Office of Housing
Agency for International Development

SHELTER TRAINING WORKSHOP

November 5-30, 1979

MATERIALS PRESENTED

BY

PARTICIPANTS

Organized by Country

(This is the third volume of notebook materials prepared as part of the shelter workshop)

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SUGGESTIONS FOR COUNTRY WORKSHOP PRESENTATIONS

The following items have been identified as being of particular concern to workshop participants.

When preparing your country presentation please try to cover to your country experience.

INSTITUTIONAL ISSUES

1. What are the major national housing policy issues of concern?

2. Do politics or political issues effect your national housing programs? If so, give an example.

3. How is coordinatic-n achieved between housing institutions? Is this a problem?

4. How are your country trying to improve institutional capacity? What training programs are being used?

LAND ISSUES

1. Is there a problem with land speculation in your country?

2. How do you acquire sites for public sector housing?

3. What methods do you use to make land available cheap to low income people?

PHYSICAL STANDARDS

1. How do you set physical development standards to meet the needs of low income groups?

   a) In sites and service projects
   b) In upgrading projects

2. What is the role of local building materials in your housing programs? How are they produced?

3. Is self-help efforts used in your housing programs? So how?

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FINANCIAL ISSUES

1. How do you determine affordability?

2. What subsidies are involved? How are subsidies determined? what specific items are subsidized?

3. What financial instruments are used? What are the terms and conditions of different financing plans is used in your country?

4. What interest rates are used? How are interest rates determined?

5. How do you convince low income families to be willing to pay for the units provided?

IMPLEMENTATION ISSUES

1. How do you select household for the houses provided?

2. How do you deal with delinquency problems?

3. How do you manage implementation?

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BARBADOS

Country Presentation

26th November 1979

The paper examines the following three issues drawn from the Barbadian Experience:-

(i) Implementation

(ii) Selection of Households

(iii) Control of delinquents

Historical Data

Barbados, a small Country in the Eastern Canbbean is flanked by the Atlantic Sea on the North-Easterly Cost, and by the Canbbean Sea on the South-Westerly Coast.

The Country has a land mass of 166 sq. miles and is undulated with areas of hill side, flat land and valleys. The Country is divided into eleven parishes nine of which are abounded by the Sea. There is a net-work of roads which makes every parish accessible to the main City within one hour from the farthest point. The population of the Country was 253.1 thousand at the end of December 1975. About 80% of the population is Black and about 50% of the total population is concentrated in the urban area.

There is democratic system of government similar to the Westminster-Whitehall Model and Constitutionally elections are held every five years.

At 31st December, 1978, the GNP per Capita was estimated at $3,703 an increase of 10.6% over the figure for the period ended 31st, December 1979. The growth per capita income placed Barbados among a small group of high-income developing countries, and as a result the Country is expected to generate a greater portion of its needs for development capital from its own resources. Historically agriculture is the main industry, but in recent years Tourism has become one of the leading industries. In addition, to Agriculture and Tourism, there are a number of enclave industries which play a significant role in the economic development of the Country. Sectoral contribution to GDP during 1978 were as follows:

Whole Sale and Retail	18.7%
Tourism	11.6%
Manufacture	11.3%
Agriculture	5.5%

Barbados like all developing countries is confronted with two major problems - inflation at a rate of about 9% and unemployment at a rate of about 12.8% of the labor force.

Housing Policy:

It has been the policy of successive governments to place emphasis on housing since it is accepted that every Barbadian should have satisfactory housing, a basic human need.

Government through the National Housing Corporation aims at providing houses for the low-income workers, the lower middle and middle income earners by means of:

(i) Construction of units for rental low-income workers
(ii) Loans to low-income workers to assist in the purchase and or construction of houses.
(iii) Construction of single units for sale to low-income, over middle income and middle income earners.

During the present financial year (April-March) the Sum of $6 million (6.8% of the Total Capital Budget) has been allocated for the construction of 306 houses for rental to low income workers. In addition, 113 single units will be completed for sale to lower income and middle income workers.

The three issues will now be examined-

A. Implementation

Implementation is the most critical of all the process through which all projects involve (See Appendix I Attached). The process is critical since the success of a project however wellconceived and planned depends on its being implemented.

The Corporation decides whether a project is to be undertaken by direct labor or on a contractural basis. For the purpose of this paper, the project is undertaken by direct labor and the implementation process is.

(1) Assignment of a Site Co-ordinator who holds consultations with and receives briefs from the professional staff responsible for the preparation of the plans.

(2) The Co-ordinator takes over the Site and:

(i) organizes all resources - human, material and physical plant.

(ii) Prepares work schedules, and cost-control charts.

(iii) Prepares projections of labor and material requirements.

(iv) Institutes a system for quality control and evaluation of the project.

(v) Reports on the progress of the project.

Some Specific Details:

Procurement of Materials: The work overseer orders the concrete blocks and aggregates from approved suppliers. He submits requisition for other building materials to the Purchasing Officer. In cases where the material are available from stock they will be delivered accordingly and in other cases the Purchasing Officer will purchase them direct from local suppliers.

Sanitary ware and other items of major costs are obtained through the tendering process.

Payment of Wages: The Site Clerk maintains a daily record of the attendance of each employee on the site and at the end of the week the information is transfered to paysheets which are sent to the Finance Division for processing. Payment of wage is made by staff of the Finance Division to the employees on the site and is usually one week in arrear.

Payment to Suppliers: The invoices from the Suppliers of appregates and concrete blocks are sent by the work overseer to the Finance Division for payment. The Purchasing Officer also forwards the invoices for other building materials to the Finance Division which processes payment by cheques either on a monthly or weekly basis.

Accounting: The Site Clerk keeps a record of the project cost in addition to the cost which is kept by the Finance Division. Where the materials is delivered from stock, such material is costed on the average cost-method and at the end of each month, the officer at the store-room submittes an analysis of the cost of material he delivered to the Site, and supported with copies of all delivery countes to the Finance Division for entering in the records.

Infrastructure:

(A) Roads - The Corporation prepares the base for the roads, and then private contractors are invited to tender for the surfacing of the roads in accordance with the prepared specifications.

The Board of the Corporation considers the Tenders and makes the award accordingly.

(B) Water - The site plan is submitted to the Water Resources Department and an estimate for the cost of the off-site and on-site installation of the service is submitted to the Corporation. A deposit of 75% of the estimated cost is paid before work is commenced and on the completion of the work the final claim is sent to the Corporation.

(C) Electricity - A copy of the site plan is submitted to the Barbados Light and Power Company, Ltd., a private company which prepares a lay out plan for the installation of the service. The lay out plan requires prior approval of the Town and County Planning Department before work is commenced, and the Corporation is required to pay the cost of the installation of the service before work is commenced.

Financing: The Corporation receives quarterly allocation from the Ministry of Housing to finance its capital programme. Before the beginning of the quarter, the Corporation sends detailed projections of its requirements for the quarter. The Ministry will make the money available to the Corporation in a lump sum or in installments depending on the over all cash flow situation.

Evaluation: There is continuous evaluation of the project to:

(a) match actual expenditure against projected expenditure.
(b) ensure that schedules are being kept.
(c) ensure that work is being carried out in accordance with the plans.

(d) to assess the impact the project will have on the environment, and also its aesthetics.

Reporting: This is also a continuous process, and periodic reports are prepared by the Project Coordinator for the information of the Minister of Housing, The Board, and Manager of the National Housing Corporation.

Connection of Utility Services: When the units are completed and ready to be occupied, the Corporation pays the fee for the connection of the electricity service to each individual unit. The tenant is however responsible for the payment of the consumption charges.

With regards to water, the tenant also pays the consumption charges for the utility but they are not required to pay the connection fee.

Implementation Lag - Generally projects can be plagued by the "implementation lag" and some reasons for the lag are:

(i) civil and political disorder
(ii) delay in obtaining funds
(iii) lack of discipline, i.e., discipline inherent in the plans - what is planned and done often bears no relation to each other.
(iv) administrative and procedural delays
(v) lack of adequate supervision

Whatever is the cause of the lag delays are costly and should be avoided or minimized.

B. Selection of Tenants - The procedures are:

(i) Prospective tenants submit application to the Corporation
(ii) The Housing Management Division reviews the application, interviews the applicants, and if necessary carry-out investigations.
(iii) a list of applicants who satisfy the criterion for the rental of houses is prepared and submitted to a Sub-Committee of the Board for consideration.
(iv) The Committee approves the allocation of the houses and successful persons are required to sign tenancy agreements.
(v) Before the tenants occupy the houses, they are required to pay one month's rent in advance and arrange with the Barbados Light and Power Company, Ltd., and the Water Resource Department to pay the Consumption Charges for these utilities.

C. Control of Delinquents - The following measures are taken to Control Delinquents

(i) The tenant is informed when the rent is in arrear.
(ii) When no effort is made to clear the arrear, the tenant is interviewed in order to determine the reason for the non-payment of rent and those tenants with financial problems make arrangements to pay the arrears.
(iii) Legal action is taken against those persons who are able but refuse to pay their rents. When the Court grants judgement against these persons, they are required to pay amounts as fixed by the Court.
(iv) When no attempt is made to comply with the Court order, the Corporation levies on their household effects which are removed from the houses.

(v) The tenants have at least five days to pay the arrears and to recover their household effects. At the end of this period and the arrears have not been paid, the Corporation will sell the effects and then evict the persons from the houses.

Conclusion: The above approaches to the issues of implementation, selection of tenants and control of delinquency have been reasonably successful from the Barbadian experience but it is recognized that there are inherent problems in any system resulting from the political, economic and social climate in which we live.

APPENDIX I

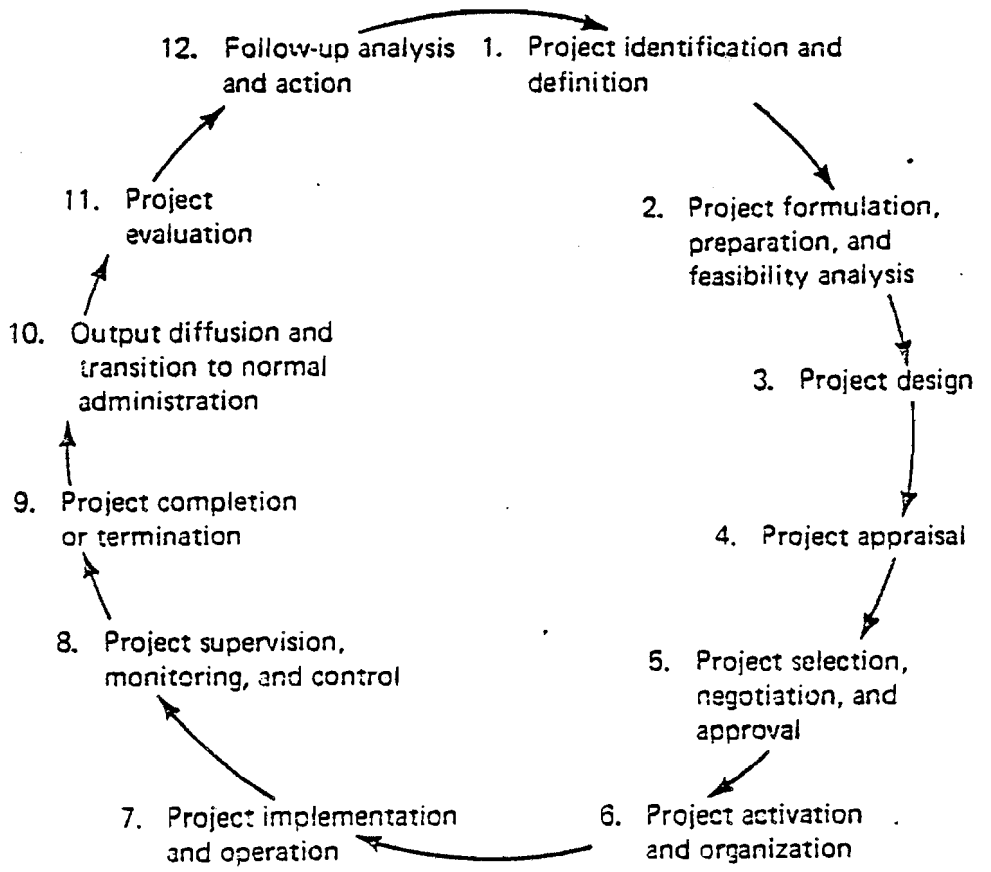
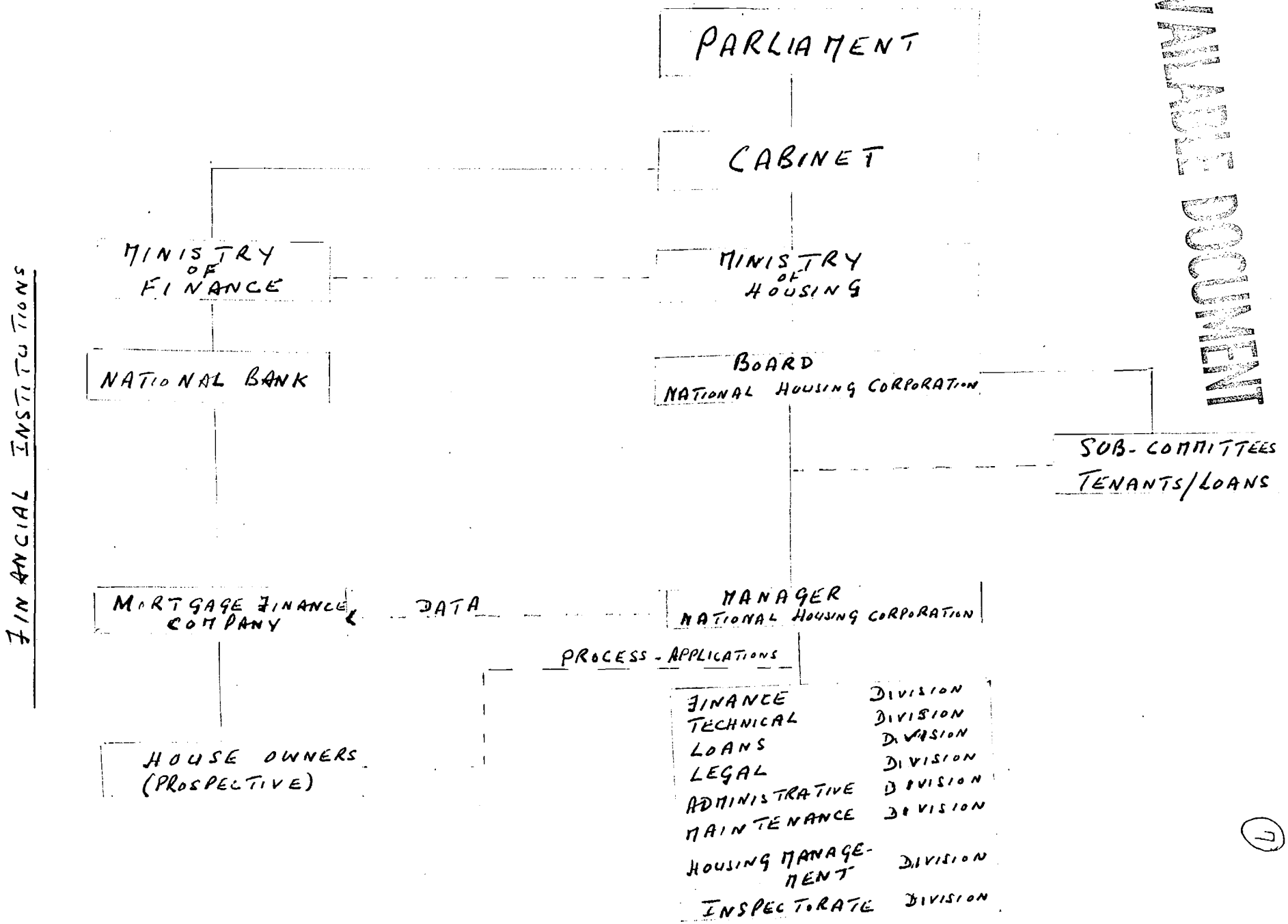


Figure 1
Project planning and management cycle.

BARBADOS

NATIONAL HOUSING CORPORATION



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BARBADOS

NATIONAL HOUSING CORPORATION – STRUCTURAL CHART

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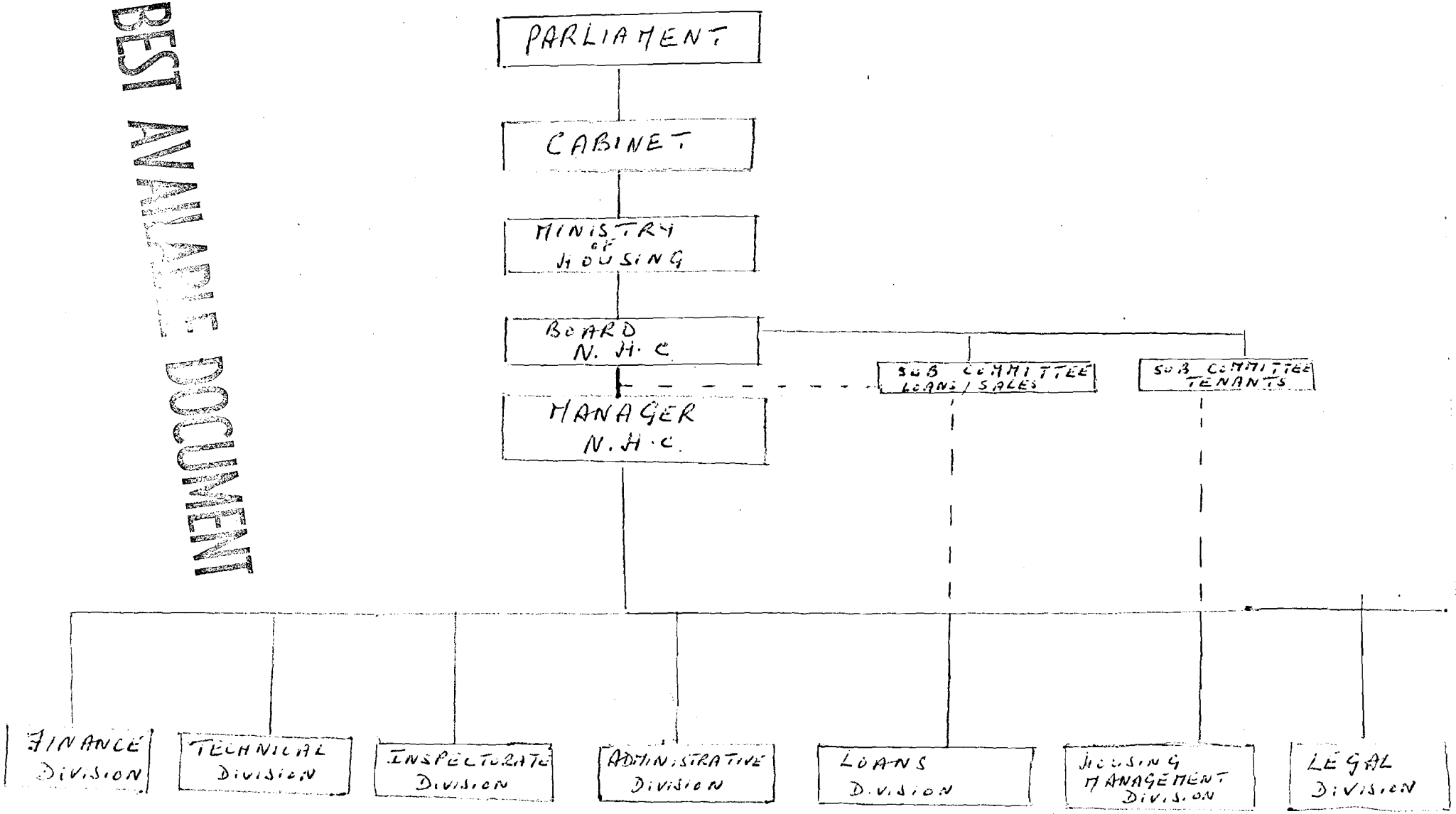

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ACTUAL HOUSING PROJECT DATA SHEET:

NAME OF PARTICIPANT BURGESS, ALVIN WINSTON

NAME OF COUNTRY BARBADOS

This form should provide information on one housing project recently constructed which was designed for low-income people. The information will be used during the Shelter Training Workshop in a participant study exercise.

1. General Information

a. Name of the project: N.H. 210 HAYNESVILLE, PHASE I NON-COMMERCIAL HOUSE TYPE - 603 TERRACED UNITS.

b. Location of the project (city): ST. JAMES.

c. Year of construction: JUNE 1978 - JULY 1979

d. Number of units in project by size (square meters):

No. of Units	Size (in m^2)
55	59.91 m^2

e. Annual income range of households in project area:

Lowest: $40.00 U.S. (Weekly) Highest: $75.00 U.S. (Weekly)

f. If possible, indicate what percentage of households in the city where the project is located have an annual income higher than the average income of households in the project.

_____%

g. What is the average number of persons per household?

FIVE (5)

h. What is the average population density in the project?

TWO HUNDRED AND SEVENTY-FIVE (275) PERSONS

2. Housing Finance Terms

a. List the monthly payments required by each house type (listed in Item 1d above).

Size of Unit	Monthly Payment
59.91 m^2	32.50 U.S. (dollars)

b. If the housing units were sold, List:

(1) Sales price of the unit by size: -

(2) Downpayment required as a percent of sales price:

- %

(3) Loan (mortgage) amount as a percent of sales price:

- %

(4) Annual interest on the mortgage loan in percent:

- %

(5) The number of years for mortgage loan payment:

- years

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3. Unit Cost Data on Project

a. What was the total size of the project in square meters?

1.43 h a = 14.284 g sq. metres (m^2)

b. What was the average cost per square meter for the raw land (total project site raw land cost divided by number of square meters):

U. S. $3.85

c. What was the total cost for on-site infrastructure (grading, water, sewer, roads, drainage, etc.) for the project?

WASTE DISPOSAL SYSTEM IS PRICED INTO COST OF UNITS
WATER $51,000.00 U. S. ROADS $44,534.00 U.S. ELECTRICITY $5,100.00 U.S.

d. What was the total cost of off-site infrastructure (investments required to bring water, sewers, roads, or drainage to the site itself, but not on to the site)?

WATER $2,000.00 U.S. ELECTRICITY NIL

e. What was the average construction cost per square meter of the housing units?

$203.53 U.S.

f. What plot sizes were used by frontage and depth and total square meters?

Plot Size	Frontage	Depth
67.52 m^2	4.26 m	15.85 m

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g. What were the amounts of money charged for connections per plot by item (like water connection, electric connection, gas connection and/or sewer connection)?

Water 100.00 U.S.

Electric 7.50 U.S.

Gas NIL

Sewer NIL

Other NIL

h. Were construction costs of public facilities (such as schools, health clinics, or special recreation facilities) charged to the households? NO If yes, what were the total costs of these facilities for the total project?

i. Was there any special construction on each plot besides the house unit (for example, a boundary wall or septic system or latrine)? YES If yes, what was the total cost per plot of these special items?

FENCES OR BOUNDARY WALLS AND COMMUNAL WASTE DISPOSAL SYSTEM COSTING

APPROX. $425.00 U.S. PER UNIT ALSO INCLUSIVE OF UNIT COSTS.

4. Physical Standards

a. What percentage of the total project site is in parks or open space?

OPEN SPACES 29% %

b. What is the percentage of land area used for schools, health clinics, or other community facilities (plot area is desired, not area covered by buildings)?

NIL %

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c. What percentage of the project area is used for roads and footpaths?

PAVEMENTS & FOOTPATHS 14% ROADS AND PARKING AREAS 16% = 30% %

d. What is the width, in meters, of streets or footpaths by the types used in the project?

ROADS 4.87 m FOTPATHS 1.52m

e. What is the average block length? 27.02 m

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BOTSWANA NATIONAL URBAN HOUSING POLICY

Paper Presented By: CHAPSON J. BUTALE
STANLEY M. MOTSE

INTRODUCTION

(a) Location: Botswana is situated in Southern Africa. It is bounded by South Africa to the South, Zimbabwe in the South East and North East, Zambia in the North, and Namibia in the West. The size of Botswana is 222,000 square miles.

(b) Population: According to 1971 national census, the population of Botswana is about 850,000.

LAND TENURE POLICY

Botswana like all developing countries has had to lay down urban land development policy applicable to all its urban centres. These are as follows:

(i) State owned land: this is used for public institutions, residential (high, medium and low cost housing) and the site and services areas.

(ii) Freehold: these are privately owned plots purchased from the state or other private individuals.

HOUSING POLICY

Botswana population is predominantly rural but with opening avenues of urban employment and rural urban migration, the housing problem is growing rapidly. The problem ranges from insufficient and un suitable accommodation to illegal and unacceptable squatter structures.

The Ministry of Local Government and lands has portifolio responsibility over housing and under it there is Botswana Housing Corporation which is responsible for the provision of housing government employees, parastal private sector employees including members of the public in general. This corporation is however unable to meet the high demand for urban housing. These houses are either rented or sold to occupants.

Government encourages home ownership by urging occupants of Botswana Housing Corporation to buy the houses they occupy. In addition to that, individuals can buy pieces of land and build their own houses. To meet financial requirements, the Commercial Banks and Botswana Building Society assist individuals by granting of loans.

SITE AND SERVICE SCHEMES

In persuant of its policy to meet urban housing demands, the Government introduced the self help housing schemes in the urban centres. Here land is made available for construction of self help houses by the low income groups. The applicants are determined by the income they get per annum which has a ceiling of $4,235. If the applicant qualifies for the site and service plot, he/she has an option of applying for a loan of building materials from council or any financial source. The loans are not made available in cash but in terms of building materials up to a maximum of $726.

Plot holders have their building materials delivered to their sites by council without any charges. The plotholders either engage their own artisans or do the construction themselves. However, before all stages of loan, delivery of materials and handover of plot are passed, the applicant should accept a certificate of right which entitles him/her to occupy the plot.

Coupled with the site and service scheme is the upgrading of illegal squatters. These are operated on the same lines with the site and service schemes.

Plotholders repay the loans at the rate of 8% over a perior of 15 years. Plotholders have to pay a nominal service levy of 5,45 dollars per moth. This is to meet recurrent costs for services such as roads, water and so on.

COMMUNITY FACILITIES: In all the site and service areas, land is set aside for public amenities such as schools, health facilities, centres and others. Their capital and recurrent costs are met by the council.

However, more details will be brought to surface in the slides showing the upgrading excercise in Gabonone Town.

STAFFING: These schemes are under a council department called Self Help Housing Agency. This department is new and is undergoing serious organizational structuring and its staff are mainly trained on the job. Plans are currently underway to look for training facilities for this cadre who in future will form the biggest council department.

BOTSWANA HOUSING FRAMEWORK

BOTSWANA HOUSING FRAMEWORK

~~MINISTRY OF LOCAL GOVERNMENT AND LANDS~~

MINISTRY OF LOCAL GOVERNMENT AND LANDS

BOTSWANA HOUSING CORPORATION
Provides housing to all (Preference civil servants)

BOTSWANA HOUSING CORPORATION
~~Provides housing to~~
all (preference to civil servants)

Town Councils
site and service
upgrading - caters
for low income groups

~~TOWN COUNCILS~~
Sites & Services-
~~daters~~ to low-income
~~groups~~

Individuals buy
plots from Govt
and build their
own houses

INDIVIDUALS buy plots from
government and build their
own houses

Commercial
Banks,
Buildings
give Loans
individuals
to build the
own houses

COMMERCIAL BANKS
BUILDING S..
give loans to
individuals to
build their own
houses

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November 5-30, 1979

ACTUAL HOUSING PROJECT DATA SHEET:

NAME OF PARTICIPANT STANLEY M. MOTSE

NAME OF COUNTRY BOTSWANA

This form should provide information on one housing project recently constructed which was designed for low-income people. The information will be used during the Shelter Training Workshop in a participant study exercise.

1. General Information

a. Name of the project:

OLD NALEDI SQUATTER UPGRADING PROJECT

b. Location of the project (city):

GABORONE, BOTSWANA

c. Year of construction: 1978-80

d. Number of units in project by size (square meters):

No. of Units	Size (in m^2)
1950 PLOTS	250-550 $m.^2$

e. Annual income range of households in project area:

Lowest: PULA 200/YEAR Highest: PULA 1500/YEAR

f. If possible, indicate what percentage of households in the city where the project is located have an annual income higher than the average income of households in the project.

~70%

g. What is the average number of persons per household?

4.5 PERSONS / HOUSEHOLD 1.28 HOUSEHOLDS / PLOT

h. What is the average population density in the project?

100 PERSONS / HECTARE

2. Housing Finance Terms

a. List the monthly payments required by each house type (listed in Item 1d above).

Size of Unit	Monthly Payment
ALL UNITS	PULA 4-50 / MONTH (SERVICE LEVY)

b. If the housing units were sold, List:

(1) Sales price of the unit by size: N.A.

(2) Downpayment required as a percent of sales price: N.A %

(3) Loan (mortgage) amount as a percent of sales price: N.A %

(4) Annual interest on the mortgage loan in percent: N.A. %

(5) The number of years for mortgage loan payment: N.A. years

3. Unit Cost Data on Project

a. What was the total size of the project in square meters?

116 HECTARES (1,160,000 M.²)

b. What was the average cost per square meter for the raw land (total project site raw land cost divided by number of square meters):

STATE LAND

c. What was the total cost for on-site infrastructure (grading, water, sewer, roads, drainage, etc.) for the project?

PULA 1,000,000

d. What was the total cost of off-site infrastructure (investments required to bring water, sewers, roads, or drainage to the site itself, but not on to the site)?

NO OFF-SITE COSTS

e. What was the average construction cost per square meter of the housing units?

PULA 25-35 / M² (SELF HELP LABOUR)

f. What plot sizes were used by frontage and depth and total square meters?

Plot Size	Frontage	Depth
VARIES	VARIES	VARIES
250-550	NOT LESS THAN 12M.	NOT LESS THAN 15 M.

g. What were the amounts of money charged for connections per plot by item (like water connection, electric connection, gas connection and/or sewer connection)?

LEVY P 1.05/PLOT/MONTH ← Water THERE ARE NO CONNECTIONS TO INDIVIDUAL PLOTS

LEVY P0.16/PLOT/MONTH ← Electric " " " " " " "

Gas N.A.

Sewer ONE VENTILATED DOUBLE-PIT LATRINE COST PULA 290/PLOT

Other N.A.

h. Were construction costs of public facilities (such as schools, health clinics, or special recreation facilities) charged to the households? NO If yes, what were the total costs of these facilities for the total project?

NO.

i. Was there any special construction on each plot besides the house unit (for example, a boundary wall or septic system or latrine)? YES If yes, what was the total cost per plot of these special items?

VENTILATED DOUBLE-PIT LATRINE PULA 290/PLOT

4. Physical Standards

a. What percentage of the total project site is in parks or open space?

1.5 % %

b. What is the percentage of land area used for schools, health clinics, or other community facilities (plot area is desired, not area covered by buildings)?

7.0 % %

c. What percentage of the project area is used for roads and footpaths?

~ 25 %

d. What is the width, in meters, of streets or footpaths by the types used in the project?

ROADS VARY FROM 15-12-10-8-5 M. IN WIDTH

FOOTPATHS VARY FROM 10-5-2-1 M. IN WIDTH

e. What is the average block length?

N.A.

23

REPUBLIC OF BOTSWANA

CERTIFICATE OF RIGHTS

.....TOWN COUNCIL

CERTIFICATE OF RIGHTS issued on the.....day of..... 19.....

by the .....Town Council under authority of the President of the Republic of Botswana in terms of the State Land Law No. 29 of 1966, as amended.

The ..... Town Council (hereinafter referred to as the "Council") grants to:-

NAME: (Print) .....

ADDRESS:.....

.....

.....

(hereinafter referred to as the "Occupier") the Rights set out below, and subject to the obligations, terms and conditions therein, in respect of Plot No. .....

.....

.....

as shown in Plan No. ..... held by the Department of Surveys and Lands

1. (a) This Certificate of Rights is the sole property of the Occupier who is not entitled or empowered nor has he any right to mortgage, hypothecate, pledge or give as security, whether directly or indirectly, in any manner whatsoever, any of the rights granted to him by virtue of this Certificate.

   (b) This Certificate can be ceded, assigned, transferred or made over with the written consent of the Council.

2. On the death of the Occupier the rights granted to him under this Certificate shall be inheritable.

3. The Occupier shall not give up occupation or possession of the plot or any portion thereof without notifying the Council in advance.

4. The plot shall only be used for residential purposes, provided however, that the Occupier shall be entitled to use the aforesaid plot for any other purposes which are authorised in writing by the Council.

5. (a) The Occupier shall be entitled to reside on the plot himself and with members of his family and with his friends and with any of his lodgers.

   (b) Notwithstanding the provisions of sub-clause (a) above, lodgers of the Occupier shall only be entitled to reside on the plot if the Occupier is himself residing thereon, unless the Occupier obtains the Council's prior written consent.

   (c) Notwithstanding the provisions of sub-clause (a) above, the Occupier shall not sub-let the plot without the written permission of the Council.

6. The Occupier shall develop the plot (here set out specifically what type of development must take place)

   .....

   .....

   .....

   .....

   within ..... months from date of issue of this Certificate.

7. (a) The Occupier shall pay to the Council a regular service payment in consideration of the rights hereby granted to him and for the services to be provided by the Council to the plot in respect of which this Certificate is granted and to the locality in respect of which this plot is situated.

   (b) The service payment referred to in sub-clause (a) above for the rights to be granted by the Council to the Occupier in terms of sub-clause (a) above shall be the sum of R..... (please fill in this amount) per month/year (please delete where necessary) which shall be payable in advance not later than the first working day of each month/year (please delete where necessary), commencing from the..... day of ..... 19.... at the offices of the Council or such other place as the Council may notify the Occupier.

   (c) The Council, provided that it has obtained the written approval of the Minister of Local Government and Lands, shall be entitled to vary the amount of the service payment to be paid by the Occupier to the Council, and in the event of the Council so varying the amount of the service payment, the Occupier hereby agrees to pay such varied amount, the provisions of this clause applying in the case of such variation *mutatis mutandis*. The Council shall give to the Occupier notice in writing of any variation of the amount of the service payment and the date such variation shall become effective.

   (d) The notice of variation envisaged in sub-clause (c) above shall be deemed to have been validly given by the Council to the Occupier if the Council serves the notice on the Occupier personally, or, if there are any improvements on the plot, affixes it to any such improvement, or, if the plot is a vacant piece of land, affixes it to any suitable post or other material on the vacant land so that such notice is clearly visible.

   (e) The variation of the service payment shall become effective on such date as may be specified in the notice given by the Council in terms of sub-clause (c) above, but in any event shall not become effective before fourteen (14) days have elapsed after the service of such notice.

8. (a) Should the Occupier commit or permit the commission of a breach of any of the clauses of this Certificate of Rights and fail to remedy any such breach within thirty (30) days after notice (which can be given in any of the manners set out in clause 7 (d) above) by the Council to the Occupier (then the Council shall be entitled, notwithstanding any previous waiver or anything to the contrary contained herein, but not obliged, to cancel this Certificate of Rights forthwith and to retake possession of the plot without prejudice to its claim for any arrear service payments or for any damage which it may suffer or sustain by reason of such breach and cancellation, and in that event the Occupier will have no claim whatsoever, whether for damages or otherwise, against the Council. Cancellation by the Council shall be given in writing and service of such cancellation shall be deemed to have been validly given if such written cancellation is served in any of the manners set out in clause 7 (d) above.

BEST AVAILABLE DOCUMENT

(*b*) In the event of the Council cancelling this Certificate of Rights in terms of sub-clause (*a*) above, the Council may make *ex-gratia* payment to the Occupier in respect of any improvements on the plot, and any such payment shall be approved by the Minister.

9. (*a*) The Council shall, upon being so directed by the Minister that the plot is required for public purposes be entitled to cancel this Certificate of Rights, provided that it gives to the Occupier six (6) months' notice, or in the event of the plot being urgently required such lesser notice as the Minister directs and advises in such notice the Occupier what the public purpose is for which the Government requires the plot, and if applicable, why urgently required.

(*b*) "Public purposes" means one or other of the following purposes:–

(i) in the interest of defence, public safety, public order, public morality, public health, town and country planning or land settlement; or

(ii) in order to secure the development or utilisation of that or other property for a purpose beneficial to the community.

(*c*) Any such notice, and any such cancellation following thereon shall be deemed to have been validly given by the Council to the Occupier if served in any of the manners set out in clause 7 (*d*) above.

(*d*) In the event of the Council cancelling this Certificate of Rights in terms of sub-clause (*a*) above, then the Council shall pay to the Occupier the current market value as at the date of cancellation or the cost thereof, whichever is the greater amount, of any improvements, on the plot.

10. (*a*) The Council shall advise the Occupier by notice in writing that he may appeal to the Minister within 30 days, or any longer period which the Minister may allow, against any of the decisions made by the Council in terms of clauses 1 (*b*), 4, 5 (*b*), 5 (*c*), 6, 7 and 8. Any such notice to be given by the Council shall be deemed to have been validly given if served in any of the manners set out in clause 7 (*d*) above.

(*b*) Within 30 days or any longer period which the Minister may allow, after any such notice envisaged in terms of sub-clause 10 (*a*) above has been served on the Occupier, he shall have the right to appeal to the Minister of Local Government and Lands.

(*c*) The Occupier must exercise his right of appeal through the District Commissioner. It shall be the duty of the District Commissioner–

(i) to assist the Occupier in drafting and framing any appeal;

(ii) to transmit the appeal forthwith to the Minister of Local Government and Lands;

(iii) to advise the Minister of Local Government and Lands, if applicable, of all the circumstances relevant to any appeal not having been made within 30 days;

(iv) to assist the Occupier to obtain any necessary information to enable him to draft and frame the appeal in terms of sub-clause 10 (*c*) (i) above.

SIGNED at ..... on this ..... day of .....

19....

As witness .....

.....
For the Council

SIGNED at ..... on this ..... day of .....

19....

As witness .....

.....
The Occupier

BEST AVAILABLE DOCUMENT

(2k)

REPUBLIC OF BOTSWANA

TEMPORARY OCCUPANCY PERMIT

Issued on the ..... day of ..... 19.....

by the ..... Town Council under the authority of the President of the Republic of Botswana in terms of the State Land Act (Cap. 32:01) as amended.

The ..... Town Council (hereinafter referred to as the Council) grants to:-

Name: .....

Address: .....

.....

(hereinafter referred to as the Occupier)

This Temporary Occupancy Permit authorising the occupation of the premises known as .....

.....

.....

.....

(hereinafter called the premises) by the Occupier from the date hereof until the 31st March, 197..... subject to the following obligations, terms and conditions:

1.

The premises shall only be used for private residential purposes by the occupier himself or such other purpose as may be authorised by Council in writing;

2. (a)

The Occupier shall not do or permit or suffer to be done on the premises any act or thing which shall or may cause damage or nuisance or annoyance to the Council or to the occupants of any neighbouring premises;

2. (b)

The Occupier shall not erect or effect any development or improvements whatsoever on the premises without the written consent of the Council;

3.

The premises or any portion thereof shall not be leased, transferred or sublet without the written consent of the Council;

4. (a)

The Occupier shall pay to the Council a regular service payment in consideration of the rights hereby granted to him and for the services provided or to be provided by the Council to the premises in respect of which this Temporary Occupancy Permit is granted and to the locality in respect of which these premises are situated;

4. (b)

The service payment referred to in 4(a) above for the rights to be granted by the Council to the Occupier in terms of 4(a) shall be the sum of P..... per month which shall be paid in advance not later than the first working day of each month commencing from the ..... day of ..... 19..... at the offices of the Council or such other place as the Council may, in writing notify the Occupier. The Council may with the written approval of the Minister of Local Government and Lands vary such service payment on giving to the Occupier not less than fourteen (14) days written notice of such variation;

5.

Without prejudice to the rights of the Council under Clause 6 thereof, failure to pay the service payments under Clause 4 shall render the Occupier liable to Civil Action for the recovery thereof;

6.

Should the Occupier commit or permit the commission of a breach of any of the clauses of this Temporary Occupancy Permit and fail to remedy such breach within thirty (30) days after notice in writing requiring him to remedy the breach, then the Council shall be entitled notwithstanding any previous waiver or anything to the contrary herein contained, to cancel this Temporary Occupancy Permit forthwith and to recover possession of the premises without prejudice to its claim for any arrears of service payments and in the event of such cancellation the Occupier shall have no claim whatsoever whether for damages or otherwise against the Council;

7. (a)

The Council shall, upon being so directed by the Minister of Local Government and Lands that the premises are required for public purposes, be entitled to cancel this Temporary Occupancy Permit provided that the Council gives to the Occupier not less than thirty (30) days notice in writing and in that event the Occupier shall be paid the current market price for the premises as determined by the Director of Surveys and Lands;

7. (b)

Public purposes means one or other of the following purposes:

(i) in the interest of defence, public safety, public order, public morality, public health, town and country planning or land settlements; or

(ii) in order to secure the development or utilisation of that or other property for a purpose beneficial to the community;

8.

The Occupier shall notify the Council in writing of his intention to vacate the premises, whereupon this Temporary Occupancy Permit shall be cancelled and the obligations to pay the service payments hereunder shall cease with effect from the first day of the month next following;

9.

Any notice or cancellation under clauses 4, 6 and 7 hereof shall be deemed to have been validly given by the Council to the Occupier after the Council serves the notice on the Occupier personally or affixes such notice or cancellation upon the premises so that it is clearly visible;

10.

This Temporary Occupancy Permit shall not be transferred, ceded or hypothecated by the Occupier and shall determine on the 31st March above-mentioned, and may be renewed annually by the Council;

11.

