beneficiaries: The application was restricted to households with incomes no higher than KSh.2400 (for condominium) or KSh.3000 (for core houses). The type of occupation of the owners indicate that the project has succeeded in reaching households in the below-median income bracket.

The project has been less successful in reaching its goal of owner-occupancy. Increasingly, owners rent out their units and presently two-thirds of the houses are occupied by tenant households. The tenants are of a slightly higher income group than the resident owners. Nearly all units are occupied by one household even those that have been extended. The design of the

units appears so far to effectively prevent the subletting of rooms.

Within the context of the Nairobi low-income housing market it is unrealistic to expect a high level of owner-occupancy. People have a high priority to invest in rural holdings and urban housing is viewed mostly as an investment which is used to maximize income. Approximately 80 per cent of the urban households are renters, mostly of privately owned housing units or rooms. A single focus on owner-occupied housing may therefore not be the right policy priority.

The neighborhood is generally well liked since it offers a high level of community facilities. The eternal problems of cleanliness of the drains and the general environment take away some of the appreciation for the estate. The housedesign met with a lot of critique which focussed particularly on the small size of the rooms, the location of the cooking area and the small size of the common splash-area. The individual toilet/shower was for most households an improvement over their previous accomodation, although many criticized the fact that the bathrooms are not adjacent to the dwelling. The overall courtyard design was generally liked because it provides for a secure living environment.

Project Costs: The Umoja II houses were theoretically priced to yield a surplus for the NCC. Construction costs, consulting fees, survey costs and administrative costs were included in the price, as well as a ten per cent added-on value to bring it closer to market value. Land costs and interest rates were both below market, however, and therefore the hidden subsidy was still considerable. Market prices for the units are approximately 30 per cent higher than the price paid by the allottees.

The overall costs of the project have escalated considerably for a combination of reasons: severe delays during project planning and implementation in an environment of rising construction costs, problems with faulty construction work which needed extensive repair and replacement, and changes in contractors for the project. Estimated project costs in 1985 were KSh.212,000,000, while present estimates add up to KSh.410,000,000.

As a consequence, the committed AID funding sources of KSh.317,000,000 (\$17 million originally committed and a recent additional borrowing of \$1.45 million, at varied conversion rates) are insufficient to finalize the project and NCC does not have the resources to make up the deficit. Under these circumstances, the NCC may have to decide to construct only seven out of the eight planned zones of the project.

Another financial implication of these cost increases is the fact that deposits and monthly repayments by the owners no longer cover the anticipated proportion of project costs. Coupled with

the high level of defaults on the monthly payments (a provisional figure of approximately 50 per cent was given by the HDD, although present administrative procedures do not allow a precise estimate), this situation has serious financial implications for the NCC.

Institutional Development: The institutional development components of the project intended to improve the financial and professional capacities of the HDD. A Housing Development Fund was set up in which 11 per cent of all payments by the allottees would be deposited. However, the poor financial situation of the NCC, combined with the high default rate appear to preclude the functioning of the Fund as a continuing source of funding for low-income housing investments.

Manpower inputs to strengthen the HDD were never properly planned for or approved and did not go beyond the direct needs of project implementation.

Project Management: The structure of project management is fairly complex but not unusual. The management system works reasonably well during periods of normal project implementation, but is too weak to respond efficiently to crisis situations. The NCC/HDD is the client which has the ultimate management responsibility. It is assisted by a consultancy team, which has the responsibility for the design and on-site supervision, while AID is the guarantor to project loan and provides limited technical assistance to the project.

The complex administrative and political structure of the NCC makes the decision-making process cumbersome. Long delays in gaining approvals on standards and design have been the result, as well as the pre-qualification of an unqualified contractor who later was selected for the project. Both issues had severe implications for project finances. Also, internal coordination problems between different departments of the NCC caused important financial and legal issues to go unattended until crisis situations forces the system to take decisions.

The consultancy team has generally carried out the tasks specified in the contract, although in times of problems a greater leadership role and sense of responsibility might have been expected. As a result AID would at times of problems feel the need to tighten its supervisory role. Although, AID has the right and the duty to monitor the project closely, the methods it choose to do this often created friction within the management team.

All parties agreed that a clearly defined regular technical and financial monitoring system, sponsored by AID as the guarantor of the loan, would have prevented some of the management and coordination problems from occurring.

Recommendations: The recommendations address the following three areas:

1. The completion of Umoja II

- o The speedy completion of Umoja II should have the highest priority and any further delays should be avoided as much as possible.
- o Given the financial shortfall of the project and the overall financial situation of the NCC, the Commission should carefully assess whether it can raise the funding for the construction of Zone 8, which is the last to be completed.
- o In keeping with the principle of selling houses as close to market values as possible, and in view of the financial situation of the NCC, it appears advisable to sell the housing units which are meant for sale for the highest price the market will carry.
- o Priority for institutional inputs during this last year of the project should be given to improve the system for administration of the monthly payments for the project, since it is critical to establish sound recovery systems early on in the project. Internal know-how is already available within the NCC.
- o A second area of priority is solving the problem with the signing of the tenant purchase agreements of present occupants, in order to prevent informal transactions of properties, which at a later date are difficult to manage.

2. The replicability of Umoja II

- o The process of planning and implementation of Umoja II has been ineffective and would have to be adjusted for the NCC to respond to the escalating demand for low-income housing. The NCC/HDD has clear limitations as developer and manager of construction projects both in its decision-making structure, its financial management system, its manpower constraints and its financial resources. The collaboration with the private and cooperative sector in the provision of low-income housing may alleviate some of these problems. Ideally, the HDD should play a coordinating role, provide infrastructure and services, set appropriate standards etcetera. However, the present structure and mandate of the HDD does not allow it to play that role. A restructuring of the low-income housing departmental and committee structure in the NCC appears to be critical for most of the above concerns to be addressed.
- o The densities in Umoja II, both in the number of housing units and in the number of persons per hectare and the infrastructural and building standards are a major breakthrough in formal sector low-income housing provision in Nairobi. It is recommended that these standards are accepted

by NCC for future housing projects.

- o The Umoja II condominium house design (or a version with slightly fewer units) appears to be appreciated by most of its occupants. It provides a good level of security while at the same time it offers more privacy features than room rentals in site and services projects. The design, although appropriate for condominium type ownership units, appears even more suitable for rental housing units. It is therefore recommended that the condominium concept as well as the design features should be further refined according to some of the user reactions which came out of the survey and made available to interested public and private developers.
- o One of the most appreciated features of Umoja II is the level of community services which will be provided; schools, nurseries, markets and clinics. While it is too early to do a user survey at this point, it would be useful for future project planning to assess the satisfaction with and functioning of these facilities.

3. Future USAID Support to NCC/HDD

- o The most urgent requirement for any input in the housing and urban development field in Nairobi is that it should effectively address the scale of the housing problem, particularly concerning low- and medium-income housing. Even if new approaches are experimented with in a pilot project, the ultimate test will have to be whether the housing system can be replicated on a large scale and within a reasonable time-span, given the financial and manpower limitations of the NCC. Issues related to the delivery system of low-income housing are of equal importance as the actual product produced. Yet, they seldom receive adequate attention.
- o Within the context of the Nairobi housing system it is important to consider the rental market as well as the ownership market since the demand for rental housing is high and the priority for owner-occupation low. Most rental units are presently supplied through the informal sector. In the formal sector site and services, room-rentals with shared facilities provide the majority of units. These projects are, however, oriented towards owner-occupancy which is reflected in the whole planning and implementation process. Other supply systems, which may be more efficient in providing rental units to the market, should be explored as well, e.g. employer housing, private and non-governmental investment in rental housing. It is recommended that for future housing planning the rental market is studied carefully.
- o Considering the present urban growth rate, the overwhelming need appears to be to add new housing units to the present stock. In this context the upgrading of existing units has a lower priority.

Also, traditional ways of upgrading have a limited potential in the Nairobi context, where landowners, houseowners and house-occupants are often different people. On-site upgrading which intends to benefit the present occupants is only feasible on government land or where cooperatives of residents own the land. In cases of private landownership of land occupied by informal housing, the landlord seldom intends to upgrade infrastructure and housing to benefit the low-income occupants. The main component of upgrading under these conditions should be the resettlement of the present occupants of the land. Because of the complicated land-ownership patterns in Nairobi squatter areas, a study of land markets ought to be a prerequisite for any upgrading project.

CHAPTER 1 BACKGROUND

Umoja II is a housing and community facilities project developed by the Nairobi City Commission (NCC) and financed through the United States Agency for International Development's Housing Guaranty Program (USAID). It is the second part of Umoja Estate, a large middle and low-income housing area on the east-side of Nairobi. The first part of Umoja, also financed by USAID, was authorized in 1974. It was among the first core-housing projects in Kenya. The second part, Umoja II, was authorized in 1979, but the design and approval of the project took several years to be completed and actual construction did not begin until 1985.

This was a period of intense discussions between the Government of Kenya and international development agencies on the need to find ways to reach lower-income households with government sponsored housing projects while at the same time shifting to fuller cost-recovery. It was also a period of exploring ways to consolidate and enhance the capacity of housing implementing institutions at the local government level to deal more effectively with growing housing problems. Within that context the following general goals were formulated for the second part of the Umoja project:

1. To increase production of low-income housing with essential community facilities and at the same time to provide income and employment generating opportunities, and
2. To strengthen NCC's capability to plan, develop and manage such programs.

The Umoja II project is nearing completion. Construction is expected to be completed in May 1989. Approximately two-thirds of the houses are presently occupied.

There are several reasons to carry out an evaluation at this point even though the project is not fully implemented. Firstly, there has been a major transfer of staff in the Regional Office of Housing and Urban Programs for East and Southern Africa (RHUDO/ESA) and both the officer in charge of the Umoja project as well as the RHUDO Director are new to the project. The present evaluation provided the opportunity not only to assess the Umoja project but also use that experience to begin to formulate ideas of future assistance by USAID in the housing and urban development field. Secondly, a number of major decisions have to be made at this point in the finalization of the project for which evaluative inputs are considered useful. The evaluation has therefore five objectives:

1. Determine the extent to which the goals outlined in the project outputs were met;
2. Examine whether the target beneficiaries were reached;
3. Evaluate the success of the project design and the concept of condominiums;
4. Examine the effectiveness of community services;
5. Evaluate the overall project management and make recommendations for future projects.

CHAPTER 2 SCOPE AND METHODOLOGY

The evaluation included an assessment of outcomes of the housing and community development project to date as well as of project managerial and institutional issues. Several institutional objectives of the project have changed or have not been fully developed yet (see Chapter 3). These will be discussed only briefly in the report.

The orientation of the evaluation is geared towards implications for future policies and programs, rather than towards past performance of the project in reaching stated goals and outputs. The constraints experienced in implementation of the project were manifold and an evaluation could easily become an unhelpful litany of problems. This focus on the future is particularly important since the general thinking on urban development issues has changed radically since the time this project was developed. The Umoja II project was initiated as a pilot complete housing project which, if successful in reaching its objectives of creating owner-occupied low-income housing should be replicable by the NCC. However, it is increasingly recognized that the role of governments in the provision of housing has to change from being one of main providers to a more enabling one which allows a larger formal role for the private and non-governmental sector. The experiences gained with Umoja II will be interpreted within the context of this changing policy environment.

In order to reach these varied objectives of the evaluation, different assessment methods were used, both quantitative survey methods and qualitative assessments.

1. **Beneficiary surveys** were conducted in zones 1 through 4 of Umoja II between August 17 and 29, 1988. Three types of surveys were included;
 - o a 15 per cent random sample survey of both resident owners and tenants of the condominium units,
 - o a selective survey of absentee owners of condominium units,
 - o a census and 50 per cent sample survey of occupants of core units.

The sampling frame for the occupants surveys were the lists of housing units. A stratified random sample was taken on the basis of housetype. All households living in the selected unit were interviewed. The size of the condominium occupant survey was 242 households out of a total of 1629 occupant households. Of the core houses 52 per cent was found vacant and of the total number of 75 resident households 36 were interviewed. Both random sample surveys of occupants used a structured questionnaire (see Appendix II).

The survey of absentee owners included only those absentees who responded to a letter of invitation from HDD to come to interviews with the researchers (30 out of 50 contacted). A

checklist rather than a structured questionnaire was used for these interviews.

The main objectives of the beneficiary surveys were:

- o To establish whether the project objectives of home ownership for the below-median income-group had been met;
- o To obtain the opinion of residents on the accomodation and services provided;
- o To examine the residents' understanding and appreciation of the condominium concept;
- o To examine the nature and extent of consolidation and the type and amount of investment in improvements and extensions of housing units;
- o To examine rent-levels and market values of different types of housing units and monthly repayment records.

Matrix Development Consultants Inc. was responsible for the survey work.

2. **In-depth interviews** were conducted with staff of the NCC/HDD, the main consultants to the project, the contractors and technical evaluators of the project. Additional interviews were held with persons knowledgable about the Nairobi housing market and the role of the NCC/HDD (see list of people interviewed in Appendix I). Most interviews were held on a one-to-one basis. However, several small-group discussions took place with the consultants, HDD staff and the evaluator on problems related to project management and the future role of the NCC/HDD. These interviews were very helpful in providing a forum for consensus-building as well as for clearly stating opposing positions by different groups or individuals. The evaluation draws heavily on the insights gained during these interviews.
3. **Records** were checked covering the period from project formulation (1979) to the present.

In addition several site-meetings were attended as well as an orientation-meeting for allottees. Before departure from Nairobi debriefing meetings were held with RHUDO/ESA and USAID Mission staff.

CHAPTER 3 PROJECT OVERVIEW

Objectives and Project Description

The 1979 project paper defined the goals of the project in very general terms: to increase production of low cost housing and community facilities, to provide income and employment generating opportunities and to strengthen NCC capability to plan, manage and develop such projects. Most of the specific objectives of the project have undergone a change over time and will be discussed briefly below.

Shelter solutions: Concerning the housing component the specific objectives included the idea of a mixed type of development with the majority low-income households and a small proportion of middle-income households. It was based on the common practice of partial self-help and the potential for subletting part of the house in order to reach a greater number of beneficiaries and lower the affordable income floor.

After the signing of the implementation agreement in 1982 and the appointment of consultants, a period of intensive debate began on the specific design criteria for the project. It is important to state the final project objectives for the shelter component, as given in the brief to the consultants, which differed considerably from the original ideas:

- o The seeking of affordable shelter solutions for the very low-income groups as far below the median level as possible;
- o The provision of home ownership with security of land tenure;
- o Non-reliance on subletting as a means of achieving affordability;
- o Full recovery of all project costs without negative affects on the City finances and the avoidance of a negative cash-flow;
- o The establishment of a surplus for the benefit of a housing development fund from which further housing developments would be funded;
- o The improvement of living conditions for the very poor at a minimal level of amenity provision.

The combination of requirements for full cost-recovery and non-reliance on subletting in the design of low-income housing had never been successfully tried before in Kenya and was an incredible challenge for the designers. The only way these objectives could be reached within the context of permissible planning and building standards was through the introduction of the **condominium** concept. This allowed several households to share a plot on a condominium ownership basis. Clusters of five or six units are constructed around a common courtyard. Occupants are the sole owners of their home and private open space and share in the ownership of the courtyard and other common areas with the other occupants of the cluster.

A small proportion (8 per cent) of the houses were planned to be

free-standing core houses to be extended by the owners. These would be occupied by a slightly higher income group than the condominium units. A few of these core houses would be finished by the contractor and sold for market price. Profits from the sale would be deposited in the Housing Development Fund of the NCC/HDD (see below).

The final design of the project included 4048 condominium units, 330 core houses, 15 completed core houses and 13 core houses with dukas (see fact sheet). At the time of the evaluation close to 2800 condominium units and 220 core houses had been handed over by the contractor and allocated to the selected households.

Community Facilities: The original plan provided for a full range of community facilities for the whole of Umoja Estate (see fact sheet). However, when the project faced cost overruns the level of community facilities to be constructed was scaled down and the finalization of the originally proposed plans was made contingent upon the availability of funds. Landscaping of the public areas within the project was included in the plans as a separate component. To date four primary schools have been handed over to the HDD, two nursery schools and two markets are nearing completion.

Employment Generation: This sub-project was originally conceived of as the establishment of a loan fund to provide short-term credit and related facilities and services to small businesses and industries in Umoja Estate. The fund would be managed by an agency which has the appropriate technical advisory staff for guiding such a project. This part of the project is still in the planning stage and is scaled down to the provision of workshop space alone. At the time of writing of the report the discussions between HDD and the RHUDO had reached a stalemate because of a difference in opinion regarding overall costs of the workshops and their management.

Institutional development: The original project document called for the strengthening of the Umoja Project Unit, which had been created for the implementation of Umoja I. Developments in later years made it clear that NCC might be better off to consolidate all low-income housing efforts within a strengthened HDD. HDD had been specifically set up to implement the World Bank funded projects. The institutional development objectives stated in the implementation agreement reflected this change. These included the establishment of a Housing Programming Unit within HDD which would undertake long-term strategic planning; the establishment of a Housing Development Fund to be used for the development of additional low-income housing activities by HDD; the improvement of allocation and collection procedures and the strengthening of the community development department.