Should the Occupier be aggrieved by the decision or the action of the Council in relation to this Temporary Occupancy Permit, the Occupier shall have a right to appeal to the Minister of Local Government and Lands through the District Commissioner within one month from the date of Council's decision and the Minister's decision shall be final and binding on both the Occupier and the Council.

Neither Council nor the Occupier shall in that event have any right whatsoever to make an appeal to any other body or person in respect of the same grievance which has been settled by the Minister.

I acknowledge receipt of a copy of this Temporary Occupancy Permit and accept the obligations, terms and conditions thereof.

SIGNATURE OF OCCUPIER .....

SIGNATURE OF WITNESSES 1. .....

2. .....

THUS DONE AND SIGNED AT ..... this .....

day of ....., 19.....

SIGNATURE OF AUTHORISED COUNCIL OFFICER .....

RENEWALS

This Temporary Occupancy Permit is hereby renewed for one year with effect from the..... day of ....., 197 .....

Signature of Occupier: .....

Date. .....

Witnesses: .....

.....

This Temporary Occupancy Permit is hereby renewed for one year with effect from the ..... day of

....., 197 .....

Signature of Occupier: .....

Date: .....

Witnesses: .....

.....

(29)

REPUBLIC OF BOTSWANA

URBAN DEVELOPMENT AND LAND POLICY

Ministry of Local Government and Lands

April **1978**

INTRODUCTION

In February 1978 a committee including representatives from all central government departments involved in urban policy, the Urban Development Committee, reported to Cabinet on a proposed framework for urban development policy. Under Presidential Directive Cab 9/78 the report of the Committee was approved and is reproduced here for the guidance of all those involved in administering Botswana's urban policy.

Under the same Presidential Directive Cabinet also made its recommendations on the report of the Urban Land Policy Advisory Committee, a body set up to advise on questions of urban land tenure and policy. These recommendations are also reproduced here.

Ministry of Local Government and Lands
April 1978

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REPORT OF

THE URBAN DEVELOPMENT COMMITTEE

I. LAND DEVELOPMENT POLICY

1. Sources of Finance

In general, the Committee notes, we are bound by the present system for financing projects. The present approach, doing comprehensive infrastructure development, implies big finance. Therefore, these major operations restrict us to the complexities of donor finance. The Committee recommends that the Ministry of Finance should put the idea of programme financing of secondary site and service infrastructure to donors as this would remove some of the present problems of "lumpy" projects. It was noted that the Ministry of Finance should carefully study the procurement rules of any agency to which a project is put. It should also avoid packages of finance which involve more than two donors.

Financial planning for primaries should be carried out well in advance of requirements to avoid the kind of problems being experienced in Gaborone at present.

2. Agencies for Development

The Committee recommends that Government should continue to plan and finance all primary infrastructure. In this way Government retains overall control of management and direction of the growth of Botswana's towns and can therefore ensure that the interests of all sections of the community are served. Government, parastatals, and the private sector should develop secondary infrastructure in areas where Government has supplied primaries. This should be encouraged in order to tap all possible sources of finance for urban development. The physical installation of water and electrical infra-

structure should be implemented by the Water Utilities Corporation and Botswana Power Corporation in the towns where they are operating. B.H.C. should be given areas to develop in primary serviced land which have been zoned for fully-serviced residential development by the Department of Town and Regional Planning. When B.H.C. or the private sector develops residential areas, the secondary infrastructure should be handed over to the Town Councils and Utility Corporations. Secondary costs will be recovered from rents or plot sales by B.H.C. and the private sector.

3. Development Standards

The Committee recommends that with the present shortage of funds, we have to accept that the standards set in NDP IV are too high. Realistic standards (with resulting recurrent and capital costs) should be determined by a working group which should be established to deal with this question. A range of site and service standards should be developed to cater for identified income levels. To avoid uncontrolled settlement, the Committee recommends that pegged plots, serviced only by standpipes and scraped roads, be developed. Other services can be added as and when funds become available to Government and plot occupiers.

4. Plot Sizes

The Committee notes that high density areas save recurrent costs, but have less effect on capital costs. The placement of very large plots was discussed. It was noted that placing very large plots near the towns' centres results in pushing poorer people on the circumference far from sources of employment and the services at the centre of town.

The Committee recommends that in general, fully serviced plots should range between 300 to 2000 m^2, with some larger plots to meet demands in exceptional circumstances. The minimum area for partially serviced plots is 400 m^2.

5. Control of Urban Growth

The Committee recommends that towns should be developed to deal with inevitable urban growth. Developments should not encourage such growth. People who live in urban areas must be required to pay for the services they receive. With sufficient demarcated plots available Town Councils should move immediately to prevent squatting and be vested with the necessary powers to do so.

6. Maintenance after Development

The Committee notes with alarm the fact that Town Councils often fail to maintain developments properly in the towns. This results in a waste of capital resources. It recommends that Town Councils must have financial and technical capabilities and other resources to provide adequate maintenance after development. The towns' maintenance services must increase to keep pace with urban growth.

II. HOUSING POLICY

1. Housing Demand

The Committee notes that B.H.C. faces demand for conventional high, medium and low cost housing. Minimum yearly income to afford a B.H.C. house is at present P 1,700 with sub-economic rents. With economic rents this would rise to about P 2,400. At present, there is no mortgage guarantee scheme

operating which would help people wanting to purchase houses. If a scheme is introduced B.H.C. expects a large demand to purchase low cost houses at replacement value.

The Committee notes that B.H.C. houses cannot be built below a certain standard as people expect high quality from the Government's Housing Corporation. However, if people build their own houses they are more ready to accept their own limitations.

The Committee recommends that various grades of self-help housing standards should be provided to cater for identified target income groups. The top-end of the self-help standards should overlap B.H.C. low cost standards. Self-help standards should be reviewed for NDP V and guidelines established. The priority for self-help housing will be to satisfy basic needs (standpipes, earth roads, pegged plots). The income restriction on eligibility for allocation of a site and service plot should be retained but raised to P 3,500 yearly income. The order in which plots are allocated to those eligible should be determined by a points system which gives priority to those with low income and poor housing before allocation.

2. Housing Provision

The Committee recommends that the Ministry of Local Government and Lands should continue to be responsible for overall planning and allocation of serviced land. B.H.C. should continue to provide high, medium and low cost houses for sale and rental. B.H.C. should be responsible for staff housing for the parastatals. Where Government or B.H.C. provides plots with secondary services one third should be offered to the private sector. If private sector

developers begin to develop blocks of land by installing secondary services and houses, the stated split should be maintained overall by adjusting B.H.C.'s allocations. (The percentage shares may be adjusted in future if supply conditions change).

3. Construction

The Committee recommends that assistance should be given to small local building contractors in terms of their financing, mobilisation and effective skills. The Ministry of Commerce and BEDU should ensure that this is done. The Ministry of Finance and Development Planning should look into a scheme whereby small contractors would be underwritten in order to give adequate security when bidding for building contracts.

It is also agreed that in order to protect the small contractor a legal system of registration should be introduced whereby building contractors would be categorised according to capability and financial standing and contracts of a certain size would be put out to contractors in the appropriate category.

The Ministry of Local Government and Lands should look into the possibilities of housing co-operatives.

Direct labour should only be used by Town Councils for ad hoc projects such as upgrading schemes or where it has been priced and is competitive with other contractors.

The true self-help part of site and service construction should be encouraged as this lowers labour costs and hence the total cost of a house. There is nothing wrong with a mix of small contractors and true self-help labour. Nor is there anything wrong

with a Certificate of Rights holder contracting out if he can afford to.

4. Calculation of Rents and Service Charges

a) The Committee notes that B.H.C. rents at present recover an annual return of about 9.6% on costs. This means that rents are about 68% of an economic level. This is too low. B.H.C. rents should rise each year to at least keep pace with inflation and become economic.

The Committee recommends that Government accept the B.H.C. proposal that its rents should rise by at least 12½% per annum until an economic level is reached.

b) As far as the private sector is concerned the Committee notes rents for both high and low cost property are excessive in Gaborone, but the only effective method of control is to ensure an adequate supply. Rent control is seldom effective even with adequate manpower to enforce it. The present Act could be applied to the commercial and high cost sectors, but controls in the less formal low cost rental market would be impossible. Not only would there not be enough inspectors, but also there were numerous ways in which the controls could be evaded. The Certificate of Rights does give the Council the power to prevent sub-letting if the rent charged is thought to be excessive which gives a degree of control in site and service areas.

c) The Committee notes that arrears in service charges are a growing problem. The Ministry of Local Government and Lands should look into the

problem and study why it arises. Meanwhile, the Committee recommends that Councils should be told that they should not tolerate arrears and strong action should be taken to enforce payment, including early eviction for those who do not honour the terms of the Certificate of Rights.

At present service charges are sub-economic. The Committee recommends that Town Councils should bring them up to economic levels. Charges for plots of a similar kind within each town should be the same; there will of course be a range of plot types in each town.

Schemes should be designed so that economic changes are affordable by plot occupants. (See also Cost Recovery Policy).

5. Planning and Zoning

The Committee notes the high costs of developments with highly integrated plots of different types and the possible problems of social acceptability. It also notes that polarisation can be avoided and services be available to all without plots of vastly different standards being next door to one another.

The Committee recommends that a fundamental principle of planning should be the primacy of access to services for the poor.

As a town grows from a single nucleus the need arises for a number of centres for the provision of facilities, services and employment opportunities within easy access of residents. How this can be achieved in practice allowing the town to function effectively is the responsibility of the Ministry of

Local Government and Lands through the Department of Town and Regional Planning.

6. Building Standards

The Committee notes that the Building Regulations Board proposes two grades of regulations, one for conventional housing and one for site and service areas. The regulations will be applied by area. The required minimum building standards should not make construction too expensive for people who must comply. Standard plans provided by SHHAs will get automatic approval. A properly operating SHHA can help people build proper buildings and prevent the construction of unsafe structures which would be condemned. The Committee notes that regulations must not be too restrictive. The aim must be to provide individuals with enough opportunity to build their own homes. Overly restrictive regulations hinder individual initiative.

7. Home Ownership

The Committee recommends that a Mortgage Guarantee Scheme be established. Such a scheme is essential for those not catered for by site and service schemes but wanting to own their own house. It is essential that such a scheme is consistent with the building material loan schemes in operation.

The Committee recommends that the scheme be open to citizens on incomes of above P 2,500 per annum who wish to take out a mortgage with the Botswana Building Society. Government should guarantee up to 25% of the value of the property being purchased, provided that the guarantee does not exceed P 3,000. In this way the borrower would only have to make a deposit of 5% on loans up to P 12,000. Above this

amount the borrower would have to pay an increasingly large deposit. The terms of the mortgage would be those normally applied by the Building Society.

The scheme should be administered by the Botswana Building Society who would pass each application to the Ministry of Finance and Development Planning for approval. The Ministry would keep a record showing Government's contingent liability calculated every six months.

The loans advanced should cover both plot and house; in the event of the plot not being developed in accordance with the development covenant, ownership of the plot should revert to the Building Society as provided for under the waiver agreed between the United Building Society and Government.

Only one loan should be guaranteed for any one individual at any time.

8. Building Material Loans

The Committee notes that Building Material Loans benefit those in the middle of the urban income range. It is better to have them at an interest rate which makes them replicable, rather than one which is only possible from grant finance and therefore only open to a few. It is therefore recommended that funds for Building Material Loans should be passed to the Councils at an interest rate of 8% per annum (the present PDSF interest rate) over 15 years, for onlending to borrowers at a rate of 9% per annum over 15 years. The small margin would help to cover the costs of administering the scheme.

9. Squatter Upgrading

The Committee recommends that the present approach be continued. However, although upgrading programmes should continue to have a high priority they should only be carried out when an adequate supply of new site and service plots with basic services is being provided; otherwise new squatter settlements will develop and will be costly to upgrade.

The standard of servicing should depend on the incomes of the target population, that is those in the area to be upgraded. Donor finance for upgrading schemes should be readily available, given the circumstances of the beneficiaries.

10. Public Transport

The Committee notes that as the towns grow there is an increased need for adequate public transport within them. The Committee recommends that the Department of Town and Regional Planning and the Councils should identify priority routes which should be served and the Ministry of Works and Communication should be contacted to discuss how best to ensure that such routes are served.

11. Co-ordination

The Committee notes that the provision of local centres, schools and health facilities is essential to urban development projects. These are primarily a responsibility of the Ministry of Local Government and Lands. However, an essential part of the planning of an area is consultation with the Ministries of Education, Commerce and Health and the relevant Town Council on these issues. Once the project is being implemented it is the responsibility of the

Urban Development Co-ordinator to ensure that contact is maintained. The Committee recommends that in new projects the infrastructure for local centres should be included in the main infrastructure contract for the area. Work should be done concurrently with planning infrastructure to secure finance for schools and clinics or health posts.

III. COST RECOVERY POLICY

1. Secondary Costs

The Committee notes that as the vast majority of new urban development is concerned with self-help housing all the costs of urban development can no longer be recovered through rates and the sale of fully serviced plots. As stated in NDP IV, the residents of self-help areas will have to pay the costs of developing these areas.

It is felt that service charges to occupants of self-help areas should provide for full recovery of the Council's recurrent costs of road maintenance, water and refuse collection in the areas. Since street lighting in the area provides benefits to both area residents and residents of the town as a whole, it is proposed that area residents pay only a portion of street lighting costs. Service charges should be averaged for areas of the same standard within a town.

The Committee also proposes that the Councils' normal housing administrative costs should be recovered through service charges, as this would be easily affordable by residents. It is noted, however, that the achievements of previous projects have been limited by staff shortages, and to enable residents to build more efficiently it will be necessary in the

future to provide more and better qualified staff to help implement the self-help projects. The Committee believes that the management of urban growth through self-help housing is a national problem requiring a greater input and expenditure than could reasonably be recovered by the Councils. It is therefore proposed that the Councils' administrative costs attributable to implementation of self-help housing projects should be funded by grant from Government or donors as previously proposed in NDP III.

As Certificate of Rights holders do not pay rates, the Committee recommends that the debt servicing costs of all secondary infrastructure in site and service areas should be recovered from the monthly charges to plot occupants. These charges should be averaged for all areas of the same standard within a town. In areas where plots are to be sold, the Committee recommends that the present practice of recovering all secondary costs of water, power, roads and sewers from plot sales should be continued.

The Committee therefore recommends:

a) Service charges in self-help areas should provide for recovery of all recurrent costs of road maintenance, water, refuse collection and a portion of street lighting costs. They should also cover the day-to-day costs of administering the areas and the debt servicing charges for all secondary infrastructure in self-help areas.

b) The costs attributable to implementation of site and service projects should be funded by grant from Government or donors.

c) In areas where plots are sold, all secondary

costs of roads, sewers, water, street lighting and power should be recovered through plot sales. A cross subsidy element should be included on high and medium cost residential and commercial and industrial sites.

2. Primary Costs

The Committee recommends that all primary water and power costs should continue to be funded through loans at 8% over 25 years to the Water Utilities Corporation and the Botswana Power Corporation and recovered by them through tariffs. As future urban development will consist mainly of self-help housing areas which do not increase the Councils' rate bases, primary roads and streetlights should continue to be funded through loans to Councils at 1% over 25 years. Primary sewerage works will serve rateable areas and so should be funded through loans to Councils at 8% over 25 years.

To aid in the determination of service charges Councils should be required to keep adequate maintenance records.

The Committee recommends that soft finance obtained from donors for urban projects should be used to benefit residents of all self-help housing areas in the town concerned. Also, as the capital costs of community facilities such as schools, health clinics and health posts are unrecoverable, they should be funded by grant when possible. To avoid encouraging increased migration to the towns, the standards of rural and urban community facilities should be equal.

IV. URBAN FINANCE

The Committee has studied projections of all four Town Councils' revenues and expenditures for the next five years and believes that revenue sources at present applied will be inadequate and will lead to unacceptable deficits in the period. It is noted that expenditure is generally rising due to inflation and general urban growth while revenue is remaining relatively static. While some Councils such as Gaborone will be able to avoid serious trouble due to very high local government tax and rates bases, Francistown has a very seriously depressed economy, with little growth in employment and falling property values.

The Committee notes that rates, local government tax and service charges will be the critical sources of Council revenue, as all other sources are minor and will have little effect on the overall financial positions of the Councils. It is agreed that deficit grants such as presently apply to District Councils should not be applied to the Town Councils, as this would encourage increased expenditure. The Committee instead prefers solutions which would encourage the Town Councils to regulate expenditure and collect revenue as efficiently as possible.

The Committee notes that in some towns rates have been relatively low and recommends that in future rates be set on a more rational basis, at least keeping pace with inflation and resulting in roughly equal rate bills for the same type of houses in different towns. Local government tax collection should also be improved, but this will only be possible if Councils have adequate staff.

The Committee heard evidence that many Batswana working in South Africa at present do not pay local government tax, but that this tax may soon be deducted by employers in South Africa. It was also reported that Gaborone Town

Council now receives more local government tax than is actually attributable to Central Government employees working in Gaborone. The Committee recommends that local government tax proceeds from all Central Government employees and all workers in South Africa be pooled and distributed to Councils according to need. In the next five years it is projected this pool will keep all Councils in surplus, provided adequate rates and service charges are charged and collected.

Due to the fact that most local government tax in urban areas is derived from people paying at the maximum level, revenue from this source does not rise with pay increases and does not therefore keep pace with inflation. For this reason the Committee recommends that the local government tax structure should be reviewed more frequently.

The Committee notes that in the future primary schools fees will be abolished. To prevent a loss to the Councils, the Committee recommends that school fees be replaced with equivalent grants which keep pace with inflation.

Projections of the Councils' finances have been recalculated to take account of the proposed changes and likely developments such as wage and salary awards. If Government adopts all the recommendations given above, the Town Councils should remain solvent til 1981/82, earning reasonable surplusses generally throughout the period. The only exception to this is Francistown, which would require the additional rates and local government tax income generated by the possible location of the national railway headquarters in Francistown to stay in surplus in 1981/82. In addition, the projections of revenue and expenditure also show the net deficits to be met from general revenue which will occur as the result of planned urban expansion and upgrading of squatter settlements.

In the period after 1981/82 the slow increase in local government tax, the rising volume of social services provided, and the effects of inflation will again lead to a deterioration of the Town Councils' financial positions. Thus, by 1982/83, or immediately, if the recommendations listed above are not adopted now, further measures will have to be taken to improve the Councils' finances. These suggested further measures are:

a) tax support grants

b) specific grants for health, community and educational services

c) a restructuring of local government tax

Brief descriptions of these measures are given below:

a) Tax support grants take cognisance of the fact that as most new urban growth is the result of rural-urban migration by low income families, revenue from local government taxes and rates does not grow as rapidly as Council expenditure. A tax support grant would be calculated either on the basis of a percentage of local government tax collected or an actual growth in the town's population and then passed on from Government to the Councils. It would have the advantage of encouraging the Councils to regulate expenditure and more efficiently collect revenue.

b) Specific grants for health, community and educational services may be justified on the basis that these provide national benefits and should therefore not be funded by local authorities. Specific grants would be easy to calculate, as Government would simply give to Councils grants related to the recurrent costs of these services. On the other hand, specific

grants would not encourage the Councils to regulate their own expenditure.

c) A restructuring of local government tax would enable Councils' revenues to keep pace with inflation. This would imply revising rates and income bands. This could also make local government tax more equitable by collecting percentage of income from all ranges, but might require a revision of the Central Government Income Tax Law.

The Committee proposes that Government decide soon which of these options should be applied from 1982/83 onwards, or sooner if the other recommendations are not followed. The Committee feels this is necessary so that proper planning for the administration of the chosen option can take place well before its application.

V. TOWN COUNCIL STAFFING

Town Councils carry the burden of the administration of site and service schemes and the maintenance of roads, sewerage and community facilities, as well as the financial burdens of site and service secondary infrastructure, primary roads and sewerage and day-to-day administration of the towns and their social services. At present they are inadequately staffed to carry out their responsibilities properly. The Committee recommends that high priority is given to allocating staff to Town Councils, especially their housing and treasury departments. The conditions of service must allow adequate recruitment. If this is not achieved then effective management of major urban projects can only be ensured by bringing the housing departments under the Ministry of Local Government and Lands. This alternative is not an attractive one as it conflicts with the eventual aim of decentralisation.

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The balance of priority given to allocating manpower between Central and Local Government and the practice of frequent transferring of staff must be changed to allow any improvement.

RECOMMENDATIONS ON URBAN LAND POLICY

LIST OF RECOMMENDATIONS

Paragraph of Report of Urban Land Policy Advisory Committee	Recommendation accepted by Cabinet
A.I.1.a	Urban land at present held under fixed period grant should not be converted to freehold. All future allocations of land for residential use should be under fixed period grant.
A.I.2.b	Once a house has been developed on a plot, there should be no restrictions on its sale.
A.I.3.a	The recommended policy of fixed period grant residential urban land should apply to companies.
A.II.1.a	A citizen of Botswana may be allocated one residential plot in each of the towns. Citizens who have not been allocated a plot should be given preference over citizens who have been allocated a plot in another town.
A.II.1.b	Citizens should be allowed to purchase as many free market houses as they wish.
A.II.2.b.c.d.e.	All companies' requests for plots for staff housing should be judged on their merits by the MLGL allocation Committee. Tied housing is

a problem and an investigation into this subject should be initiated. Company staff housing is subject to a five-year restriction on sale.

A.II.2.f.g	No government developed plots should be sold for "speculative" building in a situation of scarcity. This does not preclude private servicing of residential land.
A.II.3.a	Citizen civil servants should be treated the same as all other citizens as regards land ownership.
A.III.b	A mortgage guarantee scheme should be introduced, with the mortgage covering both plot and house.
B.II.1.a	Commercial and industrial properties should normally receive 50-year fixed period grants. Subject to negotiation, these could be extended or converted to freehold at a price.
B.II.3.a	Botswana's laws should be amended to permit sectional or similar titles to be initiated as they encourage owner occupation in multi-unit buildings.
B.III.2.c	The NDB should give more emphasis to commercial and industrial loans. It should advertise the fact that it can offer finance for such loans.

B.III.2.d	Local authorities should continue operating simple markets and should not get involved in building construction for lease.
B.III.2.e	Government should encourage the commercial banks to give longer term loans. Government should approach the banks to look into the question of using property and planned buildings as security for loans.

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CAMEROON PRESENTATION

ACQUISITION AND REGISTRATION OF LAND TITLES

Introduction:

When talking of Land Use Policies, there are a great number of devices for regulating these uses.

These range from regulations for curtailment of rights, rent controls, zoning regulations, restrictions of sales price of land, building regulations, purchase and ownership of lands and a ranges fo many others.

I have chosen for my presentation the aspect which deals with acquisition and ownership of land and to examine if the system in my country encourages or discourages the affordability of land for shelter for the people of Cameroon.

1. Location of Cameroon: East of Nigeria, South of Chad, West of Central African Republic, Norht of Congo and the Atlantic Ocean. Geographical location, 2° N to 12°N and 8°E to 16°E.

2. Population: As at 9/4/76 is 7.663.246 millions

   Males - 49% Females 51%

   Urban 28.5% Rural 71.5%

   Anglophone Provinces - 1.601.046 million

   Francophone Province - 6.062.200 millions

   Population density worked on an area of 475,000 square kilometres is 16.5 persons per square kilometre.

3. Historical Changes: The first effective colonial masters were the Germans who recognised the Cameroonians' ownership of the land but obtained parcels of lands from them by gifts stockfish, guns and powder and other articles of exchange.

4. After the Germans the Franch and English alliens. After defeating the Germans at the World War II which swept over all the continents divided CAMEROON into British and French Cameroons. These sectors became West and East Cameroon after independence.

During this colonial period, different land acquisition policies operated in each sector of Cameroon - i.e., British and French Cameroon. (See tabulation below).

Now	French Cameroon East Cameroon	Britich Cameroon Now West Cameroon
i.	Chiefs and individuals' rights were recognised.	The colonial Administration ignored rights but regarded chiefs as care takers of the land while the title to the lands vested in the colonial Government - but natives were to continue to use the land so far as they did not sell.
ii.	Here land was sold outright to French people etc., hence passing freehold titles to buyers.	Land was only leased to foreigners on short or long term leases by the Government. Subleases and mortgages operated only by permission from the Government.
iii.	Flexible change of lands.	No flexible change of land.

After Independence, the systems were very much questioned and as a result, in 1972, the State Government of United Republic of Cameroon set up a Land Commission to investigate into the systems and make recommendations to the Central Government. The deputy Minister incharge of Lands was made chairman of the Commission whose report came out in 1973.

As a result of the above work, the present new Land Ordinances of 1974 have been established and promulgated by the President and this is the present law under which land is acquired and registered in Cameroon.

5. (i) Under this Law (Ordinance of 1974) all lands in Cameroon are declared National Lands.

(ii) Cameroonians will continue to use the lands and may register or obtain land certificate for such lands as have been effectively developed by them.

(iii) Foreigners willing to do business in Cameroon shall obtain from the State, land concession and finally leases to such areas as they are willing to develop.

All Corporations and firms holding any sort of titles are required to regularised such documents with the Government.

(iv) In the case of individuals (former W.C.) or any one holding any certificate of occupancy must deposit such documents at the Provincial Lands Service in order to obtain new lands certificates.

IV. Within seven years of the promulgation of the law, all the work involved in the obtaintion of the land certificates - ie., surveys, registrations etc. shall be borne by the State Government.

V. The State shall acquire as private estates of the State any lands for the good management and in the interest of her people. Such lands if they have title shall be subject to compensation at the Government established rates.

VI. Finally, all undeveloped lands shall be vested in the private estate of the State after the 7 years period and such land shall therefore be sold to developers on demand at the fixed rates.

To conclude, I think that the present system aims at encouraging all grades (target groups) of Cammeroonians to develop land since Government is by far subsidizing them by the system of free registrations.

It appears that the development of housing and Agriculture would have increased immensply at the end of the 7 years period. This already being noticed by the rate at which registration is going on.

Another point of interest is that, the system stops land speculation since no land certificate is issued to an applicant for an undeveloped plot or parcel of land.

Under the system, the shelter sector is highly encouraged to construct since no land certificate could be obtained without a substantial development of a house on the plot or land.

The final point of note is that the State aims at having a large land bank at the end of the seven years which will facilitate the carrying out of State Projects.

COMPOSITION OF LAND CONSULTATIVE COMMISSION

1. President - District Officer
2. Secretary - Divisional Lands Officer
3. Technical Member - Town Planning Officer
4. Technical Member - Survey - Officer
5. Technical Member - Agriculture Officer

Traditional Council Member

6. Local Chief of Area
7. Member of Community
8. Member of Community

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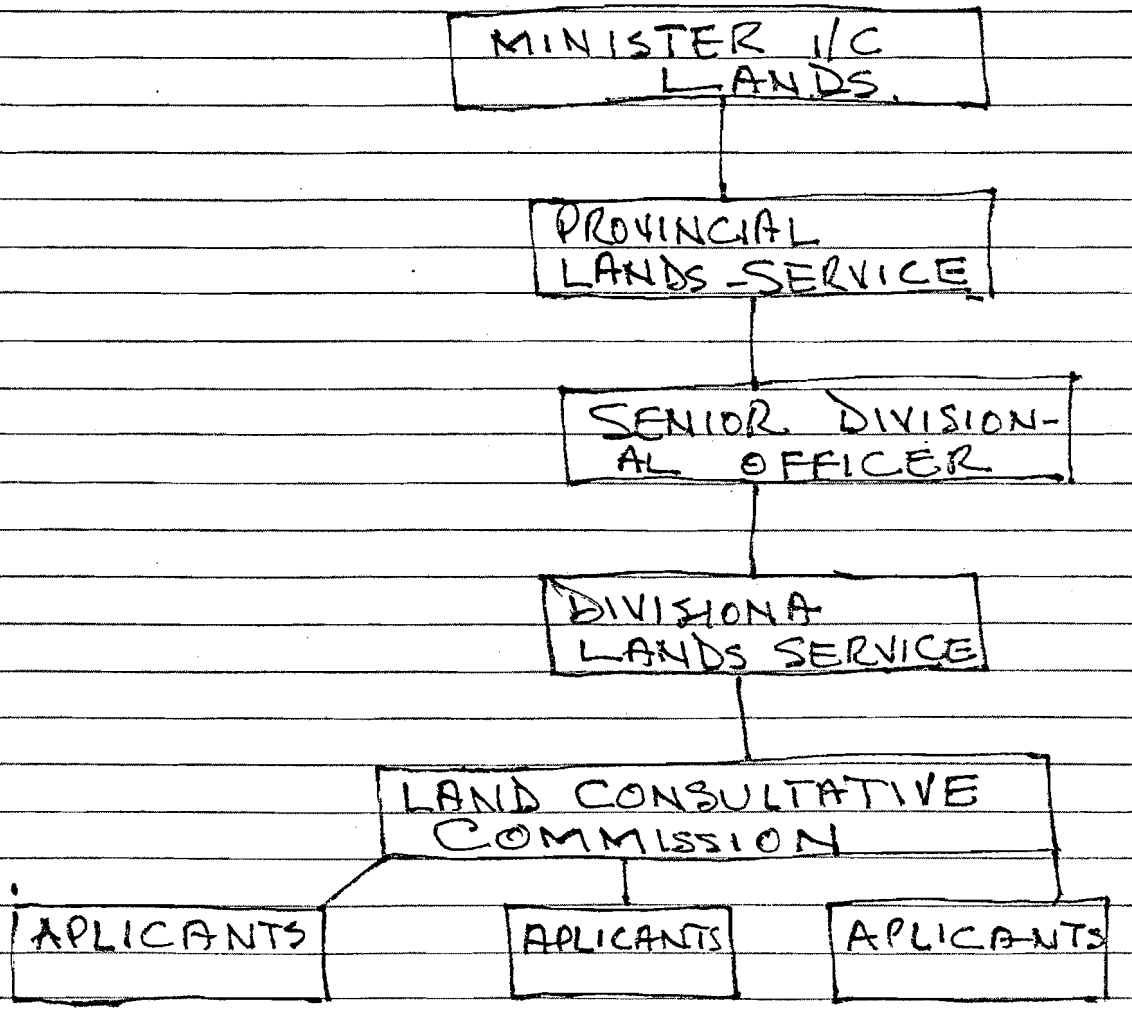
PROCEDURE FOR OBTAINNING LAND CERTIFICATE in CAMEROON.



NOTES - TO DAVID TATA

FROM G. RIVKIN

QUESTIONS

1. What leasing terms are available for Government lands?

2. Can family or business get a construction loan in the basis of such a lease?

3. If family needs some evidence of secure tenure as a condition of getting a mortgage - and yet must develop its plot in order to be eligible for a land certificate - how does one break into the cycle?

4. How are lands allotted? Solely by response to applicants? Or does government take initiative by assessing magnitude of family need, planning which sections of land to release or make available for settlement and developing infrastructure in accordance with a development program or schedule?

5. Does government prepare land use plans for evidence of development of its land holdings? If so, what do such plans cover? If not, how are conflicts between competing uses resolved? Could you describe your land use planning program? Its priorities, approaches? Relationship to shelter planning institutions and activities?

   Is there adequate suitable land available for shelter in good relationship to sources of employment? Community services? Are there problems in some areas? Could you describe them?

6. What is the objective of land banking in Cameroon? Anti-speculation mainly? What sorts of State projects do you envision on the lands held in reserve? Are these lands policed against squatters? Or has pressure simply not built up enough so that squatter invasion becomes a problem?

7. Could you trace the steps an individual faces before he can get a house developed for his family under the present system in your country?

ANSWERS

1. (a) Promise to construct a home or develop a farm to an agreed sum of money within an agreed period of time and in accordance with building regulations or agricultural regulations.

   (b) A rent is payable yearly.

2. Yes, but Government must approve mortgage of lease.

3. This is difficult with Commercial banks - but if member of family is also member of one of the cooperative organisations he/she could obtain loan through them.

4. The Ordinance assumes that persons who are already on

   (a) the land make application for land certificate. Those who are not, but are willing to own land could apply for vacant national lands. Government has some layout plans of some areas and applications are also made for title to these plots. In such cases a land concession is given for period of 3-5 years to develop. After this, a price p.s. meter is paid to State.

   (b) Recent steps being taken by State Government is the designation of sites for "Sites and Services Programs".

5. Master Plans are being made for the important cities by mostly Foreign Planning Firms on contracts. On these plans is indicated the land use proposed for development of zones, plots, etc.

   The plans are, of course, displayed at conspicious offices for information to developers, so that owners of land and developers know before hand what is allowed in A or B Zone.

   In addition, for each intended project, a Planning Permission demand is made to the Town Planning Authority who explain the plan in details. The response is a planning permission issued to the applicants. This is handed over to the applicant's designer or architect to follow the conditions in design in order to comply with the use zone.

   When the plans are drawn, they are forwarded to local council office for examination and onward approval by the Town Planning Service. The plans are then returned to the Councils' office for the Mayor to issue a Building Permit. In this way conflict of development is avoided.

6. The "Land Bank" of land by State is calculated to enable State carryout urban extention projects at a low cost and to reserve lands for the common good of all. It stops the rich men from amazing land for themselves so as to resell at a high price in hording.

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SHELTER DEVELOPMENT IN GHANA AND THE PROPOSED NATIONAL HOUSING POLICY

BY:

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DANIEL K. ASANTE

A PAPER PREPARED FOR USAID'S SENIOR PROFESSIONAL'S SHELTER SECTOR WORKSHOP

WASHINGTON, D.C. U.S.A.

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THE VIEWS EXPRESSED IN THIS PAPER ARE THOSE OF THE AUTHORS AND NOT NECESSARILY THOSE OF THE GOVERNMENT OF GHANA.

PREFACE

The purpose of this paper is to examine some of the main problems of shelter development in Ghana and attempt's being made to solve these problems. In our attempt to do this we have highlited on some of the issues which are related directly or indirectly to the housing problem.

This paper comprises essentially two parts. The first part deals with the problems which Ghanaians are encountering in their effort to provide adequate shelter for themselves. In this section some of the components,schemes and programmes of the housing sector are discussed.

The second section deals basically with the proposed National Housing Policy. It may be realised that the actual Housing Policy is not categorically stated. It can only be inferred. We have deliberately done this because a draft or proposed policy becomes a policy only when it is given the necessary political blessings.

This paper by no means exhausts all the issues in the housing sector. Infact the areas covered would have been treated in detail and other areas added had it not been the need for brevity in the light of the limited time for presentation.

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Introduction

Ghana is situated in West Africa with Upper Volta, Ivory Coast, Togol and the Atlantic Ocean Sharing her boundaries to the North, West, East and South, respectively.

She has a population of about 11 million people and a population growth rate of about 2.9%. Gross National Product at marked prices is estimated at $3,860 million and per capita income is $370.

Shelter, one of the basic human needs, is next to food the largest component of the household budget. Apart from the fact that it takes about 15-20% of total household expenditures rising to 30% in the lower income bracket, it also forms a significant portion of privately held wealth in most developing countries.

The provision of adequate housing is an important goal in both economic and welfare terms. Studies have shown that investments in housing have a significant impact on income and employment through multiple linkages. Estimates in certain developing countries suggest that the income multiplier for house is about two (2). The rate of employment creation in the housing industry is to say the least very high.

In spite of the acclaimed contribution of the housing industry to economic development, in Ghana, like in most developing countries, the rate of growth of shelter is so low that it has become a matter of grave concern.

The Housing Problem

The housing problem in Ghana involves not only inadequate physical stock but also poor quality housing. Over the years the housing problem has been accumulating because of isolated efforts to tackle it. A projection of the future demand for housing presents an alarming picture which requires immediate attention.

The elements of the total housing requirements are as follows:

(1) Existing deficit in housing meeting the standards.

(2) Replacement of obsolescent dwellings.

(3) Population growth and family size.

The basic factors which have contributed to the housing problem are the rapid growth of population and high rates of migration and urbanization. The inability of the housing sector to satisfy the high demand for housing is aggravated by such factors as inadequate and rising costs of building materials and ineffective mobilization of indigenous resources for housing development.

Population, Migration and Urbanization. High population growth, the drift to towns and the resultant urbanization are chain events, with attendent problems all over the world. In developing countries like Ghana the result is population congestion in few urban towns thus creating unemployment, house and related environmental problems. The phenomena of rural-urban unification is well known to us to merit any lengthy exposition.

Between 1960 and 1970 the total population of Ghana increased from 6.7 million to 8.6 million (i.e. 7% increase). The biggest increases of 72.59% and 37.06% were recorded in Greater Accra and in Northern regions. The average density per square mile increased from 73 persons in 1960 to 93 in 1970. Before the end of the Century Ghana should expect its population to be above 14 million.

The implications of the above to the housing situation is that Ghana should expect to house more people in the very near future than at present. If the expected future demand is added to the existing house deficiency, the magnitude of the house problem is readily appreciated.

The housing problem in Ghana cannot be properly evaluated without reference to urbanization. Population growth and migration have led to the growth of towns and urban centres in recent times. This is evidenced by the fact that while in 1931 there were only 27 urban settlements in the country, the number increased to 135 in 1970.

The Southern section of the country has as many as 72 urban settlemtns while Ashanti and Brong Ahafo Regions in the Hinterland have 36. Growth of population in the urban centres throughout the country have shown an upward trend. This has accounted for the severe overcrowding and the acute shortage of houses and the inadequacy of other amenities in these centres.

A question which deserves attention is the faster rate of population growth as compared with the increase in shelter development.

Other Factors

Rising costs of building materials, and shortages, particularly of finance and skills have placed further strains on the provision of adequate houses and essential amenities for the ever increasing population. This in turn leads to congestion, slums and squatter settlements which present their own problem of social alienation and crime. Population growth, migration and urbanization cannot be halted even though the rate may be slowed down a little with effective family planning and integrated rural development programmes.

The Slum Problem

The present trend in rural to urban migration will in all probability continue, and may even accelerate. One of the physical responses to the housing problem of the poor migrating into the cities is the development of slums. Growth of slums is thus a natural response to the requirement of shelter by lower income families and although these areas are frequently lacking in urban amenities and living conditions and housing quality are often very unsatisfactory, slum areas provide living space for the urban poor at a price which they are able to pay.

Substandard Structures

Closely related to the slum problem is the number of people living in substandard houses. Buildings with cracks and collapsing walls which constitute danger to the dweller are common features particularly in the rural areas. In addition, living in non dwelling structures such as garages is a common feature in the urban centres. If an account is taken of these, the housing deficit is considerable.

Housing Programmes

In Ghana's attempts to solve or at least minimise the house problem in Ghana various housing programmes including direct government participation in the provision of houses and indirect participation through the encouragement of private participation have been instituted. Despite the large variety of programmes the housing sector has not been able to live up to expectations. Some of the programmes will be discussed.

Public Assisted Housing Programmes

Low-Cost Housing Programme: This programme was initiated in 1972 as a crash programme to help solve the housing needs of the low income group. Since the launching of the programme about 1,447 houses have been put up and over 520 others are at vrious stages of completion. In view of the fact that this programme has not had the desired impact on the low-income housing problem it was terminated in 1976. Apart from the inability of the programme to reach set targets the ones built were priced well out of the reach of the target group. The Government has, however, been making regular budgetary allocations for the completion of all unfinished projects under the programmes in the various regions of the country.

Rural Housing Programmes

The Rural Housing programmes were launched as part of a rural development package a means to improve both the quality and the quantity of Rural Housing. Apart from easing the housing problems of the rural people the programmes were designed to inculcate into the rural communities the spirit of self-help in Co-operative Housing.

The Rural Housing programmes involve three major schemes. These are the rural co-operative housing scheme, the wall protection scheme, and the roof loans scheme.

Under the Rural Housing Scheme loans in the form of materials are given to individuals in rural communities who form rural co-operative housing societies to build their own houses. Loans are also provided under the roof loans and the wall protection schemes to applicants to plaster their houses,construct drains around the houses and roof their houses where necessary.

Since the inception of these programmes about six years ago a total of about 874 houses have been completed under the self-help co-operative house shceme and over 850 other houses are at various stages of completion. The Department of Rural Development which administers these programmes has been unable to reach the envisaged target of 1,000 houses annually because of insufficient supplies of building materials, equipment, lack of adequate investment funds and the shortage roof, shortage of artisans and technicians. The roof and wall protection schemes have not met with much success either, because of the problem of finance, high cost of building materials and the difficulties involved in the recovery of loans. In all, about 786 people have so far benefited from these schemes.

The State Housing Corporation (SHC). The State Housing Corporation was set up to build houses and provide infrastructural services for all categories of people in the country. The

Corporation's programmes are financed by loans from the commercial banks, the Social Security and National Insurance Trust and Subventions from government. Since 1975 it has been able to put up only about 1900 houses and has about 1,000 others houses under construction. The Corporation has been unable to live up to expectation because of the generally limited building capacity in the country and other problems peculiar to the corporation. Prominent among these problems are low prices for its houses, lack of building materials, management problems and low rents for rented units (rent are so low that income from this source is not enough to cover maintenance of the buildings). Currently about 1,000 houses at various level of construction have been held up for lack of materials and inadequate investment funds.

Tema Development Corporation (TDC) - The Tema Development Corporation unlike the State Housing Corporation (SHC) concentrates on housing programme at Tema, a harbourtown near Accra. Like the SHC, it has been unable to satisfy the demand for houses at Tema because of insufficient investment funds, lack of adequate building materials and consequently high cost of these materials. As a result of these problems the TDC is able to put up on the average about 300 housing units instead of an expected annual production of 1,000 units.

Urban Housing Co-operations Schemes

As part of attempts to ease the urban housing problems Urban Housing Co-operatives were started in some of the urban areas. This scheme like many others has not been very successful. For example the Co-operative Housing Scheme which started in 1971 is virtually at a standstill because of shortage of materials, financial and management problems. To date 21 houses have been completed and 31 others are under construction. The third phase involving 51 other units has not been started yet. A Technical Services Organization is however in the process of being set-up to reactivate the scheme and to manage generally co-operative housing in the country.

Ghana Urban Development Scheme

The rapid increase in Ghana's urban population and rural-urban migration has created urban problems. prominent among these problems is accommodation particularly accommodation for the people in the low income group, who are unable to pay the high rents in cities. The result of this is the emergence of squatter settlements in some of the urban areas. Among the most horrible of such slum areas are Nima-Myamobi in Accra, Ashiama in Tema, Kwesimintim in Sekondi-Takoradi, Moshie Zongo in Kumasi and wards E and F of the Central Area of Tamale. Various attempts are being made to arrest this uncontrolled development. Among such attempts are the site and services schemes and urban upgrading programmes.

Site and Sercies and Urban Upgrading Programmes

The programmes were launched as a means of providing urban services such as basic sanitary cores, water, electricity connection, roads and drainage facilities and upgrading shelter for low income groups in Kumasi, Accra, Sekondi-Takoradi, Tamale and other selected areas (in case of the site and services scheme) at cost they can afford without the need for public subsidies. Under these programmes estimated in 1976 to cost about $30 million, the living and health conditions of about 200,000 low income earners are expected to be improved.

Although actual work has not been started in any of the sites mentioned above a lot of preparatory work has been done. Socio-economic and physical surveys have been conducted in these areas. Proposals for implementation have been made in reports written on the findings of the surveys.

Conceived as a joint venture with the World Bank, the implementation of the programmes have been delayed because of the World Banks hesitation in providing its portion of the financial requirements (about 60% of the project cost).

Housing Finance

Housing Financing in Ghana has for many years involved a direct budgetary allocation to public housing agencies like the State Housing Corporation, the Department of Rural Development ment, the Tema Development Corporation to build houses for all categories of people. This method of financing is supplemented by loans from financial institutions such as Bank for Housing and Construction, the First Ghana Building Society, Commercial Banks,the Social Security and National Insurance Trust, and Insurance Companies to these public house agencies and private developers to build houses. Other societies such as credit unions, co-operative societies and credit association have also been instrumental in house financing.

One thing however is conspicious in the housing financing system in Ghana, and this is the fact that government subsidy is very significant, both in the form of direct allocation of funds for the construction of houses and provision of infrastructure and in the form of concessionary interest rates granted to public sector housing agencies.

The contribution of the private sector to house financing has been restricted to high and middle income housing because of high interest rates and alleged inconveniences involved in lending to low income groups.

Building Materials

Building materials constitutes the backbone of the construction Industry all over the world especially in developing countries where considerable attention is being focused on the development of physical infrastructure such as roads and bridges for transportation, houses, public utilities, commercial and industrial buildings.

In Ghana the cost of new constructional works in 1972 is estimated at about $40 million which is about 6% of GDP for that year. Of this amount about 50% was spent on materials alone. The annual cost of materials is estimated at 3% of GDP 40% of which is imported. Investment in local materials on the other hand is only 1% of annually GDP. This shows a very weak position in the building materials industry.

The building materials situation is worsened by the fact that most of the existing building materials factories are producing at extremely low capacity. The table below portrays vividly the performance of selected building materials factories in the country.

CAPACITIES OF SOME BUILDING MATERIALS ENTERPRISES 1979

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PRODUCTS	ENTERPRISES	CAPACITIES OUTPUT 1975		POTENTIAL CAPACITY		UNUSED CAPACITY%
Wall Tiles		28515	PCS	48000	PCS	41
Wash hand Basins	Saltpond	2828	"	10300	"	73
Water closets	Ceramics	2549	"	15000	"	83
Urinals		21	"	600	"	97
Asbestos Pipes	Kettaneh Ltd.	5000	Tons	24000	Tons	79
	Accra Fulcrit Asbestos	6639	"	8666	"	23
Asbestos Sheets	Kettaneh Ltd.	11400	Tons	24000	Tons	53
Corrving,	Accra					
Galvanised iron Sheets	Allied Chemical	66159	"	75000	"	12
Aluminium Windows		7040	PCS	67705	PCS	89
Gun Breechers		48000	"	20000	"	76
Chain & Link Fencing	UTC Accra	1200	rls	20000	rls	40
Union Dow locks		12921	PCS	100000	PCS	13
Nails Screws	UTC Accra	40000	grs	70000	grs	42
Wire Nails		320[illegible]	tons	60000	tons	73
Tilli Hinges	Dem Metal I.	190000	PCS	[illegible]	PCS	53
Barrel Bolts		16000	PCS	60000	PCS	[illegible]
Drain Pipes Pre-cast	Pre-cast and C.	2500	units	35000	units	[illegible]
Products, Concrete	Concrete Prod.	20000	"	30000	"	33
Blocks	Ltd. Accra	1440000	"	2057000	"	30

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From the table above it can be seen that idle capacity of the factories range from 12 to 99%. It must be noted here that the performance of these factories was at a period when at least some amount of letters of credit could be established for import licenses issued. Viewed against this background the factories can be said to be operating at an even lower capacity in view of the countries critical foreign exchange situation resulting in the Bank of Ghana's inability to establish letters of credit for most manufacturing firms.

The high import content of building materials (about 40%) results in problems assocated with purchasing from remot e distance for example irregularities of deliveries and high expenditure of foreign exchange on transportation.

Table 2 below depicts the imported component of Building materials in Ghana.

TABLE 2: IMPORTED COMPONENT OF BUILDING MATERIALS

Cost excluding Preliminaries etc	Residential Building ¢50,000		Office Building ¢2,300,000	
Materials	Imported Materials %	¢	Imported Materials %	¢
Cement & Reinforcement	16.7	8,350	17.2	395,600
Metalic Materials	13.6	6,800	17.1	343,300
Paints	1.7	850	0.8	18,400
Timber	1.9	950	0.5	11,500
Glazing	1.2	600	0.1	2,300
TOTAL	25.1	17,550	35.7	821,100

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The undesirable implications of irregular deliveries and high transportation costs are two fold. In the first place it increases national expenditure on building materials. Secondly, because of lack of assurance of sustained delivery schedules, the pace of construction is delayed, largely due to frequent shortages of imported materials. Thus a number of otherwise worth while economic projects have to be shelved. Others when they do start proceed at a rather show pace. Currently about 50% of all cement produced in the country is allocated to construction of the Kpong dam in the Eastern Region of Ghana. What this means is that other construction activities including housing construction have little or no cement to carry on with construction. This skewed distribution has had serious repercussions on house construction. Labour and equipment both in the private and public sectors are under utilised. In the case of the private sector trained artisans have had to be laid off.

Another problem posed by the deplorable building material situation is that the estimated cost given at the drawing board stage continues to escalate with time. For example, construction cost has increased 22% per annum in the last 5 years. It follows that an estimate for a building project doubles in three to four years .

For instance a prototype house designed by the Department of Rural Development in Ghana for the Rural Co-operative housing scheme to cost ¢4,500 in 1974 is now estimated at over ¢10,000. Obviously the increase in cost will put the house out of reach of the target group (the low income earners)

The Building materials which have exhibited spectular increases in prices are steel, cement, stone and sand. As a result of scarcity some of these materials especially cement have shown erratic price increases. Strict control exercised over

BEST AVAILABLE DOCUMENT

the distribution and price of this material has until recently resulted in speculations and under-counter sales with its attendant high prices. A bag of cement was being sold at as much as $12 instead of the controlled price of $4

The building materials problem is thus a big headache which has transéended the boundaries of the construction sector to the other sectors of the economy through linkages and by multiplier effects.

ATTEMPTS BEING MADE TO ARREST THE BUILDING MATERIALS PROBLEM

Efforts have been made in the past and are still being made to find a solution to the building materials problem.

In the past attempts were made to reduce the overdependence of the housing development on building materials with high import content by encouraging the use of Bricks in house construction. To this end a number of brick factories were established in Ghana one at Weija in Accra and the others in Kumasi to produce bricks for house construction.

Brick production from these factories is estimated at about 6 million a year. This is rather too small to have an impact on house construction in the country.

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To give mementum to the brick revolution fresh efforts are being made to increase the number of brick factories and to improve on the technology of production. New factories are thus being put up by the Bank of Ghana, Bank for Housing and Construction, the Regional Development Corporations. The GIHOC Brick and Tile Factory at Weija is also being rehabilitated to increase the present low output of burnt clay products. When these factories go into full production by 1981 the annual burnt brick production will rise to 100 million. Even though this level of production will enhance building construction activity considerably in areas served by the factories much more will need to be done to make products available in most parts of the country.

Another area where much effort is being made towards the development and use of local building materials is Research. Many researches have been conducted by a number of institutions both local and foreign into the development of local building materials. Through the tireless efforts of such institutions as the University of Science and Technology, the Building and Road Research Institute, the Forest Products Research Institute etc good and desirable local materials which have little foreign exchange content have been identified. These include unibrick, pozzolana, sand lime bricks, Tek Blocks and natural stone.

DESIGN AND PROTOTYPE

To circumvent the problem of irregularities in the delivery of cement due to foreign exchange constraints and distance the Government has entered into a joint venture with Nigeria and Togoland to establish a gaint clinker product CIMAD project in Lome. From this project it is expected that 400,000 tons of clinker will be available to the Ghana Government annually when the project starts operation in January next year.

To meet the demand for iron and steel product for construction generally an integrated iron and steel project is has been proposed at Oppon-Mason the Western Region. This project it is envisaged will utilise iron ore from the two important reserves in Ghana. It will also utilise the cheap power from the hydroelectric power supply from Akosombo.

Apart from Iron and Steel, the by products from the steel industry will be blast furnance slag for the manufacture of blast furnance slag cement, and phosphate for the manufacture of fertilizers. Much work has also been done by the Geological Surveys Department in mapping out clay deposits and other raw materials needed in the development of local building material.

Recognizing the critical nature of the building materials situation a committee was set up to in 1976 to examine critically and make realistic and practical recommendations on how best to and how effectively local building materials can be developed and used extensively in national building programmes.

After several deliberations during which the different aspects of building materials were critically examined the committee prepared a comprehensive report in which a number of recommendations were made.

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The committee recommended that:-

(1) A building materials secretariat should be set up to co-ordinate and direct government policy in the development and use of local building materials.

(2) the use of cement should be rationalised by limiting its use to only selected categories of structures eg bridges, culverts and that the use of cement for the construction or erection of structure such fences be prohibited

(3) Government should give every political, economic and technical encouragement to enable certain identified material to be produced in greater quantities as a short term measure. The materials include

(a) Portland cement, lime, pozzolana

(b) Burnt clay bricks and tiles

(c) Timber - Lumber, plywood

(d) Stabilised soil blocks and bricks

Other materials projected for exploitation in the medium and term include iron and steel products, blast furnace slag cement, black cement, stone products, calcum silicate bricks, lesser known timber species, particle board and wood wool.

(4) To facilitate the implementation of (3) the committee recommended the establishment of new factories machine reproducing industry and production units as well as the rehabilitation or expansion of existing industries to use a greater percentage of their idle capacity.

(5) Government should adopt an integrated participation policy, entering into joint ventures with private interest, local and foreign, to promote the development of large and medium scale building materials manufacturing industries.

(6) There should be a rational distribution of local building material industries from the standpoint of proximity to raw materials and optimum consumption of labour and power. It also recommended the use of lower grade fuel for the production of energy, with the lowest possible expenditure on extraction and transport.

(7) The Government should encourage greater use of local building materials by directing public institutions like the State Housing Corporation, Tema Development Corporation and Municipal and Local Council to construct a specific percentage of their building stock in local building materials.

(8) To promote greater availability and usage of local building materials the Committee has also among other recommended:

(a) The siting of production units and factories in all regions of the country.

(b) both local and overseas training of manpower of all grades in the building materials manufacturing and construction industries.

(c) strict control on the quality of local products to inspire confidence in designers and the general public.

(9) If recommended that a specific fund (both in local and foreign currency) should be voted annually to support the development of local building materials programme in Ghana.

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Proposed National Housing Policy

The ultimate goal of the proposed housing policy is to provide decent housing within a wholesome environment at a cost that most Ghanaian families can afford.

To achieve this objective a technical committee was appointed to examine the National Housing problem and to advise government on an appropriate National Housing policy.

A report which the Committee submitted diagnosed the problems of the various key areas of the housing sector and made recommendations. The areas which the Committee considered include physical standards, finance, land use, physical planning, building materials, amenities for living, building regulations and manpower. Various areas which have bearing either directly or indirectly were also considered.

For the implementation of the proposed National Policy strategies were recommended on the following:

1. Housing needs

   Since lack of information and data is a major obstacle to the detailed estimation of housing needs and for the formulation of goals it was recommended that strategies be adopted to ensure efficient collection of statistical data on housing.

2. Population and Migration

   It was realised that the adverse effects of these parameters on the urban housing situation can at best only be minimised. Recommendation were therefore made to minimise the rate of population growth and migration through family planning programmes, and community development through the creation of employment opportunities and provision of social amenities.

3. Finance

   As a means of rationalising the financing of housing the following financial strategies were advocated

   a) The mobilisation of domestic savings from the private sector would be encouraged as the fundamental step in meeting the long-run capital requirements for housing.

   b) Savings and Housing Co-operatives would be established in both urban and rural areas to accumulate private capital for housing purposes.

c) All major private firms and organizations (excluding non-profit making organisations) would in future be requested to contribute towards effective housing of their employees.

d) Major companies such as the Cocoa Marketing Board and the Timber firms would be expected to contribute some portion of their profit towards Rural Housing.

e) Effort will made to divert a reasonable part of the funds available to the Social Security and National Insuran-e Trust for investment into houses for the low income groups.

f) The Government would encourage inter regional co-operation with neighbouring countries for financing the housing sector generally.

4. Land Use

In order to ensure the satisfactory execution of national human settlements programmes it is vital to ensure that land is available in sufficient supply and that all people have access to it. This can be done by tackling such key areas like registration of deeds, cadastral surveys and land use control.

Specifically priority will be given to public ownership of land in order to facilitate a redistribution of urban land and proper urban land development.

In order to reduce speculation on land physical plans will be prepared well ahead of time and land acquired in all urban areas in accordance with the long term land requirements to satisfy the requirements of human settlement. Wherever necessary, if funds are limited, consideration will be given to the freezing of land use at some specific times.

Government will give priority to the promotion of site and services schemes in all areas in order to give access of land to a wide cross section of the people as possible.

5. Building Materials

In Ghana imported materials account for a large share of construction costs. The foreign exchange spent annually for this purpose is increasing to unacceptable levels. Efforts therefore will be made towards the development and use of local building materials.

As a first step a Building Material Secretariat will be established to plan, coordinate and promote activities in the building materials industry.

6. Other Areas which were given considerable attention in the proposed National Housing Policy are building regulations, amenities for living (water, electricity, transportation, sewerage disposal, education and health), slum improvement, site and services schemes, housing for specific groups (industrial workers, student housing, public servants), and manpower Training.

7. Institutional Framework for the implementation of the National Housing policy.

   To ensure a proper co-ordination in the various activities in the housing sector the proposed housing policy suggested the establishment of body (for example a National Housing and Human Settlement Board) to administer the national housing policy and programmes by way of planning, formulations of housing schemes and programmes, ensuring that adequate funds are available to finance these programmes and attending generally to all matters relating to shelter development in Ghana.

   The strategies it is envisaged will produce a shift of emphasis from the Government's involvement in direct house construction to the development of the infrastructural base necessary for housing development. Thus, considerable attention will be given to low-income housing in both rural and urban areas through site and services programmes, slum up grading programmes, rural and urban co-operative housing schemes and the utilisation of self help methods in such schemes.

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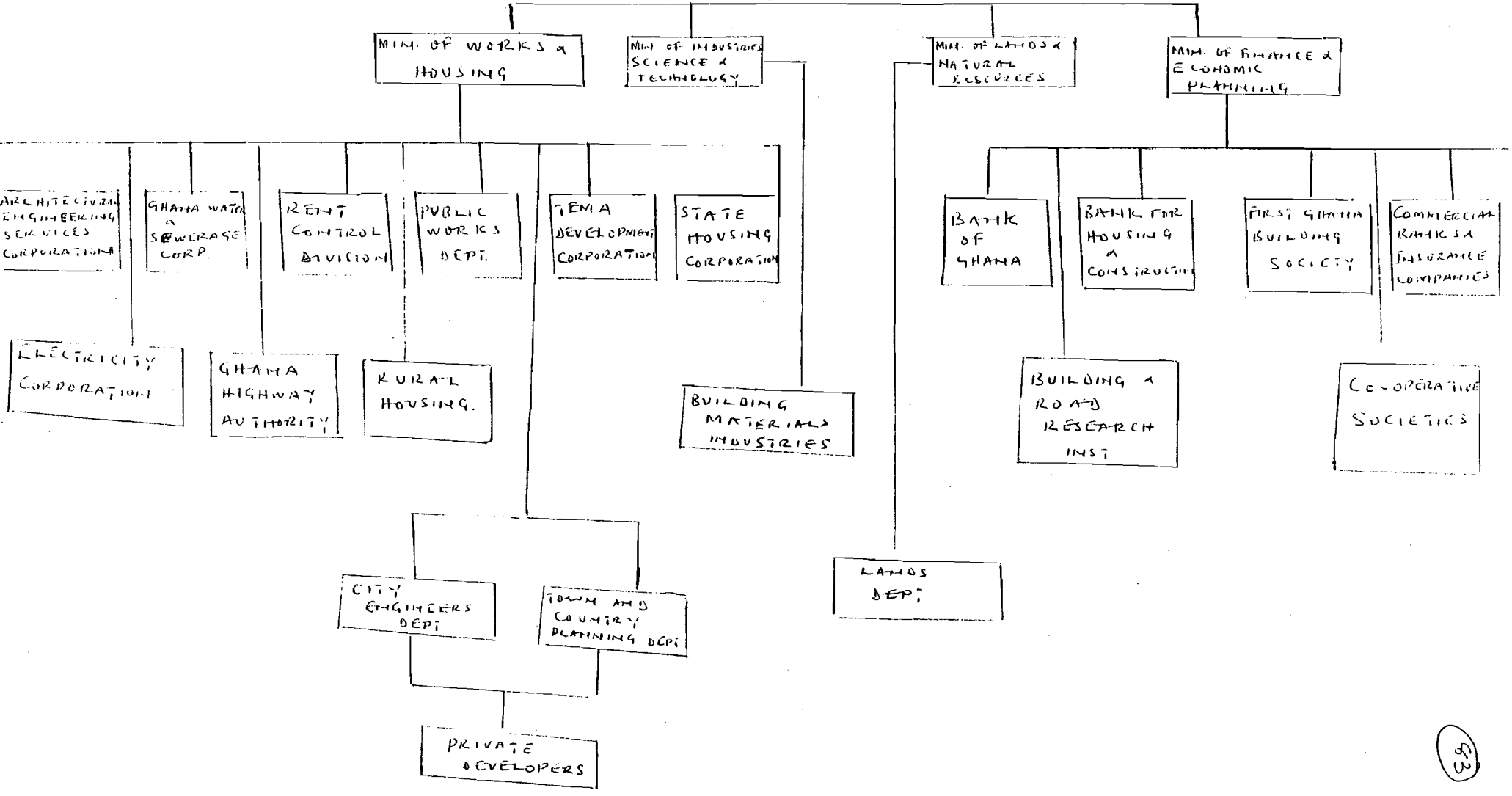
GHANA — SHELTER SECTOR ORGANISATIONAL CHART



SHELTER
TRAINING
WORKSHOP

November 5-30, 1979

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COUNTRY PRESENTATION
INDONESIA

SUBMISSION
FOR
SHELTER TRAINING WORKSHOP

SHELTER DEVELOPMENT IN INDONESIA

Washington, D. C.
November 28, 1979

Provided By:

Department of Public Work
PERUM PERUMNAS
(National Urban Development Corporation)
JAKARTA

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2. Attachment

Source:
-- Submission for Habitat International, June 78 by Radinal Moochtar.
-- Draft of PERUMNAS Program for Third Five Years Plan.

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1. INTRODUCTION.

1.1 Urban Housing Problems in Indonesia.

Indonesia is a republic with the fifth largest population in the world, now estimated at approximately 135 million. In 1971 only 18.8% of them were living in urban areas. But this proportion is changing with tendency for more rapid growth in the cities (3.89% annually) than the national population increase (2.68%). It. is obvious therefore that the rate of urbanization is considerably high, especially in large cities such as Jakarta and Surabaya.

To cope with the problem of population growth alone, each year 440,000 units of new housing are needed, assuming that every five persons shall be provided with a new house.
Individual construction is expected to provide an average of 230,000 units each year, while the remaining 210,000 units should be built by the government and the private sector developers. The latter number consists of 120,000 units of housing in rural areas and 90,000 in urban areas.

In addition to expanding the housing supply, Indonesia is faced with serious problems in the condition of existing housing, especially in urban areas.
Construction and materials are often of poor quality and comunity facilities, infrastructure and enviromental conditions need improvement.
The housing unit size in urban areas may be described as follows : 55% having only one room, 26% two room, and only 11% three rooms.
Furthermore, 52% of urban housing units were occupied by a single family, while 48% contained two or three families.
However in the rural areas, 94% of the houses were occupied by only one family.
The current breakdown of housing between urban and rural areas is as follows :

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Type of Housing Unit	Number of Units	Percent
Urban areas :		
- Exclusively dwelling	2,877,109	
- Dwelling & other uses	131,717	
Sub Total	3,008,825	13,4 %
Rural areas :		
- Exclusively dwelling	19,162,108	
- Dwelling & other uses	300,293	
Sub Total	18,462,401	86,6 %
T O T A L	22,471,227	100,0 %

Based on current projections of population growth and replacement of existing housing, a total of 1.5 million units peryear is needed, with the most severe shortage in urban areas.
In dealing with this problem, enormous technical and financial resources must be brought together under appropriate housing policies.

1.2 Establishment of Housing Institutions.

The government of Indonesia in its second five year development plan (Repelita II, 1974/75 - 1978/79) has recognized the need for greater emphasis on the housing sector.
It is also recognized that the focus of the government's efforts must be the urgent problems of low and middle income groups who are usually not able to own houses in good environmental condition particulary in urban areas.
In response to that, a major three point program has been proposed :

- To initiate a low cost housing program to meet the needs of low - middle income groups.
- To support a sites and services program to provide land and infrastructure (with or without core house) to the low income people upon which they can build their own house, or expand the core house.
- To promote a large scale kampung improvement program (KIP) to provide immediate improvement in the standard of living at the locations where the poor people are living now.
  In essence, this is a local government program that should be implemented and finance locally.

In order to undertake the program, mainly the low cost housing and sites and services programs, the National Urban Development Corporation, PERUMNAS, was created in late 1974 as an implementing agency.
It was established as a fully government owned corporation under supervision of the Ministry of Public Works ~~and Electric Power~~.
The main function of PERUMNAS is to implement all the government's programs in public housing supply and support the local governments in fullfilling their housing programs, and stimulating an integrated urban development process.
Two other institutions were established at the same time to support the implementation of the government's programs :

- The National Housing Policy Board namely BKPN (Badan Kebijaksanaan Perumahan Nasional) which will deal with the formulation of National Policies for housing development in Indonesia.
- The Housing Mortgage Bank as a saving and loan institution to provide long term credit to low income people to buy their house (mortgage system).
  The Bank Tabungan Negara (National Saving Bank) has been appointed to provide the credits as mortgage bank.

I. Housing Finance and Budgeting.

1.3 Housing Finance.

PERUMNAS is developing several different housing finance programs, each suited to the needs of the applicant. These include the following:

- Rental housing at subsidized rates with a 30 year repayment period.
- Hire-purchase housing with a 20 year repayment period.
- Conventional mortgage housing financed with a loan at 12 percent and a maximum of 20 year repayment period.

At present PERUMNAS normal practice is to administer the occupancy of a house in two stages : in stage I the house is rented.
The occupant is expected to establish permanent residence in the house and demonstrate that he is willing to respect the terms of his rental agreement.

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The minimum duration of stage I is normally two years.
The occupant then has the option of staying in rental status or applying for a hire-purchase status.
If his application is accepted he can then acquire stage II ownership of the house at terms that are more economic but still within his ability to pay.

To date PERUMNAS has not sold any its housing, but a proposal has been made to sell large open lots and a portion of the larger housing units.
The intent is to reduce PERUMNAS total capital needs through cross-subsidy and encourage outright home ownership among those able to make the payments required.
BTN, the Indonesian housing finance agency has made financing available to potential buyers of houses from private developers for units some what more costly than PERUMNAS, and the program will be extended to PERUMNAS units as well.

2. Budget.

1US$ = Rp 415

PERUMNAS total estimated budget for Pelita II is approx Rp. 91.0 billion (US $ 219 million), of which over 90 % was directly for land development and housing construction.
Rp. 68.3 million comes from the government budget, while Rp. 10.1 billion is expected to come from borrowing.
Income from sales through BTN is estimated at Rp. 12.5 billion.
In 1978/79, the last year of Pelita II and the largest single year in the program, the total budget is estimated at Rp. 41.0 billion, equivalent to approximately.
0.7 % of the total government budget and 0.2 % of Gross Domestic Product.

SOURCES OF CAPITAL - PERUMNAS PROGRAM
(Rp. 000,000).

FISCAL YEAR	TOTAL EXPENSE	SOURCES OF CAPITAL Government of Indonesia	Own Income	Loans
1974/75	1,000	1,000	-----	-----
1975/76	7,300	7,300	-----	-----
1976/77	16,400	15,000	-----	1,400
1977/78	25,245	22,500	-----	2,745
1978/79 est.	41,000	22,500	12,500	6,000
TOTAL	90,945	68,300	12,500	10,145

(91)

1.4 PERUMNAS Organization and Staff.

Starting from late 1974 PERUMNAS has become in the short time of a little over three years an agency capable of delivering very large housing program. The total staff as of December 1977 was 983 of which approximately 20 percent were graduates and semi-graduates capable of doing professional work. The major professional disciplines include civil engineering, physical planning, architecture, electrical engineering, geography, economics, law, sociology, agriculture, administration and accounting.

In spite of a vigorous and successful recruitment program, the staff was judged by a consultant in July 1977 to be less than half that required for the work load, a result of the size of the program relative to the number of trained persons who are available.

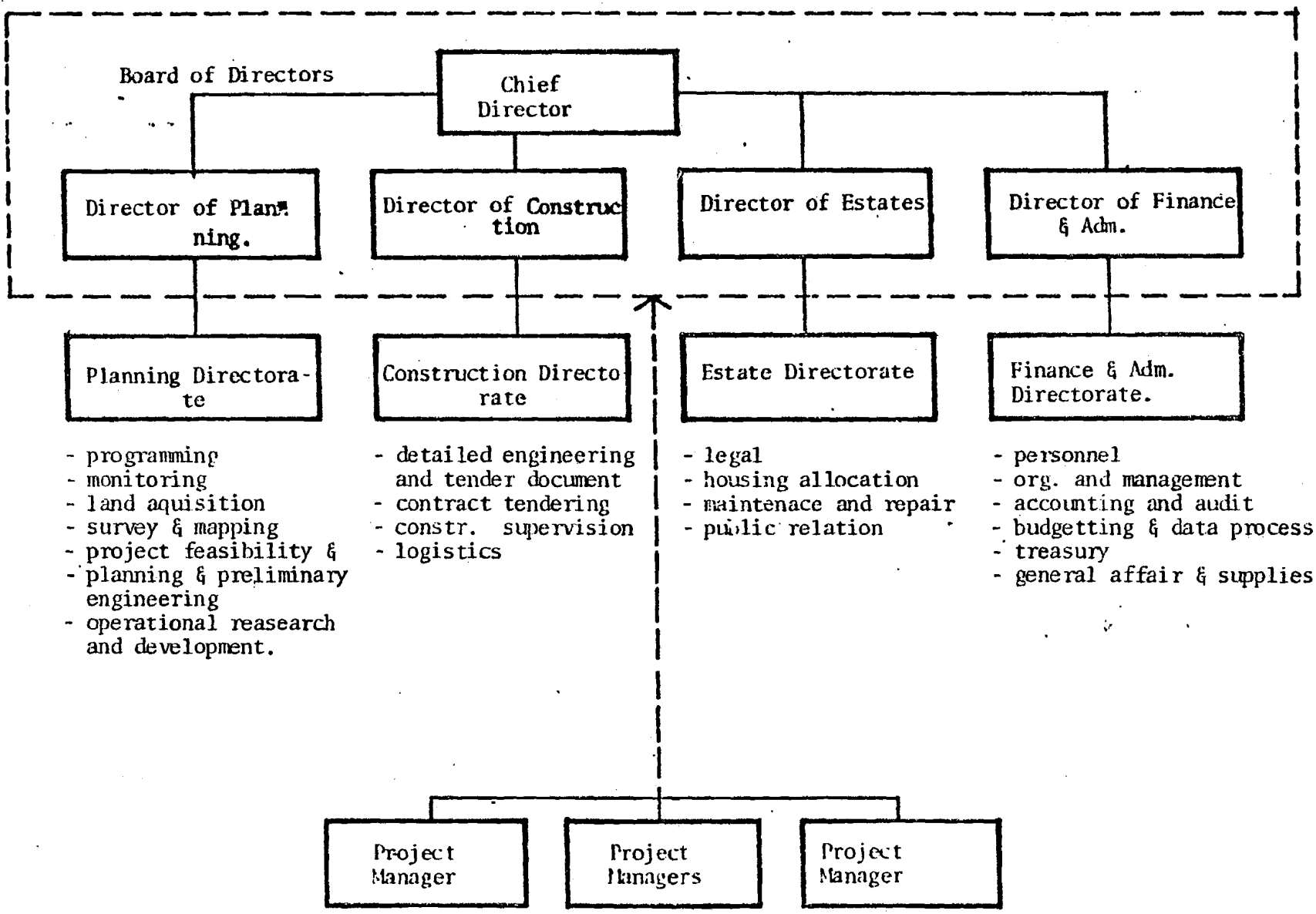
The organization of P ERUMNAS is shown in the chart : the agency is made up of four directorates including the Directorate of Planning; Directorate of Construction; Directorate of Estates and Directorate of Finance and Administration. Each Directorate is headed by a Director. The four Directors and the Chief Director constitute the PERUMNAS Board, which is responsible for the overall management of the agency within the policy guidelines and program targets established by the Government.

PERUMNAS has a headquarters office in Jakarta and several project offices, which are responsible for construction and estate management on specific sites. It is also planned to have branch offices in larger cities, or regions where many projects are likely to be developed.

At present the balance of manpower is as follows : 40 % of the staff are employed by the headquarters office, although many are on field assignments, while the remaining 60 % are empoyed in field offices.

During the initial development of PERUMNAS there has been much discussion of the role of the branch offices and project offices within the overall organization. Initially it was expected that the branch offices would become quite autonomous, with responsibility for land aquisition, design, implementation, and budgets. Due to the scale of the program, however, and the need for a more efficient "command" structure the functions of land acquisition, design and most budgetary control have been retained

ORGANIZATION OF PERUMNAS



by headquarters. This has enabled more rapid implementation during Pelita II, and time for training of field personnel. As Pelita III approaches it is expected that it will be possible to delegate authority as actual capability in the field permits.

Within the branch office concept the role of the project manager has particular significance. As a result of experience there are currently three types of project managers :

* Project managers with broad responsibility for site selection, design and implementation and responsible for several projects at one time.
* Project managers with less borad responsibility but responsible for several projects at one time.
* Project managers responsible for one project at a time.

It was believed that program progress should be monitored in a way similar to the budget, the emphasis being upon physical progress and occupation rather than budgets. Therefore a special program monitoring group was established. Each Directorate forwards reports to this section, which synthesizes them and reports directly to the Board on the status of the program. This programming and monitoring capability has been shown by experience to be very important : in early 1977, for instance, a look at land acquisition requirements for the future program resulted in an acceleration of land purchase to prevent a bottleneck that could have seriously delayed the program.

2. PLANNING AND PROJECT DEVELOPMENT.

PERUMNAS projects for Pelita II will ultimately provide for over 100,000 families, or a total population of half a million. The vast majority (over 80 %) of these people will be housed in "new communities" of 20,000 population or more, only 5 % will reside in "housing projects" of less than 1000 units or 5000 inhabitants. Thus community planning has become an important aspect of PERUMNAS' program. Each site must be provided with new services and facilities and/or integrated with the existing city.

2.1 Site Selection.

To identify appropriate land to be acquired for its program, PWRUMNAS has undertaken research on various cities. Population growth and economic factors are evaluated in determining the target group and development program for each site. Given a budget limination for land price, it has been difficult in some larger cities to find well-located sites with good access and services.

For the lower income groups, close-in sites near markets and employment are preferred to minimize travel cost, while middle income residents can afford to go farther out to suburban sites.

Local government officials generally assist in land acquisition, providing data on land values and liaison with residents. Many Indonesian cities also have master plans and aerial photo coverage which are helpful in locating prospective sites and selection of alternatives. In accelerating its land inventory to meet Pelita II targets, PERUMNAS depends on active support by local governments, which are now giving higher priority to low cost housing in making sites available and extending services.

2.2 Planning and Consturction.

During the past three yerars, PERUMNAS has developed an "in-house" capability for most project planning, and to a lesser extent for engineering work. Outside consultants have been used on about one third of the Pelita II projects, but in the future PERUMNAS staff will handle most planning. They arrange for survey and mapping, undertake site analysis and prepare concept plans for review and approval by the Board. Detailed layout and lanscape design are also done "in house". The capability for engineering and preparation of tender documents is being expanded, both in the headquarters and field offices.

The construction division has increased its output from about 2000 units in 1975-76 to over 20,000 in the current fiscal year. With more than a dozen project offices in operation, work can now be delegated to the field in expediting site development. Availability of building materials has also been assured through sources in different regions. House designs and infrastructure specifications are adapted to local conditions. Certain materials have been stockpiled by PERUMNAS in large quantities for various projects in order to reduce the impact on local markets and maintain price stability when a major project begins.

2.3 Estate Management.

Upon completion, new housing is assigned through the Estate Management Department. Government policy on allocation criteria was first applied by PERUMNAS in 1976 in the Depok project near Jakarta. Since then several other projects have been occupied.

To date allocation procedures have been based on the requirement that household income range between Rp. 15,000/mo (US $ 35) and Rp. 100,000 (US $ 240), that applicants have been employed at least 10 years, and do not already own a house. Generally for civil servants government department heads have recommended a list of applicants, with those eligible to be chosen by PERUMNAS, relating house type to household income.

Various other approaches are under consideration, such as relating family size to space needs and adjusting rent levels to ability to pay. Also there are proposals for changing income criteria to reach the lowest income groups with subsidy, and opening registration to the general public.

In PERUMNAS' initial projects, rent collection procedures have proven slow and inefficient, but accounting methods are now being improved, through experimentation in the field.

Under the rental contract agreement, house maintenance and repair is the responsibility of the tenant. Expansion of houses may also be done by the occupants with approval by PERUMNAS' project manager. Responsibility for maintenance of open space, landscaping and infrastructure is presently taken by PERUMNAS, as well as operation of some community facilities. In the absence of adequate local government services, this burden is likely to remain for the forseeable future.

3. PERUMNAS PERFORMANCE TO DATE.

3.1 Project Experience throughout Indonesia

During the Second Five Year Development Plan (1974/1975 - 1978/1979), PERUMNAS is expected to construct about 73,000 housing units, consisting of ~~20,000~~ 36,500 units low cost housing and ~~53,000~~ 36,500 units sites and services with core houses. This target will be distributed to a number of projects located in some big and medium size cities as illustrated in figure 1.

As of January 1978, PERUMNAS had completed over 17,600 units in 16 projects and 10 cities. The table bellow gives actual production to date, and projected targetsfor the remainder of the Second Five Year Development Plan.

Fiscal Year	Units Completed	Cummulative Total
1974/1975	-	-
1975/1976	2,268	2,268
1976/1977	8,216	10,484
1977/1978	21,258 (estimate)	31,742
1978/1979	41,258 (estimate)	73,000

The average size of the projects is 3,000 units, or 15,000 inhabitants. Nearly half of the projects will house more than 4,000 families each with a full range of services and community facilities.

From the experience to date, several important lessons have emerged. In undertaking urban research analysis for each city, both housing needs and effective demand should be established on a consistent basis. This information is useful in planning the national program, as well as housing mix for specific sites. It has been found that in smaller cities, with lower rates of economic growth, insufficient demand existed to fill all units upon completion. This may become a more common problem during Pelita III as the program reaches saturation levels in some cities. Hence market surveys are essential for any sites where demand is expected to be a limiting factor.

In addition to more careful analysis, means are being sought to provide more flexibility in implementation, to enable PERUMNAS to adjust to factors which cannot be anticipated beforehand. One response is the development of standard lot depths, which allow alterations in lot widths (and hence lot size and occupant group) as implementation proceeds ; the second is a construction schedule concept in which part of a project is completed and the initial ocuupants settled (thus providing a change to test the market) while construction proceeds on the next phases.

3.2 Achievements in Community Development.

As described in Section I, PERUMNAS' organization has grown and diversified. The Construction Division is currently producing at the level of 15,000 - 20,000 units per year, while the Planning capability has been developed for this expanded program. All aspects of community development are now being considered, from the provision of adequate open space and facilities to their operation and maintenance. The latest concepts of town planning

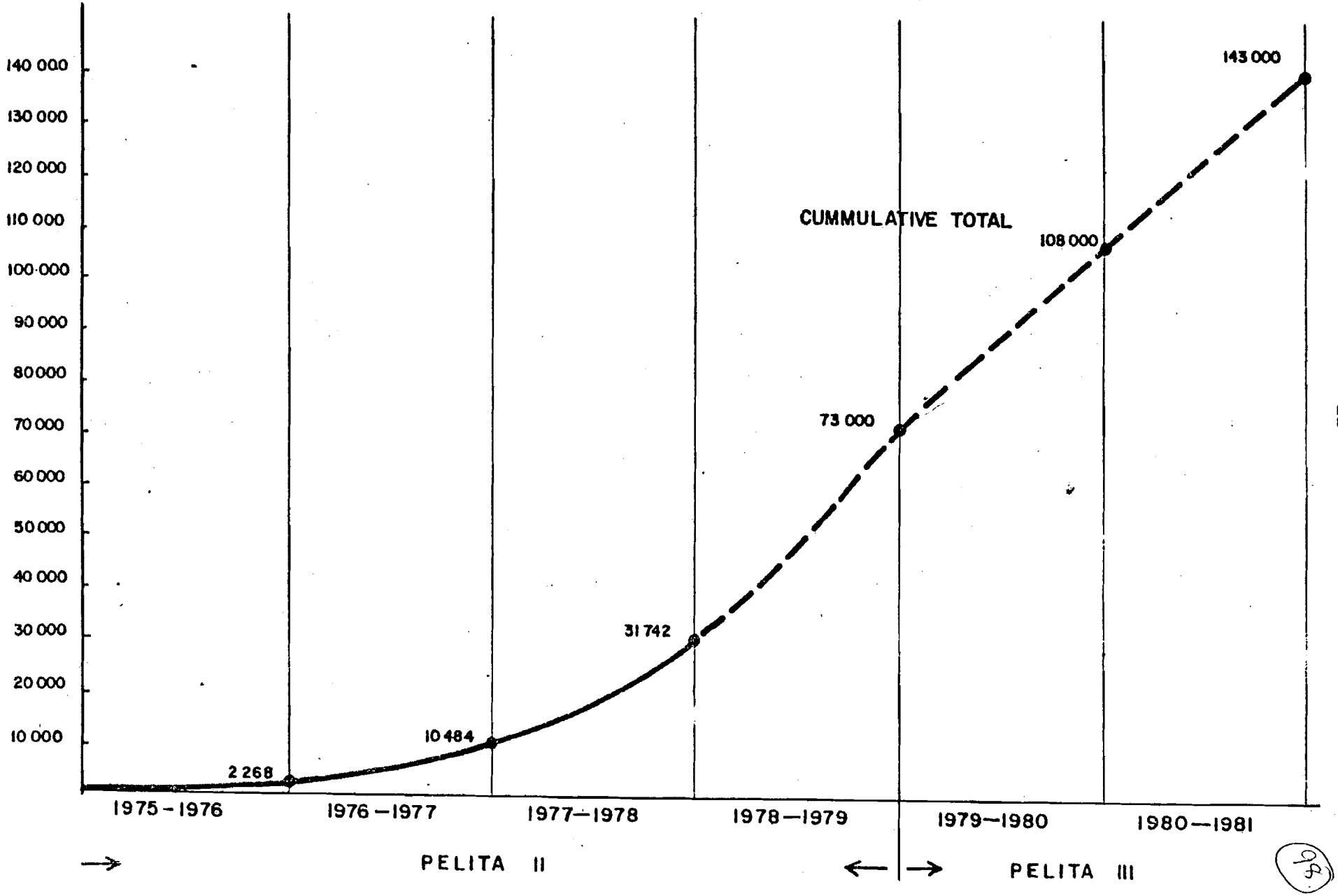
have been applied in various projects, with experimentation in physical layout and social mix. On some sites, land is being reserved for small industry to generate employment, and flexibility is provided in planning for commercial and public uses.

Various infrastructure design standards have been tried, and in three major projects complete sewer systems are to be installed. These are among the first in Indonesia. Also PERUMNAS has innovated in the use of new building materials and prefab or component systems. Particle board, "wood-wool", asbestos cement and precast concrete wall panels are being used, with steel or aluminium frames in some projects. Results will be evaluated in terms of performance, quality and cost. PERUMNAS architects and consultants have developed a variety of core house designs and expansion plans which are now being built. Through field experience, these designs will be improved for use in future projects.