For a variety of reasons the institutional development component has never been fully developed. A Housing Fund was recently established, although it seems unlikely that sufficient funds

Fact Sheet Umoja II

NUMBER OF HOUSING UNITS: 4,048 Condominium Houses
 330 Core Houses
 15 Completed Core Houses
 13 Core Houses with Dukas

COMMUNITY FACILITIES
TO BE PROVIDED: 10 Nursery Schools
 4 Primary Schools
 4 Playing fields
 1 Health Center
 1 Community Center
 6 Local Markets
 1 Small enterprise area
 1 Shopping center
 1 Post office
 1 Community Market
 2 Special Purpose Areas
 1 HDD Community Development Office

ESTIMATED PROJECT COSTS
IN 1985: KShs. 212,000,000
PRESENT ESTIMATED COSTS: KShs. 410,000,000

U.S. LOAN TERMS: \$ 17 Million
 30 years
 10 years grace period on principal
 payment semi-annually.
 Interest Rate: variable, 0.5% over
 26-week. U.S. Govt. Treasury Bills
 (now about 8.5%)

INSTITUTIONS INVOLVED: Government of the Republic of Kenya
 Nairobi City Commission
 U.S. Agency for International Development

HOUSING COST AND AFFORDABILITY:

HOUSE TYPES	A	B	C	D	Core
NUMBER OF UNITS	1,472	1,472	736	368	330
TOTAL COST: KShs.	59,900	49,600	45,300	75,700	79,400
DEPOSIT (+/- 5%)	2,500	2,000	1,700	3,300	3,800
MONTHLY PAYMENTS: KShs.	554	459	421	699	730

CONSULTANTS: Wanjohi Consulting Engineers
 Mutiso Menezes International
 John Aluoch and Associates

/

will be deposited in the account to make an impact on continued expansion of HDD housing programs. Some improvements have been made in HDD operations through project related assistance, particularly in the allocation and orientation procedures. However, no Housing Programming Unit has been planned for and HDD remains without in-house strategic planning capacity. No other projects or activities are planned for after the finalization of Umoja and Dandora.

Financial Resources

Several sources of funding the project were made available:

- o A USAID guaranteed loan of \$17 million to the NCC is the main source of funding. Another \$8 million was tentatively approved for authorization in case the \$17 million would be insufficient to finish the project and evidence could be provided that sufficient progress had been made towards the major project objectives and particularly the cost recovery problems (see fact sheet for conditions). Of the \$17 million close to \$15 million has been disbursed to date.
- o Several AID grant resources were committed to the project mostly for short-term technical assistance: IIPUP funds, AID Mission funds and RHUDO funds. In the early years of the project a full-time consultant (PSC) was hired to work on the project definition, but after 1983 only short-term technical assistance and training inputs have been provided by AID. Recently, the RHUDO hired a full-time local consultant to work with the community development department during allocation and orientation. It was impossible to obtain an accurate figure on the total grant money spent over the development and implementation period of the project. However, the total amount is well over \$500,000.
- o The NCC was to contribute the equivalent of \$5.1 million, including costs based on an in-kind basis. So far the resources provided by NCC/HDD have only been in-kind contributions of labour and services and all monetary expenditures have been met by the AID Guaranteed Loan. The NCC provided the land and rights of way for the development of the project.
- o \$200,000 of the income from downpayments made by the allottees was to contribute to the costs of the project. This has not yet been done. Another eleven per cent of the down-payments and monthly payments were to be deposited in the Housing Fund. So far only part of the total amount received in down-payments and monthly payments has been placed in the Housing Fund (Ksh.602,000 = \$33,000). The HDF was not intended, however, to be used for the direct expenditures on Umoja II. The other income from down-payments is used for operational expenses of the NCC/HDD.

Organizational and Managerial Structure

The Nairobi City Commission as borrower and project manager: The NCC is the borrower of the Guarantee Loan and is the institution responsible for the design, tendering and construction supervision of the project, as well as the foreign exchange borrowing and repayments. The HDD is the department within NCC which carries the responsibility of all low-income housing projects, including Umoja II. In that capacity it supervises and controls the consultants and contractors to the Umoja II project. It approves all certificates for payment submitted by consultants and contractors and in general acts as the project manager. It determines the pricing formulae for loans and charges to the allottees and it sets eligibility and allocation procedures for housing projects. For projects under its supervision, HDD is also responsible for debt collection, community development and certain aspects of estate management. The total number of units presently under HDD's supervision or in the process of construction is approximately 20,000.

The HDD has to receive technical approvals for all of its projects from the City Planning and Architecture Department, the Engineering Department and the appropriate Committees of the NCC. This is a cumbersome process which has delayed the project design and implementation considerably.

The Treasurer's Department is responsible for borrowings and repayments related to the Guarantee Loan. It pays the contractors and consultants to the project after certificates for payment have been approved by the HDD. The treasurer is not directly involved in debt collection in areas under HDD supervision and only receives once a year statements from the HDD on amounts received and amounts outstanding.

USAID/RHUDO as financiers: USAID acts as a guarantor for the loan made by US financiers to the borrower. Since the loan is guaranteed by the US government the RHUDO has the responsibility to monitor the project to make sure that specific loan conditions are met and prudent financial management takes place. For that purpose it was agreed that AID should conduct formal project reviews every six months during project implementation and prior to disbursements from the escrow account as well as an intensive evaluation after completion of the project. In case progress was not achieved in a manner that was mutually satisfactory, the Implementation Agreement stated that AID could take whatever legal remedies might be required to reach a situation of mutual satisfaction as to the progress of the project as a whole. AID has monitored the project on an ongoing basis and has initiated a few independent technical assessments of the project. It has on several occasions delayed disbursements when problems in the implementation of the project arose.

Consultants as designers and site-supervisors: As soon as the implementation agreement was signed in 1982, consultants were selected to prepare design criteria, a structure plan, the final

design, tender documents for the works to be done and to inspect the construction of all works on site. A number of firms collaborated to form the consultants team. The lead consultant is the engineering firm of Wanjohi Consulting Engineers; Mutiso Menezes International is the architect to the project and John Aluoch and Associates the quantity surveyor.

After a multi-year process to develop and gain approval for the design, the project went to tender on preliminary designs and estimates in the second half of 1984. The consultants prepared a shortlist of contractors and played an advisory role in the final selection. They are responsible for the inspection of all residential and infrastructure construction on site. They organize and chair weekly site-meetings. The consultants sign off on the certificates for payment submitted by the contractor before these are sent to the HDD for approval. The construction of community facilities, although done by the same contractor is supervised directly by the NCC/HDD. The consultants report directly to the NCC represented by the Town Clerk and the Director of the HDD.

General Contractors: All construction work was tendered out to private firms on a competitive basis. Despite a protest by AID, a firm by the name of Great Rift Valley Construction Co. Ltd. was prequalified and subsequently selected by the NCC (the client) from among 14 firms as the general contractor for the project. It had the lowest bid. GRV was responsible for all infrastructure and residential construction and it was awarded the contract for the construction of community facilities as well. Within six months it became evident that the selected firm was incompetent to carry out the job. However, before action was taken against the firm, the three expatriate senior managers of the firm left the country in April 1986, leaving the senior Kenyan management and junior staff in limbo. In May the consultants sent a formal letter to GRV concerning their lack of performance. After 42 days, the period required between formal notification of unsatisfactory performance and annulment of contracts, the contract with GRV was terminated and GRV staff was officially ordered off the site. After an intense process of negotiation between NCC, USAID and the consultants, an agreement was made with a reliable Nairobi firm to take over the contract. This contract included considerable remedial work on construction which had already been carried out by the first contractor, but was of unacceptable quality.

All parties were involved in finding a solution to the problems with the first contractor; NCC, USAID, the consultants and representatives for the contractor. Yet this episode left behind considerable tension in the relationships between the parties. USAID felt that pre-qualification procedures had been conducted unprofessionally by the client and that GRV should never have been pre-qualified in the first place. Also, USAID believed that better inspection on site by the consultants ought to have prevented the extent of faulty performance by the contractor. The consultants in response blame the first contractor's use of

political influence to obtain approvals for second class work. Also, their reasons for the continuation of payments to the contractor, even after problems with the quality of the work and materials had become obvious, were to prevent work from stopping altogether and to give the contractor the opportunity to remedy the unapproved work. These questions have not really been resolved. As a consequence there is still disagreement between USAID and the consultants on the issue of whether the consultants should charge consultancy fees for the assessment of remedial work to be done.

The communication and management process of the project is organized around a series of weekly and biweekly meetings, and around the process of approving and signing of certificates for payment submitted by the contractor. USAID participates in most meetings and has recently requested that copies be sent to them of the certificates for payment in order to better understand and be closer to the project management process. When USAID has a serious concern which transcends the decision-making power of the HDD, it directly approaches the Town Clerk of the NCC.

Sequence of Events

1979 Authorization for Housing Guarantee Loan of \$25 million.

1982 Parties sign Implementation Agreement.

Consultants are selected in August 1982. Structure and site plans are prepared. Lengthy approval process of the design begins. Preliminary design approved in May 1984.

1984 NCC prequalifies contractors; Consultants prepare tender documents and NCC advertises for tenders on preliminary drawings and BoQ; NCC reviews tenders and awards the contract to the lowest bidder, Greater Rift Valley Construction Co.

1985 Consultants finalize detailed designs and BoQs. Parties sign Loan Agreement for \$17 million; the first disbursement occurs in October of that year. GRV commences work on site in May.

1986 Problems arise with the quality of work by the contractor; REDSO engineers and an outside consultancy firm carry out an independent evaluation in February; in April, expatriate management staff of GRV leaves the country; NCC convenes a meeting between all parties and in June GRV is officially ordered to stop work and leave the site.

In September, 1986 NCC signs a contract with the new contractor, B.S.Sanghani, and work on site resumes in October.

NCC advertises the project and sells 30,000 application forms; students interview applicants in July and August; HDD/ NCC does assessments and balloting and letters of offer are sent to selected allottees.

1987 NCC approves an extension of the deadline for the project because the extent of the remedial work required is considerably more than estimated. Finalization date is July 1989.

In July the first allottees sign the Agreement of Sale and move on site.

CHAPTER 4 UMOJA II IN THE CONTEXT OF THE NAIROBI HOUSING MARKET

This chapter discusses the different beneficiary groups of the Umoja II project and the community building efforts. The survey results show that only approximately one third of the original allottees live in their houses themselves while two-thirds of the occupants are tenants. The proportion of tenant occupied houses has risen over the past year. Thus, Umoja II will not fulfill the objective of owner-occupancy. Why this is so can only be understood within the context of the overall housing market in Nairobi and in urban Kenya in general.

The Umoja II Residents and Owners

Who are the residents of Umoja II and which allottees decided to let their units instead of living there themselves? How do residents like the neighborhood and how does it compare to their previous place of living? An attempt was made to gain an understanding of the dynamics of the occupancy process through interviewing resident owners and tenants as well as absentee owners. Residents of both core and condominium units were included. Appendix I gives the detailed results of the surveys. Here only summarizing information will be discussed.

Occupancy Pattern:

The project is still in the early stages of development and not all zones are finished. Even so, the rate at which the units are being occupied appears to be slow considering the housing shortage in Nairobi. In Zone 1, which was ready for occupation in July 1987, 12 per cent of the condominium units are still vacant. This is down from November 1987 when approximately 40 per cent of the condominium units in Zone 1 were vacant. 1/ Of the core houses the vacancy rate in the first four zones was over 50 per cent.

Part of the reason for this **high vacancy rate** may be the fact that in Nairobi applying for low-income housing has become somewhat of a lottery. At the time of application the applicant does not know the type of house for which he or she is applying or the exact house-price and monthly payment. Knowing that one cannot go wrong with NCC provided ownership-housing in the sense that the price on the market is always higher than the sales price, people just apply to any new project advertised. For Umoja II 30,000 application forms were sold and this could easily have been more.

1/ Feiden, Peter Umoja II, Survey of Zone 1 Condominium Residents, RHUDO/ESA, January 1988.

Once the unit is allocated the household may find out that the location or type of house is not suitable or that extensions or improvements have to be made first before the family can move in. Money has to be raised and labor organized. Particularly for core-houses, the sense that extension is required before moving in, may be the reason that half the units are still empty. However, only one third of the vacant units of both core and condominium type houses are in the process of being extended. With little construction work going on one would expect the units to be rented out rather than be left unproductive for such a long period of time. This is puzzling. Since core units are by far the most attractive (see Next Chapter), this vacancy rate may be an indication of illegal attempts to transfer the units.

The second, related point is that **two-thirds of allottees of the condominium units rent them out**, despite the fact that subletting is prohibited. A similar pattern occurs in the core units. Of those core units that are occupied more than half are occupied by tenants. The market rents one can charge for a unit are invariably higher than the monthly repayments to the NCC and other costs. This extra income, added to some of the other reasons given above induces letting, particularly if the household is already reasonably housed. There is, moreover, not a strong desire to live in one's own house in urban areas.

There are clear indications that the proportion of non-owner-occupied units is increasing. A survey conducted in November 1987 in Zone 1 of the project by RHUDO/ESA staff (see above) showed that half of all occupied condo units were let at that time, while only a year later two-thirds of both core and condo units are occupied by renters.

Nearly all units are occupied by one household even where they have been extended. The design, even of the fully extended condominium, discourages occupancy by more than one household, since only one door gives access to the outside. It is interesting to note that approximately one half of both absentee and resident owners have begun extensions on those units which can be expanded. However, more absentee owners than resident owners have completed the work, most likely because they have higher incomes and receive a regular income from letting. It will be interesting to see whether extended units will be used for subletting in the future.

The survey of absentee owners indicates that most of the absentees live near Umoja and are themselves renters. The absentees did not mention the rental income as the reason for subletting, but rather the fact that they did not want to change the schools of their children, the small size of the houses in Umoja and the need to extend or improve the house before they would move in.

Household Characteristics:

The application was restricted to households which at the time of allocation did not earn more than KSh.2400 per month (\$132), which at the time was considered the **median income** for Nairobi. At present the median income is approximately KSh.3000. Since the owners were aware of that figure, the answers to the income question must be considered as tentative. Close to 80 per cent of the owners said that their total household income was below KSh.3000 (\$165). Almost one half of the tenants and approximately 40 percent of the absentee owners had an income below KSh.3000. Even though the actual income figures may not be quite correct, this general income picture is confirmed by observations of the interviewers, who found the owner occupants as a group to earn less than the tenants.

Also, the **type of employment** of the head of household indicates that the project has succeeded in reaching households at the below median income level. The great majority of the owners are regularly employed in such jobs as clerk, typist, semi-skilled labourer. Only 7 per cent is self-employed and very few hold a professional or managerial job. This indicates that under the present allocation process, it is harder for the self-employed to qualify for a unit.

Of the tenants, 14 per cent are self-employed and only tenants hold professional and managerial jobs. This information tends to support the observation that the owner occupants are within the target requirements set by USAID and that tenants are of a higher socio-economic group than the owners.

The 1987 Survey (see above) indicated that the majority of occupants works in the industrial area or the Eastern part of the City. Proximity to employment appears therefore to be an important factor in the choice of a place to live.

The owners and tenants have the same **age structure**. Seventy-five per cent of the heads of household are between 26 and 75 years old. However, the owners have larger households than the tenants; 70 per cent of the owners have between 4 and 7 household members, while the same proportion of tenants has four or less occupants. The typical owner household consists of a married couple, two or more children and frequently a live-in maid to look after the children. Tenant households are more likely to have individuals sharing with friends or relatives.

Since the majority of both owners and tenants occupy one room, the larger owner households are more crowded.

Improvements in Living Conditions:

The great majority of the owner-occupiers and of the tenants rented accommodation or stayed with relatives or friends before moving to Umoja II. Two-thirds of the owner-occupiers moved from

the predominantly low-income areas of Dandora, Eastleigh, Huruma, Kariobangi, Kibera and Makadara, whereas only 39 per cent of the tenants came from these areas.

Other details of the type of accommodation previously occupied by the tenants and owner-occupants indicate that the standard of accommodation and services were higher for tenants than for owners. Most **owners** shared a water tap and a toilet with other households on the plot, while now they have their own. Half of the owners rented one room, 40 percent rented two or three rooms (the other 10 per cent shared accommodation or had other tenure arrangements). The majority paid a similar amount in rent as they now pay in monthly instalments for their units.

On average, **tenants** paid higher rents than owner-occupiers in their previous accommodation. Half of the tenants had their own water tap and their own toilet and less than one third of the tenants only rented one room. So more owners improved their living quarters by coming to Umoja.

The interviews with the **absentee owners** showed that most of them pay the same amount in rent as they would in Umoja, but have better services and more space in their present accommodation. For this group there appears to be little incentive to move to Umoja II. These interviews do not represent a representative sample of absentee owners.

One of the greatest improvements for both owners and tenants is in neighborhood rather than individual housing characteristics. Both the lay-out and the level of services and community facilities to be provided are very attractive to the residents and better than their previous neighborhoods (see Chapter 5).

Community Building:

Umoja II is one of the first condominium-type low-income housing projects in Kenya. Most low-income ownership projects are site-and-services projects, which in the Kenya context are also designed for multi-household occupancy but based on the principle of single ownership of the plot, the services and the extensions. In practice, few owners live on their plot and as many rooms as possible are let to tenants who share the facilities. Under those circumstances, it has proven to be very hard to create a sense of responsibility for the cleaning and maintenance of the units and even more difficult to create a sense of community. The Umoja II condominium concept intended to provide an affordable alternative which would stimulate maintenance and care for the housing units and services and a sense of communal responsibility.

Residents in condominium units jointly own certain parts of the plot such as the courtyard and the area where the toilet and water taps are located. They are intended to form a condominium association to administer and maintain these common areas. The condo association is an informal association, since the present

Registered Land Act does not require a corporate body to be formed. During the orientation session the concept and functions of a condominium association are explained and owners sign a membership form at the time of signing the Tenant Purchase Agreement for their units. However, a relatively small proportion of the owners have come in to sign their Tenant Purchase Agreement. For that reason, the subject of the condominium association has often not been brought to peoples' attention in a more personal way and after people have had the opportunity to actually see their housing units.