During the past two years, PERUMNAS has developed its administration and accounting systems to support an expanding program. The function of estate management is now operational, with ten projects already occupied. Improved methods of allocation, rent collection and maintenance are being implemented.

In all these efforts, project monitoring and evaluation are essential. Unfortunately an accelarating program leaves little time for reflection, and new projects are planned and built with only limited feedback from previous ones. In the last year of Pelita II. PERUMNAS will undertake a comprehensive evaluation of all projects to date, including neighborhood design factors, infrastructure standards, social and economic aspects.

PERUMNAS HOUSING COMPLETED (PROJECTED BEYOND PELITA II)



PERUMNAS House Types - Typical Examples.

No.	Location	Unit Type	Building Size	Lot Size	Basic Materials	
					Wall	Frame
1.	Jakarta (Klender)	Expandable Core (Quadraplex)	20 m2	80-140 m2	Masonry	Steel
2.	Surabaya	Expandable Core (Duplex)	20 m2	90 m2	Asbestos Cement	Aluminium
3.	Bandung	Duplex Core	20 m2	80 m2	Particle Board	Wood
4.	Jakarta (Depok)	Row House	36 m2	80 m2	Masonry	Wood
5.	Cirebon	Standard Duplex	36 m2	100 m2	Particle Board	Wood
6.	Padang	Standard Duplex	45 m2	120 m2	Masonry	Wood
7.	Surabaya	Standard Duplex	45 m2	120 m2	Asbestos Cement	Aluminium
8.	Bandung	Row House (2-story)	45 m2	120 m2	Masonry	Wood
9.	Semarang	Row House (2-story)	45 m2	60 m2	Masonry	Wood
10.	Cirebon	Standard Duplex	54 m2	200 m2	Particle Board	Wood
11.	Jakarta (Depok)	Standard Duplex	70 m2	200 m2	Masonry	Wood
12.	Depok	Row House (2-story)	70 m2	120 m2	Masonry	Steel

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PART IV: PERUMNAS in Pictures and Slides

Types of Houses and Descriptions, including:

4.1 Number of Houses Built in 2nd Five Years Plan.

4.2 Unit Cost per Unit.

4.3 Unit Cost per House.

4.4 Building Materials.

(Questions and Answers)

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PART II: Third Five Years Development Plan

1. Program and Target

   1.1 Location.

   1.2 Type of Houses.

   1.3 Amount of Houses in Every City.

2. Attachment to Point 1:

   See: Table : 1

   Table : 2

   Table : 3

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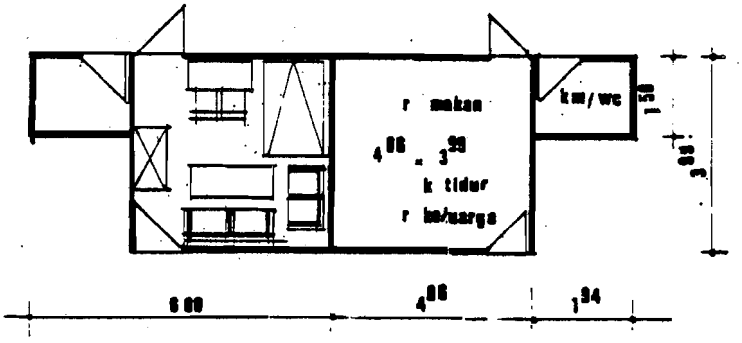
SURABAYA



HARGA BANGUNAN

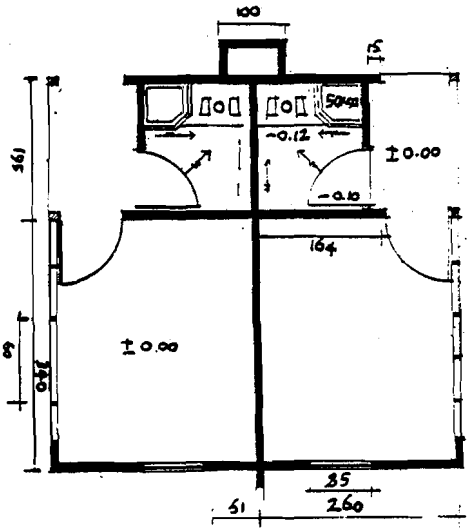
Harga per unit	:	Rp. 297.675
Harga per M^2	:	Rp. 14.883,75/m^2

KETERANGAN

Lokasi	:	Simomulyo
Jumlah unit	:	1218
Selesai dibangun	:	1218
Luas lantai	:	19 m^2
Bahan utama		
. rangka	:	profil alluminium
. lantai	:	plester
. dinding	:	eternit
. atap	:	eternit gelombang
Fasilitas	:	– air minum
		– listrik
		– tangki septik

TYPE. D 20

proyek:
CIREBON



HARGA BANGUNAN

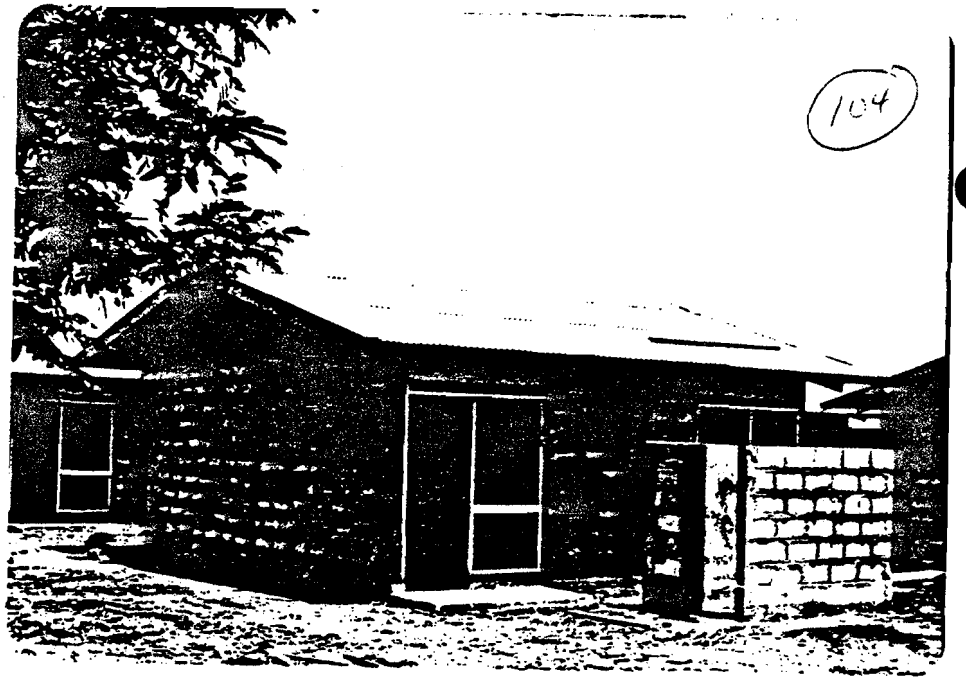
Harga per unit	:	Rp. 311.486,71
Harga per M^2	:	Rp. 22.819,54

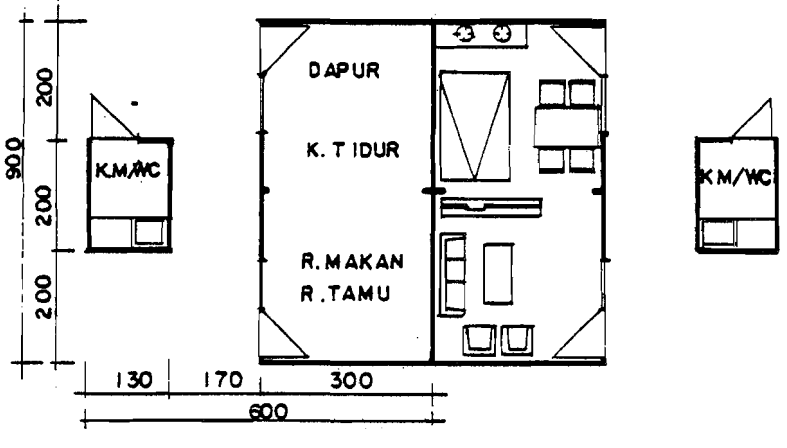
KETERANGAN

Lokasi	:	Larangan
Jumlah unit	:	1174 unit
Selesai dibangun	:	1174 unit
Luas lantai	:	14 m^2
Bahan utama		
. rangka	:	kayu
. lantai	:	beton tumbuk
. dinding	:	batako
. atap	:	asbes gelombang
Fasilitas	:	– air minum
		– listrik
		– air kotor

TYPE. D 20

proyek
DEPOK





HARGA BANGUNAN

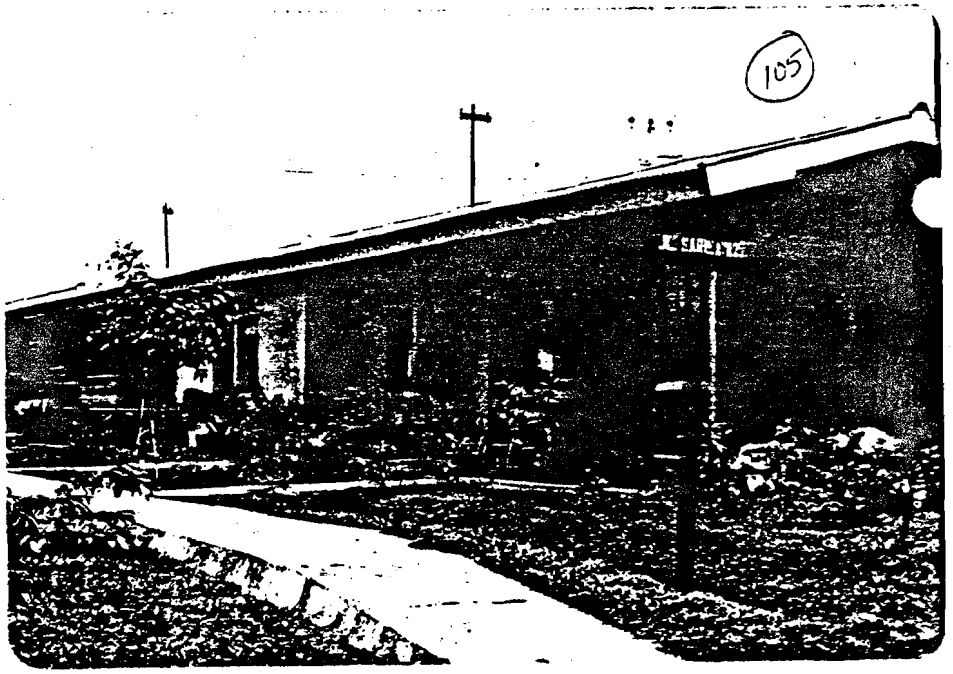
Harga per unit	: Rp. 321.815,-
Harga per M^2	: Rp. 15.325,-

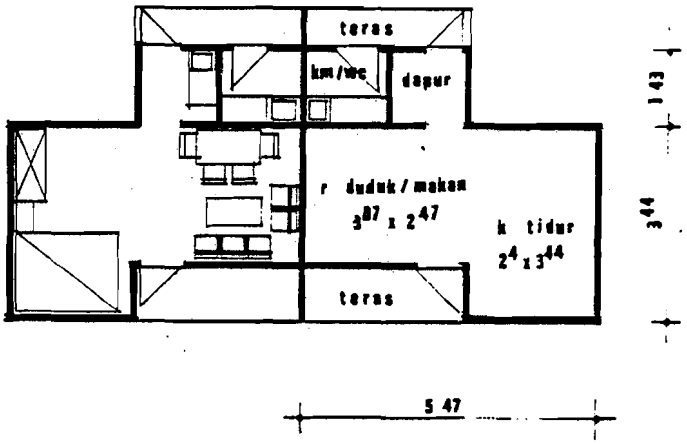
KETERANGAN

Lokasi	: Depok II
Jumlah unit	:
Selesai dibangun	: 150
Luas lantai	: 21 m^2
Bahan utama	
. rangka	: kolom beton
. lantai	: beton cor
. dinding	: batako
. atap	: asbes gelombang
Fasilitas	: — air minum
	— tangki septik

TYPE. D 20

proyek
DEPOK





HARGA BANGUNAN

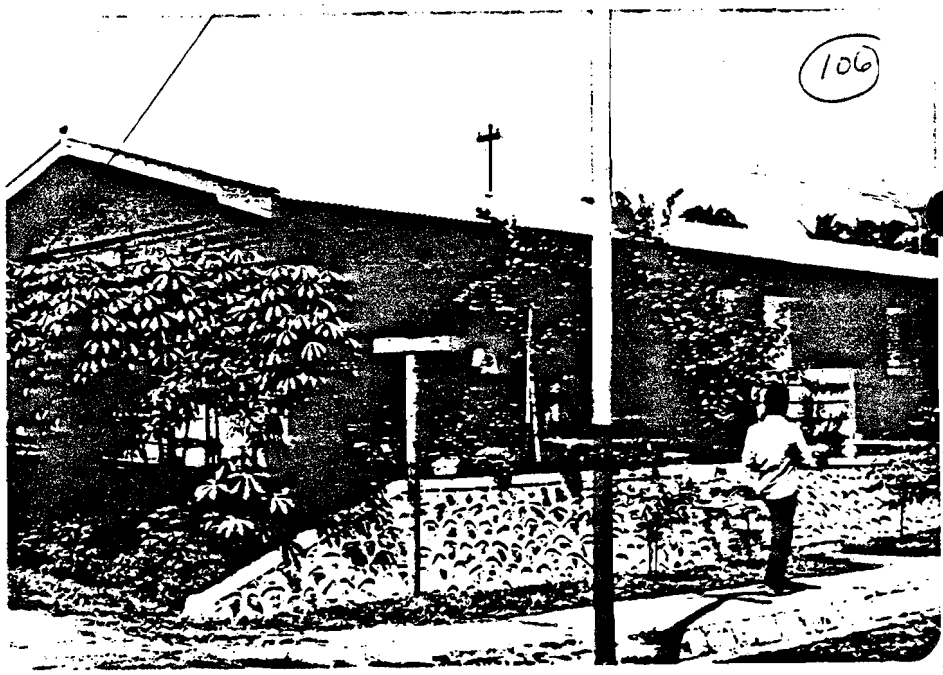
Harga per unit	: Rp. 491.885,93
Harga per M^2	: Rp. 24.594,29

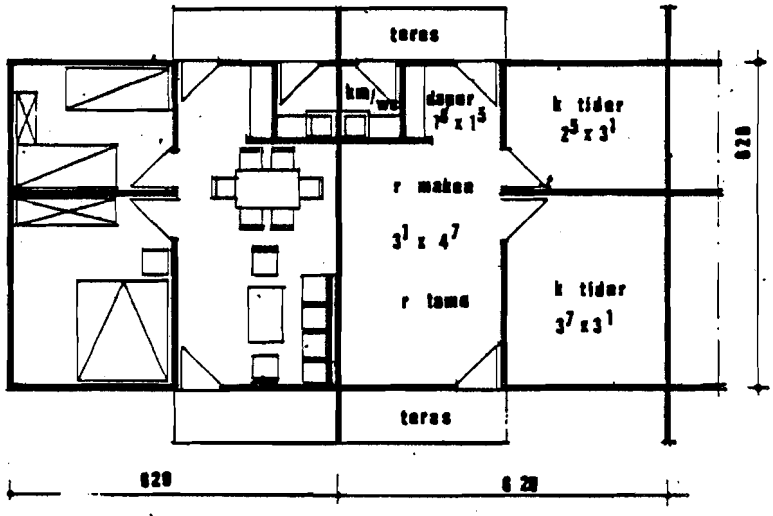
KETERANGAN

Lokasi	: Depok I
Jumlah unit	: 246
Selesai dibangun	: 246
Luas lantai	: 23 m^2
Bahan utama	:
. rangka	: kayu
. lantai	: ubin
. dinding	: particle board
. atap	: asbes gelombang
Fasilitas	: air minum listrik tangki septik

TYPE. D 36

proyek
DEPOK





HARGA BANGUNAN

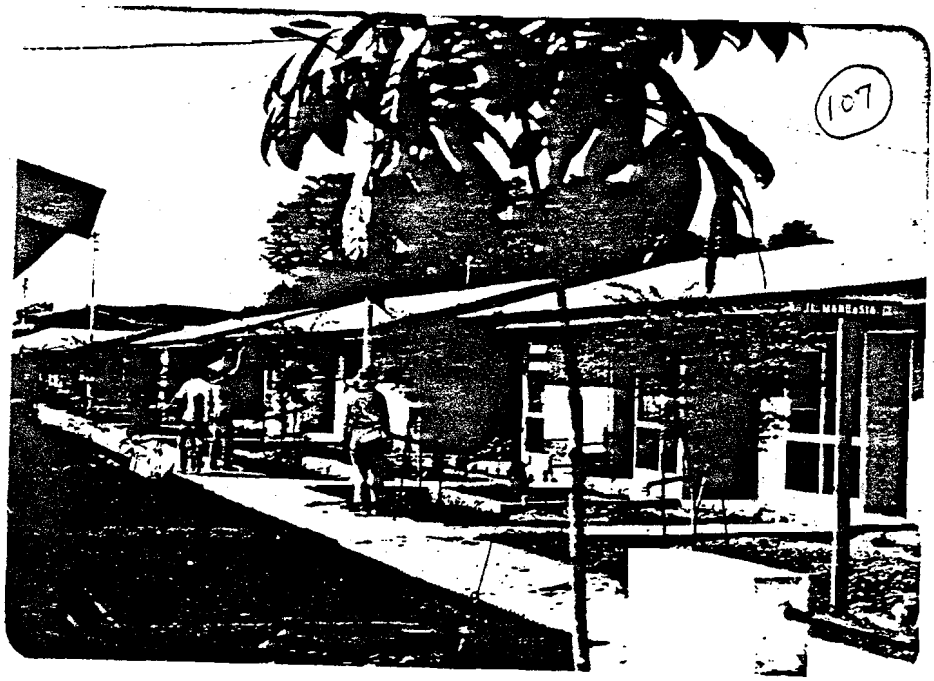
Harga per unit	:	Rp. 800.546,94
Harga per M^2	:	Rp. 22.237,40

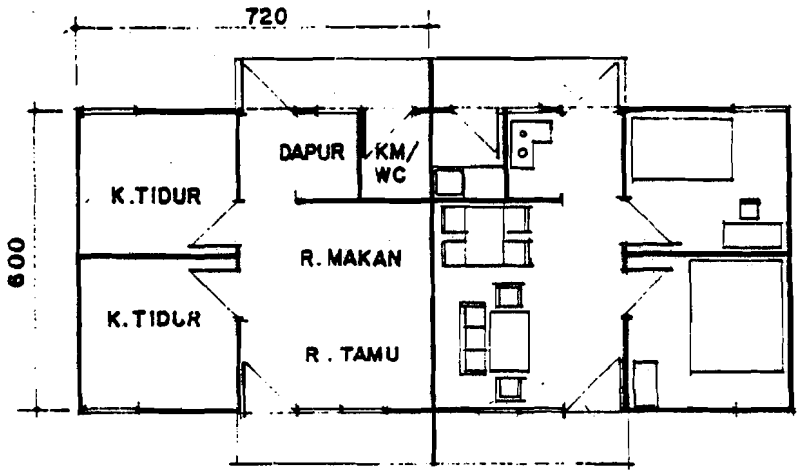
KETERANGAN

Lokasi	:	Depok I
Jumlah unit	:	1298
Selesai dibangun	:	1298
Luas lantai	:	38 m^2
Bahan utama		
. rangka	:	kayu
. lantai	:	ubin
. dinding	:	particle board
. atap	:	asbes gelombang
Fasilitas	:	– air minum
		– listrik
		– tangki septik

TYPE. D 45

proyek
SEMARANG





HARGA BANGUNAN

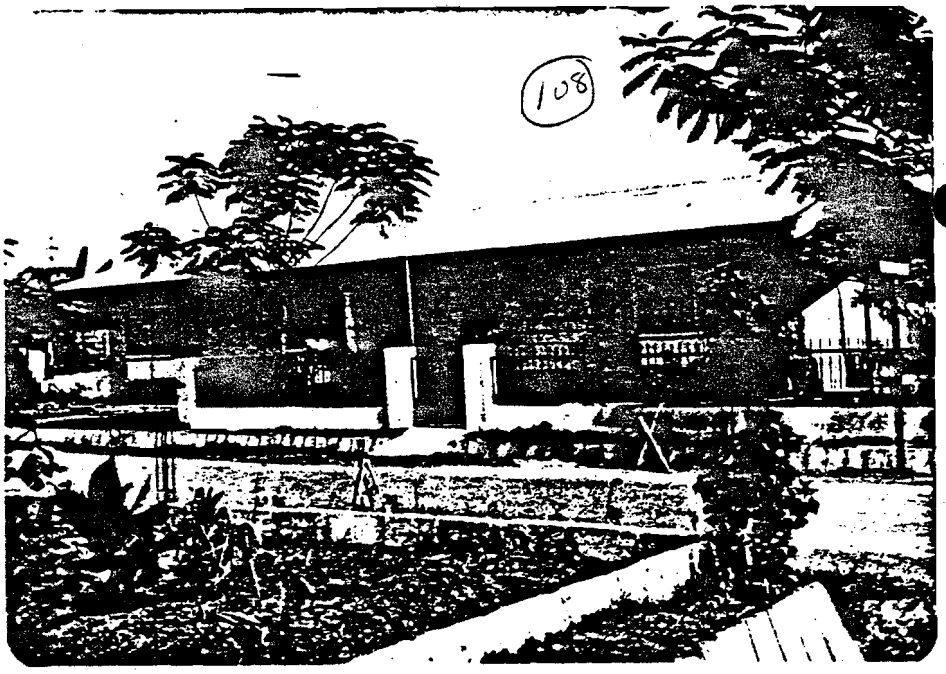
Harga per unit	:	Rp	954.833,–
Harga per M^2	:	Rp	21.218,–

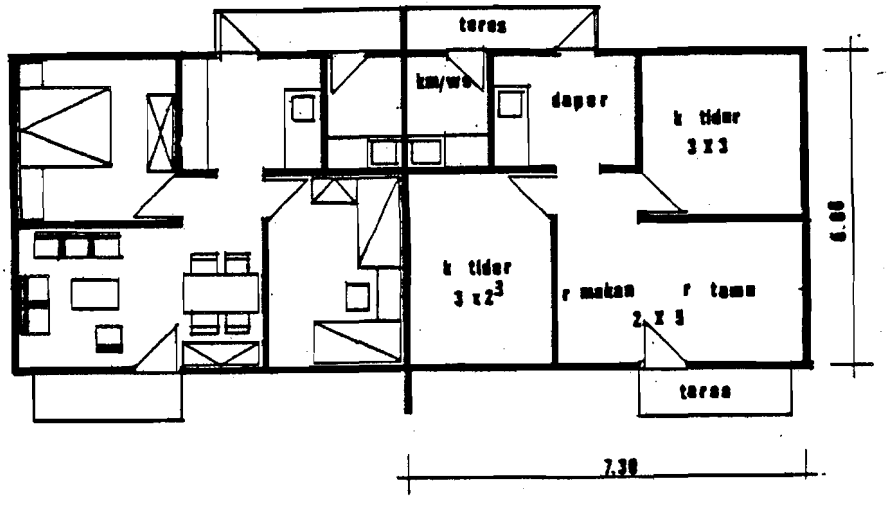
KETERANGAN

Lokasi	:	Krapyak
Jumlah unit	:	246
Selesai dibangun	:	246
Luas lantai	:	45 m^2
Bahan utama		
. rangka	:	kayu
. lantai	:	beton tumbuk
. dinding	:	particle board
. atap	:	asbes gelombang
Fasilitas	:	– listrik
		– air bersih
		– tangki septik

TYPE. D 45

proyek
DEPOK





HARGA BANGUNAN

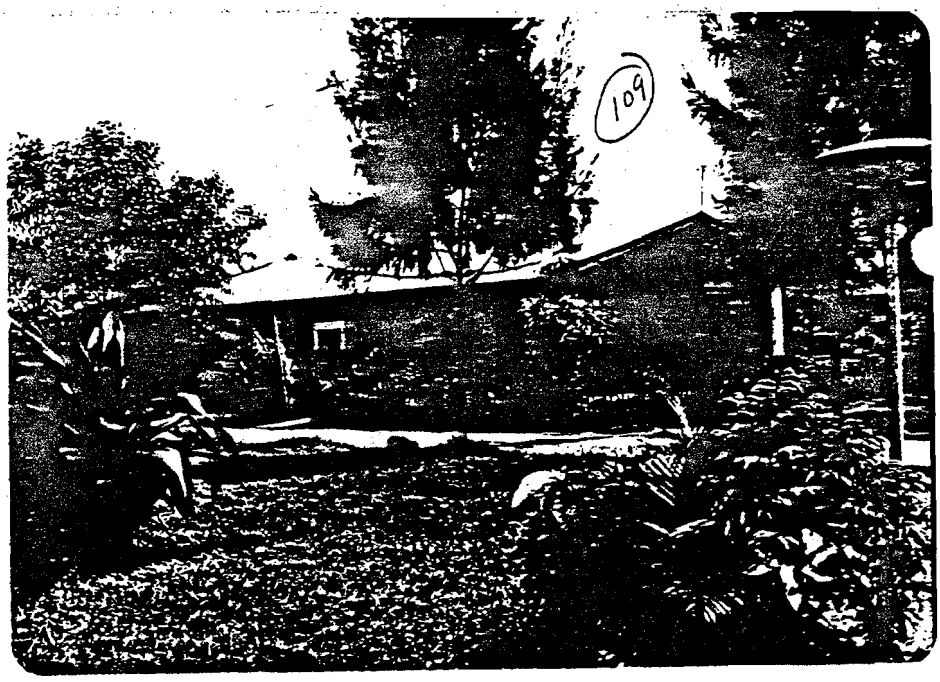
Harga per unit	:	Rp. 1.093.459,10
Harga per M^2	:	Rp. 24.299,09

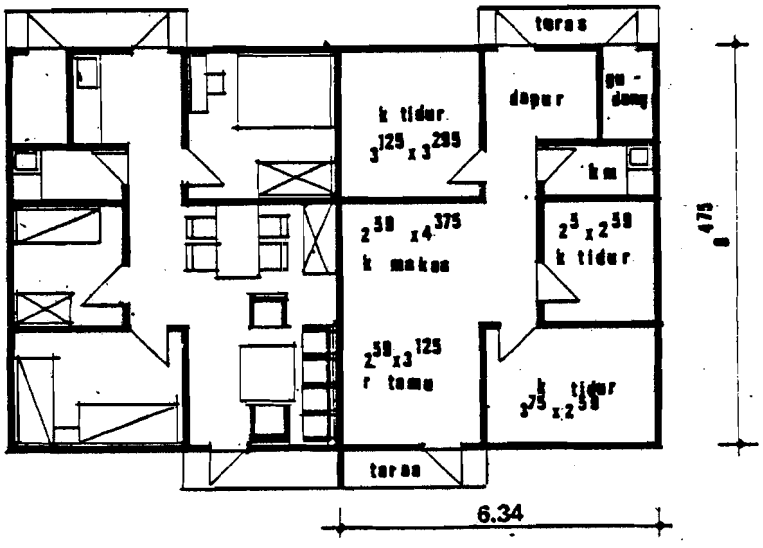
KETERANGAN

Lokasi	:	Depok
Jumlah unit	:	2090
Selesai dibangun	:	2090
Luas lantai	:	44 m^2
Bahan utama	:	
. rangka	:	ringbalk beton
. lantai	:	ubin
. dinding	:	batako
. atap	:	asbes gelombang
Fasilitas	:	air minum
		listrik
		tangki septik

TYPE. D 54

proyek
CIREBON





HARGA BANGUNAN

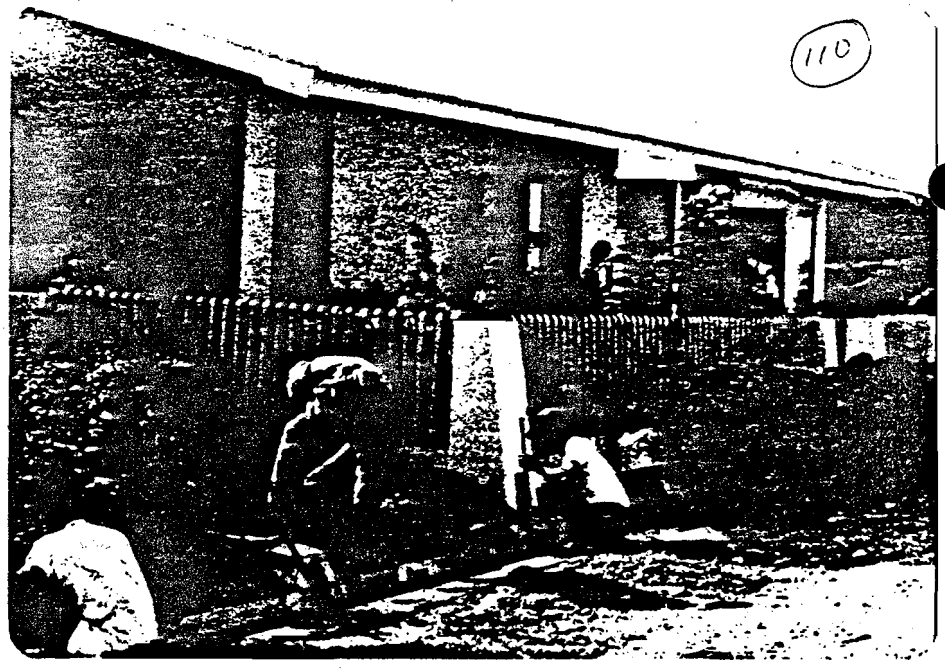
Harga per unit	:	Rp. 1.060.815
Harga per M^2	:	Rp. 19.644,72

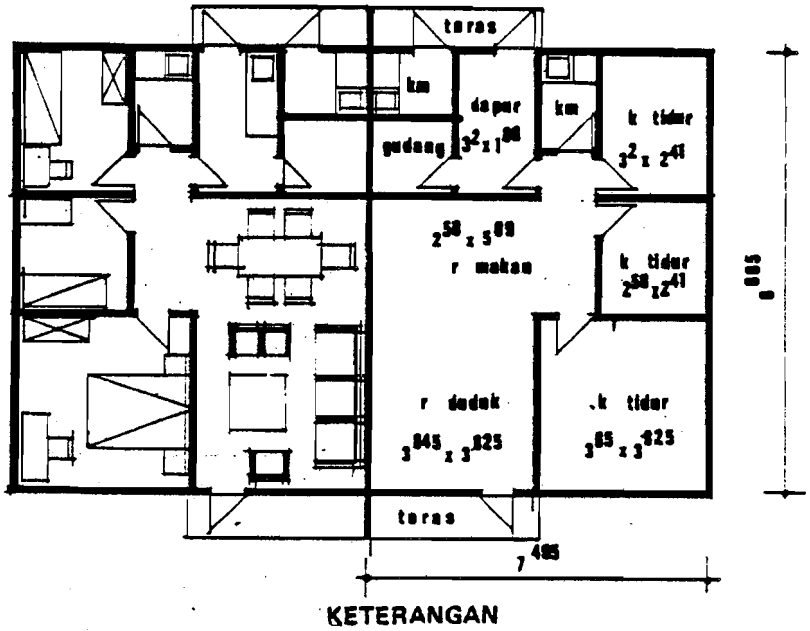
KETERANGAN

Lokasi	:	Larangan
Jumlah unit	:	276
Selesai dibangun	:	276
Luas lantai	:	54 m^2
Bahan utama		
. rangka	:	kayu
. lantai	:	ubin
. dinding	:	batako & particle board
. atap	:	asbes gelombang
Fasilitas	:	— air minum
		— listrik
		— tangki septik

TYPE. D 70

proyek
CIREBON





HARGA BANGUNAN

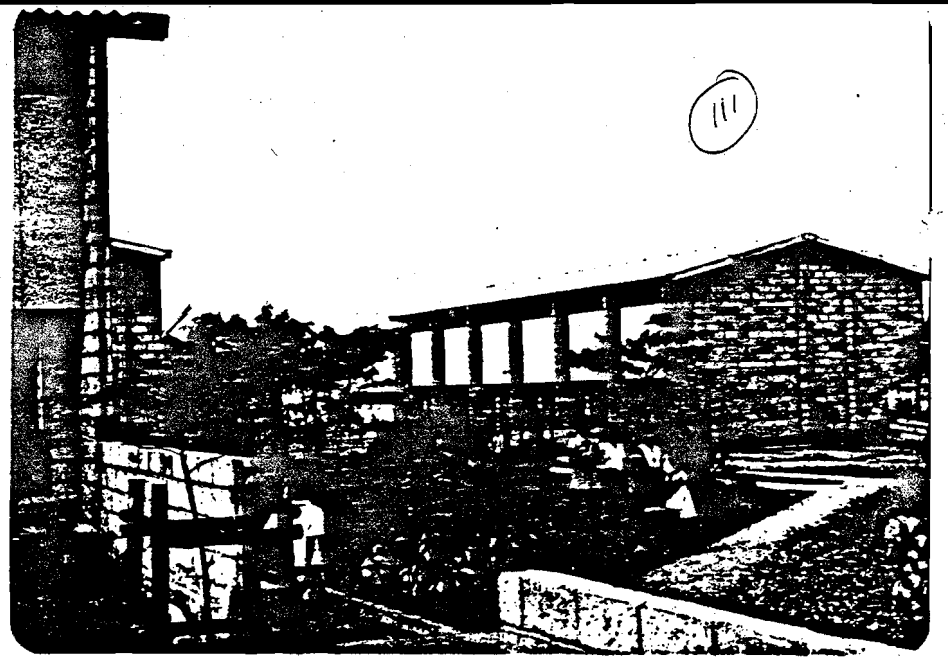
Harga per unit	:	Rp. 1.275.452,90
Harga per M^2	:	Rp. 18.220,80

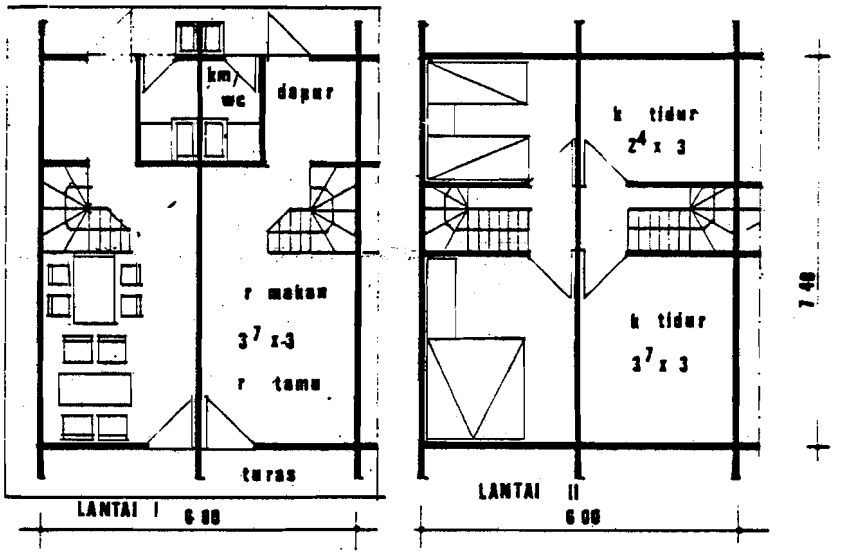
KETERANGAN

Lokasi	:	Larangan
Jumlah unit	:	102
Selesai dibangun	:	102
Luas lantai	:	72 m^2
Bahan utama	:	
. rangka	:	kayu
. lantai	:	ubin
. dinding	:	batako & particle board
. atap	:	asbes gelombang
Fasilitas	:	air minum
		listrik
		tangki septik

TYPE. M 45

proyek
BANDUNG





HARGA BANGUNAN

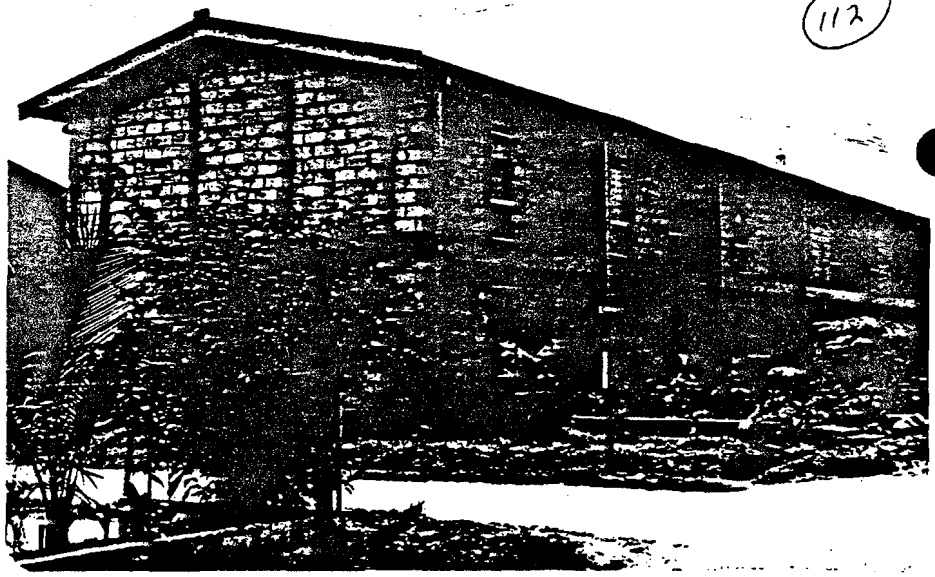
Harga per unit	:	Rp. 1.100.000
Harga per M^2	:	Rp.24.444,40

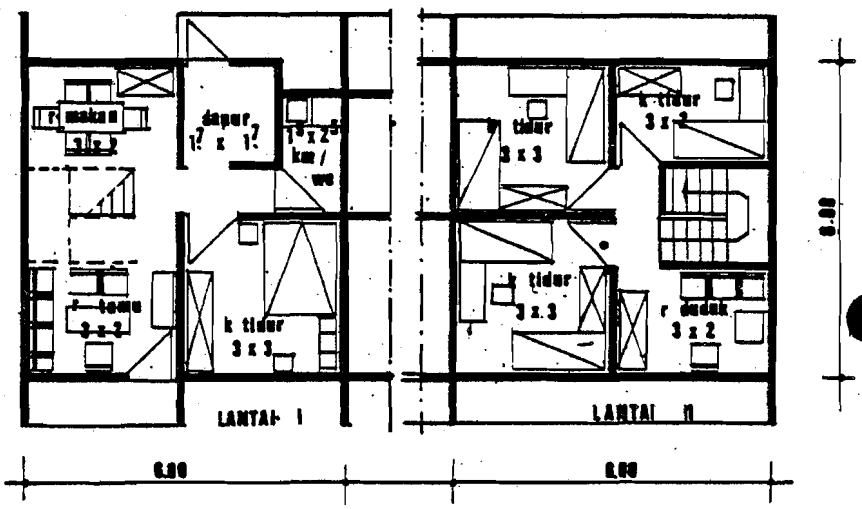
KETERANGAN

Lokasi	:	Sukaluyu
Jumlah unit	:	150
Selesai dibangun	:	150
Luas lantai	:	45 m^2
Bahan utama	:	
. rangka	:	baja/beton
. lantai	:	ubin & multiplex
. dinding	:	batako
. atap	:	asbes gelombang
Fasilitas	:	air minum listrik tangki septik

TYPE. M 70

proyek
DEPOK





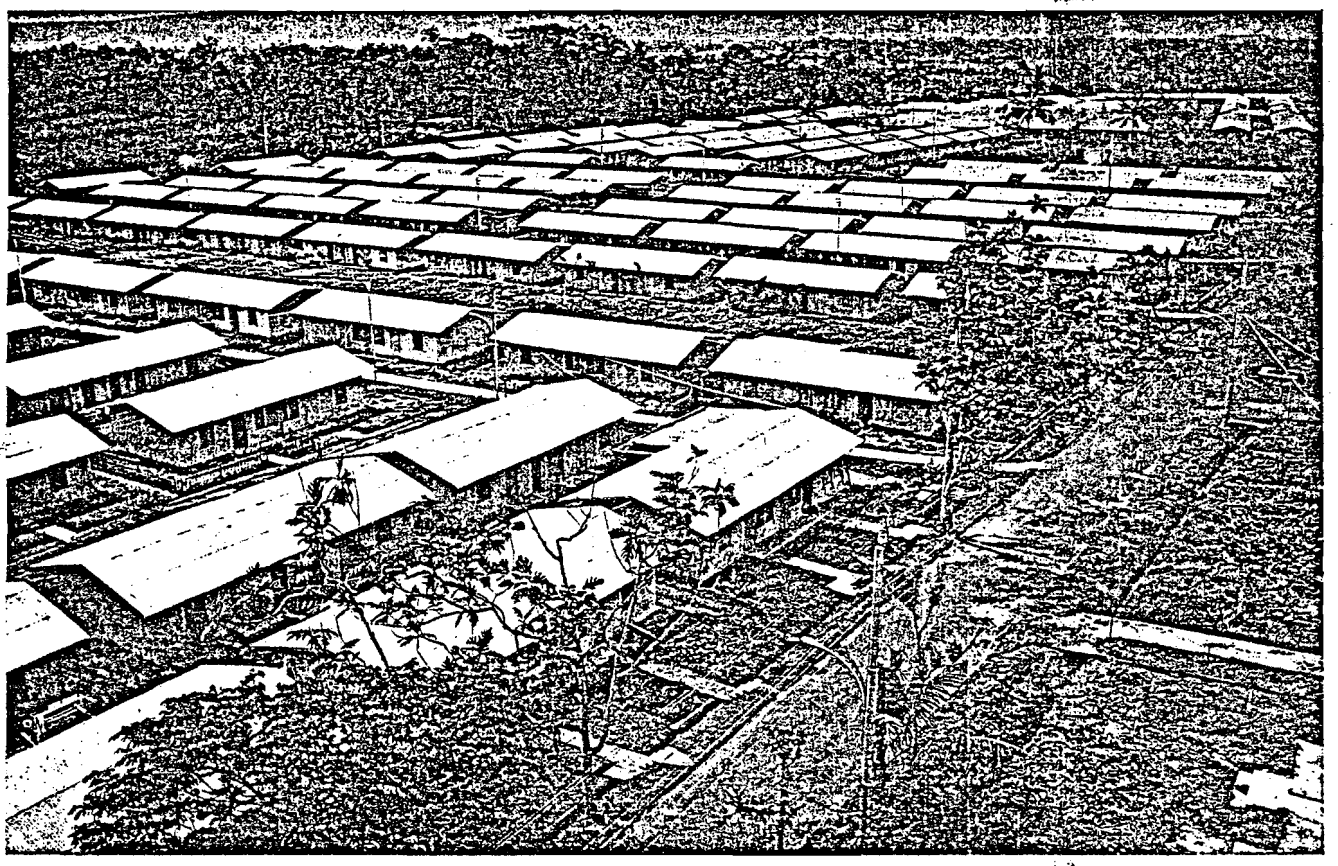
HARGA BANGUNAN

Harga per unit	:	Rp. 1.999.210,20	
Harga per M^2	:	Rp. 28.560	(pakai hollowblock semen pasir)
Harga per unit	:	Rp 1.549.930,–	(pakai batako)
Harga per M^2	:	Rp 22.142,–	

KETERANGAN

Lokasi	:	Depok I
Jumlah unit	:	330
Selesai dibangun.	:	330 unit
Luas lantai	:	72 m^2
Bahan utama		
. rangka	:	baja/beton
. lantai	:	ubin & multiplex
. dinding	:	batako
. atap	:	asbes gelombang
Fasilitas	:	– air minum – listrik – tangki septik

113



PERUM PERUMNAS

THE NATIONAL URBAN DEVELOPMENT CORPORATION

INTRODUCTION

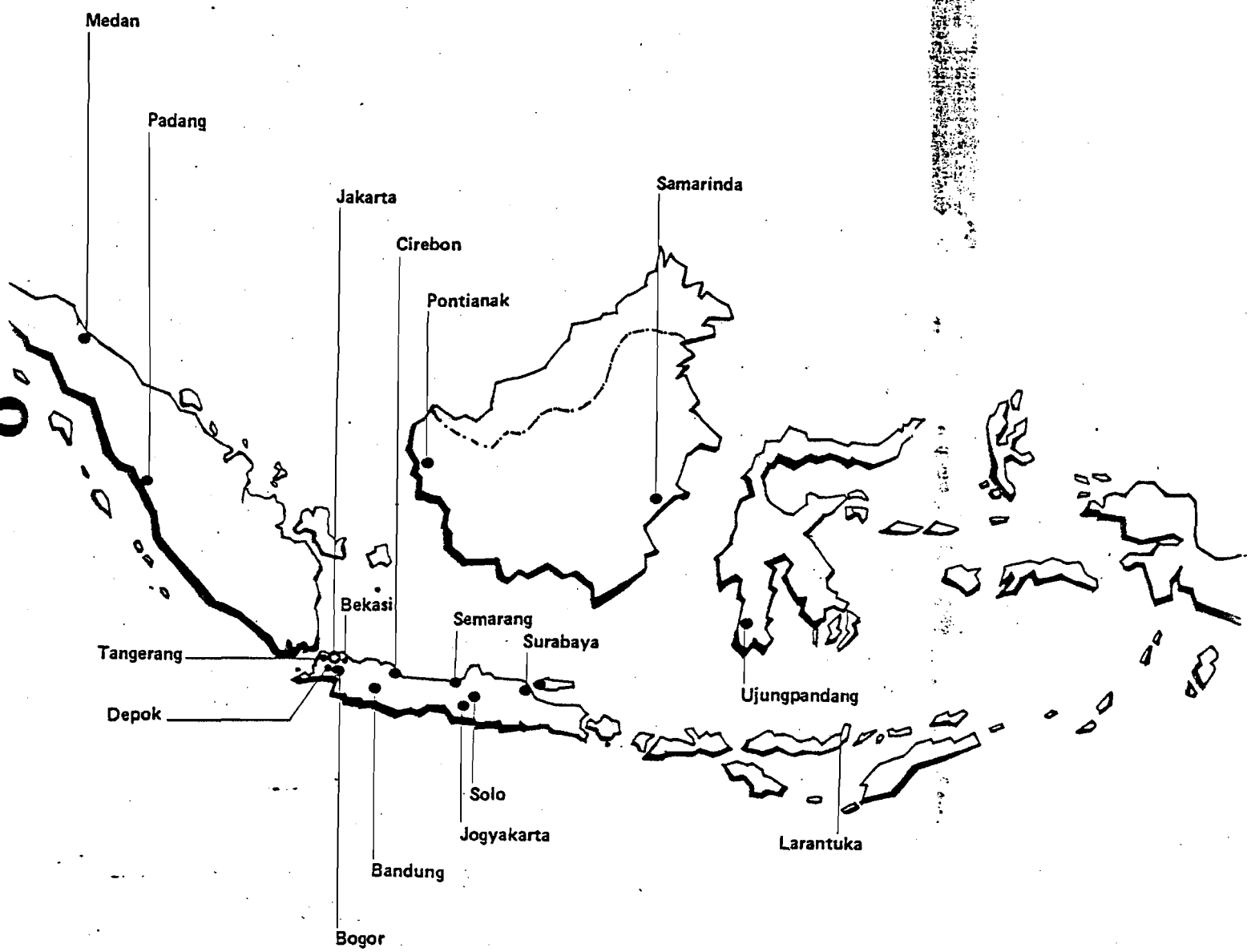
Housing as one basic need of the urban citizens has become a big problem, now or in the future.

A part of this problem solving has been entrusted to PERUM PERUMNAS based on the Government Regulation no.29,1974, founded under the Department of Public Works Republic of Indonesia.

Its implication in providing sites and services, housing for the low and middle income groups has been rendered by PERUM PERUMNAS since the PELITA II (The second Five Years Development Plan) where hopes are beginning to be quantitatively and qualitatively fulfilled.
However, nationally, in quantity PERUM PERUMNAS has not been able to accomplished more than 14% of the housing shortage yet.

The purpose of this booklet is to provide information about what and how the PERUM PERUMNAS carries out the Government programme in the provision of housing, sites and services, and its physical development from the foundation in 1974 to 1978/1979

Site of Perum Perumnas Projects



The field of coordination and renovation are carried out by various departments each in accordance with its respective tasks and special fields, such as: the Department of Finance is in charge of financing, the Department of Industry deals with the industrial aspects and building materials; the Department of Home Affairs has to take up problems in connection with land property. Whereas the Department of Public Works handles the Field of Physical Development.

As a follow up of the Field of Physical Development in PELITA II (1974 – 1979), BKPN established a General Guideline on Housing Development Policy with the emphasis on the provision of sites and services and housing for low and middle income groups.

Housing development in urban areas is carried out by the Government, authorized by PERUM PERUMNAS in cooperation with private/real-estate enterprises, non profit organizations, institutes and others.

In the villages, the housing rehabilitation is undered by the Local Government, participated by the community, guided by the Directorate General of Cipta Karya, Department of Public Works.

Besides of the housing problem, the Government pays serious attention to the Kampong Betterment Project (KBP). Here again, the Local Government level joins with the community, tackles the job under the guidance of the Directorate General of Cipta Karya.

A GENERAL GUIDELINE ON HOUSING DEVELOPMENT POLICY

	PROGRAMME	ORGANIZER					FACILITIES/SUBSIDY
		Private Real Estate Enterprises	Non-profit Organization	PERUMNAS	LOCAL GOVERNMENT	COMMUNITY	
	URBAN						
1.	Luxury housing (9000 units*)	9000 units					A. The facility of capital investments (in one package 1 : 3 : 6) B. Construction credit C. Mortgage/ownership credit D. Facilities guarantee
2.	Middle class housing (36000 units*)	27000 units	9000 units				
3.	Low cost housing (90000 units*)	54000 units	16000 units	20000 units**			A. Construction credit (Governmental Bank) B. Mortgage/ownership credit
4.	Sites & Services (225000 units*)		172000 units	53000 units**			A. Construction credit (Governmental Bank) B. Mortgage/ownership credit and Building Material credit (Governmental Bank)
5.	Kampong betterment	—	—	—	Local government	Community participation	A. A. P. B. N. B. INPRES*** C. A. P. B. D.
	VILLAGE Rehabilitation of housing and the environment	—	—	—	1000 villages as pilot projects	Community participation	A. A. P. B. N. B. INPRES*** C. A. P. B. D. D. Building Material credit (Governmental Bank)

Note :

*) Projection numbers of housing units during the PELITA II

**) Based on the PERUMNAS programme

***) The expanded and directed INPRES non-profit organization : Cooperation, Institutes

THE DEVELOPMENT AND ALLOCATION OF THE PERUM PERUMNAS HOUSES
(up to the end of June 1979)

Nos	CITIES/SITES		DEVELOPMENT				ALLOCATION				
			Finished		Being developed		Finished		In the process		
			RS	RI	RS	RI	RS	RI	RS	RI	
1.	Jakarta	: Klender	893	6.872	–	–	881	6.554	12	318	
2.	Depok	: Depok I	4.608	246	–	–	4.608	246	–	–	
3.	Depok	: Depok Utara	1.311	–	–	–	881	–	430	–	
4.	Depok	: Depok II	5.400	7.700	–	–	5.007	7.182	393	518	
5.	Bogor	: Bantarkemang	644	–	–	–	571	–	73	–	
6.	Bekasi	: Rawatembaga	818	2.500	–	–	683	1.707	135	793	
7.	Bandung	: Sukaluyu	150	–	–	–	150	–	–	–	
8.	Bandung	: Sadang Serang I	360	500	–	–	360	498	–	2	
9.	Bandung	: Cijerah I	460	–	–	–	460	–	–	–	
10.	Bandung	: Cijerah II	–	*)2.000	–	–	–	–	–	1.600	*)400
11.	Bandung	: Sukasari/S. jadi	*)1.108	1.632	–	–	704	1.593	–	39	*)404
12.	Cirebon	: Katiasa/Larangan	2.734	1.170	–	–	2.711	1.065	23	105	
13.	Semarang	: Sampangan	438	–	–	–	438	–	–	–	
14.	Semarang	: Krapyak	732	–	–	–	732	–	–	–	
15.	Semarang	: Banyumanik	2.008	1.800	–	700	906	1.124	1.102	676	
16.	Solo	: Karanganyar	576	1.230	–	–	569	1.227	7	3	
17.	Yogyakarta	: Condongcatur	1.166	–	–	–	1.125	–	41	–	
18.	Surabaya	: Simomulyo I	420	1.276	–	–	407	1.208	13	68	
19.	Surabaya	: Tandes I	1.500	1.620	240	540	1.442	–	58	–	
20.	Surabaya	: Simomulyo II	–	1.340	–	–	–	129	–	1.211	
21.	Kamal	: Banyuajuh	1.204	–	88	–	1.52	–	52	–	
22.	Padang	: Air Tawar	368	–	–	–	368	–	–	–	
23.	Padang	: Padang II	50	–	450	–	50	–	–	–	
24.	Medan	: Kp. Helvetia	3.760	898	–	–	3.348	674	412	224	
25.	Medan	: Medan II	1.072	1.200	278	1.600	485	413	587	787	
26.	Samarinda	: Samarinda	200	–	–	–	200	–	–	–	
27.	U. Pandang	: Panakukang	1.102	–	102	–	1.066	–	36	–	
28.	Tangerang	: Karawaci	1.200	*)4.000	–	–	1.022	2.500	178	–	*)1.500
29.	Pontianak	: Pontianak	830	–	248	–	616	–	214	–	
30.	Larantuka	: Larantuka	–	–	–	*)250	–	–	–	–	*)250
	Total		35.112	35.984	1.406	3.090	30.942	26.120	3.766	6.344	*)2.554
			71.096		4.496		57.062		10.110		
			75.592**)				67.172				

*) Included in the 1979/1980 programme
**) The PELITA II target realization: 73.038 units

Perum Perumnas

The National Urban Development Corporation is a non-profit Government enterprise. It was founded by the Government Regulation no.29, 1974, placed under the Department of Public Works.

MAIN FUNCTION

Is to carry out the national Government programme and helping to fill the Local Government programme up in the area of housing which is provision of core housing and its sites and services.

This include :

- provision of served plots (kaveling) and core housing built for further expansion and improvement while occupied by the tenant.

- provision of infrastructure such as roads network, electricity, water supply drainage system, sewerage disposal and other.
  Also provision of lands for social facilities such as places for worship, schools, markets, recreational fields and others.

Whereas, community housing development programme includes also provision of low cost housing which is completely built ready to be occupied and need no more additions.

Environment and Social Facilities

Any settlement site built by PERUM PERUMNAS is provided with infra-structure facilities, such as:
roads
footpath
street lighting
water supply connection to each house
electricity network
sewerage disposal and septic tank
drainage system

Besides of facilities mentioned, plots of lands are provided for social facilities such as:
kindergarten (STK)
elementary school (SD)
Junior High School
Senior High School
community centre
small mosque
church
clinic
square field
recreational area
market, shopping centre and workshop
government branch offices (police station, post office, etc.)

Scope and Implementation

Nationally, PERUM PERUMNAS has not been able to meet more than 14% of the present housing demand. This is partly due to the limited fund provided by the Government, which has another purpose to stimulate and encourage community participation in building social houses.
The scope and level of activities carried out by PERUM PERUMNAS integrated with city planning and the rapid population growth.

At the begining of the PELITA II (1974 – 1975) PERUM PERUMNAS concentrated its effort on the provision of lands for 26.500 houses in other big cities.

The provision of low cost housing has been pioneered by a pilot project of 10.000 units in Jakarta and its surrounding, followed by 10.000 more units built in other big cities.

Jabotabek	Klender	:	7.765 Units.
	Bekasi	:	3.318 Units.
	Tangerang	:	5.200 Units.
	Depok	:	19.265 Units.
	Bogor	:	644 Units.
	Sub Total	:	36.192 Units.
Outside Jabotabek	Bandung	:	6.210 Units.
	Semarang	:	5.678 Units.
	Yogyakarta	:	1.166 Units.
	Medan	:	8.808 Units.
	Pontianak	:	1.078 Units.
	Ujung Pandang	:	1.204 Units.
	Cirebon	:	3.904 Units.
	Solo	:	1.806 Units.
	Surabaya	:	6.936 Units.
	Padang	:	868 Units.
	Samarinda	:	200 Units.
	Kamal	:	1.292 Units.
	Larantuka	:	250 Units.
	Sub Total	:	39.400 Units.

Jabotabek	:	36.192 Units.
Outside Jabotabek	:	39.400 Units.
Total	:	75.592 Units.

Target of construction of low cost and core housing in PELITA II.

Type of housing	PERUM PERUMNAS	Private/Real estate non-profit organization	Total
Low Cost Housing	20.000 Units	70.000 Units	90.000 Units
Core Housing	53.000 Units	172.000 Units	225.000 Units
Total	73.000 Units	242.000 Units	315.000 Units
Housing demand in the PELITA II			500.000 Units

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Capital

To implement the National Housing Programme (draft, planning, implementing, evaluating stages), the PERUM PERUMNAS acquires its financial resources from the Government, rental loans or revenue lands and other facilities built by PERUM PERUMNAS.

In accordance with the Government Regulation no.29,1974, article 7, the capital of the corporation is a state asset, thus there is no share holders. Additional capital funds have been acquired from:

- Government capital through state budget (APBN), including investment and exploitation expenses.

- Loans include :
  Loans from foreign countries among them from the International Finance Institution, and from countries who have sympathy toward Government development programme. Loans acquires from the state banks within the country.

- Revenue from own efforts in developing funds includes :
  Housing and land rents acquire from tenants. Tenants can obtain housing loan from the BTN (State Saving Bank).
  Revenue from rent/selling the commercial facilities developed by PERUM PERUMNAS in settlement areas.

Rental Terms

Houses built by PERUM PERUMNAS will - in the first stage - be rent. After several years of occupancy, after a decision that the house can be sold the tenant is given the priority to purchase.

Time duration and rent payment procedure.

Duration of rent status is two years, and could be prolonged after its expiration date. Rent is paid monthly.
At the signing of the rent agreement, the tenant is obligated to put a deposit which equals to three times of the monthly rent.

Qualifications of tenant:

Eligible tenants are :

1. Government employees/the army force members with a minimum of 10 years service, classified under rank I and II.
2. Retireds, including those who are going to retire within the next two years, or widow/widower of Government employees/the army force members.
3. Private less prosperous companies employees which earn equal to rank I and II with at least 10 years service.
4. Community who has to get rid of locations for Government projects and development.

Requirements for applicant are:

1. Indonesian Citizen
2. Applicant or spouse has not own a house or has not get any house from the place he/she works
3. Is willing to occupy the house provided by the Perum Perumnas
4. Is willing to obey the Perum Perumnas regulations

Procedures of application.

Application form provided at the project offices has to be completed and submitted back to the PERUM PERUMNAS. An applicant is only allowed to fill one form, also each spouse could only apply not more than one form.

Selecting procedures.

After the submission, PERUM PERUMNAS (s.o. Selection Body) in each respective area then examines and selects the eligible tenants to be. Selection in some ways is based on fulfillments of the requirements and completeness of filling the form.

Allocation in type of housing.

Whenever the available houses are in different types, PERUM PERUMNAS then will decide the type of housing suits for the applicant considering applicant's salary and earning.

Letter of occupancy.

To chosen applicants, a letter of occupancy is sent out, and an information notifying when he should appear at the office of PERUM PERUMNAS to do the following:

1. to draw a number determining the location of his house.
2. to sign the document of rent agreement.
3. to pay the first monthly rent and the required deposit.

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Facts and Physical Activities Data

THE CUMMULATIVE INCREASE OF LOW COST HOUSING AND CORE HOUSE IN PELITA II

	1975–1976	1976–1977	1977–1978	1978–1979
RI	–	3.976	9.448	23.732
RS	2.268	4.229	12.217	17.149
Total	2.268	8.205	21.665	40.881

= RI (Core House) 25

= RS (Low Cost Housing) 36

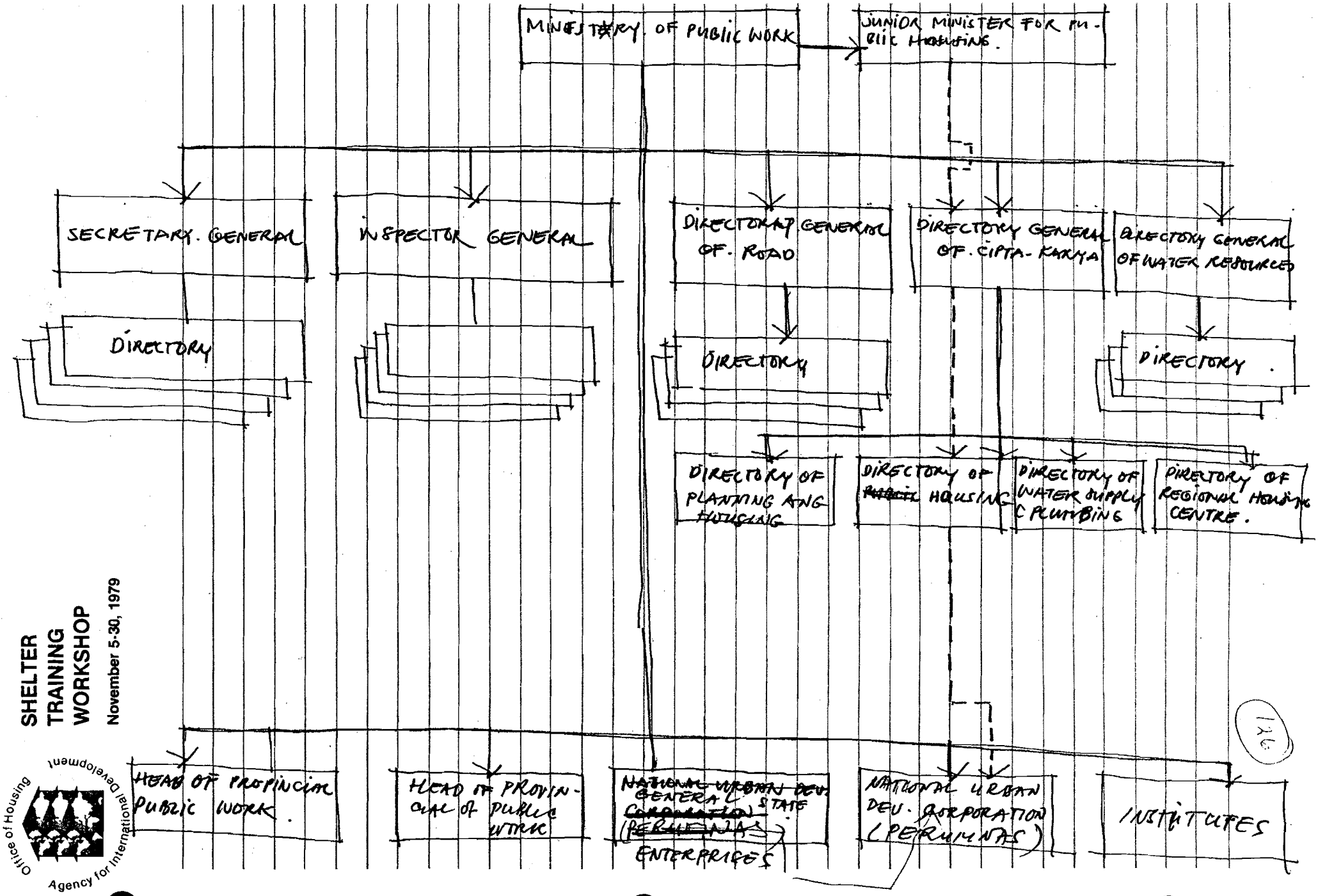
THE REALIZATION OF COMMUNITY HOUSING DEVELOPMENT IN PELITA II

Types of Housing, Materials and Housing Facilities

Type	Materials: skeleton, floor, wall, roof	Facilities
D.20 (4 x 5 m) living room, bath room, water closet	Iron/wood/alluminium, concrete/tile, bataco/particle board/ceiling/corrugated asbestos/corrugated ceiling. Only this type could be expanded and improved by the tenants during occupancy. Sites with this type of housing and being occupied are in: Depok, Klender, Bogor, Bandung, Cirebon, Solo, Surabaya, Medan.	water supply Electricity (exception Klender)
D.36 (6 x 6 m) 2 bedrooms living/dining room, kitchen, bath & water closet, porch.	Concrete/wood, concrete/tile, bataco/particle board/concrete plate, corrugated asbestos/aluminium/tin roof Floor area: 34 – 38 square meter. Sites with this type of housing and being occupied are in: Depok, Cirebon (Larangan), Padang (Airtawar), Medan (Helvetia).	water supply electricity, septic-tank
D. 45 (5–6 x 7–8m) 2 bedrooms living/dining room kitchen, bath & water closet, porch.	Concrete/wood/aluminium, concrete floor/tile, bataco/brick/ceiling, woodwool, corrugated asbestos/corrugated ceiling/aluminium/tin roof. Floor area: 43 – 44 square meter. Sites with this type of housing and being occupied are in: Klender, Depok, Bandung (Sadangserang), Cirebon, Solo (Karanganyar), Surabaya (Simomulyo), Padang, Medan.	water supply electricity, septic tank

Type	Materials: skeleton, floor, wall, roof	Facilities
M–45 2 stories (± 6 x 7½ m) I. floor: living room/ dining room, kitchen, bath room,water closet porch. II. floor: 2 bed rooms	Steel/concrete, tile & multiplex, brick/bataco, corrugated asbestos Sites with this type of housing and being occupied are in Depok, Bandung (Sukaluyu), Semarang (Sampangan)	water supply electricity, septic tank
D–54 (± 6½ x 8½ m) 3 bed rooms, living room/ dining room, storage, kitchen, bathroom, water closet, porch.	Skeleton: wood, floor: tile, Wall : bataco & particle board Roof : corrugated asbestos Sites with this type of housing and being occupied are in Klender, Cirebon	water supply electricity, septic tank
D–70 (± 7½ x 9½ m) or (6½ x 10½ m) 3 bed rooms, living room/ dining room, kitchen, storage, bathroom, water closet porch.	Skeleton: wood/ironframe concrete Floor : tile, wall: bataco/particle board Roof : corrugated asbestos Floor area : 70 – 72 m2 Sites with this type of housing and being occupied are in Klender, Depok, Cirebon, Solo	water supply electricity, septic tank
M–70 2 stories I. floor: 1 bed room, kitchen, bath r., water closet II. floor: 3 bed room, sitting room	Skeleton : steel/concrete Floor : tile & multiplex Wall : bataco Roof : corrugated asbestos Site with with this type of housing and being occupied is in Depok	water supply electricity, septic tank

INDONESIA



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INDONESIA

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ACTUAL HOUSING PROJECT DATA SHEET:

NAME OF PARTICIPANT Didi SUWANDHI + MOEGIYONO

NAME OF COUNTRY INDONESIA

This form should provide information on one housing project recently constructed which was designed for low-income people. The information will be used during the Shelter Training Workshop in a participant study exercise.

1. General Information

a. Name of the project: PERUM PERUMNAS (NATIONAL URBAN DEVELOPMENT CORPORATION)

b. Location of the project (city): IN ALL CAPITAL CITIES, PROVINCIAL AND DISTRICT. (ABOUT 100 CITIES)

c. Year of construction: 1979 – 1984

d. Number of units in project by size (square meters):

No. of Units	Size (in m^2)	
60.000	* 54 m^2 + 45 m^2	- LOW COST HOUSING PROGRAM
	* 70 m^2	
60.000	* 20 –	- SITE & SERVICES PROGRAM
	* 36 m^2	
	* 9–10 m^2	– INCOMPLETE HOUSING PROGRAM.

e. Annual income range of households in project area:

Lowest: Rp. 10.000 / MONTHLY (US$ 16) Highest: Rp. 100.000 / MONTHLY (US$ 160)

f. If possible, indicate what percentage of households in the city where the project is located have an annual income higher than the average income of households in the project.

_____ %

g. What is the average number of persons per household?

FIVE PERSONS

h. What is the average population density in the project?

50-60 UNITS/Ha.

2. Housing Finance Terms 1 U$ = Rp 630.

a. List the monthly payments required by each house type (listed in Item 1d above).

Size of Unit	Monthly Payment
1. 9-10 m²	still not decided
2. 20-25 m²	± Rp. 2800 - 3500
~~3. 36 m²~~	~~± Rp. 3800 - 4500,-~~
~~4. 45 m²~~	~~± Rp. 4800 - 5600,-~~
5. 54 m²	± Rp. 6500 - 7000
6. 70 m²	± Rp. 7500 - 8400,-

b. If the housing units were sold, List:

(1) Sales price of the unit by size: _____

(2) Downpayment required as a percent of sales price:

± 10 %

(3) Loan (mortgage) amount as a percent of sales price:

_____ %

(4) Annual interest on the mortgage loan in percent:

± 9 %

(5) The number of years for mortgage loan payment:

15-20 years

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3. Unit Cost Data on Project

a. What was the total size of the project in square meters?

very different from 400.000 – 2.750.000 m²

b. What was the average cost per square meter for the raw land (total project site raw land cost divided by number of square meters):

Raw land in every project is different between 500 Rp 2500 Rp.

c. What was the total cost for on-site infrastructure (grading, water, sewer, roads, drainage, etc.) for the project?

. land development = Rp 2500/m²

d. What was the total cost of off-site infrastructure (investments required to bring water, sewers, roads, or drainage to the site itself, but not on to the site)?

. it should be financed by gov.

e. What was the average construction cost per square meter of the housing units?

. between Rp. 22.500 – Rp. 26.000 /m²

f. What plot sizes were used by frontage and depth and total square meters?

Plot Size	Frontage	Depth
60-80 m²		
90 m²	6.00 m²	16.65 m²
100 m²		
150 m²		
200 m²		

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g. What were the amounts of money charged for connections per plot by item (like water connection, electric connection, gas connection and/or sewer connection)?

Water _____

Electric _____

Gas _____

Sewer _____

Other _____

h. Were construction costs of public facilities (such as schools, health clinics, or special recreation facilities) charged to the households? _____ If yes, what were the total costs of these facilities for the total project?

_____

i. Was there any special construction on each plot besides the house unit (for example, a boundary wall or septic system or latrine)? _____ If yes, what was the total cost per plot of these special items?

_____

4. Physical Standards

a. What percentage of the total project site is in parks or open space?

_____ %

b. What is the percentage of land area used for schools, health clinics, or other community facilities (plot area is desired, not area covered by buildings)?

_____ %

131-
~~134~~

c. What percentage of the project area is used for roads and footpaths?

_____ %

d. What is the width, in meters, of streets or footpaths by the types used in the project?

_____

_____

_____

e. What is the average block length? _____

_____

132-134

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135

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ACTUAL HOUSING PROJECT DATA SHEET:

NAME OF PARTICIPANT OLIVE LADLEY/D Lockmore

NAME OF COUNTRY JAMAICA

This form should provide information on one housing project recently constructed which was designed for low-income people. The information will be used during the Shelter Training Workshop in a participant study exercise.

1. General Information

a. Name of the project: NANCY [illegible]

b. Location of the project (city): _____

c. Year of construction: 75-76 Infrastructure 76- consolidation

d. Number of units in project by size (square meters):

No. of Units	Size (in m^2)
455	420 sqft (minimum)

e. Annual income range of households in project area:

Lowest: $700 b. yr Highest: $2500 b. yr

f. If possible, indicate what percentage of households in the city where the project is located have an annual income higher than the average income of households in the project.

55 %

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g. What is the average number of persons per household?

5

h. What is the average population density in the project?

94.8 /acre

2. Housing Finance Terms

a. List the monthly payments required by each house type (listed in Item 1d above).

Size of Unit	Monthly Payment
	20 - 30

b. If the housing units were sold, List:

(1) Sales price of the unit by size: $4000

(2) Downpayment required as a percent of sales price:

3.75 %

(3) Loan (mortgage) amount as a percent of sales price:

96.25 %

(4) Annual interest on the mortgage loan in percent:

8 %

(5) The number of years for mortgage loan payment:

25 years

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3. Unit Cost Data on Project

a. What was the total size of the project in square meters?

34 Acres

b. What was the average cost per square meter for the raw land (total project site raw land cost divided by number of square meters):

50 [illegible]

c. What was the total cost for on-site infrastructure (grading, water, sewer, roads, drainage, etc.) for the project?

$ 467 591 Contract [illegible]

d. What was the total cost of off-site infrastructure (investments required to bring water, sewers, roads, or drainage to the site itself, but not on to the site)?

16,000 Construction Fee

e. What was the average construction cost per square meter of the housing units?

N/A

f. What plot sizes were used by frontage and depth and total square meters?

Plot Size	Frontage	Depth
1500 sq ft.	30 ft	50 sq ft

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g. What were the amounts of money charged for connections per plot by item (like water connection, electric connection, gas connection and/or sewer connection)?

Water $76 - $114

Electric $50

Gas N/A

Sewer NONE

Other —

h. Were construction costs of public facilities (such as schools, health clinics, or special recreation facilities) charged to the households? NO If yes, what were the total costs of these facilities for the total project?

N/A

i. Was there any special construction on each plot besides the house unit (for example, a boundary wall or septic system or latrine)? NO If yes, what was the total cost per plot of these special items?

N/A

4. Physical Standards

a. What percentage of the total project site is in parks or open space?

15 %

b. What is the percentage of land area used for schools, health clinics, or other community facilities (plot area is desired, not area covered by buildings)?

6 %

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c. What percentage of the project area is used for roads and footpaths?

15 %

d. What is the width, in meters, of streets or footpaths by the types used in the project?

30' major

24' lateral

6' footpath

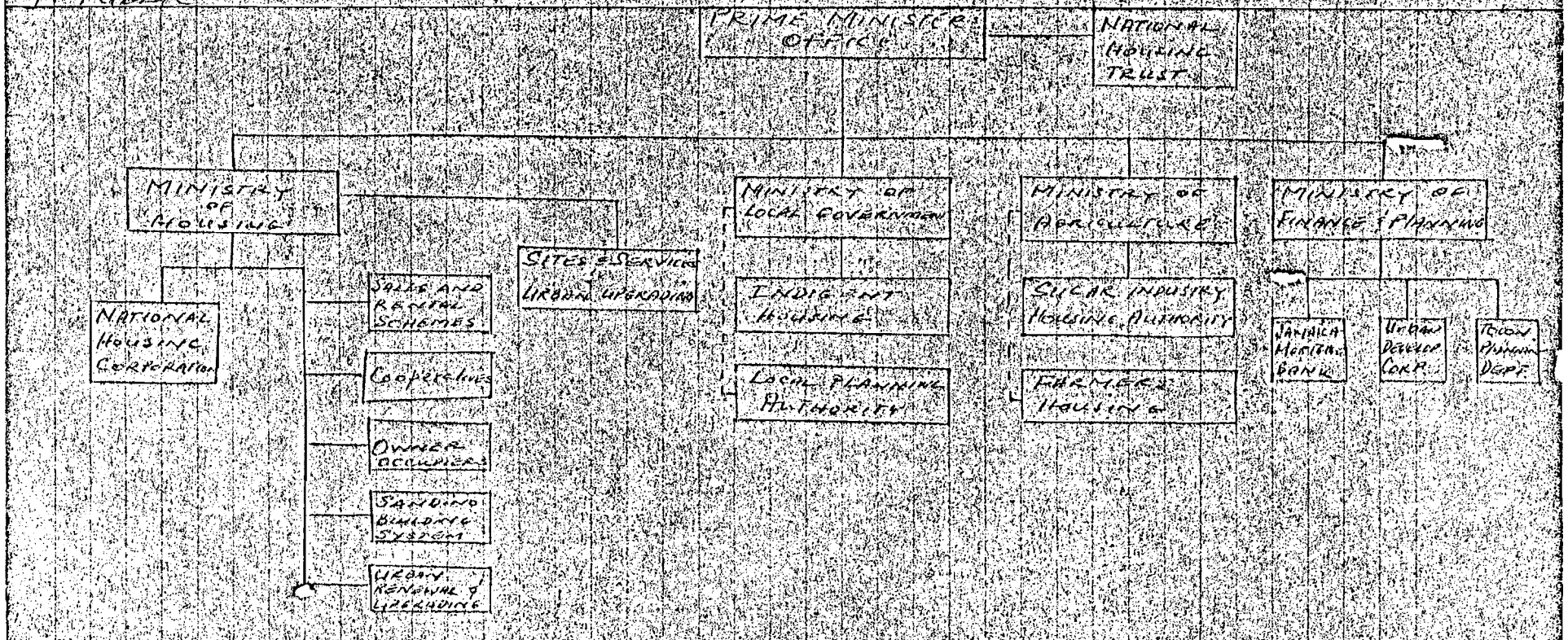
e. What is the average block length?

semi-detached units

STRUCTURE OF HOUSING INSTITUTIONS

JAMAICA

I. PUBLIC



II. PRIVATE

BUILDING SOCIETIES

MUTUAL HOUSING SERVICES (COOPERATIVES)

CREDIT UNIONS

PRIVATE INSTITUTIONS

OTHERS

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SHELTER SECTOR APPROACHES IN KENYA

1. Introduction:

1.1 The focus of this paper is on the shelter development approaches for the low income families in Kenya. It is not directed to the housing policies and programmes for the housing sector as a whole. The main reason is that this is where the core of the shelter problem lies.

1.2 It is estimated that by the year 2000 Kenya's population will have grown to 27 million persons from the present estimated 15 million. At the current high rate of urbanization it is expected that about 8 million persons will live in urban areas. This means that the urban sector will be required to provide:

1) Adequate employment opportunities.

2) Affordable shelter and infrastructure together with related facilities.

3) Transportation.

4) Viable financial and administrative institutional framework at the local level.

2. The Constraints:

One of the main constraints in devising shelter programmes and projects for the low income groups is in trying to design and develop the type of shelter and infrastructure that they can afford and that can meet the laid down health, privacy, structural and environmental standards. Let us take one simple example. At the current building prices in Kenya it is estimated that to provide a two roomed housing unit through conventional ways of development, that is through a contractor, it may cost in the region of (U.S. $6,000). Given, for instance, the Nairobi household income distribution in 1977 as indicated below it is apparent that about 60% of the urban families may not be able to afford that type of shelter and infrastructure assuming an amortization period of 15 years and 10% market rate of interest and also assuming that

such families can conveniently spend 25% of their income on housing.

Nairobi Household Income Distribution, 1977

Cumulative % of Families	Monthly Household Income Range K Sh	US$
0 - 20	0 - 550	0 - 66
21 - 40	551 - 1,050	67 - 126
41 - 60	1,051 - 2,000	127 - 240
61 - 80	2,001 - 4,000	241 - 482
81 - 100	over 4,000	over 482

3. Policy Options:

It is therefore apparent that for any shelter solution approaches to be effective and efficient they must be geared towards either:

1) Decreasing the cost of the shelter and infrastructure, or

2) Increasing the families incomes, or

3) Manipulating both options (1) and (2), or

4) Subsidizing the purchasing power of the low income groups.

4. Shelter and Infrastructure Approached:

Most of the shelter and infrastructure approaches described below contain some elements of the above policy options. They also take into consideration of the following additional guidelines:

1) The theme of the current development plan which is based to a large extent on the basic needs strategy, is the alleviation of poverty.

2) The decentralization policy which was incorporated in the last development plan continued to provide the basis for Kenya's urban development strategy.

5. National Housing Programme for Low Income Families:

About 90% of the funds allocated by Government for urban public housing development are channeled, by the Ministry of Housing through the National Housing Corporation

to local authorities for the development of site and service projects. At the moment this covers about 35 towns all over Kenya. This is a continuous programme which depends on the amount of funds available during each Government financial year. The income category considered ranges from US 42 to US 210 and the main components are the provision of infrastructure, material loans to enable the construction of one habitable room plus technical assistance from the National Housing Corporation.

6. Kenya Government/World Bank Urban Projects:

1) Urban I (Dandora Project)

The first urban project financed by the Bank, the IDA and Government is the largest single effort in low cost housing so far undertaken in Kenya. It comprised 6000 units at a single site at Dandora in Nairobi. Phase I consisting of about 1000 site and service plots has already been completed and the houses occupied. Phase II consisting of 5000 plots is almost completed and housing consolidation is underway. This is a package of services including nursery schools, kiosks health centers.

The standards of self help and self-contracted construction are very high as will be seen in the slides. So far there has been no problems in the development of houses even by the poorest allotters earning as less as US $70 per month. Cost recovery experience has been excellent, with very low arrears and defaults. Allocation was generally fair and accurate with only a few cases of richer persons sneaking into the project through dishonest means. The administrative department has functioned well.

2) Urban II (Nairobi, Mombasa and Kisumu.)

The second urban project is a continuation of the first urban project. Significant new components directly resulting from inputs of the first project are: (a) squatter upgrading as a complementary approach to site and services (which was unacceptable to Government in the first project); (b) lower standards in site and services; (c) specific institutional components aimed at improving both central and local government capabilities for developing and managing urban projects; (d) technical assistance to strengthen the financial management and resources of local authorities; and (e) efforts to improve nutrition and family planning service delivery to the low-income project areas.

Project Objectives

The second project which is already at planning stage will enable Government to accelerate implementation of low-income housing programs in Nairobi and initiate similar programs in two additional cities. During its execution, the project will also build technical, institutional and financial capabilities to continue and extend the low-cost approach to urban shelter on a nationwide scale. Specifically, the proposed project would (a) increase the supply of site and services plots to meet a significant portion of demand for such plots over the next four years; (b) introduce upgrading of unserviced squatter settlements as an official policy; (c) demonstrate an effective low-cost delivery system for health, nutrition and family planning services; (d) stimulate and encourage employment and income generating activities for the urban poor; (e) strengthen the institutional capabilities of Government and local municipal authorities for implementing and managing urban development; (f) assist Government in improving the financial resources and management of local authorities; and (g) help local authorities control the pattern of urban growth and to develop their land more effectively.

Project Components

The proposed project would consist of the following components: 1/

(a) Settlement Upgrading: provision of basic infrastructure to five existing unserviced settlements (total of 536 ha) in the three cities, affecting about 10,000 households;

(b) Site and services: preparation of about 11,770 serviced plots in parallel with upgrading of existing sub-standard areas;

(c) Settlement Plots: preparation of about 2,500 surveyed plots with public water and sanitary facilities and unpaved roads;

(d) Low-cost Housing Plots for Market Sale: financing of surplus-generating programs for construction of about 3,240 serviced sites to be sold at market prices;

(e) Housing Loans: access to credit for house improvement and new housebuilding in project areas;

1/ See the attached table for detailed breakdown of plots in each city. The city maps showing the location of project sites in the three cities are also provided.