It is therefore not surprising that during the interviews the great majority of the owners said that they were not a member of a Condominium Association and never attended a meeting of condominium residents. Hardly any of the tenants knew about such associations. The owners in particular could see a useful role for such an association in solving problems, representing the owners in cases of problems with the NCC, organizing the cleaning and maintenance of the common areas and providing security.

Despite the potential lack of involvement from a mobile tenant population, there appears to be enough interest among owner occupiers to make residents' organizations work. It is clear, however, that just explaining the concept of Condo Associations during the orientation sessions is insufficient. The HDD needs to stimulate their active formation and assist in identifying those individuals who are interested and strong enough to act as leaders. The HDD needs to support their efforts and act on problems as these are brought to their attention.

The HDD has not undertaken other community development activities on a neighborhood or zone basis either. The Community Development Department does not have a background in community building practices and hopes to find KANU leaders in the area with whom they can collaborate to mobilize the population. At present, therefore, Umoja II is little more than an agglomeration of individual households and the lack of care for the environment is one obvious result. The HDD should try to move fast in order not to miss the momentum generated by a new and enthusiastic population.

Summarizing we can say that, at present, one third of the occupants of the condominium units are low-income owners with rather large households. The proportion of owner-occupants is down from the 1987 survey which showed that half of the units were owner-occupied. The occupancy pattern of core units is as yet undetermined because of the high vacancy rate. The tenants have a slightly higher income and employment status. Yet, approximately half of the tenants have incomes below the median for Nairobi. If the trend to rent out units continues, most direct beneficiaries will be in this socio-economic bracket. The design of the condominium units has so far effectively prevented the subletting of rooms as was intended and will most likely put a limit on the interest of yet higher income groups in the units either as owners or as tenants.

Umoja as part of the Nairobi Low-Income Housing Market

The Kenya Government has always considered it as its task to assist the lower income groups in obtaining adequate shelter. In the past this was done through the provision of rental and other governmental housing for low and middle income groups. Approximately 20 per cent of the urban housing stock is government owned. There is considerable subsidy involved in this rental housing.

In later years the government shifted its efforts to the provision of site-and-services projects and other tenant-purchase housing projects in order to stimulate home-ownership. Over the past years an average of approximately 4000 low-income housing units per year were constructed by the public sector. In Nairobi approximately 20,000 such housing units have been developed since 1976, including Umoja Estate. Since most of these units are designed for multi-household occupancy through the subletting of rooms, the number of dwellings provided to the market is much bigger than this number suggests. The private sector does not play a developmental role in these projects. Again, this type of housing carries considerable subsidies; for example, the government charges below-market rates for loans and land. However, these publicly supported housing projects together with formal private developments comprise only 20 to 40 per cent of the total supply of dwelling units, depending on ones assumptions about the number of dwellings per unit. Also, it proved very difficult to attain the goal of owner-occupancy. Most of the site-and-services units intended for low-income owner-occupiers are rented out to tenant households. Even in the informal housing sector, which provides the majority of low income dwellings, room-rentals prevail and owner-occupancy of dwellings is rare.

Why is it so difficult to reach the objective of owner-occupancy, even when allocation of plots is done fairly? Is owner-occupancy the right kind of objective in the present housing market? It is difficult to answer these questions within the limited scope of an evaluation. However, we will point out some of the specific characteristics of the low-income housing system that might provide some insight into these questions.

A high priority to invest in rural property: From the early beginning of urbanization under the colonial system, people were used to renting a house in the urban areas. The priority for investments for urban-based households was and still is in the rural area. Urban people without rural ties and a rural home are looked down upon and there are strong connections between rural and urban households of a family. Most urban residents have the ideal to retire to the rural homestead. Home-ownership in the urban areas is viewed primarily as an investment. This situation is changing with an increasing number of people being born and raised in the urban area, but the associated attitudes are strongly ingrained. The 1983 Housing Survey, conducted by the Central Bureau of Statistics, showed that only one fifth of the urban households own their house. However, this is not only due

to lack of demand for ownership; there are severe supply-side constraints as well.

Land and urban housing as highly desirable investment objects:

After Independence, urban land and housing have increasingly become the objects of speculative investments by the higher income groups. Fast urban growth, increasing land values and high inflation are some of the factors contributing to this situation. It is difficult for the low-income groups to participate in such a market, even in the informal market. Indeed, the market response to the overwhelming need for low-income housing has not come from "traditional" squatting by owner-builders who gradually improve their house and hope one day to get tenure to the land. Most informal housing, which forms about 60 to 80 per cent of all urban housing constructed over the last decade, is built by the land-owners and rented by the room. Investment in formal rental housing is hampered by lack of infrastructure provision and access to credit.

A similar trend is evident in site-and-services schemes developed by the NCC for low-income owner-occupancy with the potential for subletting of one or more rooms. Most of these plots were bought up by middle and higher income investors, who were in a better position to develop the plots. They responded to the demand for middle income housing, which is not informally provided to the same degree as low-income housing is, and developed the dwelling units for renting to middle-income households.

The result of these and other factors is that 80 per cent of all urban households rent their accommodation. The Umoja II project tried to create conditions conducive to low-income ownership and owner-occupancy. Condominium ownership was thought to prevent the wholesale buy-out of allottees because units would be more affordable and there would be too many small units involved for an investor to deal with; a strong effort in community building combined with the provision of desirable community facilities would stimulate allottees to live in their units. The project may well succeed in stimulating low-income ownership, since so far there are no indications of wholesale transfer of plots (although an active market in individual units is beginning to develop as is evident from advertisements in the newspapers and discussions with real estate sales agents).

Letting of most of the housing units, however, will be nearly unavoidable, in view of the scarcity of middle-income housing and the relatively high rents one can obtain in the market, combined with a low premium for owner-occupation which people in this market are willing to pay. Indeed, owner occupancy appears to be an unrealistic objective for the low income groups and one that may not be the right priority in the present housing market in Nairobi.

CHAPTER 5 UMOJA'S INNOVATIVE DESIGN AND STANDARDS

Housing needs in urban areas are phenomenal. The 1986 study by the Urban Institute estimated that 61,000 new units would be required in 1988 and that this number would gradually increase to 143,000 units per year in 2003.^{1/} The investment levels required for housing finance, land and infrastructure to address the problem are of equal magnitude. One of the most urgent problems is therefore the reduction of required levels of infrastructure and densities for low-income housing. Yet, in the past there has been strong opposition by the NCC to approve more appropriate building and planning standards and in the case of Umoja II the project was delayed considerably in order to gain approval for experimental standards. Umoja II was designed as a pilot project to test standards that would be approvable by the NCC and yet affordable by low-income households without subletting.

The debate on standards is ongoing and has recently been brought into the limelight again after the NCC announced new planning, building and infrastructure standards in the January 1988 Proceedings of the Nairobi City Commission. On several issues these proposed standards are higher than those approved for Umoja II. Although it is too early for a technical analysis of standards of Umoja II it is important to discuss the Umoja II standards and designs and the reaction of the residents to their house design and services.

Density

Among the most important achievements of the Umoja II project are the high densities that have been obtained. The savings on land and infrastructure costs which this density has made possible, have been critical in making the project affordable to the below-median income group.

The project includes a full range of neighborhood level community facilities, for Umoja phase I and II. Residential developments consist mostly of condominium type houses which have 5 or 6 housing units on a 275 m² plot, an average of 49m² per unit. The minimum allowed number of rooms per unit is one. The allowable plot coverage is 60 per cent. The core units, which are likely to house at least 2 households, are situated on 90 m² plot with 50 per cent coverage. When fully occupied, the project will house between 5000 and 6000 households. The total number of persons will be close to 30,000.

2/ Struyck, Raymond and Piet Nankman, 1986, Developing a Housing Strategy for Kenya: Recent Housing Production, Market Development and Future Housing Needs, The Urban Institute, Washington D.C.

The total area of Umoja II is approximately 93 hectares. Only 7 per cent is used for circulation. This has been achieved by allowing only 30 percent of the plots to have road access and 30 per cent of the plots to have communal parking space (note that these figures are per plot and not per housing unit). Since the Umoja II project will provide for community facilities for both Umoja I and II, the proportion of land used for facilities is 45 per cent. The minimum planning standards for community facilities used in Umoja II are in many instances lower than those presently proposed by the NCC. For the whole of Umoja Estate the proportion of land allocated to facilities is 28 per cent. (See Appendix III for detailed infrastructure and housing standards and housetypes/lay-out plans).

The density for the residential section of Umoja II (including circulation) is 86 housing units /ha., occupied by 450 household /ha. For an average household size of 4.5, this gives over 2000 persons /ha.

House Design and On-the-plot Services

There are 4 different types of units within each condominium, two of which are expandable into two rooms and two providing one large room. Originally an outside cooking area was planned by the designers in order to keep the costs down, but the NCC insisted that each housing unit would have its own kitchen area. As a compromise a small cooking area with ventilation hood are provided within each unit.

Each unit has its own combined shower and toilet room with full waterborn sanitation. All bathrooms are clustered together in one part of the compound in order to decrease costs. A common high-level splash-area is provided where each housing unit has its own tap. Water meters are paid for and connected by each household and individual electricity connections will be available when electricity is brought to the area.

The materials for the walls are stone and concrete blocks, and the roofs are covered with unpainted galvanized iron. Most construction problems were related to the foundations and the roof. The foundations were originally constructed as floating slabs on the black cotton soil, but during construction and after the first major rains it became clear that conventional deep foundations were required on that most difficult of soils. Much remedial work had to be done on the foundations by the new contractor. In fact, it could be argued that low-income housing should not be built on black-cotton soil since it drives up the price of the houses and of later extensions which households have to pay for. Concerning the problems with the roof, there was a discrepancy between the size of corrugated galvanized iron sheets mentioned in the original specification and sizes of locally available corrugated iron. As a consequence, the first contractor used galvanized sheets that were too narrow causing a lot of leakages in the first few zones. These specifications were later

changed.

Although the NCC opposed the design standards, it approved them after lengthy discussions when it became clear that any higher standards would make these houses unaffordable for the low income groups. While these discussions on standards were continuing, however, valuable time was lost. These delays have been very costly. Construction material prices went up. Also, the contract had to be tendered on preliminary estimates and large change-orders were therefore unavoidable.

Opinions of the Residents

Neighborhood: The residents were asked what they liked and did not like about the estate and about their houses. The number of schools provided was the most frequently mentioned positive characteristic of the estate, followed in importance by the answer that it was a secure "quiet" place. Many people also mentioned that it was a well planned area and the fact that facilities such as markets are constructed in the immediate neighborhood.

The most serious concern was raised about the poor drainage in the area. The state of the stormwater drains at the back of the condominiums was variously described as filthy, stinking and a breeding ground for mosquitoes. The lack of electricity and security lights, the inadequate bus service to town, especially in rush hours and the lack of garbage collection were the other main dislikes.

One of the major costcutting features of the project and one about which the NCC had severe doubts, was the limited road access to the housing units. It was interesting to note that only a negligible proportion of the interviewees mentioned road accessibility as a problem and hardly anybody mentioned parking problems.

Room Design: Approximately two-thirds of the interviewees did not like the design of the room, mostly because it was too small and because of the position of the cooking place. The location of the cooking area next to the entrance of the room is found to be embarrassing, particularly when entertaining guests. Ten percent of the households had moved the cooking place and many more planned to do so, while 13 per cent cook elsewhere on a jiko. There is a general interest in changing the living space configuration to fit individual circumstances. Erecting partitions is second only to plastering as the improvement most commonly undertaken.

Although a direct question on the size of the rooms was not asked, many respondents mentioned that they considered the rooms to be too small. More space was also the attribute for which most people would be willing to pay more. The D unit, which is the

largest, is the only unit thought to be large enough for a family and it is liked because it can be partitioned to suit particular requirements. The B and C units are very small in the unextended version and even after extension they lack the flexibility to reorganize the space. Moreover, extension of the B units is cumbersome because of the complicated roof structure and leakages are a frequent problem.

Construction Materials: The poor quality of the roofsheets is frequently mentioned. Also the quality of the doors, locks and windows is disliked by many. It was felt that it would be better not to provide windows, doors and locks at all, rather than to provide ones that are so poor that even landlords invest in replacing them. The overall structural quality of the units was generally liked.

Services: Although for the great majority of owners the toilet/shower arrangement was an improvement over their previous house, there was considerable criticism on the arrangement. The units were considered too small and too far from the living quarters. Yet the fact that each household had its own bathroom was valued highly. Many respondents considered the common sink area to be too small and congested during cooking and cleaning hours. Also, not everybody kept the area clean and that created friction.

Open Space: A feature of the condominium design is that it provides a small area of private external space adjacent to and accessible from each unit. Most areas have not yet been fenced in and in the recently finished zones the whole area at the back of the houses, of which this private space is a part, still resembles a building site. Nearly all owners, resident as well as absentee, mentioned that they would like to build on the open space if they were allowed to. Since private open space at the back of the house is adjacent to the semi-public service area, it will be difficult to prevent encroachment. Those households which have begun to use their private space do so mostly to grow vegetables and to relax.

The central condominium courtyard is used mostly for drying of clothes, for socializing with the neighbors and for childrens play. With five or six households sharing the space, the courtyards are nearly always full of clothes.

Condominium Arrangement: Owners and tenants were divided in their attitude towards the condominium arrangement (in the physical sense). Answers depended naturally upon the specific experiences of the residents and whether they get on with their neighbors or not. Basically, the answers reflected the very commonsensical conclusion that it is a good idea when everyone "gets-on" and a bad idea when they do not. The most common bone of contention was

cleanliness of the courtyard and of the common sink. More owners than tenants undertake to keep the courtyard clean and consider that this together with general maintenance should be the main purpose of the condominium association. The second most frequent reason for quarrels was the fair number of children playing in the common area, making noise and getting in the way. The lack of privacy was mentioned by approximately 10 per cent of the residents.

On the positive side it was felt that the condominium design offered a secure environment since there are always people around. A number of occupants mentioned the inter-tribal living environment as a positive characteristic. Many people felt that the house-type was very appropriate for singles or young married couples, but not adequate for larger families. It appears that with an increasing occupancy of units by tenants, who generally have smaller households, the market responds in a similar direction.

Replicability of the Condominium Design

There are two aspects of the condominium concept which have to be evaluated separately, namely the physical design and standards and the legal status.

The design standards used for the Umoja II project have allowed to put on the market a housing unit for individual ownership with waterborne sanitation and other services for the lowest price achieved in Nairobi after Independence. The fact that the actual price is much higher because of poor performance and delays in the construction has to be looked at separately and does not detract from the achievements on the standard and costs side. Also, these achievements are important irrespective of the actual occupancy pattern. Although, both owners and tenants voiced criticism concerning the design of the house, more residents were positive about the courtyard design because of its security characteristics. The design should therefore be published and distributed to potential developers of low-income housing, whether it be for ownership or rental. Some large employers have shown considerable interest in the design for the purpose of providing employer housing. Trade-unions might find it an interesting option for the provision of housing for their members.

The number of households sharing a condominium unit could be varied according to the level of affordability. Three or four households could share a plot, so that the sense of crowding would be less. On the other hand, the design could be adjusted to allow subletting of one room in case affordability requirements would necessitate this. However, subletting, to a larger degree than letting of a whole unit, will undoubtedly lead to maintenance problems, particularly of the shared facilities. This would induce deterioration of the whole condominium unit.

The legal concept of the condominium design in the sense that a number of owners share the ownership of one plot appears to be quite acceptable. However, serious maintenance problems have not yet occurred and it is too early to judge whether resale at a large scale will occur. These factors will ultimately decide the acceptability and appropriateness of the condominium ownership arrangement for low-income housing.

CHAPTER 6 PROJECT COSTS AND COST RECOVERY

In this chapter we will briefly discuss the financial aspects of the project; the costs per unit and the price charged to the allottees, the overall cost of the project and cost increases, and the financial implications of the project for the NCC.

Unit Cost and Repayment Calculation

The Umoja II houses were originally priced to yield a surplus to the NCC. The costs to the City can be summarized as follows:

- o construction costs for housing and infrastructure
- o consulting fees
- o survey costs
- o administrative costs

In order to generate a surplus for future housing developments and to price the houses closer to market values, the following cost components were added to the above direct costs:

- o an estimated value of the land at KSh20/m²
- o an "add-on" calculated at 10 per cent of the above items.

Of the construction costs for infrastructure and consultancy fees only a specific proportion of the total was included in the price of the individual units (overall approximately 68 per cent; see Appendix IV for computation sheets). The amount of monthly payments to be paid by the allottees for the housing units was calculated to reflect these capital costs over a 20 year period, on the basis of a 10 per cent fixed interest rate and a deposit of approximately 4 per cent. Under these conditions of cost-recovery the houses became affordable for households with incomes below KSh.3000 per month (\$165), without inclusion of additional income from subletting and on the assumption that 25 per cent of the income is spendable on housing. Prices and payments for the different house types were set as follows:

	Sales Price	Deposit	Monthly Payments
Condo Type A	KSh.59,900	KSh.2,500	KSh.554
Condo Type B	KSh.49,600	KSh.2,000	KSh.459
Condo Type C	KSh.45,300	KSh.1,700	KSh.421
Condo Type D	KSh.75,700	KSh.3,300	KSh.699
Core House	KSh.79,400	KSh.3,800	KSh.730

These figures were calculated in March 1987 on the basis of the estimated costs of the project after renegotiation of the contract with the second contractor. In other words, part of the escalation in costs through delays and increase in construction costs were reflected in this price. However, the actual costs of the whole contract, including all remedial works which had to be

done because of the faulty work by the first contractor, is much higher than estimated in 1987. The NCC will therefore ultimately lose considerably on the project unless repayments are allowed to reflect the increase in costs (see below).