(f) Community Facilities: provision of social, education and health facilities to serve each site including 35 primary schools, 14 health centers, 11 community centers, 9 social halls and 2 sports centers;

(g) Nutrition/Family Planning: support for improvement of these services to 265,000 beneficiaries in project areas including facilities for home visiting, staff training, monitoring nutritional status, prevention of malnutrition, and evaluation of benefits;

(h) Employment Opportunities: provision for commercial activity and small industries including space for about 350 kiosks, 1,830 market stalls, 960 serviced sites for small industries, and loans for construction of workshops; and

(i) Technical Assistance: financing for consultants' services for detailed design and engineering, studies, training programs and consultants services aimed at strengthening of institutions, monitoring and evaluation, and future project preparation.

Detailed Features

Settlement Upgrading

This component would upgrade existing uncontrolled settlements through provision of infrastructure services, community and social facilities and secure tenure. Selection of viable neighborhoods in each city was determined by criteria such as location, economic and transport linkages, technical feasibility and need for services. Functional standards for infrastructure in the upgrading proposals are as low as possible initially so that the per family costs are affordable by households at the lower end of the income scale. However, provision is made in the planning for future upgrading of standards as household incomes increase.

In Nairobi, the two areas included for upgrading are Riruta in Dagoretti in the western part of the city and Baba-Dogo in the east. Upgrading of these two areas would result in approximately 2,050 plots, including new plots expected through subdivision by the present landowners. In Mombasa the upgrading area identified is Chaani, which is located 6 km west of the city center. The proposed upgrading will incorporate 941 existing structures and add 544 new (infill) plots. Upgrading sites in Kisumu are Manyatta in the east and Nyalenda and Pandipieri, located southeast of the city

center. These three sites will incorporate about 4,080 existing structures and accommodate an additional 560 new infill plots. In the Kisumu and Mombasa upgrading areas, every household will have access to services including water supply and sewarage, which are provided in individual wet cores located centrally in clusters of 12-15 units.

Land tenure will be regularized in all sites in the upgrading process. Owners of existing houses and allottees of infill plots in Mombasa and Kisumu will be granted secure tenure by the municipalities. In Nairobi, residents of Riruta and Baba-Dogo will be required to exchange freehold for leasehold; they will still be charged for the implementation costs and will be able to subdivide plots.

Site and Service Plots

The project would also provide residential plots in new development areas with different levels of services to cater for a variety of needs of the low-income population. A total of about 11,770 sites will be prepared on various sites in the three cities. All sites are well located in terms of employment and transport linkages. Four of the sites are already owned by the Government and acquisition of the fifth (Migosi) has already been done. Where feasible, existing housing on these sites would be incorporated in the layouts and owners will be allocated plots.

In order to keep initial costs as low as possible and to allow maximum flexibility for self-help housing consolidation, the majority (86%) of site and service plots will not have any superstructures. Allottees will build their own houses with materials loans offered under the project.

Site and Service at Mathare North

A site and services scheme of about 2,500 plots will be financed by this project on government-owned land in Mathare North in Nairobi. Provisions for resettlement within Mathare North of all eligible squatter households who will be displaced by the scheme are included in the project. However, the Bank-financed project is not directly involved in the redevelopment and upgrading of privately-owned (company) areas in the eastern end of Mathare Valley which contains the largest poorly serviced squatter settlement in Nairobi. It has proven impossible either to acquire the land for systematic upgrading in a Bank project or to insure that the private land-owning companies would redevelop the land with due regard to the intersts of the low-income population now living there. The companies' main interests, naturally, is to maximize their gains. Redevelopment of company lands is therefore inevitable and outside the direct control of NCC. Recognizing this, NCC has developed an overall proposal including a structure plan to guide development and improvements in Mathare Valley. All developers including companies will be required to conform to NCC's structure plan and phasing proposal.

Settlement Plots

Regardless of any public sector activities in Mathare Valley, considerable dislocation of squatter and low-income renting families is to be expected in the company areas. In an attempt to provide a viable alternative to this population, the project includes financing for an option with infrastructure standards that are low enough to be affordable by them. At negotiations, NCC agreed to develop about 2,500 settlement plots serviced with public water and sanitary facilities and unpaved roads in the Kayole and/or Villa Franca sites. Furthermore, NCC undertook to ensure that before it approves applications to sub-divide any village on privately owned land in Mathare Valley, the required number of settlement plots are available for the affected families. Submission of preliminary designs and cost estimates for this part of the project and NCC's proposals for phasing and development acceptable to the Association was a conditions of disbursement for the Nairobi component.

Low-Cost Housing Plots for Market Sale

In an effort to promote mixed development and at the same time cater for the housing needs of households in income brackets immediately above the target population, the project includes seed financing for low-cost housing plots to be sold on the market. The standards of construction, services and plot sizes would be similar to the site and service plots. Consequently, the market prices, while expected to yield substantial surpluses over costs, would be relatively low, making them affordable by middle and lower-middle income groups. The surpluses realized would be utilized in creating a separate housing fund for constructing more units (in the case of Nairobi), or ploughed back to be used for cross-subsidization (in Mombasa and Kisumu). The project includes financing for constructing the first phase and preparing the second phase of a four-year program in Nairobi, and complete financing for the programs in the other two cities. The number of plots to be financed directly under the project for this component is 3,242, representing about 15% of the project's total units and about 9% of total project costs.

The principles governing the operation of the housing fund created by this component in Nairobi were agreed at negotiations within the context of a broader review of housing finance regulations. The main goal of the fund is to isolate financial resources generated by NCC's housing operations to be used exclusively for new housing development.

Community Facilities

For each of the project sites, an evaluation of the needs for community facilities over and above those existing was made to determine the range and number of facilities to be financed under the project.

Thirty-five primary schools will be constructed

to minimum standards developed in the Dandora project to enroll 85% of the primary school age children in the project areas. In line with national education policy, primary schools will not include pre-primary classes, nor will the project include nursery or secondary school construction although sites have been reserved for these uses.

The 14 health facilities included in the project are designated to serve a total population of 285,000-300,000. They are of three different types; their mix in each city reflects the different stages which the local Public Health Departments have attained in their efforts to implement the national health policy of building integrated facilities. The three types are: dispensary, maternity and child health clinic, and integrated health center combining dispensary, clinic and a maternity ward. In Kisumu, one of the integrated centers will include a centralized laboratory with X-ray and a nutrition unit.

The 20 community centers are of three types: a simple social hall plus offices (Nairobi only); the same plus training wing; and the same with training wing and day-care center (Nairobi only). The social halls, located within a shorter walking distance of residents than the larger multi-purpose facilities, are needed in the larger Nairobi sites, which it would be unnecessarily expensive to equip with an equal number of full centers. The 14 markets are of the Jericho (Nairobi) type, the least expensive of any design now in use in urban areas. They consist of a surfaced, fenced area with no superstructures other than toilets and a market master's office. Nairobi's two large, outlying site and service areas (Kayole and Villa Franca) will each also have a sports center.

Nutrition, Health and Family Planning

The creation of new housing through the project is expected to improve general health conditions by providing better environmental sanitation; making clinic, dispensary and maternity services available; and enabling allottees to earn rental income. Therefore, even without a special component, health of the project population would improve over time. However, the delivery of health care services, including family planning and nutrition, to the urban poor is disproportionately lower than that to the upper income groups. Although urban areas provide the majority of family planning acceptors, acceptance of family planning is low among the urban poor. An appraisal of nutritional status also showed malnutrition to be a major cause of sickness and death among children and this was compounded by a weak program and inadequate services which affected mostly the low-income urban groups. Such disparities, therefore, indicate the need for a specific health/nutrition/family planning intervention for this particular urban group.

Since family planning, maternal and child health and nutrition services are currently provided by the city public health departments (PHDs) as an integral part of health services delivery, this component provides selective support to strengthen existing PHD efforts in these areas. The main

target groups are women of childbearing age and children up to 5 years, but other adults will also be sought out in the information and education activities. On the basis of a needs assessment, the key deficiencies in delivery of health services to the poor which this component addresses are in home visiting, staff training and use, information and education materials and use, and program evaluation.

Thus the project will finance additional staff training, initial salary support for a new nutrition cadre and for statistical clerks in new family planning evaluation and research (E&R) units, vehicles and equipment for home visiting and the E&R units, startup of demonstration plots and nurseries to facilitate family food production and baseline and follow-up nutrition surveys. The emphasis in both nutrition and family planning will be on outreach to the target group in the home in addition to conventional treatment and teaching in the clinics. In nutrition, the focus will be on making mothers aware of the effect of a better diet on their children's well-being and on simple means of preparing locally available and inexpensive foods.

Employment Opportunities

The project will provide opportunities to the target population to increase their income and will generate new jobs for them. Since a majority of the household heads in all upgrading areas are wage employed, and the same is likely in the site and services areas, access to urban centers of employment concentration was a primary consideration. In Mombasa the low-income sites are both on the primary road link into the center of the city and have access to cheap bus transport. Both locations are also within bicycle range, at five and seven km from the city center. In Kisumu, all low-income sites are directly contiguous to the city, with a walk of one to two km to reach the main employment centers. In Nairobi, all sites are well located in relation to existing and planned employment centers and transport linkages.

The main attempt to stimulate employment in this project, outside of the construction industry itself, is through provision of workshop space and loans for construction of workshops. There is thought to be sufficient private capital and management ability to use these services profitably until more complete package including loans and technical assistance can be made available ~~(see para. 2.23 below)~~. On the other hand, space for such activities is very scarce at present and there is no easy way for the private market to supply mortgage capital to the small firms which are expected to use the space provided. Thus the project is aimed at doing the minimum necessary, at very low cost in terms of administration, to allow an expansion of employment in small scale manufacturing, in contrast to a complete-package-of-services approach.

The project will provide about 960 serviced sites suitably located for workshops. Construction of the workshops would be carried out by allottees with loans available under the project. This component will address the needs of the approximately 10% of project participants who are self-employed in small-scale manufacturing. In addition to the individual workshop sites, five bulk workshop sites will be provided to be allocated at cost to charitable institutions involved in promoting small industries. Small-scale retail trade is a major productive activity in squatter areas and site and services areas. The project will cater for this activity by provision of about 350 sites for retail kiosks at convenient locations and about 1,830 market stalls in centrally located markets.

Construction of houses in the project is arranged to provide maximum scope for small firms to participate. Building in the first project has usually been undertaken with a mixture of self-help and hired labor; almost nobody has been able to build to acceptable standards exclusively by self-help. As a result, an active market for "fundies" (skilled and semi-skilled informal sector craftsmen) has been developed. The proposed project will cater for this mode of construction by providing building loans sufficient to cover the cost of necessary labor in addition to materials.

Total employment expected to be provided through components included in the project would be about 6,400 persons, excluding those involved in the construction of houses (see para 4.20). The project makes no direct attempt to stimulate additional formal sector wage employment. Kenya already is developing an institutional capacity to do this through Kenya Industrial Estates (KIE), which under the recently approved IBRD loan (IDF project) is expanding its coverage to a limited number of smaller enterprises. A portion of the KIE small-scale activities in Nairobi will be located in or near the project areas. While KIE will eventually provide a package of services to many small firms, it is not presently capable of catering to a large number of small, high-risk borrowers.

Technical Assistance

The technical assistance to be financed through the project is designed to strengthen institutional capabilities of Central Government and local authorities in project implementation, organization and financial management. The major part of the assistance will be in the form of financing to procure consultants' services, although other items such as certain capital expenditures in the training components and local costs of travelling and organizing seminars, are also included.

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Financing

The proposed Bank loan of US$25 million and IDA credit of US$25 million will finance about 72% of project cost, covering 100% of foreign exchange cost and 61% of local costs. The Bank loan and IDA credit will made to the Government of Kenya, which will on-lend to project cities at the same terms as in the first project (8.5% annual interest over 25 years). The remaining 28% (US$19.4 million) of project cost will be provided by the Government of Kenya. Government funds will be lent to the cities at standard terms: 6.5% annual interest with a repayment period of 25 years.

KENYA GOVERNMENT - USAID Tenant Purchase Schemes

A I D has committed about $17m. in three low cost housing projects in Kenya - Kimathi and Umoja Phase I, both in Nairobi and in 10 secondary cities outside the capital city ie., Mombasa, Kisumu, Kitale, Thika, Meru, Embu, Nakuru, Eldoret, Nyeri, Nanyuki.

The distribution of housing units in the three projects is as below:-

NAIROBI	NO. OF UNITS	TOTAL COST $
Kimathi	87	2.000m
Umojo Phase I	3,000	10.000m
Secondary Cities		
Mombasa, Kisumu, Nyeri Thika, Kitale, Meru, Nakuru, Nanyuki, Eldoret Kericho	1,000	5.000m
TOTAL	4,087	17,000M

Most of the houses are already completed and occupied. The target income goup particularly for Umoja and other secondary cities was families earning below median income.

Cooperative Housing:

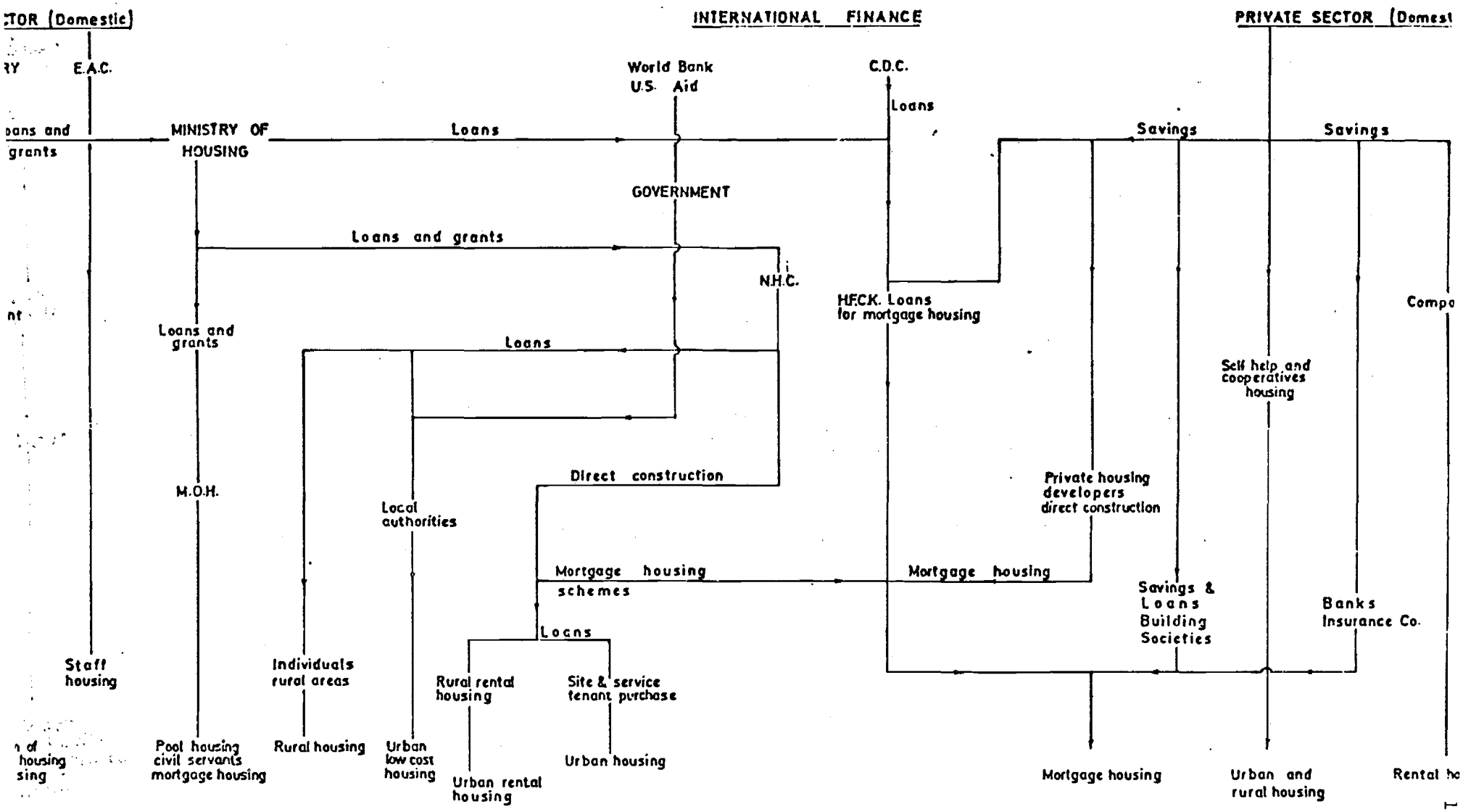
The Government in conjunction with the central organization of Trade Union has been engaged in the formation of a National Cooperative Housing Union. When it becomes operational it is intended to finance, plan, implement and manage housing projects mainly for low income workers with emphasis on workers earning about $100 and below. Intially the programme is intended to cover all the main towns in Kenya and will eventually spread out to smaller towns as well.

In the current Development Plan period the Government has earmarked about US$ 1.08 million as working capital for the National Cooperative Housing Union and it is hoped that the Union will also get a grant of US50,000. Subgrant from USAID through the Foundation of Cooperative Housing (FCH) which is assisting in the establishment of the management team of the NACHU. Eventually the main source of capital is expected to come from the Kenya National Social Security Fund and the mortgage facilities from the Kenya Cooperative Bank.

CONCLUSION

The above approaches towards the development of housing refer only to low cost housing. Other types of projects will be discussed through the use of the financial and institutional framework chart which has already been supplied to you.

NATIONAL AND LOCAL FINANCIAL INSTITUTIONAL FRAME-WORK FOR HOUSING IN KENYA



rce: Ministry of Housing and Social Services

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KENYA COUNTRY PRESENTATION MATERIALS

Nairobi Household Income Distribution, 1977

Cumulative % Of Families	Monthly Household Income Range K Sh	Monthly Household Income Range US$
0 - 20	0 - 550	0 - 66
21 - 40	551 - 1,050	67 - 126
41 - 60	1,051 - 2,000	127 - 240
61 - 80	2,001 - 4,000	241 - 482
81 - 100	over 4,000	over 482

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2

KENYA

SECOND URBAN PROJECT

Summary of Project Cost Estimates by Sites

(Excluding Contingencies)

KISUMU	Number of Plots	Total Cost (K Sh '000)
Manyatta Upgrading Area	1,461	27,347
Nyalenda/Pandipieri Upgrading Area	3,178	51,834
Migosi Site and Service Area	1,915	34,245
Off Site Infrastructure	-	11,080
General Technical Assistance a/	-	415
Subtotal	6,554	124,921
MOMBASA		
Chaani Upgrading Area	1,485	27,487
Mikindani Site and Service Area	1,490	39,605
Miritini, Market Priced Units	418	5,533
Off-Site Infrastructure	-	17,569
General Technical Assistance a/	-	415
Subtotal	3,393	90,609
NAIROBI		
Kayole and Villa Franca Site and Service, low income	7,500	137,263
Mathare North, Site and Service low income	2,500	58,790
Dandora Site and Service, market priced Development Area	1,000	4,665
Villa Franca Site and Service, market priced	700	11,938
Riruta, Area Upgrading, 85 ha. net	1,700	2 ,386
Baba-Dogo Area Upgrading, 15 ha. net	300	4,276
Off-Site Infrastructure	-	3,733
General Technical Assistance /a	-	4,276
Subtotal	13,700	246,327
Base Cost Estimate /b		461,857

Note: All site costs include design engineering and supervision.

/a Technical assistance not related directly to the housing project.

/b Technical assistance to urban areas, financed by Central Government, not included in total. See Table II-1, Page 29, "General Assistance to Urban Areas."

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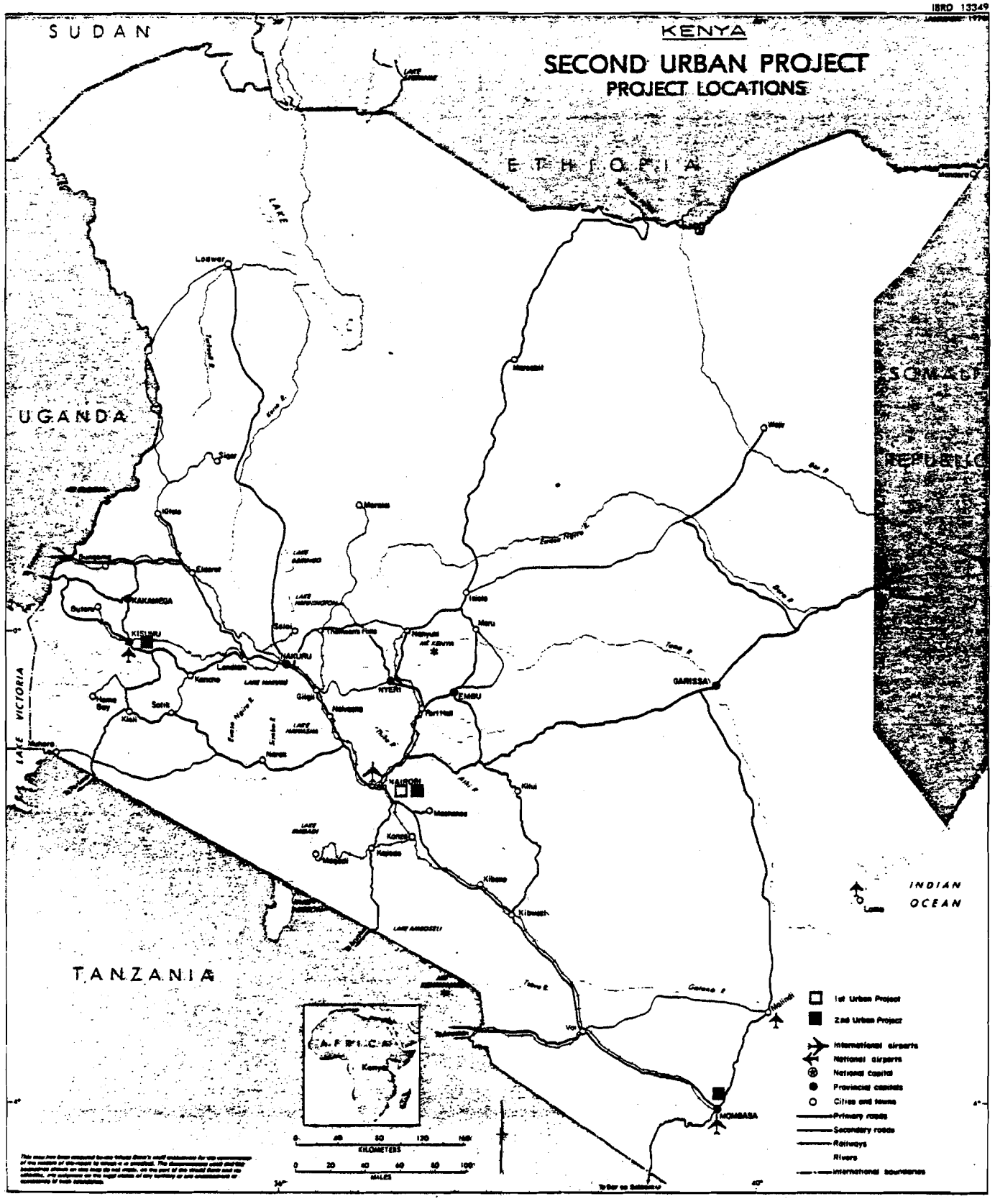
IBRD 13349



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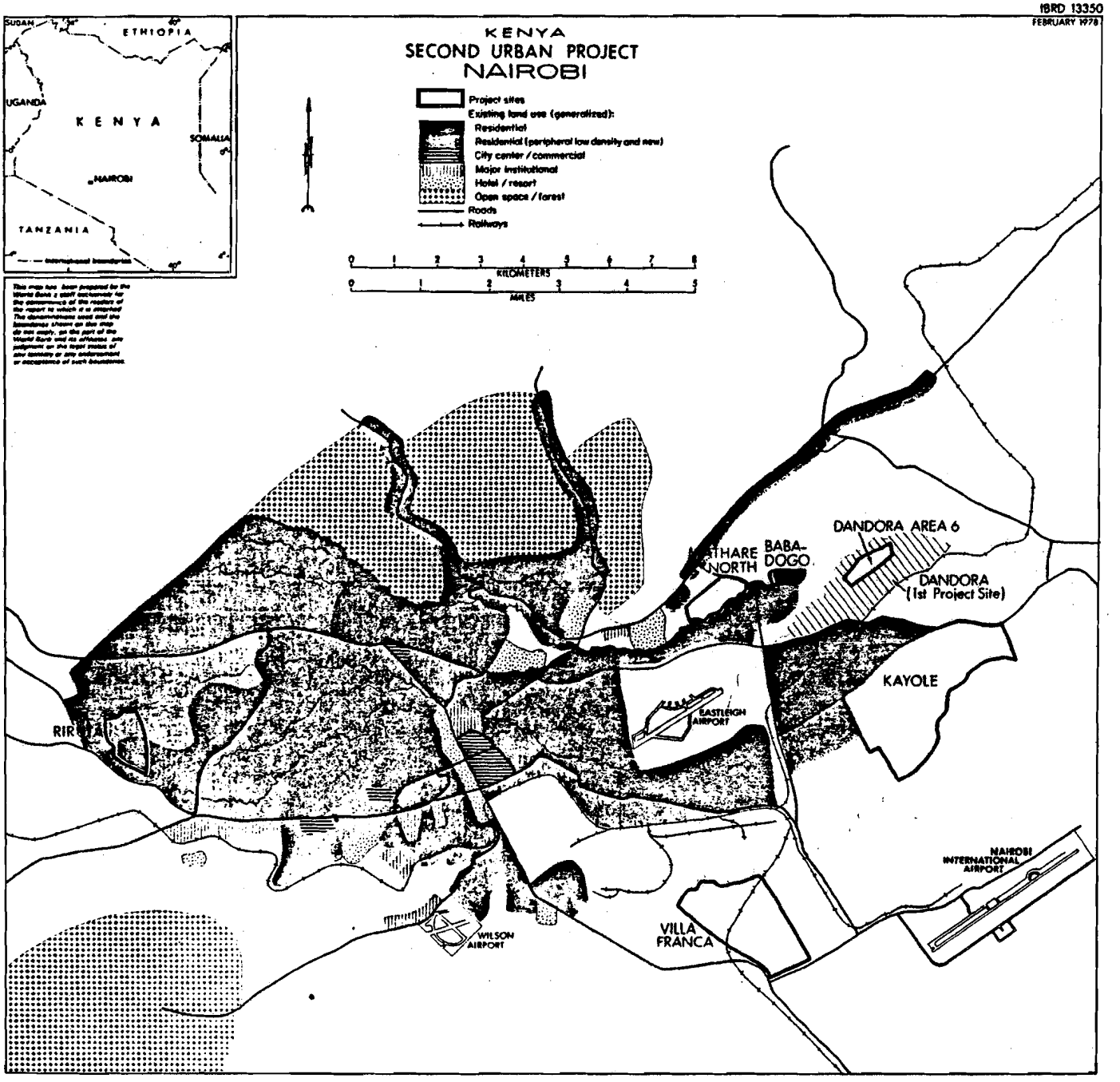
FEBRUARY 1978



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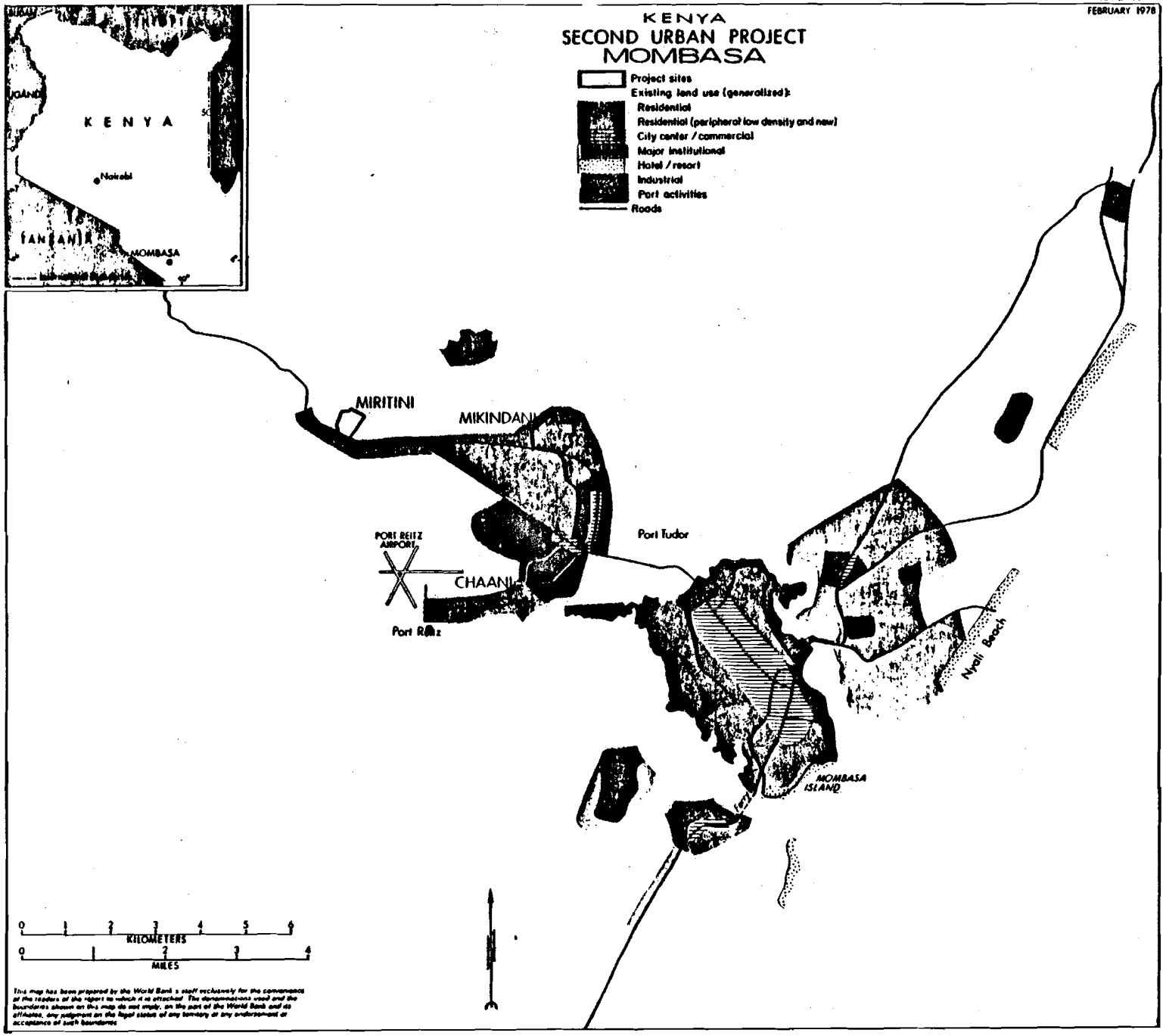
KENYA
SECOND URBAN PROJECT
MOMBASA



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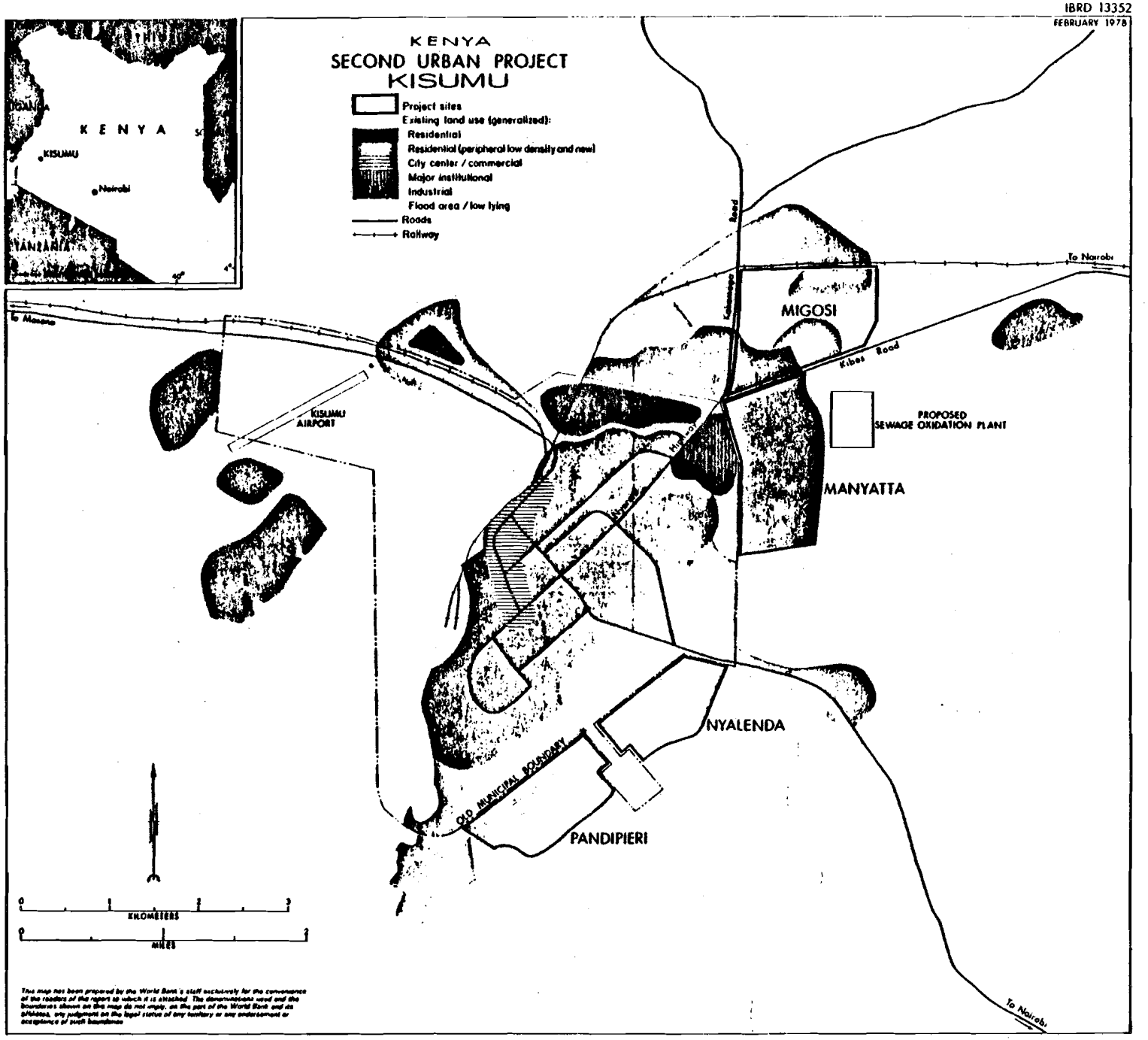

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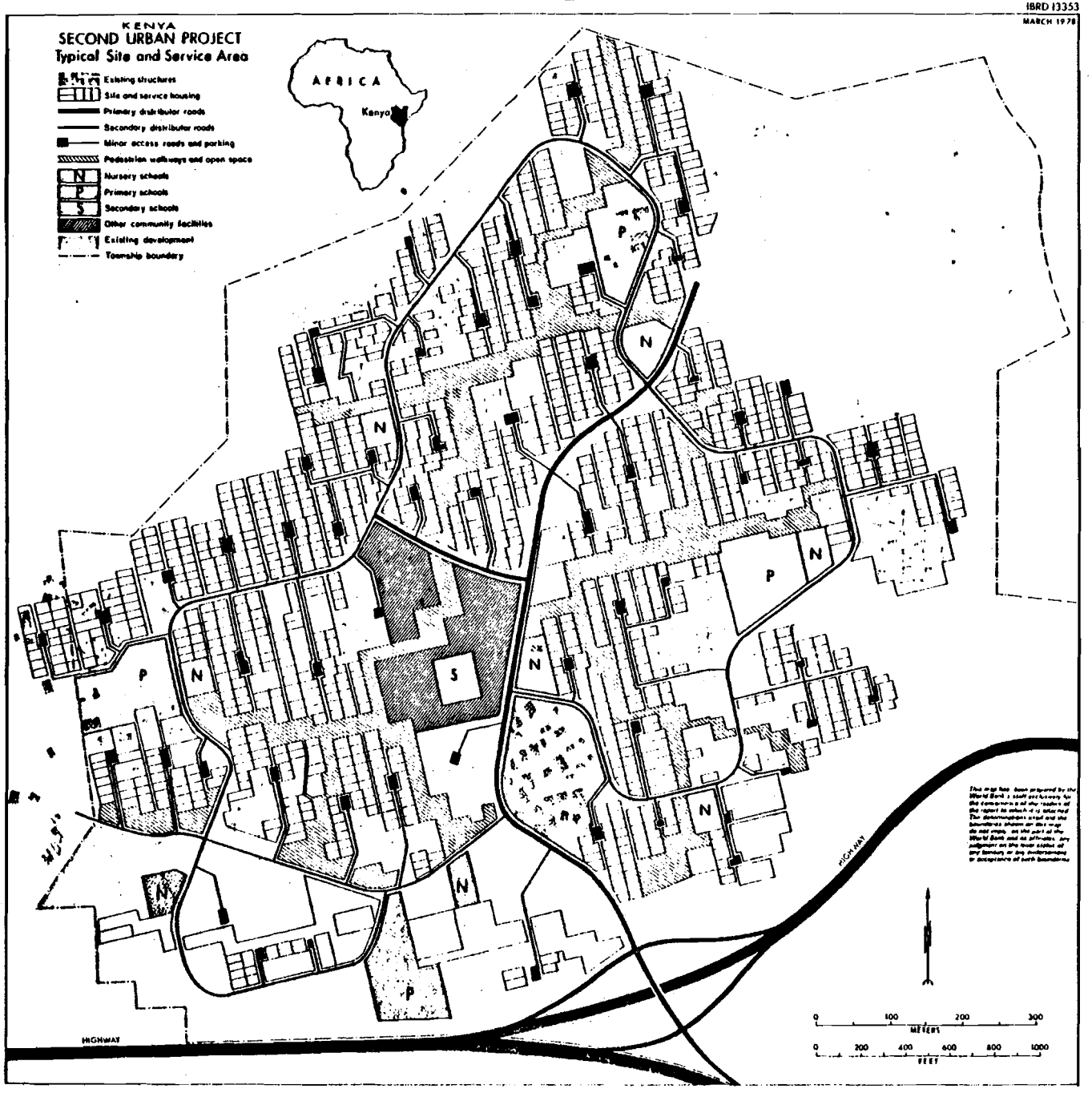
IBRD 13353
MARCH 1978

KENYA
SECOND URBAN PROJECT
Typical Site and Service Area



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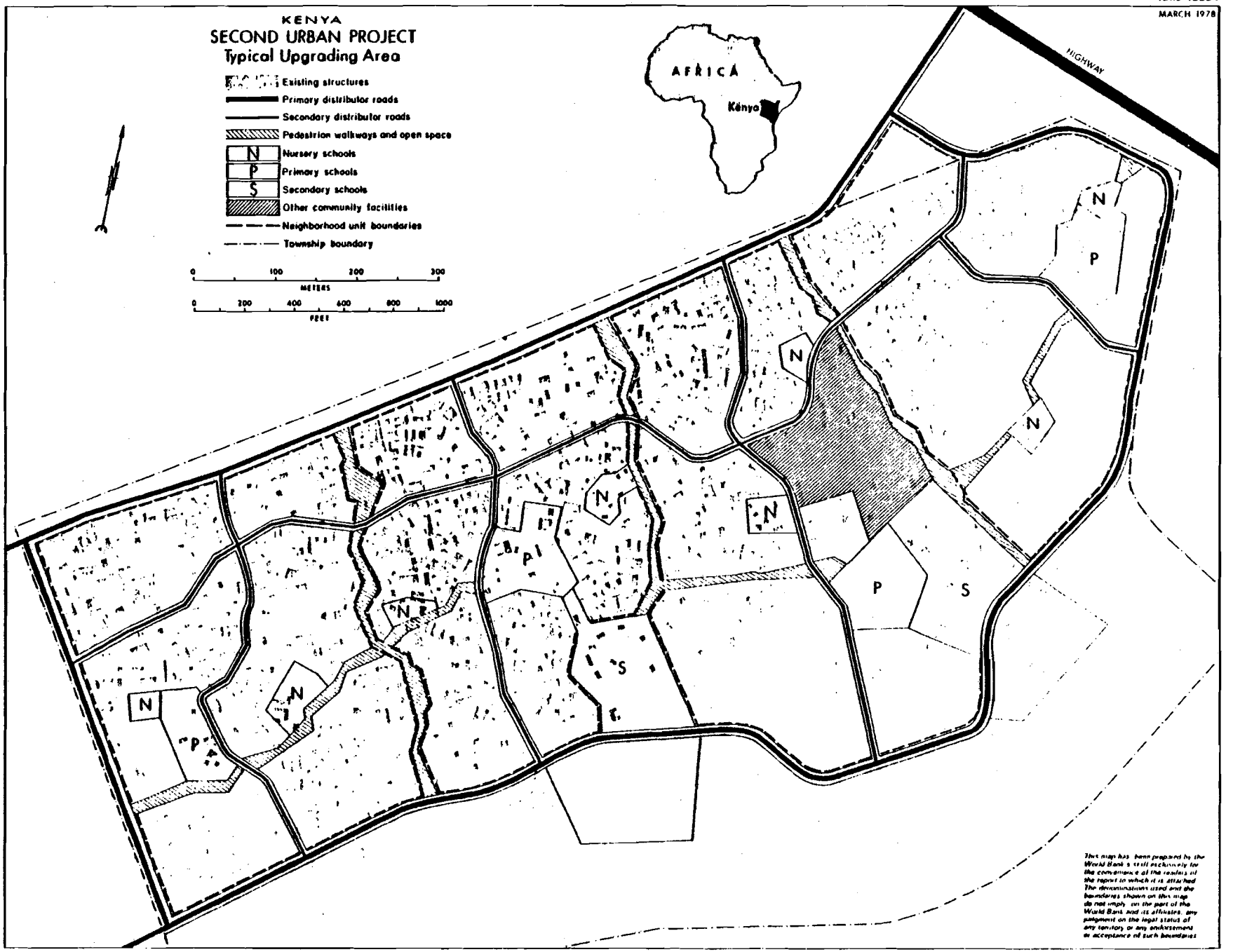
IBRD 13354
MARCH 1978

KENYA
SECOND URBAN PROJECT
Typical Upgrading Area



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Site n Service (Material loan)

SHELTER
TRAINING
WORKSHOP

November 5-30, 1979

ACTUAL HOUSING PROJECT DATA SHEET:

NAME OF PARTICIPANT NGARI JOBSON J

NAME OF COUNTRY KENYA

This form should provide information on one housing project recently constructed which was designed for low-income people. The information will be used during the Shelter Training Workshop in a participant study exercise.

1. General Information

a. Name of the project: VOI SITE & SERVICE SCHEME

b. Location of the project (city): VOI TOWNSHIP

c. Year of construction: MAY 1978 — APRIL 1979

d. Number of units in project by size (square meters):

No. of Units	Size (in m^2)
190	293.75 m^2 (each plot)

e. Annual income range of households in project area:

Lowest: K.SH. 3600/- P.a Highest: K.SH. 14400/- P.a

f. If possible, indicate what percentage of households in the city where the project is located have an annual income higher than the average income of households in the project.

11 %

g. What is the average number of persons per household?

4.5

h. What is the average population density in the project?

120 hr./Ha. (assuming 2.5 persons per room)

2. Housing Finance Terms

a. List the monthly payments required by each house type (listed in Item 1d above).

	Size of Unit	Monthly Payment
Serviced plots	12.5m. X 23.5 m.	K.SH. 163/80

b. If the housing units were sold, List:

(1) Sales price of the unit by size: K.SH. 16,520/-

(2) Downpayment required as a percent of sales price:

5 %

(3) Loan (mortgage) amount as a percent of sales price:

95 %

(4) Annual interest on the mortgage loan in percent:

6½ %

(5) The number of years for mortgage loan payment:

20 years

3. Unit Cost Data on Project

a. What was the total size of the project in square meters?

93,020.80 m^2

b. What was the average cost per square meter for the raw land (total project site raw land cost divided by number of square meters):

LAND NOT PAID FOR

c. What was the total cost for on-site infrastructure (grading, water, sewer, roads, drainage, etc.) for the project?

K.SH. 1,264,880/=

d. What was the total cost of off-site infrastructure (investments required to bring water, sewers, roads, or drainage to the site itself, but not on to the site)?

INCLUDED IN ITEM NO 3.C

e. What was the average construction cost per square meter of the housing units?

K.SH 1020/= (Current)

f. What plot sizes were used by frontage and depth and total square meters?

Plot Size	Frontage	Depth
12.5m. x 23.5m.	12.5 m.	23.5 m. x190 = 55,812.5m^2

Office of Housing
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SHELTER
TRAINING
WORKSHOP

November 5-30, 1973

g. What were the amounts of money charged for connections per plot by item (like water connection, electric connection, gas connection and/or sewer connection)?

Water K. SH. 60/-

Electric N/A

Gas N/A

Sewer N/A

Other N/A

h. Were construction costs of public facilities (such as schools, health clinics, or special recreation facilities) charged to the households? NO If yes, what were the total costs of these facilities for the total project?

—

i. Was there any special construction on each plot besides the house unit (for example, a boundary wall or septic system or latrine)? NO If yes, what was the total cost per plot of these special items?

BUT STABILISATION PONDS CONSTRUCTED FOR WHOLE SCHEME

4. Physical Standards

a. What percentage of the total project site is in parks or open space?

20 %

b. What is the percentage of land area used for schools, health clinics, or other community facilities (plot area is desired, not area covered by buildings)?

NONE %

c. What percentage of the project area is used for roads and footpaths?

20 %

d. What is the width, in meters, of streets or footpaths by the types used in the project?

ROADS 9 m. — 12 m. - 15 m

FOOT PATHS 5 m.

e. What is the average block length? VARIES BETWEEN 5 and 15 plots

Kericho SITE

No material Loan (168)

SHELTER
TRAINING
WORKSHOP

November 5-30, 1979

ACTUAL HOUSING PROJECT DATA SHEET:

NAME OF PARTICIPANT NGARI JOBSON

NAME OF COUNTRY KENYA

This form should provide information on one housing project recently constructed which was designed for low-income people. The information will be used during the Shelter Training Workshop in a participant study exercise.

1. General Information

a. Name of the project: KERICHO SITE AND SERVICE SCHEME PH. I

b. Location of the project (city): KERICHO TOWN

c. Year of construction: 1977

d. Number of units in project by size (square meters):

No. of Units	Size (in m^2)
101	293.75 m^2 (each plot)

e. Annual income range of households in project area:

Lowest: K.SH. 3600 / P.a Highest: K.SH. 14400 / P.a

f. If possible, indicate what percentage of households in the city where the project is located have an annual income higher than the average income of households in the project.

10.2 %

g. What is the average number of persons per household?

4.5

h. What is the average population density in the project?

120 hr/ha. (assuming 2 persons per habitable room)

2. Housing Finance Terms

a. List the monthly payments required by each house type (listed in Item 1d above).

	Size of Unit	Monthly Payment
Serviced Plot	12.5m x 23.5m	N/A

b. If the housing units were sold, List:

(1) Sales price of the unit by size: K.SH. 8,320/-

(2) Downpayment required as a percent of sales price:

10 %

(3) Loan (mortgage) amount as a percent of sales price:

90 %

(4) Annual interest on the mortgage loan in percent:

6½ %

(5) The number of years for mortgage loan payment:

20 years

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3. Unit Cost Data on Project

a. What was the total size of the project in square meters?

49,447.9 m²

b. What was the average cost per square meter for the raw land (total project site raw land cost divided by number of square meters):

NIL

c. What was the total cost for on-site infrastructure (grading, water, sewer, roads, drainage, etc.) for the project?

K.SH. 599,500 /-

d. What was the total cost of off-site infrastructure (investments required to bring water, sewers, roads, or drainage to the site itself, but not on to the site)?

—

e. What was the average construction cost per square meter of the housing units?

K.SH 1000 /- (for houses completed recently)

f. What plot sizes were used by frontage and depth and total square meters?

Plot Size	Frontage	Depth	
12.5m. X 23.5m.	12.5 m	23.5m	X101=29,668.75m²

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Agency for International Development

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TRAINING
WORKSHOP

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g. What were the amounts of money charged for connections per plot by item (like water connection, electric connection, gas connection and/or sewer connection)?

Water N/A

Electric N/A

Gas N/A

Sewer N/A

Other N/A

h. Were construction costs of public facilities (such as schools, health clinics, or special recreation facilities) charged to the households? NO If yes, what were the total costs of these facilities for the total project?

—

i. Was there any special construction on each plot besides the house unit (for example, a boundary wall or septic system or latrine)? NO If yes, what was the total cost per plot of these special items?

—

4. Physical Standards

a. What percentage of the total project site is in parks or open space?

20 %

b. What is the percentage of land area used for schools, health clinics, or other community facilities (plot area is desired, not area covered by buildings)?

NONE %

SHELTER
TRAINING
WORKSHOP

November 5-30, 1979

1 S n S without (material loan) (172)

c. What percentage of the project area is used for roads and footpaths?

20 %

d. What is the width, in meters, of streets or footpaths by the types used in the project?

ROADS 9 m. – 12 m. – 15 m.

FOOTPATHS 5 m.

e. What is the average block length? VARIES BETWEEN 5 and 15 PLOTS

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SHELTER
TRAINING
WORKSHOP

November 5-30, 1979

ACTUAL HOUSING PROJECT DATA SHEET:

NAME OF PARTICIPANT NGARI JOBSON

NAME OF COUNTRY KENYA

This form should provide information on one housing project recently constructed which was designed for low-income people. The information will be used during the Shelter Training Workshop in a participant study exercise.

1. General Information

a. Name of the project: NANYUKI (USAID) TENANT PURCHASE SCHEME

b. Location of the project (city): NANYUKI TOWN

c. Year of construction: 1976-1977

d. Number of units in project by size (square meters):

No. of Units	Size (in m^2)
12	21.41 m^2
26	30.25 m^2

e. Annual income range of households in project area:

Lowest: K.SH 14,400 / P.a Highest: K.SH. 18,000 / P.a

f. If possible, indicate what percentage of households in the city where the project is located have an annual income higher than the average income of households in the project.

8.9 %

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Agency for International Development

SHELTER
TRAINING
WORKSHOP

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g. What is the average number of persons per household?

4.5

h. What is the average population density in the project?

104 hr./ha

2. Housing Finance Terms

a. List the monthly payments required by each house type (listed in Item 1d above).

Size of Unit	Monthly Payment
1 Rm. = 21.41 m²	KSH. 211/- P.M
2 Rm = 30.25 m²	KSH 340/- P.M

b. If the housing units were sold, List:

(1) Sales price of the unit by size: 1 ROOMED - K.SH 25,700/- 2 ROOMED - K.SH. 41,600/-

(2) Downpayment required as a percent of sales price:

10 %

(3) Loan (mortgage) amount as a percent of sales price:

90 %

(4) Annual interest on the mortgage loan in percent:

10 %

(5) The number of years for mortgage loan payment:

26 years

SHELTER
TRAINING
WORKSHOP

November 5-30, 1979

175

3. Unit Cost Data on Project

a. What was the total size of the project in square meters?

11,155 m²

b. What was the average cost per square meter for the raw land (total project site raw land cost divided by number of square meters):

K.SH. 3/40

c. What was the total cost for on-site infrastructure (grading, water, sewer, roads, drainage, etc.) for the project?

K. SH. 276,940 /-

d. What was the total cost of off-site infrastructure (investments required to bring water, sewers, roads, or drainage to the site itself, but not on to the site)?

—

e. What was the average construction cost per square meter of the housing units?

K.SH. 1033/24 for 1Rm ; K.Sh 939/86 for 2 Rm

f. What plot sizes were used by frontage and depth and total square meters?

Plot Size	Frontage	Depth
9.5m x 15.5m = 147.25 m²	9.5 m	15.5 m

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Agency for International Development

SHELTER
TRAINING
WORKSHOP
November 5-30, 1979

g. What were the amounts of money charged for connections per plot by item (like water connection, electric connection, gas connection and/or sewer connection)?

Water N/A

Electric KSH 160 /-

Gas N/A

Sewer N/A

Other KSH 100 /-

h. Were construction costs of public facilities (such as schools, health clinics, or special recreation facilities) charged to the households? No If yes, what were the total costs of these facilities for the total project?

—

i. Was there any special construction on each plot besides the house unit (for example, a boundary wall or septic system or latrine)? No If yes, what was the total cost per plot of these special items?

—

4. Physical Standards

a. What percentage of the total project site is in parks or open space? and foot paths

23 %

b. What is the percentage of land area used for schools, health clinics, or other community facilities (plot area is desired, not area covered by buildings)?

NONE %

c. What percentage of the project area is used for roads ~~and footpaths?~~

27 %

d. What is the width, in meters, of streets or footpaths by the types used in the project?

Streets 12m and 9m reserves

Footpaths 3 m.

e. What is the average block length?

6,850 m for 1 Rm hse and 13,650 m for 2 Rm hse.

SHELTER
TRAINING
WORKSHOP
November 5-30, 1979

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ACTUAL HOUSING PROJECT DATA SHEET:

NAME OF PARTICIPANT [illegible] NGA[illegible]

NAME OF COUNTRY KENYA

This form should provide information on one housing project recently constructed which was designed for low-income people. The information will be used during the Shelter Training Workshop in a participant study exercise.

1. General Information

a. Name of the project: UMOJA PROJECT 003

b. Location of the project (city): NAIROBI

c. Year of construction: 1976 - 79

d. Number of units in project by size (square meters):

No. of Units	Size (in m^2)
2123 (TYPE 01)	27
637 (TYPE 02)	37
164 (TYPE 03)	44.5

e. Annual income range of households in project area:

Lowest: (KShs. 800/=) $106 Highest: KShs. 1600/= ($ 213)

f. If possible, indicate what percentage of households in the city where the project is located have an annual income higher than the average income of households in the project.

60 %

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g. What is the average number of persons per household?

—

h. What is the average population density in the project?

[illegible] (3.2 units per hectare)

2. Housing Finance Terms

a. List the monthly payments required by each house type (listed in Item 1d above).

Size of Unit	Monthly Payment
27 sq.M	KSHS 295.00 ($ 39)
37 sq.M	KSHS 338.00 ($ 45)
44.5	KSHS 350.00 ($ 46)

b. If the housing units were sold, List:

(1) Sales price of the unit by size: TYPE 01 - KSHS 30,600 ($ 4080)
02 - " 35,530 ($ 4737)
03 - " 39,020 ($ 5204)

(2) Downpayment required as a percent of sales price:

TYPE 01 - 5%, TYPE 02 - 5%, TYPE 03 - 10 % %

(3) Loan (mortgage) amount as a percent of sales price:

TYPE 01 - 95%, TYPE 02 - 95%, TYPE 03 - 90 %

(4) Annual interest on the mortgage loan in percent:

10 %

(5) The number of years for mortgage loan payment:

25 years

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(180)

3. Unit Cost Data on Project

a. What was the total size of the project in square meters?

200 ha 52600 SQ. M.

b. What was the average cost per square meter for the raw land (total project site raw land cost divided by number of square meters):

(13F) $1.73 per m. (1976 prices, (KSHS. 3500) $467 per plot

c. What was the total cost for on-site infrastructure (grading, water, sewer, roads, drainage, etc.) for the project?

KSH. 13,000,000 ($ 1.733 m.)

d. What was the total cost of off-site infrastructure (investments required to bring water, sewers, roads, or drainage to the site itself, but not on to the site)?

NOMINAL

e. What was the average construction cost per square meter of the housing units? AVERAGE KSHS 900/- (# 120)

TYPE 01 — KSHS 592.62 TYPE 02 - KSHS. 540.55 TYPE 03 - KSHS 533.33

f. What plot sizes were used by frontage and depth and total square meters?

Plot Size	Frontage	Depth
104 SQ.M.	6	12
126 SQ.M.	7	18
144 SQ.M.	8	18

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g. What were the amounts of money charged for connections per plot by item (like water connection, electric connection, gas connection and/or sewer connection)?

Water 20 F

Electric 150 F

Gas —

Sewer —

Other —

h. Were construction costs of public facilities (such as schools, health clinics, or special recreation facilities) charged to the households? NO If yes, what were the total costs of these facilities for the total project?

i. Was there any special construction on each plot besides the house unit (for example, a boundary wall or septic system or latrine)? No If yes, what was the total cost per plot of these special items?

4. Physical Standards

a. What percentage of the total project site is in parks or open space?

5.8 (1:5 → 7.2 %

b. What is the percentage of land area used for schools, health clinics, or other community facilities (plot area is desired, not area covered by buildings)?

10.8 %

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c. What percentage of the project area is used for roads and footpaths?

37.1 → 17.4 %

d. What is the width, in meters, of streets or footpaths by the types used in the project?

PRIMARY DISTRIBUTOR (WITH BUS TRAFFIC)	20 M
" "	18 M
LOCAL " RESIDENTIAL	12 M
MINOR ACCESS ROAD	8 M
PRIMARY PATH	5 M
SECONDARY "	6 M
DOMESTIC "	3 M

e. What is the average block length? 140 M

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Office of Housing
Agency for International Development

SHELTER
TRAINING
WORKSHOP
November 5-30, 1979

WORKSHOP: NATIONAL SHELTER POLICIES

LESOTHO: NATIONAL SHELTER POLICY

URBAN GROWTH

Lesotho covers an area of 30,444 sq. km. It is landlocked and entirely surrounded by the Republic of South Africa. It lies between 28° and 31° south, occupying the highest part of the plateau of Southern Africa at altitude ranging from 1,000 to more than 3,400 metres. Its climate is extreme, with severe winters and hot summers and an erratic pattern of precipitation.

While Lesotho does not yet have pressures of the scale found in most other Third World countries, partly due to the ability of rural families to supplement farm income with wages earned in the RSA its urban growth is still more than twice the national average (4.8% compared to 2.3%). Maseru currently has a population of 59,000. This is split more or less equally between the original town and its peri-urban areas, which together constitute Greater Maseru. Greater Maseru has been growing at about 7.4% per annum, more than three times the national average. Meanwhile the country's urban population (9% of the total population of 1.3 million) was estimated at about 117,000 residing in 13 urban centers. On the basis of current trends, Lesotho will have a population of 1.5 million by 1986, of which 168,000 will be urban.

EMPLOYMENT

The urban areas, Maseru in particular, hold the major share of Lesotho's domestic wage employment and productive activity. Nearly half of all wage employment and GNP is generated by manufacturing, government, tourism and other services, all primarily located in urban areas. The government's policy of employment creation in industry and commerce has encouraged the growth of urban centres.

In 1976 Lesotho's labour force was estimated at about 560,000 with an annual growth rate of about 20,000 until 1985, divided more or less between males and females. To continue employment at present levels would require about 15,000 jobs per annum, excluding employment of returning mine workers. In 1978 about 42% of Lesotho's male labour force worked in the RSA mines. This number had begun decreasing with S.A.'s policy of using less foreign labour.

URBAN SERVICES

Urban growth in Lesotho has far out stripped the capacity of government to provide the necessary services, particularly in the unplanned peri-urban areas of Maseru, which are growing in population at the rate of approximately 16% per annum. In these areas about 39% of the residents have access to standpipes, the rest buying water from neighbours who have piped water to their plots, while 60% have sanitation facilities in the form of pit, and bucket latrines as well as septic tanks. Central Maseru receives the most comprehensive range of services: piped water to 99% of the population, waterbarne sanitation to 50%.

HOUSING INSTITUTIONS

The Lesotho Building Finance Corporation is the only mortgage finance institution in Lesotho. It began operations in 1977 with funds from government and the United Nations Habitat and Human Settlements Foundation to mobilize domestic savings and promote private investment in housing, especially for middle and lower income groups. It currently lends to middle and upper income households having monthly incomes of R400 (US $480) and above, but hopes to lend to those earning R300 (US $360) per month in the current fiscal year.

The Lesotho Housing Corporation is empowered to build housing for all income groups. However, until now it has concentrated on the middle and upper income groups, being hampered mainly by lack of access to financial resources for the poorer sectors. The Corporation has worked on a number of construction projects using bilateral aid.

The Lower Income Housing Company was founded in 1975 as a private company. In practice, however, it has the status of a para-statal responsible to the Ministry of Commerce and Industry. Its task is to provide housing to lower income groups and assist households with incomes between R50 and R150 per month. This company is the only housing institution that is operating at the low-cost end of the housing sector, but the scale of its operation has not been adequate to meet the housing demand.

HOUSING POLICY

The following is a very brief summary of Lesotho's proposed National Housing Policy:

1. Housing Institutions

A permanent Housing Committee is to be established comprised of high level officials from several pertinent agencies. A new department of Housing and Town Planning

(or Urban Development) within the Ministry of Interior is proposed with key responsibilities for Housing and Town Planning.

A new strong Housing Corporation would be created, combining LEHCO-OP and the Lesotho Housing Corporation. This new corporation would be linked to the Department of Housing and Town Planning in Interior.

The Building Finance Corporation would function as at present, with adequate capital and staff.

2. Government Houses

Most government pool houses are to be systematically and expeditiously sold. Some would be retained to house expatriates. The houses will be added to the new Corporation for management and disposition. Proceeds from the sale of the houses will accrue to the Building Finance Corporation, which will provide financing for purchasers.

3. Town Planning and Urban Settlements

Policies relate to effective implementation of the Town and Country Planning Act of 1978 including comprehensive town plans, land use regulation, national building code, special building code provisions for self-help housing, public capital improvement programming, and adequate staffing and funding.

Planning is to minimize urban prawl and both public and private costs of development. On-site costs are to be paid by developers. Building sites are to be pre-serviced.

Settlement policies set forth encourage people to stay in villages; growth centres to be fostered in each district rather than have urban growth concentrate in Maseru.

4. Infrastructure and Public Services

Basic services to be extended as broadly as possible rather than concentrate limited resources on highest quality services for relatively few people. Health, safety and access to be important determinants of public investment; Government to encourage the use of cross-subsidies to the benefit of the poorest households.

Since government does not have the financial resources to subsidize the recurring costs of providing water, waste disposal and electricity each household needs do govern its consumption of these services according to its ability to pay for them.

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5. Lower-Cost Housing

Government will provide adequate plots with basic services for self-help constructed houses. Self-help housing will be facilitated by technical assistance, reasonable building regulations, financing and help in obtaining building materials. Subsidies of any kind, however, are not envisioned by government.

Established housing areas will be upgraded by providing basic services, land surveys and titles, and housing repair and expansion assistance. Regulations will be enforced to prevent the development of unsuitable housing areas.

6. Financing Housing

Policies are intended to strengthen the Building Finance Corporation as well as to encourage banks, credit unions, insurance companies and others to finance urban development and housing at market interest rates. Financing of new low-cost housing and upgrading of existing housing is to be provided. Financial capabilities of builders and suppliers are to be fostered.

7. Financing of Infrastructure

The full costs of major infrastructure construction maintenance and operation are to be recouped by user charges. Property owners and developers are to be responsible for providing on-site infrastructure. Only Government subsidies will be to the lowest income households to protect the general health and welfare of the households, neighbourhood and community.

8. Land Tenune

Land needed for housing will be made available in adequate amounts at suitable locations with secure, marketable titles.

9. Housing Construction

Policies foster capabilities of private builders and contractors; encourage use of local rather than imported materials; call for research and demonstrations regarding provision of efficient and inexpensive housing.

10. Rural Housing

All policies are intended to apply to rural housing as well as urban, with some obvious exceptions and modifications.

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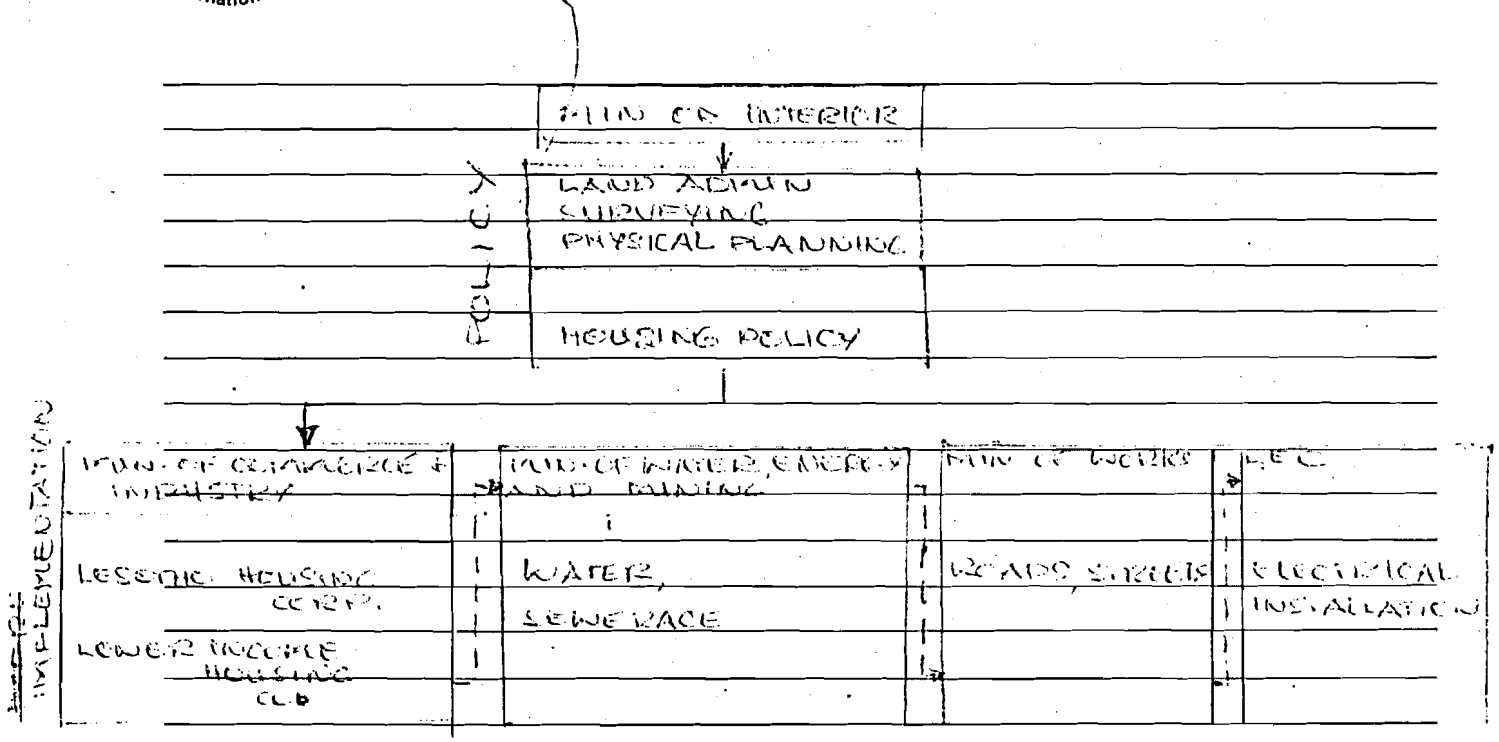
LESOTHO

Office of Housing
Agency for International Development

SHELTER TRAINING WORKSHOP

November 5-30, 1979

ORGANIZATIONAL STRUCTURE FOR HOUSING



LESOTHO COUNTRY PRESENTATION MATERIALS

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PROPOSED LESOTHO NATIONAL HOUSING POLICY

1.0 BACKGROUND

Lesotho already has national housing policies. Housing policies are set forth in both the First and Second Five Year Development Plans. Moreover, several of the housing policies in both the First and Second Plans have been substantially implemented (e.g., establishment of a housing corporation and a building society). On the other hand, some policies are yet to be implemented (e.g., implementation of the Land Act of 1978 and encouragements of local civil servants to buy or build their own houses).

While well aware of its specific housing policies, the Government, in the Kingdom of Lesotho Second Five Year Development Plan, called for the:

> "Formulation of an effective and comprehensive housing policy."

A request was made to the US/AID to provide technical assistance to the Government, through the Ministry of Interior, in the formulation of this housing policy. US/AID Office of Housing agreed to provide a consultant for 4-6 weeks to assist in drafting this policy once the Ministry of Interior hired a Director of Housing for its Housing for its Housing Section. This having been done early in 1979, US/AID provided the services of Robert L. De Voy, President of [illegible], for the period of April 9, 1979 to May 18, 1979.

Mr. De Voy closely worked with Kelefetseng Khaoli, Director of Housing, Ministry of Interior, in the preparation of several housing policy discussion papers. These papers were reviewed by officials of

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Cabinet, Central Planning, Lesotho Housing Corporation, LAMCO-OI, Department of Lands, Surveys and Physical Planning, and Building Finance Corporation. Weekly discussion meetings were held with staffs of these organizations and other Government officials involved in housing.

The contents of the first comprehensive policy paper by Robert De Voy were reviewed at subsequent meetings of the Government departments/agencies involved. Comments from most of the participants were reviewed and discussed.

This paper, prepared within Interior, is based on the De Voy report, but goes further by attempting to consolidate the views expressed by participants in Housing policy meetings. It also attempts to present the Housing Policy implementation function of the Ministry of Interior within the overall framework of the Ministry's responsibilities and the Ministry's policy implementation capacity.

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2.0 MAJOR HOUSING ISSUES AND OTHER KEY CONSIDERATIONS

In preparation for the drafting of the Proposed National Housing Policy, major housing issues and other key considerations were identified with technical personnel in pertinent ministries and statutory corporations. In this context, discussion papers were prepared on housing issues and housing policy options. Based on these activities, the following subjects were selected as most deserving of major policy statements:

2.1 HOUSING INSTITUTIONS

Where should the housing policy planning function be placed in the organization of Government; how powerful should it be; is the Building Finance Corporation

properly structured and placed; should the Lesotho Housing Corporation and LEHSOC-OT be consolidated into a strong implementation organization; to what part of Government should housing implementation be attached; what should be done to increase the funding and staffing of these institutions; what else can be done to improve the co-ordination and effectiveness of housing programs?

2.2 GOVERNMENT HOUSES

The pool houses are a major financial burden to Government (estimated cost of R1,000,000 per year even without adequate maintenance and repair). Moreover, the program is very inequitable in that only 20% of civil servants have housing while the others receive no housing benefits whatsoever. Furthermore, the Government had done little directly to assist non-civil servant with their housing needs.

Government recognizes the need to make housing more equitable and to put housing for civil servants and others on a self-sustaining economic basis. Also, the latent value of the existing pool housing stock is seen as a resource to use in financially strengthening housing implementation organizations.

2.3 TOWN PLANNING AND URBAN SETTLEMENTS

Town planning is grossly inadequate in Lesotho because of inadequate legislation, staffing and budgets. The need to greatly improve town planning efforts increasingly is recognized by Government, as demonstrated by several proposed Acts currently under consideration. The Government also realizes, however, that the capabilities within Lesotho alone are not adequate to meet the town planning needs.

DESIGNATED DOCUMENT

What should be the guiding principles and goals of the town plans to be prepared; who should decide?

Related to the town planning need is the issue of overall urban settlement policy: i.e., should continuing urban growth concentrate in Maseru without limits or should alternative growth centres be fostered; should public services be decentralized; should people be encouraged to stay in rural areas or migrate to towns; should Government attempt to control urban growth or just accommodate it wherever it occurs?

2.4 Housing is much more than just buildings. The services associated with the houses are fundamentally important to the quality of life of the occupants. Adequate roads, water supply, sewerage disposal, electricity, schools, and health facilities need to be provided to Basotho throughout the nation. However, the provision of these services is as costly as it is important. Extending services to households in rural areas is especially difficult. Nevertheless, one of the primary responsibilities of Government is to provide these services to the extent possible given available resources.

Government does not have the financial resources needed to subsidize the construction and operation of roads, water-borne sewerage systems, water systems, and electricity. Therefore, Government needs to recoup the investments it makes through user charges. Also, housing developers could pay the costs of on-site infrastructure and then pass these costs on to house purchasers and renters. When the capability to afford full modern services is not present, less costly alternative infrastructure and services needs to be considered. While these basic, intermediate facilities

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are not as satisfactory as full modern services, they are better than no services at all in urban areas.

2.5 LOWER-COST HOUSING

The large majority of Basotho cannot afford a contractor-built house. Fortunately, Basotho have demonstated remarkable resourcefulness in building their own houses using mostly indiginous materials. In rural areas it may be reasonable to expect that people can continue to provide their own houses with little or no Government involvement. However, in urban areas Government assistance is necessary for several reasons: plots are short of supply; basic services, at least, need to be provided; local materials are not readily available or as inexpensive as in rural areas; regulations, houses designs and facilities necessitate more technical capability than traditional houses in rural areas; self-help housing is facilitated by joining forced with others interested in building their own houses, thus requiring organization and co-operation; financing of building materials is needed in order to build early rather than accumulating materials over several years. For all these reasons, lower-income households need the resources and capabilitie such as those of LEHCO-CP in order to achieve satisfactory affordable housing. This need is increased as Government efforts to preclude new informal housing are upgraded.

2.6 FINANCING HOUSING

The desires to foster a private housing market, enough civil servants to provide their own housing, and facilitate self-help housing by lower-income households all depend on suitable financial institutions with adequate capitalization, staffing and a mandate to provide financing to all households who can make the

monthly mortgage payments. If the Building Finance Corporation cannot handle small loans for building materials and contractors, other means need to be found to provide this important financing.

2.7 Lesotho has many small contractors with limited capitalization, experience and technical capability. As a consequence, most larger contracts go to foreign companies. Also statutory corporations have little experience in building housing (LEHCC-OP has the most with its project of 200 self-help houses). Building materials have been increasing rapidly in price and construction frequently is interrupted by the lack of materials. Moreover, because of inadequate building regulation and staffing, Government frequently affects housing production negatively rather than expediting it. The scarcity of serviced sites for housing also restricts housing production.

2.8 LAND TENURE

The Land Bill of 1978 will be read in Parliament during its current session. This important legislation will provide for the transfer of leaseholds and titles to urban land. The enactment of the bill will facilitate the development of a private housing market and long-term mortgage financing.

2.9 RURAL HOUSING

The expressed desire of Government is to encourage people to remain in rural housing issue is not principally the provision of houses per se. Rather, the needs are to provide appropriate public facilities and services and - more broadly than housing - to provide health, education, employment, and other social and economic opportunities.

3.0 PURPOSES OF NATIONAL HOUSING POLICY

There is general recognition that the housing programs of Lesotho have been inadequate. While considerable progress has been made in recent years in terms of legislation creating institutions and with LEHCO-OP's self-help housing program, some of the legislation has not been implemented, overall co-ordination is lacking and housing production has been modest. Moreover, rapid urbanization and escalating housing costs and shortages make it essential that effective housing programmes be initiated soon if Lesotho housing problems are to be kept within the bounds of solution.

A National Housing Policy is needed to provide a co-ordinating framework and sense of direction for housing related implementation programs. Key specific purposes of the proposed National Housing Policy include the following:

Providing official recognition by the Government of Lesotho that housing is of great economic and social importance to the nation and therefore deserving of high priority in the allocation of scarc capital, land and manpower resources.

Sharpening of the focus on housing needs and opportunities as well as providing a realistic understanding of public and private capacities.

Establishing systematic, continuing housing efforts, including adequately funded and staffed balanced housing programs, which are economically prudent and cially senitive to Basotho culture.

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Fostering the co-ordination of all housing activities by Government, statutory corporations and private parties.

Facilitating the co-ordination of housing policies and activites with housing related development efforts (e.g., provision of infrastructure, social services and employment opportunities). Serving as a basis for monitoring and evaluating programs and results of housing efforts.

Without a National Housing Policy, housing efforts will continue to be unbalanced, unco-ordinated, ineffective, and insufficient. With a National Housing Policy, Lesotho has the potential of gaining control of its growing housing problems before it is too late - an opportunity available to very few nations in this world. However, only by strong, sustained commitment by Government to systematically, comprehensively and agressively implement the Housing Policy is this potentia likely to be realized.

4.0 GENERAL HOUSING POLICIES

The following policy statements provide a broad policy framework which encompasses and directs all other housing and housing-related policies and programs. The more specific policies are described below.

1. Housing is a major priority of Government deserving of a sustained substantial share of financial, manpower and land resources, because housing contributes importantly and uniquely to the Basotho economy, society, and personal health and well-being

2. Housing is an integral part of Basotho life and thus housing programs should be consistent with and reinforce the tradition, values , and aspiration

of the Basotho People.

3. Housing opportunities for all Basotho are to be equitable.

4. Housing is to be located to facilitate accessibility to jobs, education, public services, trade, and culture without prejudice to any development control regulations on zoning and ordinances currently in force.

5. Housing is to be provided on an economic basis without net Government subsidy, except as part of a temporary adjustment program.

6. Housing ownership is encouraged for all households suited to ownership. However, adequate rental housing is to be facilitated for those best suited to renting.

7. Investment by households in their houses is encouraged and protected by laws, including the right to transfer ownership to others by free choice and inheritance.

8. Households are encouraged to take advantage of available expertise and actively engage in the construction of their houses in order to achieve maximum feasible results in terms of house size and amenities, pride of ownership and co-operation with neighbours.

9. Local labour and materials are to be used in all housing construction to the maximum extent possible.

10. Modern technology is to be utilized in the provision of infrastructure, building construction

and in heating houses to provide the most efficient and comfortable houses consistent with other general policies.

11. Residential areas are to be located and designed to make the most efficient use of scarce land resources.

12. Government housing policies and programs are to encourage and foster the provision of private sector housing projects for company workers, individuals and suitable rental investment properties.

13. Government ministries, corporations and town councils are to be organized, managed and co-ordinated to minimize friction and duplication and maximize the provision of housing and infrastructure for all households in Lesotho.

14. A National Housing Plan is to be prepared as a major part of each National Development Plan and this Housing Plan is to be systematically and vigorously implemented - including continuous monitoring as well as annual evaluations and progress reports.

5.0 HOUSING INSTITUTIONS

5.1 A permanent National Housing Committee will be officially created. Members will include the Permanent Secretary of Interior as Chairman; the Director of Housing as Secretary; the Permanent Secretary of Central Planning; the Permanent Secretary, Cabinet (Personnel); chief staff officers of pertinent government agencies; and managers of statutory housing organizations. Others will be requested to co-operate with this Committee.

The Committee will monitor, evaluate and report progress towards meeting policy goals and implementing housing programs under the National Housing Plan. The Committee will issue an Annual Progress Report detailing progress and problems of all housing programs. The Committee will also prepare an evaluation of the National Housing Plan for the mid-term review of the National Development Plan. This evaluation report will include recommendations for new and revised Government policies and programs where appropriate.

5.2 It is desirable that in the long-term the Housing Policy Function of the Ministry of Interior be established as a Department with the Director holding the rank of Deputy Permanent Secretary. This new Department would be responsible for providing staff services to the National H using Committee and to formulating, recommending and evaluating housing policy programmes.

This Department would draft the National Housing Plan. It would also be responsible for Government liaison with Town Councils on all matters of Housing.

5.3 It is not intended that the Town Planning function be included in this Department of Housing. The Town and Country Planning Bill of 1978 which still has to receive Cabinet approval before going to Parliament, will make provision for the establishment of "..... a Town and Country Planning Board which shall consist of seven members appointed by the Minister ....." as well as a Planning Authority who shall be the Commissioner of Lands. The Planning Authority will be responsible for preparation and implementation of town and country plans subject to the approval of the Board. The Planning Authority shall however, liaise closely with the Department of Housing on matters relating to land use planning and preparation of master plans as they affect housing and the location of new housing areas.

5.4 Before a Department of Housing is established and is fully operational, the Housing Section within Interior - established as a division of the Deaprtment of Lands, Surveys and Physical Planning - will continue to undertake the work of formulating, co-ordinating, implementing and administering the National Housing Policy. The section will be headed by a Director of Housing, who will be on the same level as the divisional heads for the Lands, Surveys, and Physical Planning divisions.

5.5 A new statutory Housing Corporation will be created, consolidating the existing Lesotho Housing Corporation (LHC) and the Lower Income Housing Company (LEHCO-OP). This new Housing Corporation will be granted broad and strong powers to implement housing and related programs set forth in the National Housing Plan. The Corporation shall have two distinct departments, one dealing with the provision of low cost housing on a co-operative or similar basis, and the other dealing with construction of houses, town/row houses and apartments for sale or rent to middle and upper income earners at commercial prices.

The Housing Corporation will:

- develop and service sites for housing constructio
- construct lower-income housing;
- contract the building of houses to private companies
- sell houses;
- manage and maintain its own rental housing;
- purchase building materials and create a materials stockpile to supply builders and households building their own houses;
- provide all technical assistance required by individual households and co-operatives

engaged in upgrading, self-help and mutual help housing schemes and;

- perform other functions essential to its responsibility to implement National Housing Policy.

Part of the Government "pool" housing stock will be assigned to this new Housing Corporation for management, maintenance and repair. The housing Corporation will be responsible for collecting rents from the occupants of the pool houses. Proper housing accounts will be created (see policy statement on Government houses for additional policies).

The Government will ensure that the new Housing Corporation is adequately funded to perform its functions with the expectation that its earned income will grow until in a few years, it is adequate to meet costs.

To ensure that housing policy is implemented and housing policy and urban development programmes are properly co-ordinated, the Housing Corporation will be operationally linked to the new Department of Housing of the Ministry of Interior.

5.6 The Building Finance Corporation (BFC), is empowered to accept savings deposits, other deposits, loans and grants in order to loans for land development, construction and house mortgage. BFC is to function as a complementary organization to the new Housing Corporation described above. In order to foster its crucial housing finance responsibility, the Building Finance Corporation will continue as it is presently, attached to the Ministry of Finance.

5.7 The BFC capitalization will be increased substantially by direct Government grants and by proceeds from the slae of Government pool houses ceded to BFC. The government will ensure this capitalization is adequate year by year by additional direct grants, facilitating savings, and, if and when the need arises, creating a secondary mortage institution.

5.8 Government will seek technical assistance to evaluate its housing finance needs and capabilities and to recommend means of providing the required institutions, management and technical staff, operating policies and procedures, and capitalization.

6.0 GOVERNMENT HOUSES (this issue is being handled by a special interministerial/agency committee chaired by S.P.S. Its recommendations will be incorporated into the general housing policy).

7.0 TOWN PLANNING AND URBAN SETTLEMENTS

The implementation of the Town and Country Planning Act of 1978 and Urban Government Act of 1978 requires that high-priority be given to the allocation of time of officials, technical staff and budget. To this end, the following specific policies are set forth.

7.1 Provide for increases in the town planning staff and an adequate budget and office space. In the short-term, both funding and technicians will be requested from donors; as Lesotho budget capabilities increase and Basotho are trained, Lesotho will assume more financial and technical responsiblity.

7.2. More town planners and related professionals will be trained in foreign universities and appropriate subject matter will be systematically introduced in the curricula of the National University of Lesotho.

7.3 Comprehensive Town Plans will be prepared for each of the urban areas in accordance with the Town and Planning Act of 1978.

7.4 Land use zoning regulations will be prepared, and each urban area will be zoned consistent with the comprehensive town plan.

7.5 A National Building Code will be prepared, adopted and enforced in all urban areas and other designated growth centres.

7.6 This Building Code will incorporate and apply special standards for self-help housing to keep the cost as low as possible while safe-guarding the health and safety of the general public and house occupants.

7.7 Government will provide town planning assistance to town councils; each town plan is subject to adoption by the Town Council and general approval by the Government Planning Authority.