Other non-budgetary costs not charged to the allottees are the underpriced land charges, the low interest rate as compared to commercial loans and an underestimation of administrative costs. The total hidden subsidies are therefore still considerable. One indication of the level of subsidy is the comparison with the prices of the units on the open market, which at first glance are at least 30 per cent higher, without the favourable financing conditions.

The carefully worked out cost-cutting design decisions, made in order to make the housing units economical and affordable, appear almost futile when compared to the tremendous cost escalations of the project because of delays and faulty workmanship.

The price of the complete houses which are to be sold at market price is still being debated. In view of the overall financial position of the project, it is advisable to sell these units for the highest possible price the market allows.

Total Project Costs, Repayments and Deficits

Preliminary cost estimates for the project in 1985 were KSh.212,000,000. At the time of the evaluation in October 1988, the contractor's and consultants' cost estimates added up to KSh.410,200,000. This estimate includes the amount paid to the previous contractor. It is based on the assumption that all eight zones will be constructed. If the last zone will not be constructed the costs of the total project will be KSh.362,000,000.

These cost increases are due partly to the fact that the original estimate was based on preliminary designs, and several variation orders had to be negotiated after the contract was signed. Also, specifications on doors and iron roof sheets were changed and increased the overall costs. However, most of the cost escalation is related to poor workmanship of the first contractor, which made it necessary to carry out extensive remedial work. The tremendous delays in project approval and implementation during a period of escalation of construction costs, contributed further to considerable cost increases. The construction cost index was 519 in January 1985, 559 in 1986, 637 in 1987 and 782 in 1988. Much of this increase is due to the fall of the Kenya Shilling, increases in duties on imported materials, and variations in Sales Tax including its imposition upon items not previously subject to this tax. As a result of the inclusion of remedial work and the increase in construction prices, the consultancy fees which are charged as a percentage of the total contract, increased as well. Speedy implementation and prudent qualification procedures for contractors would have saved more

money than any other single factor.

The insurance bond deposited by the previous contractor and outstanding claims on flood insurance, although amounting to close to KSh.35 million, appear not to be retrievable by the NCC. The reason given is that the insurer is the previous contractor and not the NCC and therefore the NCC does not have the legal right to demand claims or bonds. In view of the amount of money involved, and the earlier agreement with the insurance company on flood damage and theft claims, it appears advisable to have a private counsel follow up these issues once more. However, at the moment, this money cannot be used to offset increasing costs.

The cost increases have several critical consequences for the NCC:

- o The total amount of funds available from the \$17 million Housing Guarantee Loan is KSh.291,395,653 (conversion rates at time of disbursement). An additional borrowing of \$1.45 million (KSh.26,390,000) is approved, which brings the total US funding to KSh.317,785,653. The NCC committed KSh.30,000,000 to the project, but is at present not sure whether it is able to raise the money. This means that there may be as much as a KSh.44,000,000 deficit if Zone 8 is not constructed and a deficit of close to KSh.92,000,000 if the whole project will be completed. At the time of the evaluation, when these figures were calculated, no decisions had been taken on ways to close the deficit. Given the precarious financial situation of the NCC it may decide not to construct Zone 8 and allow the allottees to acquire a plot in a future housing project.
- o Because the price-increases were only partly reflected in the charges to the allottees, payments by the owners no longer cover the proportion of the costs originally anticipated and the deficit on the project for the NCC has increased considerably.

Apart from price increases in the project, other factors contribute to the bleak financial situation of the project:

- o Defaults on payments by the owners are extremely high and only 44 per cent of the amount which should have come in from deposits and monthly payments has been received to date (as per information from the finance department of the HDD, 27/9/88). However, the loan administration of the HDD does not allow an accurate assesment of received payments to be made. This figure is therefore tentative. Eighty-nine per cent of the deposit and monthly payments by the owners was planned to be deposited in the general fund of the NCC. The other 11 per cent was to be reserved in the special Housing Development Fund. With the high default rate the cash-flow problems have increased and only KSh.600,000 had been deposited into the Housing Fund at the time of the evaluation. (see chapter 7)

- o The foreign exchange risk on the HG loan is carried by the NCC. The NCC has to pay interest on the loan in US dollars and with the rapid devaluation of the Kenya Shilling the amounts it has to raise for these payments in local currency is increasing. Again, this affects the overall financial situation of the NCC negatively.

CHAPTER 7 INSTITUTIONAL DEVELOPMENT

The focus of the institutional development component of the project was to stimulate a greater financial and professional independence of the HDD. This part of the project ran into serious trouble and was never programmed in any detail. In this section we will discuss the types of inputs provided and the constraints that were experienced as well as some of the achievements in this area.

The main areas of agreement between USAID and NCC were the initiation of the **Housing Development Fund** and the **Housing Programming Unit**. In previous chapters we already mentioned that the Housing Development Fund was to receive 11 per cent of all monthly payments and deposits. In practice, the financial situation of the NCC has only allowed approximately 8 per cent of the expected incoming amount to be deposited (KSh. 602,000 from total expected income from Umoja II payments of approximately KSh. 7 million). The deposits in the Fund have so far been made irrespective of actual income from the project. In other words, arrears have not been taken into account. At present, the income from Umoja II consists largely of deposits and to a lesser degree of monthly payments. With increasing arrears in monthly payments, the incoming amount will be well below expectations. It is unclear how this will affect the deposits in the Housing Development Fund in the long run. The success of the Housing Development Fund is of great concern to the HDD, however, and HDD intends to become more aggressive in dealing with arrear cases.

The HPU was a more complicated concept and one which would have needed a detailed manpower and funding plan. The needs and functions of an HPU within the HDD were carefully analyzed in an excellent report by C.Patillo. Its success would depend on the quality of the staff that could be attracted. However, without commitment from USAID to provide technical assistance funds and from the NCC to create new positions, the HPU was never given a change. More importantly, within the present structure of the NCC the HDD does not have the mandate to act as a wider developer of low-income housing and is dependent upon the planning and engineering departments for approvals. A high level of commitment is critical to change the overall mandate and functions of the different departments in NCC, including the HDD. In general, institutional development work is ineffective and impossible when there is no real interest in change within the particular institution.

Ultimately, the institutional development efforts of the project were limited to assistance in the implementation process of Umoja II and were not much related to the overall functioning of the HDD. Most inputs were related to the facilitation of the allocation, orientation and settlement process which is the responsibility of the Community Development Department. Although those inputs were very effective and appreciated by the HDD, they were singularly focussed on Umoja II. Only staff working on the

Umoja II project was included in training and other institutional development inputs provided by AID.

Some of the reasons for the lack of success of this project component are summarized below:

- o At the time this proposal was developed the ideas concerning institutional development in the development agencies were not yet well developed. The common way to deal with inefficient institutions was to create a special implementation unit staffed with well paid professionals whose sole responsibility was the speedy implementation of the project. This was the scenario for the Umoja I project and for the World Bank projects. With the gradual change to more sectoral development strategies these concepts were modified; development became equated with building up the capacity within local institutions. However, at the inception of the project no adequate plan was prepared on the type and level of expertise and training needed, and very little financial resources were made available. Most inputs were therefore ad hoc.
- o Within the NCC and HDD Community Development Department there is a strong resistance against what is seen as "interference in internal affairs". The NCC/HDD went through a political upheaval and internal change, which did not facilitate an easy collaborative attitude towards outsiders within the agency. Under these circumstances high level expert inputs are shunned and more general inputs dismissed as non-relevant; a no-win situation for both AID and HDD.
- o The project orientation of institutional development inputs prevented overall departmental improvements from being implemented.
- o The priority for providing institutional inputs was the development of a fair allocation process. This goal has mostly been achieved. However, other important areas for improvement did not get the attention they deserved. For instance, the financial management of the loan system is hopelessly inadequate and has prevented the timely response to late payments and defaults in previous schemes. As a consequence the default record of the Umoja II project already shows signs of entrenched attitudes of non-payment which drastically affects the cash-flow of the project. In collaboration with the Treasury Department of the NCC, AID's inputs in this area might have made a crucial contribution to solve the financial management problems of the HDD.
- o For the HDD to take on the overall task of planning and providing for low-income housing in the City, the first step is a thorough review of its mandate and relationship to the other departments within the NCC. For instance, HDD needs to be able to initiate collaborative efforts with the private sector, it needs more independence to set relevant planning

and building standards. This requires internal NCC decisions at a high level without which institutional development inputs by external agencies are ineffective.

CHAPTER 8 PROJECT MANAGEMENT

In the overview of the project we indicated already that the planning and implementation process of Umoja II has seen many ups and downs: major delays occurred in the process of signing the agreements and in gaining the necessary approvals; the selection of an unqualified contractor and subsequent insufficient supervision of construction work delayed the project even further and increased the costs; the lack of continuous and consistent financial monitoring procedures created the situation where the costs of the project had, unknowingly to its implementors, increased beyond the available resources. What are some of the structural problems underlying the weaknesses in technical and financial management? And how can these be avoided in future projects?

The Management Team

The NCC/HDD as implementing agency faced considerable internal as well as external constraints in executing the project. Because local governments are both administrative and political bodies, decision-making and coordination processes for project implementation are often cumbersome and guided by political objectives. Some examples will indicate the effects this can have on project implementation:

The most problematic decision in this context was the **prequalification and selection process** of the first contractor. If purely professional criteria had guided the selection process, this firm would not have been prequalified and many problems and delays which plagued the project would never have occurred.

Another example of problems in the decision-making process is the acquisition of **approvals of standards and designs**. When one of the NCC departments is the main implementor of a project for which the NCC is the borrower, this process can become forbiddingly long. All relevant departments as well as various City Commission committees are included in this process and collaboration depends on the internal relationship between the departments. The original concept was that the HDD only had to relate to one NCC committee and would be less dependent on other technical departments for approvals. This would have facilitated the management of such pilot projects as Umoja II immensely. For instance, the approval period for the planning and design standards could have been much shorter. It would then have been unnecessary for the contract to go to tender on preliminary estimates and, therefore, there would have been less need for the large variation orders which have increased the costs of the project. Earlier, we mentioned the effects of the delays on the overall construction costs.

An example of coordination problems, which appear unimportant but

which may have long-term implications, are the difficulties in having the **legal documents for the sale** of the property signed at the time people take possession of their houses. Only a fraction of the owners have signed their tenant purchase agreements and the condominium association documents. Market transfers of those properties will be done informally and this will decrease the value of the properties as an investment. Also, without emphasis on the **establishment of condominium associations**, maintenance of the units will not be organized and this will eventually affect housing quality and value.

On the **financial management** side a similar situation of poor coordination and lack of supervisory capacity has affected the project. While the Treasury Department of the NCC is responsible for the disbursement requests and repayments of the Housing Guaranteed loan for Umoja and for making the approved payments to the contractors and consultants, it is not informed about the actual changes in costs of the overall project. At the same time, the HDD has no insights in the amount in KSh. still available from the HG loan and it does not monitor the overall cost of the project. Cost overruns are therefore not incorporated in regular project management decisions but are dealt with in crisis situations only. As the client of such a project the NCC should have better mechanisms for coordinating the overall finances and monitoring the cost of the project. The problems concerning the financial management of the project were augmented by fact that the consultants did not undertake any regular financial analysis of the project.

Also, the City Treasury is not directly involved in the collection of payments for deposits and monthly charges from the Umoja residents or any other low-income housing project. It receives no regular information from the HDD on the total income it could expect from these projects and of the arrear situation. It only receives summary statements well after the end of the financial year on amounts received and still outstanding.

The experience with Umoja and other similar projects suggest that a restructuring of the internal organization of the low-income housing related departments and committees is a prerequisite for future housing efforts.

Additionally, the appointment of an outside project manager should be considered. Such a manager should have the power to act on behalf of the client in many well defined areas and should have the ultimate responsibility for coordination of all technical and financial aspects of the project. As we will discuss below, the consultancy team to this project does not fullfill this role effectively.

The consultant team, which is responsible for the day to day management of the design and construction process, has generally carried out the tasks specified in the terms of reference. Plans were prepared, prequalification and tender documents were

designed, meetings were held at regular times, work was inspected in time, progress reports were regularly submitted etcetera. However, from consultants to a complex client as the NCC/HDD, stronger leadership and a more assertive management style might have been expected, particularly in times of crises.

Contrary to this expectation, the coordination within the team of consultants was at times lacking and always very loose. Information which should have been readily available and used in a consistent way by all parties within the group, such as the estimated costs of the total contract or the estimated unit price, was often not available and different parties worked with different figures. It was extremely difficult to obtain precise cost information from the consultants even after the new contractor had prepared detailed estimates. Also, while the original contract with the consultants specified the use of a financial analyst at regular intervals, no financial analysis of the project has been carried out since the design stage. This hampered the financial management of the project and has contributed to the present situation where, unbeknownst to the main implementers, available project funds are no longer sufficient even to finalize the seventh out of the eight zones of the project.

The consultants appear to have shown a stronger leadership role in the design stage of the project than during the actual implementation. In the absence of a specific project manager, the responsibilities of the consultant team are necessarily more comprehensive and supervisory than strictly specified in the contract. The team did not live up to these expectations, particularly when it was most needed during times of crises. When faced with the incompetence and deceitfulness of the first contractor a stronger leadership role could have been expected from the consultants. They should at an earlier stage have put a stop to the payments to the contractor since the work was sub-standard and the whole process of opening up the site and the sequencing of the work was an invitation to disaster. A competent and assertive project consultant could have prevented a financial debacle from happening. Yet, no responsibility is taken by the team for that episode and this has created a certain apprehensiveness in the relationship to AID. At present, with a bona fide contractor on site, management of the project is relatively simple and straightforward.

An issue not directly related to project management, but which has created frictions within the steering group, is the inconsistent **consultancy contract** which was drawn up by the consultants and on which basis the consultancy fees are calculated. There appears to be a widespread consensus among professionals that the document is ambivalent in the way it allows consultancy fees to be derived at. It has not been put together in a professional manner, even allowing for the variety in the different professional groups involved, architects, engineers and quantity surveyors. This ambivalence has raised unnecessary suspicion of overcharging. With the rising costs of

the contract and, therefore, rising consultancy fees, a clear and unequivocal contract would have facilitated the control over fee charges and would have prevented present communication problems. The consulting agreement does not conform to basic USAID requirements and it is unclear why it was signed in its present form.

The role of USAID/RHUDO is mostly one of financial guarantor of the project and therefore only calls for regular monitoring to ascertain that the project is implemented according to the specifications in the implementation and loan agreements. These specifications include technical, financial, social and developmental objectives.

USAID also would provide direct assistance to HDD related to the implementation of specific social and developmental objectives, e.g. the design and implementation of a fair allocation process, training of staff in community development approaches. USAID would pay for specialized consultants to assist HDD in these tasks. In addition, AID/RHUDO would, when specific problems arose, provide direct assistance to facilitate implementation of the project.

It is particularly on these social and institutional issues that monitoring by the RHUDO staff has focussed. RHUDO staff generally attend all steering committee meetings and even site meetings and know in great detail about the day-to-day progress of the project. Yet, in-depth financial or technical evaluations commissioned by AID were not built into the normal project cycle. With such close AID involvement in implementation aspects, the lines of responsibility between client, consultant and financier appear to have become blurred.

At times of problems or crises in the project implementation or management AID often felt the need to tighten up its supervisory role. Different ways were used to do this:

- o AID would send a letter of concern about specific financial, organizational or technical matters to the HDD director or the Town Clerk;
- o AID would call a special meeting with all parties concerned to discuss urgent issues;
- o AID would hire a short-term staff person, who would be acceptable to HDD, to work with the project implementation team;
- o AID would call in outside technical evaluators, often unbeknown to the other parties or without having discussed the terms of reference of such evaluators;
- o At the time of disbursement of the loan, the RHUDO would write to the HDD Director or the Town Clerk to warn that the new disbursement might be stopped if specific conditions would not be met, e.g. garbage collection in Umoja, the record of repayments, the Housing Development Fund, the titling of the land, the signing of tenant purchase agreements.

Although there is no question that AID/RHUDO has the right and in fact, the duty to monitor the project closely, the way this was pursued was not always effective and often created unnecessary tension between the main parties. This was particularly the case when outside evaluators were called in and when AID would refuse clearance of disbursements because of project implementation issues that were not directly connected to the main objectives of the project. Even by USAID the involvement of outside evaluators was considered a method of last resort during times when the leadership ability or objectivity of the consultants was questioned.

It is our opinion that, while a reasonable process of communication with clients and consultants was available this mechanism should have been pursued more vigorously before taking some of the above actions. From discussions with the consultants, it appears that many issues could have been resolved by directly confronting the involved parties at a high level of project management.

Furthermore, many of these actions by AID would have been unnecessary, if a regular half-yearly monitoring program by highly qualified outside professionals had been set up, whose terms of reference would be understood by all parties. This should have been part of normal prudent financial management procedures for a loan this size. In future projects, the role of AID in implementation and monitoring should be discussed and agreed upon in much greater detail.

Project Coordination

Because of the particular combination of decision-makers in the project, the management process is organized around committee meetings for different purposes. It is not necessary to describe the workings of these committees in detail here and on the whole this form of coordination works well for general day-to-day progress meetings on the construction part of the project. However, there are two drawbacks to this structure which are worth pointing out.

Steering Committee Meetings of the client are chaired by the HDD, while within the NCC some of the main issues related to project management are not within the responsibility of the HDD. Major issues, such as the financial management, are for that reason not included in the agenda of these meetings and can slip through, because there is no other point of coordination.

The second problem with the committee structure is the fact that often people who really are in a position to take actions do not attend and decisions taken at committee meetings will therefore not be acted upon. Also, the diffuse nature of the NCC makes it difficult for committee decisions to be pursued. Individuals who have to follow up on issues are easily rebuffed. The minutes of the meetings show agenda items return without any progress

reported for months.

Concluding, we can say that project management follows a well-defined process and is generally as effective as might be expected. However, the combination of responsibilities of different parties and the type of decision-making structure allow for loop-holes in management, causing delays and unnecessary crises. As mentioned above, for future projects the mandate of the HDD and its relationship to other NCC departments and Committees should be reviewed. Also, the internal coordination of project teams need to be strengthened by giving the consultant a stronger leadership role or by appointing an independent project manager.

RECOMMENDATIONS

In the previous analysis of the project it will have become clear that implementation of Umoja II has encountered many problems, some of which were circumstantial, while others are more structural in nature. The recommendations will therefore not repeat the analysis and will focus on suggestions for change where this will be pertinent for future project work or for the immediate rinalization of the project. Also, implementation problems need to be viewed separately from the intrinsic value of the product itself. In other words, the replicability of design standards and neighborhood features should be evaluated as a separate issue, independent from conclusions about the delivery system.

A. The completion of Umoja II

1. All parties agree that the speedy completion of Umoja II has the highest prioritiy. Even if there are many unresolved issues which seem important enough for USAID to show a serious concern, it is important that ways to resolve these problems be choosen which will not delay construction.

2. Given the financial shortfall of the project, and the overall financial situation of the NCC, the Commission should carefully assess whether it can raise the funding to finalize Zone 8. Given the conditions of the present HG loan to the Commission, whereby the NCC carries the foreign exchange risk, further borrowing on those terms beyond what is presently committed (\$17 million and \$1.45 million) appears unadvisable. The political problem of disappointing households which have been promised a plot in the project can be solved by transferring the allottees to the upcoming Kayole site and services project.

3. In view of the financial problems of the project and in keeping with the principle of selling houses as close to market values as possible, it is recommended that the housing units meant for sale be sold for the highest price the market will carry.

4. The priority for institutional inputs during this last year of the project should be in the area of administration and collection of monthly payments. The outdated card index system now used for the Umoja Estate loan administration makes it impossible to track late payments. Once it is generally known that defaulters are not prosecuted it is nearly impossible to turn the situation around. The improvement of loan administration is therefore a matter of the greatest urgency. Also, the poor financial situation of the NCC makes this a high priority issue. Basic computer systems for loan administration are already in place in the HDD as well as in the department dealing with the rental NCC housing. These systems appears to work efficiently and

internal know-how is therefore already available within the NCC. Costs for hardware and software could be paid for from the project income if grant money is not available; if the system of payment administration improves, these expenses will be earned back within a very short time.

5. Another high priority for action is the legal situation concerning the land tenure of the Umoja site and the tenant purchase agreements for allottees. Concerning the signing of tenant purchase agreements of present occupants, it appears necessary to put on a publicity campaign to stimulate people to come in and sign their agreements during specific days, preferably including a weekend. At the same time the condominium association concept and workings could be explained to those who come in. For those zones where housing units have not yet been occupied, problems with the agreement signing could be avoided by providing extra assistance to the legal department of the HDD for the timely preparation of the tenant purchase agreements so that allottees can sign at the time they receive their keys.

B. The Replicability of Umoja II

There are several aspects to the issue of replicability of Umoja II; the replicability of planning and building standards and the design characteristics of the housing units and community facilities in relation to the costs and affordability to the low-income groups, and, the replicability of the implementation process. The pilot nature of the project related specifically to the innovative standards and condominium design aspects, and in general these have proven to be successful enough to be replicated at a larger scale. The implementation process, on the other hand, needs serious reconsideration.

1. The densities in Umoja II, both in the number of housing units and in the number of persons per hectare and the infrastructural and building standards are a major breakthrough in formal sector low-income housing provision in Nairobi. It is recommended that these standards are accepted by NCC for future housing projects.

2. The Umoja II condominium house design (or a version with slightly fewer units) appears to be appreciated by most of its occupants. It provides a good level of security while at the same time it offers more privacy features than room rentals in site and services projects, because each unit has its own bathroom/toilet. In fact many of the occupants have moved to Umoja from the surrounding site and services areas. The design, although appropriate for condominium type ownership units, appears even more suitable for rental housing units. It is therefore recommended that the condominium concept as well as the design features should be further refined according to some of the user reactions which came out of the survey and made available to interested

public and private developers.

3. One of the most appreciated features of Umoja II is the level of community services which will be provided; schools, nurseries, markets and clinics. While it is too early to do a user survey at this point, it would be useful for future project planning to assess the satisfaction with and functioning of these facilities.

4. Even if only judged by the number of years it has taken to construct the 4000 housing units in Umoja II, it is clear that the implementation process is ineffective and has to be changed for the NCC to respond to the escalating demand for low-income housing. The NCC/HDD has clear limitations as developer, manager and financier of construction projects. These limitations are partly related to the lack of manpower and financial resources, but, more importantly, to its decision-making structure and the inefficacy of the financial management system. The collaboration with the private and cooperative sector in the provision of low-income housing may alleviate some of these problems. So far limited experience exists with this type of collaborative ventures, but these should be carefully evaluated, particularly on their relevance for the low-income groups. Ideally, the HDD should play a coordinating role, provide infrastructure and services, set appropriate standards etcetera. However, the present structure and mandate of the HDD does not allow it to play that role. A restructuring of the low-income housing departmental and committee structure in the NCC appears to be critical for most of the above concerns to be addressed.

C. Future USAID Support to NCC/HDD

1. The most urgent requirement for any input in the housing and urban development field in Nairobi is that it should effectively address the scale of the housing problem, particularly concerning low- and medium-income housing. Even if new approaches are experimented with in a pilot project, the ultimate test will have to be whether the housing system can be replicated on a large scale and within a reasonable time-span, given the financial and manpower limitations of the NCC. Only when a structure is in place which guarantees a efficient planning and implementation process should commitments be made. Alternative systems of collaboration with the private and non-government sector should be carefully explored. Issues related to the delivery system of housing are of equal importance as the actual product produced, yet, they seldom receive adequate attention.

2. Within the context of the Nairobi housing system it is important to consider the rental market as well as the ownership market since the demand for rental housing is high and the priority for owner-occupation low. This was again confirmed in the Umoja II evaluation. Most rental units are

presently supplied through the informal sector. In the formal sector site and services room-rentals with shared facilities provide the majority of units. These projects are, however, oriented towards owner-occupancy which is reflected in the whole planning and implementation process. Other supply systems, which may be more efficient in providing rental units to the market, should be explored as well, e.g. employer housing, private and non-governmental investment in rental housing. It is recommended that for future housing planning the rental market is studied carefully, both the demand aspects as well as the supply systems and the regulatory framework in which they operate.

3. Considering the present urban growth rate, the overwhelming need appears to be to add new housing units to the present stock (see Struyck and Nankman's study quoted on p.20). In this context the upgrading of existing units has a lower priority.

Also, traditional ways of upgrading have a limited potential in the Nairobi context, where landowners, homeowners and house-occupants are often different people. Because of the relative low densities, physical aspects of upgrading are not as complicated as in many other parts of the world. However, previous upgrading attempts have run into serious problems because land and house-ownership patterns were not understood. On-site upgrading which intends to benefit the present occupants is only feasible where owner-occupiers squat on government land or where cooperatives of residents own the land. In cases where land occupied by informal housing is owned by private landlords, the landowners will almost certainly have other plans with the land than the provision of formal housing affordable to the present low-income occupants. This is particularly true in an environment of rapidly increasing land values.

The main component of an upgrading program under these conditions should be the resettlement of the present occupants of the land. Since many private landlords in this category may own various parcels of land in Nairobi, it may be possible to use some of that land for a resettlement program. Because of the complicated land-ownership patterns in Nairobi squatter areas, a study of land markets ought to be a prerequisite for any upgrading project.

APPENDIX I

List of People Contacted

RHUDO, Nairobi:

Mr. Mike Lippe, Director RHUDO/ESA
Mr. Joel Kolker
Mrs. Teetee Weisel

Housing Development Department, Nairobi City Commission

Mr. H. Mugo, Director HDD
Mr. J.N. Muraya, Deputy Director HDD, Finance Department
Mr. S. Kingori, Technical Department
Mr. B. Gachuhi, Senior CDO
Mr. H. Aura, CDO
Mr. P. Wakaya, Legal Department

City Treasury Department, Nairobi City Commission:

Mr. P. Brice, Assistant City Treasurer

Ministry of Lands and Housing

Mr. Gilbert Njau, Housing Department, Ministry of Lands and Housing

Project Consultants:

Wanjohi Consulting Engineers:
Mr. Isaac G. Wanjohi, Principal
Mr. A.C. Pinto, Senior Resident Engineer

Mutiso Meneses International:
Mr. David Mutiso, Principal
Mr. M.I. Mwendwa, Resident Architect

John Aluoch and Associates:
Mr. John Aluoch, Principal
Mr. A. Otieno

Contractors:

B.S. Sanghani Construction
Mr. K. Sanghani
Mr. P.L. Sanghani, site agent.

Twiga Construction:
Mr. S.D. Patel, Site Engineer

Other Consultants to the Project:

Mr. T.W. Kagwe, Kagwe and Co. Advocates.
Mr. Ian Cambell, Research and Planning Services.
Mr. Chris Mitchell, Davson and Ward
Mr. G. Alder, Matrix Development Inc.

Others:

Mr. Ian Lane, CDC

USAID/PRE/ Washington

Mr. Fred Hansen
Mr. Peter Feiden

APPENDIX II

Terms of Reference Umoja Evaluation Draft

I. Background

Umoja II is a 4,400 unit home-ownership project being developed by the Nairobi City Commission through the Housing Development Department. Community facilities, including markets, primary and secondary schools, and workshops, as well as employment generation are also components of the project. Umoja II is designed to be fully cost recoverable with each unit reflecting the actual cost of the housing and the accompanying infrastructure.

The project was authorized in the fall of 1979 although the borrowing did not occur until the spring of 1985. The five year delay was due to a number of considerations including City Commission internal problems, high interest rates, standards and design issues, and changes in Commission personnel. Another delay occurred when the initial contractor, Greater Rift Valley, walked off the job causing a year delay and leaving nearly Ksh. 55 million in remedial work to be completed. The new contractor, LBS Contractors, is on site and work is now progressing on schedule. Supervision has been undertaken by a series of consultants paid by HDD through the USAID financing. There have been a number of problems with this relationship.

Project outputs, as outlined in the project paper, were to include the following;

- a. New low-income shelter solutions;
- b. Improved infrastructure services;
- c. New community facilities which were staffed and operating;
- d. Increased employment through construction activities as well as businesses and light industries established on site;
- e. The Nairobi City Commission using a revised, automated portfolio and accounts management system;
- f. The Nairobi City Commission producing and implementating a long range plan to produce low-cost shelter.

In order to make the Umoja II units affordable, a courtyard design concept was initiated. The intention is that residents will own their homes on a condominium basis whereby they have sole ownership of the individual houses and private open space, and shared ownership with four or five other families of the courtyard and common areas.

45

Each individual room has its own toilet, shower, and water tap. Electrical connections are also provided. While initial construction includes only one room, provisions have been made for an extension to two rooms (on some of the units) by the individual owner or their contractor. In addition, 28 core units and units with shops have been constructed and are being sold at market rates. The profits from these units will also go into Housing Development Fund run by the Nairobi City Commission.

A comprehensive public information, orientation, and community development program has been established by the Housing Development Department. This includes three different levels of community organization although their usefulness has been questioned.

Construction is being undertaken in eight stages. Zones one through four are complete and presently being occupied. Zones five through seven are now under construction. Due to a shortfall of funding, zone eight has been delayed although funds have been identified to complete the project. The anticipated completion date is mid 1989.

The project is being financed by a \$17 million loan through USAID and fully guaranteed by the U.S. and Kenya governments. The terms include variable rate interest payable over 30 years with a ten year grace period. Title deeds will be on a 99 year leasehold basis.

The overall objectives of the evaluation include the following:

1. Determine the extent to which the goals outlined in the project outputs were met;
2. Examine whether the target beneficiaries were reached;
3. Evaluate the success of the project design and the concept of condominiums;
4. Examine the effectiveness of community services;
5. Evaluate the overall project management and make recommendations for future projects.

II. Statement of Work

The consultant will be required to undertake the following activities:

1. Familiarize itself with all relevant project documents;
2. Prepare a detailed plan for the evaluation study, including the proposed methodology, procedures, and logistics. The plan should be approved by the Nairobi City Commission's Housing Development Department and RHUDO.;

3. Manage and coordinate with a separate team of consultants responsible for the collection of data. Once this information has been collected, the consultant will be responsible for the analysis of the data.
4. Undertake an evaluation as described below and make recommendations regarding future projects.
5. Prepare a draft report for submission to AID/Kenya and RHUDO/ESA within two weeks after the conclusion of field work;
6. Prepare and submit the final evaluation report within three weeks of receiving HDD and RHUDO/ESA comments;

The following evaluation topics should be given priority:

1. Analysis of Beneficiaries

- a. Determine the approximate monthly incomes of beneficiaries and evaluate whether the targets were reached.
- b. Examine the percentage of renters and owners.
- c. Examine the percentage of arrearages and recommend possible improvements.
- e. Determine the beneficiaries monthly income and the percent spent on housing. Examine whether the affordability figures initially set were accurate.
- f. Examine whether owner-occupants are renting out their second room. If so, at what cost? Determine the effect these renters have on overall affordability rates.
- g. Determine where beneficiaries were living before Umoja.
- h. Determine the number of persons per unit by type.
- i. Examine whether the beneficiaries are satisfied with the level of construction.
- j. Examine the cost of housing in comparison to other household expenditures.
- l. Examine the process being used to reallocate the lots of beneficiaries given duplicate plots.
- m. Examine the number of units completely occupied by renters and suggest alternative arrangements for future projects.

2. Units and Construction

- a. Determine the average beneficiary investment into units by type. Generally identify what types of investments were made.
- b. Examine what other sources of funds are tapped for construction of the additional rooms or investments and where they come from. Briefly examine the role of the informal sector.
- c. Determine the beneficiary reactions to plot size and level of services. Make recommendations for future projects.
- d. Examine the rental levels by unit types?
- e. Evaluate the actual market value of units by type?

3. Community Services

- a. Examine the beneficiaries reactions to the condominium associations. ie, are they active? Why or why not. Make recommendations on the role of community organizations in future projects.
- b. Examine the effectiveness of the orientation program.
- c. Determine if the open spaces are being utilized.
- d. Determine whether the schools are being properly utilized.
- e. Examine the process used to allocate market stalls.
- f. Examine the institutional constraints to providing garbage collection and electrification.

4. Project Management

- a. Evaluate the assigned roles/responsibilities among the various institutions, including AID, and make recommendations for future projects.
- b. Examine the coordinating mechanisms used during project implementation and their effectiveness.
- c. Examine some of the institutional effectiveness within Housing Development Department (HDD).
- e. Identify institutional problems within the contracting procedures.

f. Examine the utilization and effectiveness of the supervising engineer consultant.

g. Determine what resources (ie materials, financial, manpower) affect the efficiency of project implementation.

h. Recommend possible changes in the project design or implementation procedures.

STANDARDS CHART

CONSTRUCTION STANDARDS	1		2		3		4		5		6		7		8		9	
	OPTIONAL, EXISTING, LOW RISE	COMMERCIAL, FACTORY	RESIDENTIAL, MULTI-FAMILY	RECOMMEND (NOT D. MEMORANDUM)														
CONCRETE	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
STEEL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
WOOD	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
GLASS	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
ROOFING	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
MECHANICAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
ELECTRICAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
PLUMBING	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
PAINTING	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
FINISHES	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
GENERAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
TOTAL	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

The first part of the chart is the list of standards...
 1. The first part of the chart is the list of standards...
 2. The second part of the chart is the list of standards...
 3. The third part of the chart is the list of standards...
 4. The fourth part of the chart is the list of standards...
 5. The fifth part of the chart is the list of standards...
 6. The sixth part of the chart is the list of standards...
 7. The seventh part of the chart is the list of standards...
 8. The eighth part of the chart is the list of standards...
 9. The ninth part of the chart is the list of standards...
 10. The tenth part of the chart is the list of standards...

Best Available Document

APPENDIX IV

CONDOMINIUM TYPE A UNIT

Computation of Sales Price

Per Unit Cost

1. House Construction	(407,765 X .0998)		<u>40,695</u>
2. Infrastructure			
a) Bus Route:	<u>2,784,235</u>	X .18 =	<u>501,162</u>
b) Foul Trunk Sewers:	<u>988,983</u>	X .46 =	<u>454,932</u>
c) Local Distributors:	<u>3,234,957</u>	X .70 =	<u>2,264,470</u>
d) Other Infrastructure:	<u>31,018,668</u>	X .75 =	<u>23,264,001</u>
Total			<u>26,484,565</u>
Divide by Area (square meters)			<u>/260,763</u>
Average Square Meter Cost			<u>101.57</u>
Less 100% Weighing Factor For Road Access			<u>X .8132</u>
Condominium Plot Square Meter Cost			<u>82.60</u>
Multiply by Type A Sub-Plot Factor			<u>X 56.68</u>
			<u>4,682</u>
3. Architectural, Engineering, Surveying, and Other Consulting Costs			
Total Fees Paid			<u>25,500,000</u>
Multiply by Percent of Construction Costs Charged to Condo Type A Unit (#'s 1 plus 2 divided by total construction costs)			<u>.000226</u>
			<u>5,763</u>
4. Land Value			
Square Meter Value			<u>20.00</u>
Multiply by Plot Size			<u>X 48.89</u>
			<u>978</u>

5. NCC Administration cost

Subtotal of #1-4	<u>52,118</u>
Add 5%	<u>X .05</u>
	<u>2,606</u>

6. NCC Housing Fund

Subtotal of # 1-4	<u>52,118</u>
Add 10%	<u>X .10</u>
	<u>5,212</u>

TOTAL	<u>59,936</u>
-------	---------------

SALES PRICE (ROUNDED)	<u>59,900</u>
-----------------------	---------------

Down Payment	<u>2,500</u>
--------------	--------------

Balance as Mortgage Loan	<u>57,400</u>
--------------------------	---------------

Monthly Payment (10%, 20 yrs)	<u>554</u>
-------------------------------	------------

Core Unit No. _____

Interviewer _____

UMOJA II
USER SURVEY QUESTIONNAIRE
CORE UNITS

Interviewer _____

Date of interview _____ Start _____ Finish _____

Core number () () 1
Zone number () 2

Name of allottee (from HDD records) _____
(Is name same as owner respondent: Yes ___ No ___) () 3

The core unit is occupied by: TICK ONE ONLY:

the owner himself/herself or a member of the owner's family
not paying rent _____ ()
a tenant paying rent to owner or paying repayments for owner _____ ()
more than one tenant sharing the rent _____ () 4

Describe the state of the unit: TICK ONE ONLY:

The unit has not been extended (there is only the core) _____ ()
The extension is under construction _____ ()
The extension has been completed _____ () 5

The total number of completed rooms in the house is _____ () 6
COUNT ALL THE ROOMS EXCEPT THE BATHROOM

SECTIONS 1 - 3.

QUESTIONS FOR BOTH OWNER OCCUPIERS AND TENANTS

(The interviewer will interview the head of the household
whenever possible and confirm this by filling in below:)

The respondent is the head of the household: Yes ___ No ___ () 7

If no, the respondent is the _____
of the head of the household () 8

(Ask the respondent: please will you answer the following questions as part of a survey of people living in Umoja II estate. The survey is being undertaken so that HDD and USAID can understand more about your views and preferences in order to improve this and other housing projects.)

SECTION 1.

- 1.1. Age of head of household: 18 - 25 ___
 25 - 30 ___
 30 - 40 ___
 40 - 50 ___
 50 - 60 ___
 60 and above ___ () 9
- 1.2. Sex of head of household: Male ___ Female ___ () 10
- 1.3. When did you move in: Month _____ Year _____ () () 11

SECTION 2

- 2.1. Where did you last stay before moving to Umoja II:
 up-country ___
 another town ___
 in Nairobi ___ () 12
- 2.2. If Nairobi, where did you stay: _____ () () 13
- 2.3. Did you previously: own your house ___
 rent accommodation ___
 stay in a hotel ___
 stay with relatives/friends ___ () 14
- 2.4. At your previous residence, did you have electricity:
 Yes ___ No ___ () 15
- 2.5. Where did you get water from: own tap ___
 shared tap on plot ___
 water from off plot (e.g. kiosk) ___
 other _____ () 16

ASK PREVIOUS RENTERS AND OWNERS ONLY

- 2.6. How many rooms did you own/rent (circle answer)
 1 2 3 4 5 6 () 17
- 2.7. How many people occupied these rooms (circle answer)
 1 2 3 4 5 6 7 8 9 10 11 12 () () 18

51

ASK PREVIOUS RENTERS ONLY

- 2.8. What rent were you paying per month before moving here:
- | | | | |
|-----|---------------|-----------------|--------|
| Shs | 0 - 200 | _____ | |
| | 200 - 400 | _____ | |
| | 400 - 600 | _____ | |
| | 600 - 800 | _____ | |
| | 800 - 1,000 | _____ | |
| | 1,000 - 1,200 | _____ | |
| | 1,200 - 1,400 | _____ | |
| | 1,400 - 1,600 | _____ | |
| | over 1,600 | _____ (specify) | (_) 19 |
- 2.9. Did the rent include water: Yes ___ No ___ () 20
- 2.10. If no, how much did you pay for water (per month)
Shs _____ () 21
- 2.11. Did the rent include electricity: Yes ___ No ___ () 22
- 2.12. If no, how much did you pay for electricity (per month)
Shs _____ () 23
- 2.13. Why did you move to Umoja II:
(Number three in order of priority)
- | | | | |
|-------|-------------------------------------|-------|--------|
| | to own a house | _____ | () 24 |
| | to be next to relatives/friends | _____ | () 25 |
| | cheaper | _____ | () 26 |
| | nearer work | _____ | () 27 |
| | better accommodation | _____ | () 28 |
| | nowhere else | _____ | () 29 |
| | evicted from previous accommodation | _____ | () 30 |
| | other (specify) | _____ | |
| _____ | | | () 31 |
- 2.14. What do you like about the Umoja II estate and the services provided: THREE POINTS ONLY
- _____ () 32
 - _____ () 33
 - _____ () 34
- 2.15. What do you dislike about the Umoja II estate and the services provided: THREE POINTS ONLY
- _____ () 35
 - _____ () 36
 - _____ () 37

Core Unit No. _____

Interviewer _____

SECTION 3.

- 3.1. Are you: employed (i.e. earning a wage or salary) ___
self-employed ___
unemployed ___ () 38
- 3.2. What is your occupation: _____ () () 39
- 3.3. If employed, who do you work for:
Government ___
parastatal ___
local authority ___
private employer ___
other (specify) _____ () 40
- 3.4. How do you get to and from work:
public transport - bus or matatu ___
employer transport ___
own/friend's/relative's car ___
bicycle ___
walk ___ () 41
- 3.5. How many other people in your household have an income ___ () 42
- 3.6. Do any of them contribute to the household expenditures
Yes ___ No ___ () 43
- 3.7. What is your estimate of the total (combined) income of
your household per month:
Shs 500 - 1,000 ___
1,000 - 1,500 ___
1,500 - 2,000 ___
2,000 - 3,000 ___
3,000 - 4,000 ___
4,000 - 5,000 ___
5,000 - 6,000 ___
6,000 - 7,000 ___
over 7,000 ___ () () 44

SECTION 4QUESTIONS FOR TENANTS ONLY

- 4.1. How many rooms do you and your family occupy _____ () 45
- 4.2. How many people are staying in these rooms:
- | | | |
|--------------------|-------|------------|
| Head of h/h | _____ | |
| Husband or wife | _____ | |
| Children | _____ | |
| Other relatives | _____ | |
| Others not related | _____ | |
| Total | _____ | () () 46 |
- 4.3. If others not related, who are they _____
 _____ () 47
- IF THE CORE UNIT HAS BEEN EXTENDED ASK:
- 4.4. Are there other tenants living in the other rooms in:
 the house Yes ___ No ___ () 48
- 4.5. If yes, how many other people live in the house _____ () 49
- 4.6. Has the landlord made improvements to the rooms
 that you occupy: Yes ___ No ___ () 50
- 4.7. If yes, what improvements have been made: NO MORE THAN
 THREE POINTS
 _____ () 51
 _____ () 52
 _____ () 53
- 4.8. Did you apply for a unit or house at Umoja II and fail
 to be allocated one: Yes ___ No ___ () 54
- 4.9. Did the landlord himself/herself ever live in this house:
 Yes ___ No ___ Don't know ___ () 55
- 4.10. Are you the first tenant to live here:
 Yes ___ No ___ Don't know ___ () 56

Core Unit No. _____

Interviewer _____

4.11. What is the name of your landlord:

* (Is name same as allottee: Yes _____ No _____) () 57

4.12. How can he/she be contacted (Place of work/telephone number
Box number etc.)

4.13. Are you related to the landlord: Yes ___ No ___ () 58

4.14. If yes, do you pay rent to the landlord or do you pay
the monthly payments to the City Commission on behalf of
the landlord:

rent ___ re-payments ___ () 59

IF RENT:

4.15. How much rent do you pay per month: Shs _____ () 60

IF REPAYMENTS:

4.16. How much do you pay per month: Shs _____ () 61

4.17. Does this rent/repayments include water: Yes ___ No ___ () 62

4.18. If no, how much do you pay for water per month: Shs _____ () 63

4.19. Do you share the rent/repayments with anyone else who
is living here: Yes ___ No ___ () 64

4.20. If yes, how many people share the rent: _____ () 65

4.21. How much do they pay each: Shs _____ () 66

Thankyou for answering these questions. In case I want to contact you
again, please give me the name of the head of the household:

SECTIONS 5, 6 and 7.QUESTIONS FOR OWNER OCCUPIERS ONLYSECTION 5.

- 5.1. Are you the original allottee (or a member of the original allottee's family and not paying rent): Yes ___ No ___ () 67
- 5.2. If a member of the family, how are you related to the owner
_____ () 68
- 5.3. If not the original allottee, did you purchase the unit:
from the original allottee ___ through an agent ___ () 69
- 5.4. If bought, how much did you pay for it: Shs _____ () 70

SECTION 6

- 6.1. Space has been provided for the addition of three rooms to the house, what progress has been made:
- | | Finished | Started
but not finished | Not Started | |
|------------|----------|-----------------------------|-------------|--------|
| Room No. 1 | _____ | _____ | _____ | () 71 |
| Room No. 2 | _____ | _____ | _____ | () 72 |
| Room No. 3 | _____ | _____ | _____ | () 73 |
- 6.2. Did the owner buy a building plan from HDD Yes ___ No ___ () 74
- 6.3. Has the owner added more rooms or features which are not on the plan: Yes ___ No ___ () 75
- 6.4. If yes, how many other rooms: _____ () 76
- 6.5. What other features: NO MORE THAN THREE

_____ () 77
() 78
() 79
- 6.6. Who bought/is buying the materials:
the owner ___ the builder ___ () 80
- IF ALL THE BUILDING WORK IS FINISHED ASK THE OWNER:
- 6.7. How much did all the building work cost you: Shs _____ () 81
- 6.8. How much did you pay the builder: Shs _____ () 82

Core Unit No. _____

Interviewer _____

ASK THE OWNER THE FOLLOWING QUESTIONS WHETHER THE BUILDING WORK IS FINISHED OR UNFINISHED

6.9. How did you pay/are you paying for the extension

directly from income: ____

savings: bank account ____ savings & credit society ____
cash ____ other (specify) _____

loan: family/friends ____ merry-go-round ____ bank ____
savings & credit society ____ finance house ____
employer ____ other (specify) _____ () () 83

SECTION 7

7.1. What improvements to the core unit have you made or started:

plastering ____
ceiling ____
wiring for electricity ____
additional security (locks, bars etc.) ____
partition walls ____
painting ____ () 84

7.2. Have you made/are you making any changes to the arrangement of the space in the core house itself: Yes ____ No ____ () 85

7.3. If yes, what changes: NO MORE THAN THREE

_____ () 86

_____ () 87

_____ () 88

7.4. How much did you spend on these improvements: Shs _____ () 89

7.5. How did you pay for the improvements:

directly from income: ____

savings: bank account ____ savings & credit society ____
cash ____ other (specify) _____

loan: family/friends ____ merry-go-round ____ bank ____
savings & credit society ____ finance house ____
employer ____ other (specify) _____ () () 90

7.6. If you took a loan, how much did you borrow: Shs _____ () () 91

63

Core Unit No. _____

Interviewer _____

7.7. Have you enquired about an electrical connection:
Yes ____ No ____ () 92

7.8. Which of the following would you have paid higher monthly charges to have had constructed for you: THREE IN ORDER OF PRIORITY:
more space _____
finishes (plaster, ceilings) _____
electricity _____
other (specify) _____ () 93

7.9. What comments do you have on the structure of the core house:
NO MORE THAN THREE COMMENTS

() 94

() 95

() 96

7.10. What features do you like most about the house design:
NO MORE THAN THREE

() 97

() 98

() 99

7.11. What features do you like least about the house design: NO MORE THAN THREE

() 100

() 101

() 102

7.12. What do you think you might do in future (if the family gets bigger, or you have to move elsewhere) would you:
sell the house ____
rent the house ____
keep the house in the family ____
other (specify) _____ () 103

7.13. Are your repayments up to date: Yes ____ No ____ () 104

Thankyou for answering these questions. In case I want to contact you again, please give me the name of the head of the household:

64

UMOJA II

BENEFICIARY SURVEY QUESTIONNAIRE: ALLOTTEES WITH TENANTS

Condo unit No. () () () 01
Zone No. () 02
Unit type () 03

Name of respondent _____

Is the respondent the original allottee: Yes ___ No ___ () 04

If not the original allottee, how did the respondent acquire the unit:
_____ () 05

Does the respondent or a member of his/her immediate family currently occupy the unit: Yes ___ No ___ () 06

If no, what is the respondent's main reason for not occupying the unit

_____ () () 07

How did the respondent raise the money for the deposit:
income ___ loan ___ savings ___ () 08

If savings, where from: bank account ___ cash ___ other
(e.g. withdrew savings from building society)
_____ () 09

If loan, what was the source:
family/friends ___ bank ___ finance house ___ employer ___
savings & credit society ___ merry-go-round ___
other _____ () () 10

Has the respondent signed the Tenant Purchase Agreement with the City Commission: Yes ___ No ___ () 11

Has the respondent ever occupied the unit: Yes ___ No ___ () 12

If no, did the respondent ever intend to occupy the unit:
Yes ___ No ___ () 13

_____ () 14

Does the respondent intend to occupy the unit in future:
Yes ___ No ___ () 15

_____ () 16

Did the respondent attend the orientation sessions
Yes ___ No ___ () 17

Is he/she a member of the condominium association
Yes ___ No ___ () 18

Has he/she ever been to any meetings of the condominium
association:
Yes ___ No ___ () 19

What does the respondent understand the purpose of the
condo association to be:

_____ () () 20

ASK OWNERS OF A AND D TYPE UNITS ONLY:

Have you made any improvements to the unit: Yes ___ No ___ () 21

If yes, what improvements:

plastering _____
plastering and painting _____
wiring (for electricity) _____
ceilings _____
partitions _____
improved security (locks, better doors, window bars) _____
moved/changed cooking place _____
put sink in unit _____ () () 22

other (specify) _____ () () 23

Did you buy the materials or did the builder buy
the materials: owner ___ builder ___ () 24

How did you choose the builder
_____ () 25

How much did the improvements cost: materials: Shs _____ () () 26
 labour: Shs _____ () () 27
 total: Shs _____ () () 28

What did you use to finance the construction:
 income ___ loan ___ savings ___ () 29

If savings, where from: bank account ___ cash ___ other
 (e.g. withdrew savings from building society)
 _____ () 30

If loan, what was the source:
 family/friends ___ bank ___ finance house ___ employer ___
 savings & credit society ___ merry-go-round ___
 other _____ () 31

What other improvements/changes/extensions would you like to make:
 (GIVE DESCRIPTION/DETAILS OF WHAT THEY WANT TO DO UNDER EACH HEAD)

Partitions _____ () 32
 Plumbing _____ () 33
 Position of doors _____ () 34
 Extend into outside space _____ () 35
 Electrical wiring _____ () 36
 Other _____ () 37

ASK OWNERS OF B AND C TYPE UNITS ONLY

Have you made improvements to the unit: Yes ___ No ___ () 38

If yes, what improvements:
 plastering ___
 plastering and painting ___
 wiring (for electricity) ___
 ceilings ___
 partitions ___
 improved security (locks, better doors, window bars) ___
 moved/changed cooking place ___
 put sink in unit ___ () () 39

other (specify) _____ () () 40

Have you extended the unit: No ___ Started ___ Completed ___ () 41

IF COMPLETE:

Did you undertake the improvements and the extension at the same time: Yes ___ No ___ () 42

Did you buy the materials or did the builder buy the materials: owner ___ builder ___ () 43

How did you choose the builder
_____ () 44

How much did the improvements cost: materials: Shs _____ () () 45
labour: Shs _____ () () 46
total: Shs _____ () () 47

What did you use to finance the construction:
income ___ loan ___ savings ___ () 48

If savings, where from: bank account ___ cash ___ other
(e.g. withdrew savings from building society)
_____ () 49

If loan, what was the source:
family/friends ___ bank ___ finance house ___ employer ___
savings & credit society ___ merry-go-round ___
other _____ () 50

What other improvements/changes/extensions would you like to make:
(GIVE DESCRIPTION/DETAILS OF WHAT THEY WANT TO DO UNDER EACH HEAD)

Partitions _____ () 51

Plumbing _____ () 52

Position of doors _____ () 53

Extend into outside space _____ () 54

Electrical wiring _____ () 55

Other _____ () 56

ASK ALL OWNERS:

If undertook improvements/extensions, were these undertaken before finding a tenant: Yes ___ No ___ () 57

12

How did you find a tenant (TWO POINTS ONLY)

_____ () 58

_____ () 59

How did you decide what rent to charge (is the rent level related to the amount spent on the extension/improvements or on other factors e.g. market rent)

_____ () 60

How much rent do you charge: Shs _____ per month () 61

Have you received any water bills: Yes ___ No ___ () 62

If yes how much do you pay for water: Shs _____ per month () 63

Does the rent include water: Yes ___ No ___ () 64

If no, how much do you charge for water: Shs _____ per month () 65

Are your repayments to NCC up to date: Yes ___ No ___ () 66

If no, how many months are you in arrears _____ months () 67

CHARACTERISTICS OF OWNERS:

Age of respondent: 18 - 25 ___
26 - 30 ___
31 - 40 ___
41 - 50 ___
51 - 60 ___
61 and above ___ () 68

Sex of respondent: Male ___ Female ___ () 69

Employed ___ Unemployed ___ Self-employed ___ () 70

Occupation _____ () 71

If employed who is the employer _____ () 72

Place of residence _____ () 73

Type of residence: detached/semi-detached house ___
flat ___
shared house ___
other _____ () 74

Number of rooms occupied by respondent and family: ___ () 75

Where is water source:
own inside ____ own outside ____ shared outside ____ () 76

Is there electricity: Yes ____ No ____ () 77

Does the respondent: rent the accommodation ____
own the accommodation ____
live in employer owned house ____
other _____ () 78

If rent, how much does the respondent pay: Shs _____ pm () 79

How many people are in the respondent's household: _____ () 80

Was number in household a contributory reason for not
living in the unit in Umoja II: Yes ____ No ____ () 81

How many of the household members contribute to the
household income: _____ () 82

Estimate of total (combined) income of your household per month
Shs 500 - 1,000
1,000 - 1,500
1,500 - 2,000
2,000 - 3,000
3,000 - 4,000
4,000 - 5,000
5,000 - 6,000
6,000 - 7,000
over 7,000 () () 83

(INTERVIEWERS COMMENTS ON INCOME ESTIMATE):

() 84

What is the respondent's opinion of the standard of
construction of the condo units: (THREE POINTS ONLY)

() 85

() 86

() 87

What comments does the respondent have on the Umoja II
estate and the services provided: (THREE POINTS ONLY)

() 88

() 89

() 90

REPORT ON THE SURVEY OF BENEFICIARIES OF UMOJA II

BY SARA WAKEHAM

The survey was conducted between August 17th and 29th 1988 in Zones 1 - 4. The occupants of 242 of the 1,629 condominium units and 30 absentee owners of those condominium units who were identified through the occupants survey were interviewed. A 100 percent occupancy survey was undertaken of the 146 core units in Zones 1 - 4 and occupants of 36 of the 75 occupied core units were interviewed. Appendix A gives a detailed breakdown of the sample.

The main objectives of the survey were:

1. To establish whether the project goal of providing home ownership for those at or below the median income group has been met
2. To obtain the opinion of residents on the accommodation and services provided
3. To examine the residents' understanding and appreciation of the condominium concept
4. To examine the extent and the nature of consolidation and the type and amount of investment in improvements and extensions
5. To examine rent levels and arrearages

This report presents the main findings of the survey in relation to these objectives.

SUMMARY OF MAIN OBSERVATIONS AND CONCLUSIONS

As the survey was undertaken in Zones 1 - 4 only, which are not yet fully occupied, it is too early to draw many firm conclusions. Zone 4 has only been available for occupation since April 1988 and 55% of those interviewed had lived in the unit for less than three months. Only two or three units in many condominiums in Zones 3 and 4 are currently occupied. The impact of full occupancy has therefore not yet been felt in a large proportion of the condominiums visited.

The rate at which the units are being occupied appears to be slow considering the demand for accommodation in Nairobi. 12% of the units in Zone 1, which was ready for occupation in July 1987, are still vacant. The reasons for this slow

occupation of units are unclear but it appears that many owners do not want to occupy the unit themselves or put a tenant in before they have completed the improvements and extension. It is not possible to determine how many allottees intend to eventually occupy the unit nor how many are trying to find tenants or buyers, but the survey showed that 66% of the allottees have chosen to let their units rather than live in them.

It is not possible to determine how many people never intended to occupy the unit but simply "bought a ticket for the lottery" in the hope that they might win an additional source of income or capital. The reasons given for not occupying the units vary but it is clear that a number of allottees thought that the units would be the same as those in Umoja I and do not want to live in the condominium arrangement. This does not, however, explain the large number of core houses which are also still vacant. 52% of the core units in Zones 1 - 4 have not been occupied nor are they being extended. In this case, it appears that the allottees are having difficulties in raising the finance to construct the extension and are holding on to them in the hope that they will be able to extend sometime. They may, however, be forced to sell the unit as the cost of construction increases.

34% of the occupied condominium units are inhabited by owners who are predominantly in the lowest income group and are undoubtedly surprised and pleased to have "won" a home of their own. However, many of these have large families and have not yet been able to raise the finance to extend. Only 21% of the owner occupants of B and C type units have completed the extension. The units offer neither the space for a big family nor the potential to let some space to a lodger. They are clearly more suitable as bedsitters for single working people and young married couples with one or two children which is what they are increasingly becoming. The survey established that the tenants as a whole fit into this category.

The most common situation is therefore that the five or six rooms in a condominium are occupied by a mix of owners and tenants, with the tenants outnumbering the owners by two to one. This clearly calls into question the whole concept of the condominium associations as a means of organizing residents into self-help groups. The situation at present is that the owner occupiers are keen to introduce some means by which maintenance, cleaning and security in the condominium can be organized. A predominantly tenant population with different landlords makes this difficult and many commented on the problems of sharing space and facilities without one individual, such as a landlord, to oversee the situation.

The main criticism from both owners and tenants is that the units, with the exception of the D type, are too small. The courtyard is also thought to be too small especially where families with a large number of children inhabit most rooms in the condominium. There is clearly a desire on the part of owner occupiers to extend their living space by building on the private outside area. The main advantage of living in Umoja II as perceived by most residents is the high level of community facilities which will be provided when they become operational. Despite the fact that few are operating yet, many respondents mentioned the proximity to primary schools, nursery schools, markets and clinics as the aspect they liked most about Umoja II.

SURVEY FINDINGS

1.1. Occupancy

Of the 242 households interviewed in the condominium units, 160 (66%) were tenants, and 82 (34%) were owners or members of the owners' immediate family not paying rent or repayments.

	Number	Percent
One tenant	152	62.8%
More than one tenant (sharing the rent)	8	3.3%
Owner himself/herself	71	29.3%
Member of owner's family (not paying rent to owner)	11	4.5%

This can be broken down as follows for the different zones:

	Tenants		Owners	
Zone 1	33	(67%)	16	(33%)
Zone 2	41	(73%)	15	(27%)
Zone 3	36	(57%)	27	(43%)
Zone 4	50	(69%)	22	(31%)

A 100% sample of the 146 core units in Zones 1 - 4 revealed that 27% were occupied by tenants, 21% by owners and 52% were unoccupied:

	Total	Tenants	Owners	Vacant
Zone 1	19	9	4	6
Zone 2	52	20	10	22
Zone 3	42	7	7	28
Zone 4	33	4	9	20
	146	40 (27%)	30 (21%)	76 (52%)

Of the 70 occupied units, 43% are occupied by owners and 57% by tenants

1.2. Household incomes and occupation of household heads:

Respondants were asked how many members of their household were earning and contributing to the household income. In 75% of both owner occupier and tenant households the head of the household is the only earner. 18% of owner households and 21% of tenant households have one other earner, usually the spouse of the household head.

79% of the owner occupiers and 49% of the tenants said that their total monthly household income was below Shs 3,000. Looked at another way, 21% of the owner occupiers and 51% of the tenants admitted to a total household income of more than Shs 3,000 per month.

The 30 absentee owners were also asked to estimate their household income. 43% said that it was below Shs 3,000 and 57% admitted to over Shs 3,000 which accords more with the tenant than the owner occupier responses.

H/h income	Tenants	Owner occupiers	Absentee owners
0 - 500	0	2.4%	0
501 - 1,000	1.9%	1.2%	0
1,001 - 1,500	6.3%	6.1%	0
1,501 - 2,000	14.4%	26.8%	0
2,001 - 3,000	26.9%	42.7%	43.3%
3,001 - 4,000	23.1%	12.2%	33.3%
4,001 - 5,000	15.6%	4.9%	10.0%
over 5,000	11.9%	3.7%	13.3%

The owners' responses may have been influenced by the fact that they are aware that a condition of allocation was that their income should not be higher than Shs 2,400 at the time of allocation. Despite this, 57% of the absentee owners admitted to having incomes in excess of Shs 3,000 per month. The owner occupiers do seem to be in the lowest income group. The interviewers were asked for their own observations on the income level of respondents and all agreed that as a group the owner occupiers appear to have lower incomes than the tenants.

83% of tenants, 88% of owner occupiers and 100% of absentee owners were in regular, formal sector employment. 14% of the tenants and 7% of the owner occupiers were self employed. This indicates that under the present allocation process, it is harder for the self-employed to qualify for a unit.

A higher percentage of both owners and tenants are in office rather than manual work. Only 23% of owner occupiers and 16% of tenants were in skilled, semi-skilled or unskilled manual work. The highest number fall into the clerk/typist, accounts clerk, technician categories; 29% of owners and 32% of tenants are in these categories.

A higher proportion of owner occupier household heads are in lower paid jobs: 41.5% of owners and 21% of tenants are in the clerk/typist and semi-skilled manual category. All those in the professional and white collar management categories are tenants. All but four of the absentee owners were in "white collar" jobs.

The occupations of owners and tenants tend to support the observation that the owner occupants are in the lowest income group and it can therefore be concluded that approximately one third of the units are being occupied by owners who have incomes at or below the USAID target income group.

1.3. Household size/number of occupants:

93% of both tenants and owners have only one household staying in the unit. No one admitted to having a lodger. There were eight cases of a number of single tenants living together and sharing the rent.

More people live in the owner occupied units. 78% of owner occupied rooms have four or more occupants whereas 70% of tenant occupied rooms have four or less occupants:

Number of occupants	Tenants	Owners
1	14%	7%
2	19%	7%
3	15%	7%
4	22%	24%
5	9%	23%
6	11%	11%
7	4%	10%
8	4%	4%
9	0	4%
10	1%	1%
14	0	1%

Tenant households are most likely to be individuals sharing with a family member or friend or married couples with one or two children. The higher numbers of tenants indicate a number of individuals living together and sharing the rent.

With owner occupants high numbers indicate large numbers of children and other dependants as owner occupants are mostly married couples with two or more children. Households with children frequently include a live-in maid to look after the children.

1.4. Previous tenure and residence:

87% of owner occupiers and 76% of tenants rented accommodation before moving to Umoja II. More tenants (14%) than owners (7%) lived with relatives or friends before moving.

51% of all occupants lived in low income areas closeby before moving to Umoja II. 14.5% moved from Dandora, 12% from Huruma, 9.5% from Eastleigh and 9% from Umoja I. 5% moved from Buruburu, 4% from Kibera and 4% lived outside Nairobi before moving to Umoja II. The remaining 35% come from a very wide range of locations throughout Nairobi.

68% of owner occupiers moved from the predominantly low income areas of Dandora, Eastleigh, Huruma, Kariobangi, Kibera and Makadara whereas only 39% of tenants came from these areas. More tenants (18%) than owner occupiers (7%) previously lived in the comparatively high income areas of Buruburu and Umoja I.

Other details of the type of accommodation previously occupied by tenants and owners indicates that the standard of accommodation and services previously occupied by tenants was higher than that occupied by owners:

Previous Services:	1	2	3
	Tenants	Owner Occupiers	Absentee Owners
Electricity	84%	71%	83%
Own tap	50%	29%	63%
Shared tap	46%	62%	37%
Water off plot	4%	9%	0

Number of rooms previously occupied:

One room	30%	51%	23%
Two or three rooms	42%	39%	77%

	1 Tenants	2 Owner Occupiers	3 Absentee Owners
Previous rents:			
Shs 200 - 600	29%	56%	41%
Shs 601 - 1,200	36%	22%	23%
Shs over 1,200	11%	4%	5%

This indicate that before moving to Umoja II, tenants paid more rent and had a somewhat higher standard of accommodation than owner occupiers.

These results can be compared with the information given by the absentee owners on their current accommodation as shown in column 3. Of the 30 absentee owners interviewed, 22 admitted to living elsewhere but eight insisted that they were living in their Umoja II unit.

Of the 22, 41% live in Eastleigh, Umoja I, Kariobangi and Jericho. The rest live in a wide variety of locations. One lives as far away as Karen and two live in other towns. These three were all posted to these locations by their employers.

The absentee owners appear to pay the same amount in rent as they would for repayments in Umoja II for apparently better services and more space.

54% of the absentee owners gave their dislike of the accommodation provided in Umoja II as their main reason for not occupying the unit, most of these said the unit was too small to accommodate the family. Other reasons given were that they did not want to move the children from their present schools which were far from Umoja II, that they were finishing improvements before moving in and that they had been temporarily posted elsewhere.

2.0. Opinions of Residents

Owner occupiers, absentee owners and tenants, were asked their opinions on the design of the unit and standard of construction, the standard of services, the condominium arrangement and the Umoja II estate as a whole.

The base for all the opinions is the previous residence, respondents naturally compare the Umoja II estate and the services provided with where they were living before.

The general opinion is that the estate is well designed and the services, when operating, will be excellent but that the condo units are poor both in terms of construction and design. The main design criticism is that they are too small and the location of the cooking place is generally disliked. The courtyard is thought to be too small to be shared by five or six families and the shared sink was frequently criticised as a cause of contention and quarrels between residents.

The poor quality of materials used, and in particular the roof sheets, are remarked upon by everyone. Decisions on what to provide and what to exclude in order to cut costs are proving to have been incorrect - more covered space which could have been partitioned to suit individual requirements, a sound roof, no cooking area, partitions or fittings would have enabled individual owners to divide the space and provide the level of finishes which suited their pockets and family circumstances.

No doors, windows and locks would have been better than poor quality as many have already been replaced. The extensions are expensive to execute in relation to the small amount of additional space they provide - the roof detail on the corner B units is particularly cumbersome and expensive to construct.

In contrast, the core units are generally very popular and there were few complaints about the quality of the materials used in the cores.

2.1. Opinions on the Umoja II estate

Residents were asked to mention three things they liked and three things they disliked about the Umoja II estate and the services provided. Of the likes, the number of schools provided was mentioned most frequently followed by the fact that it is secure "quiet" and "peaceful". Many mentioned that it was well planned and liked the fact that facilities such as markets are so close to the houses.

However, more residents could think of things they disliked than liked about the estate. The response rate was 73% for dislikes and 53% for likes. The most frequently mentioned dislike was the poor drainage. The state of the storm water drains at the back of the condominiums was variously described as "filthy", "stinking" and "a breeding ground for mosquitoes". The lack of electricity, the inadequate bus service to town, especially in rush hours, and the lack of garbage collection were the other main dislikes.

2.2. Opinions on the condominium units

Room design:

	Tenants	Owners
Room design: like	36%	38%
dislike	64%	62%
Design crits: position of cooking place	41%	38%
too small	39%	20%

87% use the cooking area provided despite the unpopularity of its position just near the door in the sitting room. Many respondents said that they found it "embarrassing" to cook in the same room especially when entertaining guests. 13% cook elsewhere, on a jiko in the courtyard or in the private outside space. 10% have moved the cooking place to the extension or to a different place in the room depending on the room type and many others plan to do the same. There is a general interest in changing the space around to fit individual circumstances. Erecting partitions is second only to plastering as the improvement most commonly undertaken.

Although a question on the size of the rooms was not asked directly, the fact that they are too small was continually raised by respondents. When asked what they would have been prepared to pay more for (as repayments or rents) the highest number of responses was "more space". The D unit is the only unit thought to be large enough for a family and is liked because it can be partitioned to suit particular requirements.

Quality of the construction:

	Tenants	Owners
Quality of the structure: no problems	37%	22%
some problems	63%	78%
Main problems: roof leaks/poor roof sheets	43%	28%
poor materials generally	21%	42%

Owners, both occupiers and absentee, were more concerned than the tenants about the poor quality of the materials as they see the unit as a long term investment. Most often mentioned were poor roof sheets followed by poor quality doors, windows and locks. The first thing that owners do, whether they intend to occupy the unit themselves or not is to replace the locks and re-inforce the security of doors and windows.

2.2. Opinions on Services

Respondants were asked to compare the WC/shower and sink/tap arrangement in Umoja II to those in their previous residence.

Considering that 54% of all the residents moved from a situation in which they shared a WC and tap with others, there were a surprising number of complaints about the Umoja II arrangements:

		Tenants	Owners
WC/Shower better than previous:	yes	42%	62%
	no	54%	37%
	same	7%	1%
Comments:	good	19%	31%
	bad	81%	69%

These opinions reflect the fact that tenants had better services in their previous residence than owners and the services in Umoja II compare unfavourably. The main reasons for disliking the shower/WC arrangement were that it was too small for both the WC and shower and that it was too far from the unit. 21% of tenants and 13% of owners would prefer the WC and shower attached to their own unit.

		Tenants	Owners
Water/sink better than previous:	yes	35%	55%
	no	62%	42%
	same	3%	3%
Comments:	good (own tap)	11%	11%
	bad	89%	89%

The sink arrangement was very unpopular. The most frequent criticism was that it was congested. Everyone wants to use it at the same time when preparing food and washing up after meals and there is not enough space for all to wash up together. The lack of space and the fact that some people do not keep it clean is the most common source of quarrels among residents of the condominiums.

2.3. Use of private outside space:

A feature of the condominium design is that it provides a small area of private external space adjacent to and accessible from each unit and residents were asked whether they used it and if so, what they used it for:

		Tenants	Owners
Use private outside space:	yes	34%	57%
	no	66%	43%
Main use:	growing vegetables	17%	34%
	relaxation	11%	13%

The space at the back outside units B, C and D has not yet been fenced in many areas and in Zones 3 and 4 still resembles a building site. More people therefore use the space in Zones 1 and 2. Many people are more likely to use the courtyard where they can sit and chat with neighbours for relaxing. 91% of the owner occupiers and 60% of the absentee owners said that they would like to build on the outside space if they were allowed to do so.

2.4. The condominium arrangement:

Residents were asked whether they thought the condominium arrangement (in the physical sense of a number of private units opening on to a shared courtyard with shared facilities) was a good idea.

	Tenants	Owners
Favourable comments	57%	54%
Unfavourable comments	43%	46%

Both owners and tenants were split down the middle in their attitude to the condominium arrangement. The responses can be summed up by the most common response which was that it is a good idea if everyone "gets on" but a bad one if they do not. Opinions therefore depended on each respondent's own experience and their relationship to their neighbours. The most common bone of contention was cleanliness. More owners than tenants undertake to keep the courtyard clean and considered that this, together with maintenance generally, should be the main purpose of the condominium association.

Many also felt that it was "alright for singles" but "bad for families", mainly due to the size of the space which is more often than not completely taken over by washing. Children using the space to play, making a noise and getting in the way, is the second most frequently mentioned cause of quarrels after congestion at the sinks.

15% of tenants and 11% of owners specifically mentioned that it was a good arrangement for security because there was always someone around to look after the unit. But 12% of owners and 9% of tenants disliked the lack of privacy.

It is important to remember that many of the condos in Zones 3 and 4 are not fully occupied, quite frequently less than three of the units are occupied. The pressure of numbers had therefore not yet been felt by many respondents.

3.0. The condominium association

Owner occupiers and absentee owners were asked whether they were members of the Condominium Association. 91% of the owner occupiers and 63% of the absentee owners said that they were not. 96% of the owner occupiers and 90% of the absentee owners said that they had never attended a meeting of the Condominium Association. The six who said they had attended a meeting all owned units in Zone 1.

Tenants were also asked whether they knew about the Condominium Association and 96% said that they had never heard of such an association.

Owners and tenants were asked what they understood the function of a residents' association to be. 26% of owners and 22% of tenants thought that its main purpose would be to solve problems, in other words, to take the place of the landlord. 10% of owner occupants thought that it could represent the residents and take their problems to the NCC for resolution. 22% of tenants had no idea what such an association would do and 4% said that it would be impractical because many residents are tenants and therefore not likely to stay long.

The owners, both occupiers and absentee, were more positive about such an association and agreed that the three main concerns of a condominium association should be the welfare of the residents, the cleaning and maintenance of the common areas and security. On the latter issue many said that they should install a more secure gate or employ an askari to guard the condominium.

Despite the potential lack of involvement from a mobile tenant population, there appears to be enough interest among owner occupiers to make residents' associations work. The question is whether the HDD should be involved in encouraging their formation by identifying those individuals who are interested and strong enough to act as leaders, supporting their efforts and acting on problems as they are brought to their attention.

4.1. Consolidation

Zones 1 - 4 were ready for occupation as follows:

Zone 1	July 1987
Zone 2	December 1987
Zone 3	February 1988
Zone 4	April 1988

The position in Zones 3 and 4 is still very fluid with a large number of units still unoccupied. It was therefore felt to be too early to undertake an occupancy survey of all the zones. A 100% sample survey was, however, undertaken in Zone 1 as a follow up to the 100% sample survey undertaken in November 1987, with the following results:

	No of units November 1987	No. of units August 1988
Unknown (occupier unavailable)	67	0
Occupied by owner	69	113
Occupied by tenant	63	180
Vacant	136	41
Total	334	334

41 units or 12% of the total units in Zone 1 therefore remain unoccupied after over a year of being available for occupation. Of these, 14 are being extended and improved. As 20% of the occupants were not identified in November 1987, it is not possible to calculate the change in the balance of owner/tenant occupancy.

52% of the core units in Zones 1 - 4 are vacant. 68% of the vacant units are cores on which no development has started, 29% are cores which are in the process of being extended and the remaining two have been fully extended.

The consolidation pattern by zone is:

	Total built	Extension not started	Extension in progress	Extension completed
Zone 1	19	6	8	5
Zone 2	52	30	16	6
Zone 3	42	29	8	5
Zone 4	33	24	7	2

The low occupation rate of the core units should be a cause of concern to HDD. All have been officially allocated and a list of allottees is available. It is thought that many of the allottees are unable to raise the finance to build the extension and do not want to occupy the unit until the extension is complete. This does not explain why the units have not been let in the meantime to at least cover the repayments, but it may be that owners are worried that it would be difficult to evict tenants when they are ready to occupy the unit themselves.

4.2. Changes in Ownership

Despite the conditions in the Tenant Purchase Agreement which attempts to prevent the sale of units in the first five years without the permission of the NCC, a market for units is clearly developing and a number of agents advertise both condominium and core units for sale.

The survey found no firm evidence of units changing hands and only two instances of landlords of different units with the same name. All the owners sampled, both occupiers and absentee, were asked whether they were the original allottee or whether they had purchased their unit. All said that they were the original allottee. The tenants were asked the name of their landlord. 35% did not know or would not give the landlord's name.

The 104 names which were given were checked against HDD's list of allottees and 27% were different. This is, however, unlikely to be an accurate indicator of changes in ownership. Individuals go under many different names, tenants may be primed to give the allottee's name when asked or they may only deal with an agent and not know the landlord's name. Some units may already have changed hands but on the whole it appears to be too early for many transactions to have taken place.

4.3. Improvements and extensions

The units as handed over to the allottees have concrete floors, unplastered walls, no ceilings and no electrical wiring. A and D units can be partitioned and B and C units can be extended. Foundations and a concrete slab for the extension are provided.

More absentee owners than owner occupiers have undertaken improvements and completed extensions to the units:

Progress of improvements:

	Tenant occupied units	Owner occupied units
Some complete	67%	52%
None started	33%	48%

Progress of extensions, B and C units only:

Complete	45%	31%
Started	0	16%
Not started	55%	53%

The main reason for not starting the improvements is simply lack of finance. Some owner occupiers indicated that they had to repay the loan they had taken to pay for the down payment before they could undertake improvements. Absentee owners were found to be somewhat wealthier than owner occupiers and are more able to raise the finance, they also have an obvious incentive in the extra rent that improvements and an extension will attract.

The improvements that are most commonly undertaken first are plastering and painting, constructing partitions and improving security. The latter almost always includes replacing the locks and often the whole door, and putting burglar bars on the windows. Wiring for electricity is often done at the same time as the plastering. Putting in ceilings is not a priority and is generally left to last. In B and C units, improvements are invariably undertaken at the same time as the extension.

The responses to the question on how much had been spent on improvements and extensions proved to be very unreliable. Many people do not keep a record and simply do not know how much they spent, others are not prepared to say or exaggerate their estimates. HDD technical staff estimate that a C extension should cost between Shs 9,000 and Shs 11,000 and a B extension between Shs 11,000 and Shs 13,000.

The most reliable information was obtained from the absentee landlords but even they gave a very wide range of figures from Shs 1,000 for improved doors and locks to Shs 20,000 for an extension plus improvements. The costs would have to be more closely related to the amount of work done than was possible in the course of this survey.

4.4. Funding sources:

Owner occupiers and absentee owners were asked how they raised the finance for the extensions and, if they had taken a loan, the source of the loan. 86% of the absentee owners had raised their loan from a Savings and Credit Society. The main advantage of these short term loans is that a regular income is the only security required.

	Owner occupants	Absentee owners
Cash from income	29%	0
Savings	42%	30%
Loan	29%	70%

Source of loan:

Employer	0	14%
Savings & Credit Soc.	62.5%	86%
Friends/relatives	37.5%	0

5.1. Rent levels

The rents charged vary according to the type of unit, the standard of finishes and whether the B and C type units have been extended (improvements are usually undertaken at the same time as the extension). A standard range of rents is developing for each type of unit which all tenants pay unless they have some special arrangement with the landlord:

Range of rents for the condominium units:

Unit type	Rent Shs per month	Repayments to NCC Shs per month
A unimproved	500 - 800	554
A improved	1,000 - 1,200	
B unimproved	500 - 700	459
B extended	800 - 1,200	
C unimproved	500 - 600	421
C extended	800 - 1,000	
D unimproved	800 - 900	699
D improved	1,000 - 1,300	

The amount of rent charged appears to be dictated more by general market forces than by the amount of the investment made by the owner in extensions and improvements. It is, however, interesting to examine the return on investment obtained through the rents charged for the improved or

extended units. If it is assumed that Shs 12,000 is borrowed for an extension to a B unit from a Savings and Credit Society, the terms will be 12% over three years. This means a repayment of Shs 400 per month. If it is assumed that water payments are covered by the tenant and the rent charged is Shs 1,000, this means a profit of Shs 141 per month in the first three years and at least Shs 541 after all payments on the loan are complete.

There is even more profit to be made on a D type unit. The cost of full improvements (partitions, wiring, plastering, painting and ceilings) is unlikely to exceed Shs 6,000, while the rent which can be attracted is Shs 1,200 or more.

These calculations do not, however, take into account maintenance costs, periods when the unit is vacant, the up-front costs of purchasing the unit (application fee, downpayment, water connection fee, stand premium) or the yearly charges not yet in effect. But it is likely that the financial advantages of renting will increase in future as rents rise with inflation and the development of the community generally, while owner's payments remain unchanged (unless the mortgage interest rate is increased and the land rents and rates are introduced).

Tenants are paying more rent in Umoja II than they paid in their previous residence. 54% are paying over Shs 800 per month in Umoja II as opposed to 32% previously.

	Previous %	Current Umoja II %
No rent	21.3	0
0 - 200	2.5	1.3
201 - 400	9.4	1.3
401 - 600	19.4	26.2
601 - 800	15.6	17.5
801 - 1,000	6.9	23.8
1,001 - 1,200	13.8	24.4
over 1,200	11.3	5.6

None of these figures include payment for water or electricity as there is no electricity yet in Umoja II and the billing for water is currently so erratic that it was not possible to establish what individuals are paying. 48% of those interviewed have not received a bill, some have received estimates not based on meter readings and others do not know whether they or the landlord are responsible for payment.

10% of the tenants said that they were related to the landlord and 5.6% said that they pay the repayments for the landlord rather than rent.

5.2. Arrearages:

A high percentage of both absentee owners admitted that they were not up to date with their repayments:

	Owner occupants	Absentee owners
Payments up to date	61%	23%
Payments not up to date	30%	77%
Don't know	9%	0

There is undoubtedly a generally lax attitude to payments and a belief that the NCC will not evict. Most respondents had not signed the Tenant Purchase Agreement which states that the NCC has the right to re-possess if payments are over one month in arrears. Noone who is in arrears had received a reminder from NCC.

APPENDIX A

BENEFICIARY SURVEY - SAMPLE

- Interviewed:
- (1) 242 residents of 1,629 condominium units
 - (2) 36 residents of 146 core units
 - (3) 30 landlords of condo units identified through the survey of residents

1. Condominium units:

Sample:

Unit Type	Total	Sample	Interviewed
A	594	10%	60
B	594	10%	61
C	288	25%	78
D	153	25%	43
Total	1,629		242 (15%)

Units were selected from Zones 1 - 4 as follows:

Zone 1	Total A units	120	interviewed	12
	B	120		12
	C	68		13
	D	26		9
Zone 2	Total A units	150		14
	B	150		14
	C	76		19
	D	37		9
Zone 3	Total A units	154		16
	B	154		17
	C	72		21
	D	41		11
Zone 4	Total A units	170		18
	B	170		18
	C	72		22
	D	49		14
Total		1,629		242

Handover of Zones:

- Zone 1 July 1987
- Zone 2 December 1987
- Zone 3 February 1988
- Zone 4 April 1988

In addition a 100 per cent occupancy survey was conducted of all the condominium units in Zone 1 as a follow up to the one undertaken by Peter Feiden in November 1987.

50 owners who had been identified as landlords by their tenants were selected at random and invited to come to the HDD offices in Umoja 2 for interview. 30 attended and were interviewed.

2. Core units survey

Sample:

The survey did not include core units with dukas or extended cores as these have not yet been allocated. A 100 percent sample of the core units in zones 1 - 4 was examined to determine the progress of extensions and occupancy.

The residents of 25% or 36 of the 146 core units were interviewed as follows, the numbers in the sample are shown in brackets:

	total built	extension not started	extension in progress	extension completed
Zone 1	19	6 (1)	8 (2)	5 (3)
Zone 2	52	30 (7)	16 (5)	6 (3)
Zone 3	42	29 (3)	8 (1)	5 (2)
Zone 4	33	24 (6)	7 (2)	2 (1)
	146	89 (17)	39 (10)	18 (9)

EVALUATION OF UMOJA 2

SURVEY OF 30 ABSENTEE OWNERS

50 landlords identified through the survey of occupants were invited by HDD to attend for interviews on September 15 and 16 1988. 30 responded and were interviewed. Of these, eight insisted that they were living in their units themselves and 22 admitted to living elsewhere and having a tenant living in the unit.

Place and type of residence: the landlords live in a wide variety of locations, with 13 out of the 22 living near Umoja 2, two in other towns and one as far away as Karen. These three all explained that they had been posted to these areas by their employers:

Eastleigh	3
Umoja 1	2
Kariobangi	2
Jericho	2
Bahati	1
Buruburu	1
Makadara	1
Muthurwa	1
Pangani	1
Kibera	1
South B	1
Roysambu	1
Moi Air Base	1
Kabete	1
Karen	1
Nyeri	1
Nakuru	1
	22

Type of residence:

Shared house	11
House	7
Flat	4

Number of rooms occupied:

2 rooms	9
1 room	5
3 rooms	5
4 rooms	3

Tenure of residence

Renting	15
Employer owned	4
Family owned	3

Source of water

Own inside	12
Own outside	2
Shared outside	8

Electricity: Yes: 19, No: 3

Rent paid:

None (employer/family)		7
Shs	200 - 350	1
	351 - 500	8
	501 - 800	3
	1,000	1
	1,050	1
	1,500	1

Employment: all were employed, no self-employed

Clerk/Clerical officer	9
Secretary	4
Receptionist	2
Computer operator	2
Driver	2
Technician	2
Production supervisor	1
Teacher (primary)	1
Soldier	1
Domestic staff university	1
Proof reader	1
Clinic assistant	1
Computer operator	1
Catering supervisor	1
Hospital domestic staff	1
	30

Household Income

Shs	500 - 1,000	0
	1,001 - 1,500	0
	1,501 - 2,000	0
	2,001 - 3,000	13
	3,001 - 4,000	10
	4,001 - 5,000	3
	5,001 - 6,000	2
	6,001 - 7,000	2
	over 7,000	0
		30

Repayments up to date: No 23, Yes 7.

Months in arrears:	1 month	- 8
	2 months	- 3
	3 months	- 6
	4 months	- 1
	5 months	- 2
	6 months	- 2
	9 months	- 1
		23

Reasons for not living in Umoja 2:

Children in school and don't want to move them	5
The room is too small for the size of the family	6
Finishing improvements/extension before occupying	4
Temporarily posted elsewhere	3
Too far from place of work (Karen)	1
Problems with transport from shift work at night	1
Poor security	1
Will not move until there is electricity	1
	22

Comments on Umoja 2 Estate and the services provided can be summed up as - potentially very good services but very poor houses. The comments generally expressed a landlord's / non-occupier's point of view - nothing about transport, few comments on the state of the drains etc. Rather all said that the planned services appeared to be very good while the units were poor i.e. it is not possible to get the rents they would like without first investing in improvements to the units.

On the units themselves, the main comments were that poor quality materials had been used (17 mentions) and that the room was too small (13 mentions). Also mentioned eight times was the fact that the courtyard was too small for the number of families sharing. There were comparatively few comments from the landlords on the location of the cooking space or on the congestion at the taps, which again indicates that they have not experienced the day to day problems of living in a condo unit.

When asked whether they had signed the Tenant Purchase Agreement 15 said they had and 15 said they had not. There is obviously a considerable amount of confusion about the paper work involved.

23 landlords had attended the orientation sessions, three said that they did not attend.

Asked whether they were a member of the Condominium Association 11 said they were and 19 said that they were not. Three respondents said that they had attended a meeting

of the Condominium Association - all own units in Zone 1 - 27 said that they had never heard of any meetings.

Asked what they understood the purpose of the Condominium Association to be, 14 said that they had no idea, 11 said that it should deal with the welfare of the residents and look after cleaning and maintenance and five said it should solve disputes and improve services.

Improvements and extensions:

	A & D units:	B & C units	Total
Improvements	14	6	20
No improvements	3	7	10

Improvements made - all units:

Plastering and painting	20
Partitions	15
Improved security	12
Wiring for electricity	9
Ceilings	4
Moved cooking place	2
Put sink into unit	1
New windows	1
Built-in wardrobes	1

Amount spent on improvements only:

Shs 1,000 - 2,000	2
2,001 - 4,000	1
4,001 - 6,000	4
6,001 - 8,000	1
8,000 - 10,000	1
13,000	1
17,000	1
20,000	1
Can't say	3
Inc. extension	5
	20

Amount spent on improvements plus extension:

Shs 13,000	1
15,000	3
35,000	1
	5

Extensions B and C units only:

Complete	5
Started	2
Not started	6

Money raised for the deposit through:

Cash savings	9
SCS loan	8
Employer loan	8
Savings account	4
Merry go round	1
	30

Money raised for improvements and/or extensions:

SCS loan	12
Cash savings	4
Employer loan	2
Savings account	2
	20

Other investments landlords would like to make:

Extend into outside space	12 (if allowed)
Electrical wiring	11
Ceilings	11
Partitions	7
Re-inforce the doors	4
Fencing	4
Re-inforce windows	2
Put a sink in the unit	2
Repair leaking roof	1
Put in another window	1
Move the cooking area	1
Add another window	1