7.8 A Capital improvements program will be prepared for each urban area which designates the public facilities to be built in a five-year period and estimates what else these facilities will cost and how the costs will be paid; such capital improvements will be systematically maintained and adapted; also each programmed facility is to be consistent with and in furtherance of the comprehensive town plan.

7.9 Each town plan will provide for the pattern of land uses and the design and placement of community facilities so as to minimize both public and private development and operating costs, especially for the networks such as roads, sewers and water lines.

7.10 Urban sprawl will be minimized also by establishing urban boundaries, land and development regulations, and land rents which encourage compactness and discourage fragmented development.

7.11 Town plan development regulations will encourage and facilitate the provision of a wide range of housing opportunities by designing residential plots of various sizes, generally much smaller than previously, and designating suitable sites for row houses and blocks of flats.

7.12 Development projects in urban areas will be approved only on the condition that the developers provide on-site roads, sanitary sewer and water services at levels which permit capital and service costs to be fully recoverable from intended beneficiaries; furthermore, that adequate off-site services are available, can be feasibly made available by Government, or through construction of the development project.

7.13 Basotho are encouraged to remain in their home rural areas and villages; Government will continue to upgrade living improved public facilities and services (e.g., water, health, care, schools, etc.,) as well as fostering agriculture and small business.

7.14 Rather than have urbanization and industrialization concentrate on only a few urban areas, at least one urban growth centre will be designated in eavh of the ten Districts; proper growth will be facilitated in these designated growth centres by the timely provision of;

(a) highways and roads, bus service and air service linking these places with one another and their respective trade areas;

(b) water supply and sewerage disposal services;

(c) health centres, upper level, and technical schools and other public facilities and services.

(d) serviced sites for housing construction, including self-help with technical assistance and material loans;

(e) construction of Government "tied" or institutional houses; and

(f) decentralization of government functions to the District level, thereby creating local job opportunities and overall economic growth.

8.0 INFRASTRUCTURE AND PUBLIC SERVICES

In order to provide infrastructure and public services to as many people as possible throughout the nation, Government has the following policies:

8.1 Schools and Health Services are to be extended throughout the nation so that everyone has reasonable access to these essential services. (No more is said about these services because they are best covered by Education and Health policies directly).

8.2 It is essential that all Basotho have safe drinking water in abundant supply; as feasible, potable water will be extended in each town and vilaages where houses are clustered and the source of water is suitable.

8.3 Sewerage disposal facilities will be upgraded and extended to all urban households as resources permit. Water-borne systems will be extended in urban areas as feasible; alternative intermediate means of waste disposal will be provided where water-borne systems are not feasible.

8.4 Urban and rural roads will be constructed and maintained to facilitate acess to employment, education and health services, and other goods and services.

8.5 Government will continue to encourage the provision of electricity as broadly and as inexpensively as possible, without public subsidy.

8.6 It is the responsibility of government to construct and maintain major off-site roads, water systems, and sewerage disposal systems; the capital and operating costs of these facilities will be recovered from taxes and user fees.

8.7 It is the responsibility of developers to provide the extention of these infrastructure within housing projects in accordance with government regulations; thus, the capital costs will be paid by those directly benefiting by each new housing project.

8.8 Within capital and operating financial accounts for the provision of road, water, sewerage and electric services, Government encourages the use of cross-subsidies to the benefit of the poorest households.

8.9 In allocating scarce public resources to the provision of infrastructure, the order of priority is first, to provide safe drinking water and basic roads to the entire population, second, to provide waste disposal systems in urban areas serving as many people as possible with basic systems, and third, to upgrade the basic roads, water, and waste disposal systems to higher quality systems as resources permit.

8.10 Government does not have the financial resources to sunsidize the recurring cost of providing water, waste disposal and electricity, therefore each household must govern its consumption of these services according to its to pay for them

9.0 LOWER-COST HOUSING

9.1 The Government will provide adequate plots in urban areas; these plots will be serviced with basic roads, water supply and waste disposal systems for the construction of self help houses; this programme will be a major continuing responsibility of the new Housing Corporation (combining the Lesotho Housing Corporation and LEHCO-OP).

9.2 Technical Assistance will be extended by the new Housing Corporation to help organize households into effective co-operatives and i other mutual-help organizations and to help with the on-going operations of these organizations.

9.3 Construction assistance by the Housing Corporation will be provided to households building their own houses, including but not limited to house designs, construction drawings, material lists, cost estimates, tool loans and instruction, on-site consultation, obtaining materials, and skilled labour for more technical aspects of construction.

9.4 Building regulations will include reasonable standards for low-cost housing in order to keep costs as low as possible while still protecting the health and safety of the occupants and ensuring that such housing will be compatible with more expensive housing in the vicinity.

9.5 Financing mechanism will be created and capital provided to enable lower-income households to borrow monies

to purchase building material and pay for limited skilled labour.

Areas without services and with poor quality houses will be upgraded by providing basic services, surveying the plots and arranging proper titles, assisting in improving the houses, selectively demolishing those houses which are dilapidated and uneconomic to improve, and aiding households with building new houses.

Research and demonstrate projects will be continually fostered to find means for minimizing the costs of constructing and operating both infrastructure and houses

Land use controls and development regulations will be enforced to prevent the creation of further substandard houses and unsuitable housing areas.

FINANCING HOUSING

Government is committed to providing the appropriate financial institutions and facilitating their adequate capitalization and staffing to ensure that construction and house purchases can be readily financed.

Specific housing finance policies are as follows:

The Building Finance Corporation will continue to be supported and nurtured by Government as the principal source of loans for land development, housing construction and houses mortgage. Government will enact legislation which enables BFC to attract personal savings deposits as well as deposits from commercial and Government organizations. Also, Government will continue to provide capital from the budget and from the ceding of the value of Government pool houses to the BFC.

10.2 Staffing of the BFC with trained and experienced financial managers is essential; accordingly, the Ministry of Finance will aggressively recruit such per personnel through international channels and arrange for the training and experience of Basotho.

10.3 As the demand for mortgages increases, the Ministry of Finance will evaluate the need for a secondary mortgage institution. Should such an institution be desirable Government will create it and provide for its effective implementation.

10.4 The Lesotho Bank, commercial banks, credit unions, insurance companies and other financial institutions are encouraged to make loans for land development, house construction, mortgages and house improvements in accordance with guidelines established by Government.

10.5 Loans for housing construction, improvements and mortgages are to be at market interest rates (i.e., not subsidized by Government) in order to attract adequate capital on a sustained basis and not tax Government's limited financial resources.

10.6 Mortgage closing costs and other fees should be kept nominal and repayment periods should be as prudent in order of monthly payments as low as possible.

10.7 Borrowers should be encouraged to make the maximum downpayments they can afford, but lenders should be willing to make mortgage loans with small downpayments as long as the borrowers have the capacity to make monthly payments.

10.8 A continuing public information programmes will be undertaken by the Ministry of Finance, in co-operation with the BFC and other institutions, to familiarize Basotho with the advantages and responsibilities of urban home ownership and mortgage financing.

10.9 The BFC and other lenders are encouraged to make housing construction, improvement and acquisition loans to lower income households on the most favourable of terms, including low down-payments and extend repayment periods. Coss-subsidies will be employed by charging somewhat higher interst rate for mortgages on more costly houses. While Government generally cannot afford to subsidize housing loans, it will endeavour to provide monies for financing low-cost housing as resources allow.

10.10 High priority is acsigned to upgrading existing housing and creating new self-help housing, thus appropriate and adequate means will be sought to finance material loans and small construction construction contracts.

10.11 Government will foster provision of capital needed by qualified builders and construction companies for both equipment and operations.

11.0 FINANCING INFRASTRUCTURE

The provision of on-site and off-site infrastructure will be facilitated by the establishment regulations to ensure adequate and equitable funding for the construction, maintenance and operation of roads, water,

waste disposal and electricity systems. Specific policies polcies regarding the financing of infrastructure are as follows:

11.1 Major off-site infrastructure (i.e., primary roads; water supply and main distribution systems; sewerage treatment plants, trunk sewers, and other off-site collection systems; electricity genrating plants and distribution systems) construction and maintenance fin financing are the responsibility of government and its statutory corporations.

11.2 The full costs of major infrastructure construction, maintenance and operation are to be recouped by user charges which as closely as possible directly relate to the benefits derived. Thus, rates for water disposal services are to be fixed for each household based on the actual services provided and the household's share of the total cost of that service. These rates are to be carefully derived and fully collected.

11.3 Properties are to be systematically and regularly assessed according to market or economic value and tax rates fixed and collected to cover costs of town governments, and specific Government functions most directly benefiting urban property owners (e.g., police and fire protection, street lighting).

11.4 Property owners and developers are responsible for providing infrastructure (i.e., roads, water lines and waste disposal systems) according to Government regulations; when the actual construction is undertaken by Government, the costs will be recouped by benefit assessments levied against each affected property.

12.7 Leasehold titles will be properly recorded, including a surveyed description of the property and a description of lease rights and obligations.

12.8 Adequate staff and budget will be provided for the administration of land transactions, recordings and surveys.

13.0 HOUSING CONSTRUCTION

Housing production is to be fostered by the following policies in addition to those described in other parts of this National Housing Policy:

13.1 Encourage the growth and strengthening of private builders and contractors through such efforts as training programs, business loans, tendering of housing construction, and licensing of firms and tradesmen.

13.2 Provide suitable and adequate sites for housing construction in accordance with comprehensive development plans, zoning ordinances and building regulations.

13.3 Provide major infrastructure required to service housing areas before the houses are constructed.

13.4 Adequately budget and staff Government housing and house-related functions to expedite rather than hinder the production of housing.

13.5 Conduct housing, land planning and infrastructure research and demonstration programmes as appropriate to determine how to create and operate housing as economically and effectively as possible.

13.6 Emphasize means of providing low-cost housing, including but not limited to: traditional housing designs and construction techniques: production and use of local building materials; innovative technology (e.g.

low-cost solar energy, waste disposal and roofing systems); standardization of building components to facilitate mass purchasing and stockpiling; improving and increasing self-help housing programmes.

14.[illegible] RURAL HOUSING

Housing policies expressed above are intended to include rural housing as well as urban housing except when the statements clearly pertain only to urban housing. Specific rural housing policies include the following:

14.[illegible] Government encourages Basotho to continue to reside in their home areas as much as practicable.

14.[illegible] Public services, such as education and health, will be extended throught Lesotho as feasible to enable all Basotho to enjoy better services without needing to relocate or travel as far as they do now.

14.[illegible] Rural roads will be improved to increase access to and among District towns, thereby making it more convenient to stay in rural villages.

14.[illegible] Infrastructure (including local roads, potable water, waste disposal, and electricity systems) will be provided, as feasible, on a self-supporting basis (in most rural areas basis systems will be all that can be afforded); high levels of services will be provided in District growth centre towns in order to facilitate housing projects in those places.

14.5 Research and demonstration projects will be undertaken to ascertain the housing preferences and needs of rural Basotho before capital investments are made.

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14.6 Means will be sought to increase the production of local building materials (e.g., thatch, quarried stones, timber) in order to enhance local housing provision as well as economic opportunities.

14.7 Efforts will be made to seek inexpensive and effective means of heating rural houses.

14.8 Rural housing programmes will recognize and take account of the particular household characteristic of rural household (e.g., the absence of young adult males the presence of older former miners without adequate employment, the subsistence nature of most agriculture).

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Office of Housing
Agency for International Development

SHELTER TRAINING WORKSHOP

November 5-30, 1979

MALAWI:

OFFICE OF PRESIDENT
AND CABINET (OPC) HOUSING SECTION
~~(MALAWI HOUSING CORPORATION)~~
EXECUTIVE CHAIRMAN
|
GENERAL MANAGER
|
DEPUTY G.M

- CENTRAL ADMINISTRATION
  - TRAINING
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Office of Housing
Agency for International Development

SHELTER TRAINING WORKSHOP

November 5-30, 1979

(216)

MALAWI

OFFICE OF THE PRESIDENT AND CABINET (HOUSING SECTION)

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MALAWI HOUSING CORPORATION

MINISTRY OF WORKS AND SUPPLIES

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CAPITAL CITY DEVELOPMENT CORPORATION

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MALAWI HOUSING CORPORATION

HOUSING POLICY
1978 — 2000

LOW COST
HOUSING DEVELOPMENT

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The Importance of Housing

Housing plays an important role in socio-economic development. It has hitherto not been used as an effective instrument of development policy in Malaŵi and as a result the level of financing has been reduced to one which is totally inadequate to fulfilling the country's housing requirements.

From a consumption point of view housing is generally considered as a social overhead. However, the construction of housing and community facilities can contribute directly to the improvement of the country's employment situation, with multiplier effects extending to those industries which manufacture consumer durable goods for the home. Moreover it is a means for training construction labour and building a reserve of skilled workers essential for the development of an efficient construction sector. While a small amount of simple equipment raises the capital/labour ratio only moderately, it raises the ratio of total output to total inputs considerably, thus raising incomes as well. Housing construction can also be used as a regulator for reducing fluctuations in employment.

Cost benefit analysis applied to low cost public housing has shown that the benefits in terms of increased worker productivity, and reduced health costs, when measured in monetary terms and discounted to their present value exceed the present value costs of this kind of housing.*

Thus housing in addition to being a social welfare measure is also a tool for economic development. While the general economic policy of the Government for the second decade will continue to be directed towards the encouragement of adequate capital formation, specific attention will also be given to the housing sector.

The Existing Situation

Whilst it may not be profitable to dwell on the past or even on the existing situation, it is necessary to reflect very briefly on the background against which the new housing policy has been conceived. It is also essential in order to establish the various problems and issues to which the policy is directed.

The basic housing policy of Malaŵi for the period 1971 to 1980 is laid down in the Statement of Development Policies issued by the Government in 1971.

Government strategy in the field of housing has been to provide more housing in the towns, particularly in the main urban centres of Blantyre and

* (See "Planning and cost-benefit analyses of social investments," by Norman Scott in Bulletin No. 2 of the International Institute of Labour Studies, Geneva, February 1967.)

Lilongwe. This was essential because of the high rate of urbanisation. The population of Blantyre is currently estimated to be growing at a rate of 6.5 percent a year and that of Lilongwe at 6 percent with the smaller towns and other centres of urban growth ranging from 2 to 2.5 percent per year. Should this trend continue, the urban population of Malaŵi will double itself every 12 years.

In the statement of Development Policies issued in 1971 the Government listed four characteristics of the urban housing problems in Malaŵi, which lead to the determination of the policy on housing. These included the urban population increase, the problems of the emerging squatter areas, the reluctance of investors to invest in low cost permanent housing projects, and finally the limitations on the supply of financial resources.

With this in view Government policy was aimed at reducing the acute problems of overcrowding and uncontrolled settlements in urban areas, resulting from rural urban migration and from the natural growth of population. Government policy has therefore been directed towards:—

(i) The development of site and service schemes, for the great majority of the urban population who could not afford housing of permanent materials;

(ii) A greater investment in small and medium sized permanent houses, demand for which was expected to rise rapidly as a consequence of general economic development;

(iii) A determined effort to increase the sources of finance for housing both from local and foreign resources; and

(iv) Eliminating the rent subsidy given to Civil Servants in order to encourage home ownership.

Prior to about 1963 housing in Malaŵi was mainly directed to the provision of housing for the civil servants. Very little effort was directed towards housing the general population. Since 1969 housing construction has increased from about 920 units built in 1969 to a little over 5,000 units built in 1976. As a result of the high rate of population growth and urbanisation, housing needs have by far exceeded the supply, and are extremely difficult to cope with in the face of low levels of output and incomes.

Overcrowding in the urban areas has lead to a situation where development is unplanned. This is further characterised by a lack of essential services leading to high health hazards to the whole community and to those seeking

accommodation.

Despite the high rate of migration from rural to urban areas (presently about 90 percent of the total population live in the rural areas) the rural population continues to grow at approximately 2 percent per year. Agricultural employment is the principal occupation of a very substantial percentage of this population. While the largest population of workers in agriculture is self-employed, the number of landless workers is growing and this could lead to a worsening situation of the man to land ratio in these areas. The rural areas have a smaller share of economic infrastructure services, such as housing, water, electricity and waste disposal than the urban areas, and, even where these services exist the rural population do not have access to them because the organisation is fragmented and inadequate and the cost is high.

In contrast to the conditions in the rural areas where the people are better able to help themselves, only a very small population of the urban populations can afford to rent or own a standard or conventional housing unit. Most occupiers of conventional housing units are heavily subsidised by Government or private employers. This situation reflects not only the preponderance of very low income earners, but also the relatively high cost of house building. It will be futile to imagine that in the foreseeable future, such changes in these two variables will occur, as to increase the capability of low income earners to own or rent standard housing.

Faced by many different needs crying out for simultaneous attention, the Government has found itself hard pressed to decide on the allocation of priorities and on what should be done first.

Inability to keep abreast with urban growth, much less make a dent in the existing housing back log, has been due to the low priority accorded to housing in the development strategy of the last decade, and also because no specific goals had been set, rather than to ineffective administrative machinery or due to a lack of capacity.

There exists therefore, a need to formulate broad housing goals, within which more specific targets of the housing plan could be developed. The goals must be broad enough to enable more detailed adaptation at a later stage. The lack of credit both short term and long term also needs to be remedied.

The Policy

The broad long range housing policy for the country for the period 1978 to 2000 will be stated as follows:—

1. To house every urban family by the year 2000 in home, the

minimum standard of which will represent an improvement over current level of living by the bulk of the people; and

2. to provide electricity, water and sanitation excluding housing per se, for rural communities, and to provide educational and technical guidance, so that they can improve their housing standards.

This statement of policy calls for the following specific objectives in relation to housing in the urban areas:—

1. To eliminate the existing deficit in housing by the year 2000;
2. to replace obsolescent dwellings;
3. to provide housing for the future urban population;
4. to vigorously pursue a policy of gradually removing subsidies; and
5. to encourage home ownership.

For the effective execution of this policy there is a need for establishing goals and targets. This will include the preparation of a detailed programme specifying in precise terms, the housing targets to be achieved by the specified dates at specified cost levels.

In order to work out realistic goals for housing, certain basic data are necessary. Such data is not available in complete, detailed or accurate form. With a large proportion of the population living in inadequate housing and having a low level of community facilities, the first steps in the formulation of decisions about the volumes and kinds of housing and facilities needed is made on the basis of data which is to a large extent estimated. As time goes on increasing information could make possible more exact determination of housing conditions, needs, and resources.

Housing Needs and Requirements

The identification of needs involves the measurement of existing conditions against some predetermined standards and estimating future requirements to provide for population and household growth and the replacement of obsolescence.

Minimum standards of housing will be set at a level which will represent an

improvement in the present level of living of the bulk of the population, but not so high as to be unattainable or even to maintain in the near future. Although minimum standards will apply primarily to housing for low income groups, it will be necessary in Malawi where there exists a severe housing shortage to set a maximum standard as well, so that scarce resources will not benefit only privileged groups. Furthermore, the goals and targets which are set for housing, and the possibility of achieving them are strongly affected by the proportion of housing that is to be executed at cost higher than those required by minimum standards.

Since the gap between the desired standard and the resources available is large and in a situation where a large proportion of the population are living in temporary housing and their economic situation is such that they are unlikely to be able to afford permanent housing in the foreseeable future, emergency standards for the improvement of temporary dwellings to a minimum level of livability and the provision of new dwellings with minimum facilities will be encouraged.

Emphasis will be placed or self-help programmes capable of bringing non-monetary resources into action and thus increasing the ratio of minimum standard new dwellings to population. Consideration will be given to the involvement of Youth Week programmes in housing construction.

Accurate information concerning housing conditions in Malawi current or even going back in time is not comprehensive enough and a complete picture of the country's housing situation will only be available after the proposed national housing census is taken.

The current housing deficit comprises the number of families needing a new or different dwelling. Based on waiting lists for houses as at December 1976 the deficit for houses amounts to 44,000 units. This is made up of families living in non-improvable or sub-standard dwellings, those homeless and those overcrowded or involuntarily living with another family.

In the absence of an inventory of the housing stock and information concerning the age or condition of the houses, it is impracticable to estimate with any degree of certainty the number of dwellings necessary to replace obsolescent dwellings. If the average life of dwellings of permanent construction is fixed at 70 years and of traditional construction is fixed at 20 years, permanent houses built before 1908 and traditional houses built prior to 1958 will need to be replaced before 1978. In the absence of sufficient factual information, summary methods of estimation are resorted to. Considering the durability of building materials used in construction, costs of improvement to minimum standards compared with replacement costs and the resources likely to be available, a replacement rate of 1 percent per year of the existing housing stock, seems to be appropriate. Based on estimates of the present housing

stock, 700 dwellings a year will be needed to replace obsolescence.

Housing needed to shelter the expected future population is the major factor governing future housing requirements. In the absence of detailed demographic data and of the nature and extent of rural urban migration, accurate projections of future population and its geographical distribution cannot be made.

On the basis of assumptions as to population growth and household size and considerations of cost, income and ability to pay for housing, the number of new dwellings required in each urban area has been computed. It should be noted that this is only an approximate method of computation, particularly as it is based on very broad assumptions as to population growth and household size. With increasing information becoming available it should be possible to make more accurate determinations of housing conditions and needs.

Thus, the number of additional dwellings required for the period 1978 to 1985 to house anticipated population and household increase is 45,000.

The sum of the number of dwellings needed to remove the existing deficit, to replace obsolescent dwellings for eight years (1978 to 1985), at a rate of 1 percent of the housing stock per year, and to house the anticipated population and household increase amounting to 94,600, represents the total housing requirements for the period 1978 to 1985. Divided by 8, it yields a first figure of 12,000, representing the average number of new or improved units needed per year during the period, if by 1985 all housing in the country is to meet the minimum standards.

If it is assumed that the existing deficit amounting to 44,000 units is to be removed over the plan period 1978 to 2000. The average number of dwellings needed annually for population growth, obsolescence and the removal of existing deficit will amount to 8,300 units per year; made up of 2,700 permanent houses and 5,600 plots.

In the above analysis, the number of dwellings required represents about 12.8 per 1,000 of the 1977 to 1985 average population of about 650,000. Applying this ratio to the 1977 population of 503,800 about 6,400 units will have to be built and by the year 1985 the comparable number would be 10,200 based on an assumed population in that year of 800,000.

For the purposes of computing needs beyond 1985, it is assumed that the average annual increase of urban population i.e. due to rural-urban migration and natural increase for the period 1977 to 1985 would continue until the year 2000 with the 1977 population as base, reflecting an assumed continuation of the drift to the cities. In the year 2000, then Malawi would have an urban population of 1,919,000 compared with 503,000 in 1977, an increase of nearly 300 percent. The average number of persons per household was assumed at 6.4 (representing a high degree of doubling up) dropping by 2000

to 6.0, representing a lower rate of natural increase.

These assumptions as to population growth, and present and future household size make it possible to compute future housing requirements for the period 1985 to 2000. The number of new dwellings required for this period (1985 to 2000) to house population increase is 196,000, and the average number of dwellings needed annually during this period for population growth, obsolescence and removal of existing deficit will amount to 16,300, made up of 9,800 plots and 6,500 permanent dwellings. The total number of dwellings represents about 12 per 1,000 of the 1985 to 2000 average population. Applying this ratio to the population in 1990 and the year 2000, the number of units that will have to be built in 1990 will be 12,900 and in the year 2000, 23,000.

The total development expenditure in 1976 and the proportion of this currently being spent annually for housing indicate that the present level of resources assumed available, is entirely inadequate to achieve the assumed theoretical objective of fulfilling the country's housing requirements. At assumed future costs resources could cover only about 7 percent of average annual housing needs between 1977 and 1985 and about 3 percent of that between 1985 and 2000. The number of housing units required per year from data and assumptions made in the preceeding section would be as follows:

	1977	*1985*	*1990*	*2000*
Approximate Population	504,000	800,000	1,071,000	1,919,000
Dwellings per Year	6,400	10,200	12,900	23,000
Percentage of 1977-2000 average	43	69	88	156

and the number and type of units that will be required per year for the period 1977 to 2000 is as follows:

	1977	*1985*	*1990*	*2000*
Plots	3,840	6,120	7,740	13,800
Permanent Housing:				
High density	1,280	2,040	2,580	4,600
Medium density	768	1,224	1,548	2,760
Low density	512	816	1,032	1,840

Costs

In order to relate requirements to resources assumed available the following costs are assumed as appropriate to minimum acceptable standards:

	K
Permanent Dwellings:	
High density housing	8,000
Medium density housing	16,000
Low density housing	23,000
Plots in Traditional Housing Areas	500

Urban land will be made available by the Government to statutory developers at no cost and, with emphasis being placed on minimum standard houses, large scale construction and other economies it is assumed that housing costs could be kept at current value despite inflation.

The basic housing goal will be to meet the requirements as estimated above. The problem, then, if the requirements are to be met at the standards and costs assumed, is to determine whether current and future resources permit this to be done, and if not whether ways could be found to increase them.

As has been seen above the housing requirements of the urban population for the period 1977 to 2000 could be met by building approximately 12 to 12.8 units per 1,000 of the average 1977 to 2000 population.

The following computations show what this will require as the population increased at the assumed rate, how these resources would compare with the resources that would be assumed to be available at given ratios of investment, as the G.D.P. increased and how the targets might be set.

At the future costs assumed above, this will mean the following approximate average costs per year required for housing:—

	1977	*1985*	*1990*	*2000*
	K	K	K	K
Plots	1,920,000	3,060,000	3,870,000	6,900,000
Permanent Housing:				
High density	10,240,000	16,320,000	20,640,000	36,800,000
Medium density	10,290,000	19,580,000	24,770,000	44,160,000
Low density	11,780,000	18,770,000	23,740,000	42,320,000
Total	34,230,000	57,730,000	73,020,000	130,180,000

At an assumed rate of growth of the G.D.P. of 5 percent per annum through 1977 to 1985 and 6 percent per annum thereafter, the amounts available for investment would be as follows:—

	1977	*1985*	*1990*	*2000*
Index Number of G.D.P. base 1976 = 100	105	155	207	370
G.D.P. base 1976 G.D.P. = K443.2 million	465.4	686.9	917.4	1,639.8
Housing Investment required K million	34.23	57.73	73.02	130.18
Percentage of G.D.P.	7.4	8.4	8.0	8.0
Percentage of G.D.P. assumed available for investment in dwellings 1976	2.1	2.1	2.1	2.1
Amount available K million	9.78	14.42	19.27	34.4
Percentage amount available/amount required	28	25	26	26

From the above it can be seen that at the assumed ratio of investment the annual amount of investment will only be about 25 percent of that required even at the year 2000.

The Strategy

The Government will consider the following possibilities in order to reconcile its goals:—

1. Increasing the G.D.P. above the annual growth rates which have been assumed; or

2. increasing the ratio of investment in housing; or

3. reducing housing costs and standards.

Alternative 1 is thought to be impracticable and alternative 3 is unwise for the standards are already at an absolute minimum. If it is decided to choose alternative 2, increasing the ratio from 3 percent to 8 percent by the year 2000,

the resources that would be available compared with the requirements would be as follows:—

	1977	*1985*	*1990*	*2000*
Percentage of G.D.P. available in dwellings	3	5	6	8
Amount available K million	13.96	34.34	55.0	131.0
Percentage of amount available to amount required	40	60	75	100

From the above analysis it can be seen that the only means of achieving these goals would be to increase the investment in housing to a rate of around 8 percent of the gross domestic product. Present level of investment in the housing sector is hardly 2 percent and this has lead to a deteriorating housing situation. If this trend is allowed to continue the situation will be further aggravated and the country's economic base for development could be undermined. It is worth noting here that the level recommended by the United Nations for the second development decade, for a realistic share in housing is a minimum rate of investment of around 5 percent.

These quantitative targets call for the following strategies:-

Rural Housing

(i) The Government is committed to improving the economic and social life of the rural population and this involves extending the benefits of development to those areas. As the volume of resources available for allocation even for urban housing is limited, public investment in the rural areas will necessarily be confined to the provision of essential facilities such as electricity, water and sanitation excluding housing per se. Government will also give assistance to the rural population by way of educational and technical guidance so that they can improve their housing standards.

(ii) The provision of such services as electricity, water and sanitation does not fall within the purview of the housing sector and will be adequately catered for in the context of community development and national water supply policies.

Urban Housing

(i) Continued emphasis will be placed on site and service schemes for the large majority of the population who cannot afford housing of permanent materials.

(ii) The existence of squatter areas constitutes an urban blight. If the construction of houses in these areas is forbidden many migrants to the towns will be left with no houses at all, and they will crowd in with friends and relatives.

It is recognised that although the squatter areas are unplanned they represent an asset both in social and financial terms. These areas require planning and services and the fullscale demolition of good and bad houses alike is not a practical, solution.

Priority will be given to the upgrading of these areas and the provision of appropriate technical infrastructure including electricity, piped water supplies and roads and footpaths; surface drainage and sewage disposal and other communal facilities.

Such technical infrastructure as electricity, piped water supplies, roads and footpaths and surface drainage and sewage disposal will be made available by the Malaŵi Housing Corporation, and the Ministries and Authorities concerned will ensure that adequate funds are made available for such facilities in their own programmes.

The Role of the Government and the Private Sector

The magnitude of the housing problem is so great as to exceed by far the resources for housing at the disposal of the Government. Market forces operating alone, are also unable to provide adequate housing solutions for any but the most well-to-do households.

It is clear therefore that if the housing goals are to be met, the Government should encourage, orient and supervise the private housing sector. What is called for is an integration of both the private and public resources to implement the national housing policy across the entire income range.

The private sector is vulnerable to fluctuations in the economy, particularly when inflation rates are high, and fiscal policies make it difficult to obtain

credit for housing. In such times because building activity cannot be maintained at a high and constant level the construction industry cannot fulfill its role of providing enough housing, promoting employment and stimulating activity in other sectors of the economy.

Housing policy will therefore be planned and implemented on a continuous basis in order to generate greater confidence in the part of the construction industry.

Policies in the public sector will be aimed at increasing the volume of Government loans for housing and the provision of serviced sites and public housing, as well as regulating the use of Government resources so that the benefits reach the largest number of people. In the private sector, housing investment will be promoted by the development of financial institutions capable of providing resources needed by individual house builders, and by sponsoring the growth of housing developing agencies who will undertake the construction and letting or sale of low cost houses. This latter programme will be linked to the expansion of financing institutions, as individual home owners will have to be given Financial Support to acquire their houses.

To this end public funds will be used not only as resources with which to build housing for the low and middle income groups, but also as a lever to multiply the volume of private savings and investments going into housing. A limited amount of public funds will be earnmarked for the purpose of attracting private funds to middle income housing, capital which otherwise might be spent on luxury consumption, by such measures as giving Government loans to sponsors who are able to raise part of their necessary financing, and giving Government bonuses to savers to encourage families to save towards buying a house.

It is realised that the distinction between private and public involvement is blurred as for example with financial resources which are qualified as private, even though this may in part consist of long term loans given by the New Building Society or other financial institutions over which the Government has control.

Financing

The acute housing problems of the majority of the urban population are reflected in the almost general absence of facilities to obtain credit for housing partly because the modern monetary institutions have so far served only the higher and middle income levels of the urban population.

The main problems in the field of finance for housing have been:

1. Loans for housing are mostly only available to middle and higher income groups.

2. Repayment periods are short in relation to the life span of the house.

3. Existing financial institutions which have been set up in lines corresponding to those of institutions in the United Kingdom both in their role as a receiver of savings and as a lending body have not been directed to the low-income majority.

4. Savings and loan systems serving people needing site and services and similar ideas still have to be developed.

5. With the considerable increase in building activities which must occur to meet housing needs it will be necessary to establish or refine methods and procedures for the financing of infrastructure.

Financial institutions such as the Post Office Savings Bank, the New Building Society, Pension and Provident Funds and Insurance Companies all collect savings from their participants. A drawback of the Post Office Savings Bank is that it draws money from local low income sources and then invests it mostly in Government bonds. Until now the Post Office Savings Bank has provided no credit facilities to savers. Such savings from these financial institutions constitute a considerable and for many years a potential source of investment for housing; especially Pension Funds and Life Insurance Companies and Medical Aid Schemes dispose of capital for long-term investment such as housing; but there has been a reluctance on the part of the governing bodies of such institutions to increase their investment in housing. Government will direct such institutions to invest a greater percentage of their funds in housing.

It is expected that these Organisations will play a major role in the financing of housing. However at the present time ready made solutions for such funding are not available, and the sophisticated methods developed in high-income countries are not workable solutions for local conditions. The Government will consider the prospect of extending the coverage of the New Building Society in such a way that credit could be successfully channelled to the lower income groups as well. New solutions will therefore have to be considered. It must be realised that the most important part of the capital for housing will have to be provided by the people to be housed.

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As it may be more difficult to increase the supply of public funds for housing, than to expand private investment, every effort will be made to increase the latter, and special fiscal and other incentives will be provided to increase the number of dwellings supplied by the private sector.

The Government will adopt measures aimed at promoting and strengthening the local materials industries and providing other fiscal measures in the form of exemptions and other incentives related to taxes.

These will include:-

1. Income tax concessions to housing investors — The income accruing to any person from any new house will be exempted from Income Tax for 7 years from the date of completion of the house, the construction of which begins after 1978. The scope of this exemption will be limited to residential units not exceeding 1,500 square feet in floor area, whether owner occupied or not.

2. If the floor area does not exceed 600 square feet similar income tax exemptions will be available for a period of 10 years.

3. Income tax relief will also be extended to Housing Developers. A person who for the first time sells a house the construction of which had been commenced after 1978 will have the profits and income arising from such sale exempted from income tax, if the floor area of such a house does not exceed 600 square feet and the price at which it was sold does not exceed K6,000. Where the house is sold at a price exceeding K6,000 but not exceeding K10,000, 50 percent of the profits and income from such sale exempted from income tax.

4. Exemption from income tax will similarly apply to any dividends paid by a company to its shareholders, if it is out of the profits and income from sale of houses which belong to these abovementioned categories.

The Malawi Housing Corporation will also make land available for private sector developers and also provide group loans to private sector developers for the construction of houses for those who lease land from them etc., with these concessions the Government expects that the private sector housing developers will progressively increase their investments.

For housing developers in Site and Service Schemes the Government will provide new incentive whereby the output of housing will be increased. In addition to the services that are already being provided, the Government will

supply prospective home builders with the necessary building plans, and some of the building materials like doors, windows, corrugated iron roof sheeting on loan to be repaid in instalments varying from K2 to K10 per month over a period. This it is expected will provide a major incentive to self help home builders.

The Government will take steps to direct major employers in the country, to introduce a scheme for home ownership within their respective organisations. For ease of administration arrangements will be made between the employer and the Malaŵi Housing Corporation, for the Corporation to build the houses and the employer to meet the entire cost of the houses. The entire cost will then be treated as a loan to the employee which will be recoverable at a nominal charge during his working life.

The Government will also take steps to raise capital for housing and infrastructural works by the issue of local registered stock, and the Malaŵi Housing Corporation will be given statutory authority to market bonds directly.

Apart from the organisation and establishment of machinery for financing of housing which has been described above the Government will supply all of the capital, in the form of grant for technical infrastructural works such as roads, water supply, sewage system and electricity without any obligation on the part of the Malaŵi Housing Corporation to pay principal or interest. The Ministries and Authorities responsible for providing these services will make sure that adequate funds are provided in their budgets to provide for these facilities.

For the financing of housing and infrastructure in the rural areas the Government will institute housing finance programmes which are linked to agricultural and rural development projects. Decentralised credit institutions which could effectively reach households who plan to make housing investments will be promoted. The Government will lay down broad policy directives for the housing credit operations to be performed by institutions at the district and village level. Loans and credit will also be made available by the Commercial Banks to Co-operative Credit Institutions at the regional or village level to enable them to establish a revolving fund for rural housing and to extend loans.

The Government will also take steps to widen the range of acceptable collateral securities for credit to include, in the case of agricultural households, the crops as well. This would be the rural equivalent of recoveries from the pay of wage earners and salaried persons.

In the effort at mobilising resources for housing development in the country, insufficient attention has been paid in the past to external aid that could be harnessed for the programme. From past experience it is believed

that it is possible to interest both bilateral and multilateral donors in well conceived programmes of housing development, particularly in Site and Service Schemes and in schemes for the low cost sector. Apart from the assistance from Governments and international agencies, there is also considerable opportunity for mobilising non Governmental assistance for projects formulated under the low cost housing sector. The Government will take steps to harness this potential.

Housing Subsidy

Housing subsidy in Malaŵi is not something that is universal. Apart from the small element of subsidy in site and service projects to plot holders, subsidisation is confined mainly to civil servants, and employees of some of the larger firms.

Subsidies have not been very successful, as only a very small percentage of the target population is fortunate enough to benefit from subsidised housing. In the case of subsidised site and service projects, plots may be allocated to families who are less in need of subsidy than others, or to low income speculators who may later sell the plots at market value.

Subsidies are also sub-economic in that it is a drain on the country's resources, particularly financial resources. It also constitutes a distinct and powerful disencentive to homeownership.

Generally subsidies have favoured to-date only a fortunate few and not the population as a whole. Such subsidies are difficult to justify in Malaŵi, where food and other essentials, indispensable to low-income groups are not subsidised.

However, there are cases in which certain special need, low-income groups will need substantially subsidised Government provided housing. Among others, they include squatters reallocated against their will and labourers working in remote parts of the country in development projects essential to economic growth.

The Government will vigorously continue its policy of gradually eliminating the housing subsidy to civil servants. The higher income groups living in Government housing projects will be charged full market rents, and the surplus returns will be ploughed back into the housing fund. The Government will direct employers also to fall in line with this policy.

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Housing Standards

Standards of housing in Malawi have been evolved independently by various institutions that have been responsible for housing construction. This independent formulation of standards has led to a lack of uniformity between houses built by different organisations, and sometimes even a lack of balance between the different aspects of housing built by the same organisation.

The standards for house design appear to have been based more on the subjective experience of administrators. The standards have been arbitrary and do not appear to have been based on systematic research into local cultural patterns, family organisation or resource availability.

This peace meal approach to housing standards has pushed the cost of housing beyond available resources. For these reasons therefore the standards of housing and services to be adopted by all institutions responsible for public housing will be made mandatory and will relate to the environment, economic, technical and social conditions as well as to the quantity and quality of the resources available.

Building codes will be based on performance criteria and will take into account differences between climatic zones, customs, urban and rural housing, and housing built of permanent materials and housing built of short life materials. The standards set will be high enough to represent an improvement over current levels of living by a bulk of the people, but not so high as to be unattainable or difficult to maintain in the near future.

Minimum standards relating to public health and safety will be safeguarded. The standards set will not only be measures of absolute quality but they will also reflect values of social acceptability.

The approach to setting basic minimum standards for socio-cultural infrastructure, i.e. general public facilities and commercial facilities will be based on similar considerations. The provision of these facilities, however, falls under urban and rural development programmes rather than the national housing programme, and the cost of these facilities will be treated as a general social overhead.

For the construction of technical infrastructure for new dwellings such factors as climate, custom, space, density, health and cost will be taken into account while for certain areas such as squatter settlements temporarily acceptable standards below minimum standards will be set.

Building Materials

Building materials and components are the major inputs in housing. A

substantial proportion of the consumption of materials is imported. The cost of materials tends to be high and there is little adaptation of new construction materials for local needs. The use of temporary materials for building squatter and traditional housing is partly due to the scarcity of suitable building materials in the market, necessary for the construction and improvement of more durable housing at costs within reach of the middle and low income groups.

If housing programmes are to be rapidly expanded, there exists a need to develop a local building materials industry. The problems of the building sector have hitherto been left to the interaction and free play of private initiative and market forces.

To be meaningful for low-income housing needs, building materials must be inexpensive and their use should contribute to better performance of building. The insufficiency of locally produced building materials is due to a lack of investment capital, limited markets and transport problems, rather than to the absence of raw materials. Clays, limestones, sand, concrete aggregates and other raw materials for building are widely distributed and could form the basis of an expanded building materials industry.

Bricks and tiles for example are particularly suitable building materials in Malawi where construction technology is more labour intensive. Clay deposits are widely available in quality and quantity and in proximity to markets and the technology is also available for the manufacture on a small scale, and the development of such industries will be encouraged.

In developing the building materials industry, preference will be given to increasing the production of selected materials necessary for low cost construction. Government will seek to strengthen the building sector through labour intensive construction activities, and the development of building materials production which maximises the utilisation of local raw materials such as timber, shredded rice husks, bagasse, maize stalks, and other agricultural residues, and discourage the importation of expensive materials and components. Other initiatives will include long term low interest loans to establish or expand the production of needed building materials, provision of land, subsidies and grants for the establishments of workshops manufacturing housing components such as doors and windows and special training for programmes for people not familiar with conventional designs. Standards of quality and testing controls will be instituted and enforced, and the Bureau of Standards will ensure that a satisfactory quality of building materials will be maintained at all times.

While these measures are designed to assist the building sector directly, other indirect measures such as Government sponsored demonstration housing projects using local materials will also be used so as to stimulate the

production and availability of more locally produced building materials.

It must be said that necessary policies and targets for the establishment of a proper industry for the manufacture of building materials will have to be based on a comprehensive survey of the level and capacity of the existing industry, volume, and location of raw materials, and the availability of manpower in all categories.

Maintenance

Safeguarding the physical value of the housing stock should be one of the pressing concerns of the Government. In a situation where management and tenants are both responsible for the proper maintenance of the housing stock there are shortcomings such as tenant respect for property, management's lack of administrative measures to enforce rules and the insufficient provision funds for replacement, maintenance and repair work. Low income housing particularly if it is rental could deteriorate rapidly into slum structures if not properly maintained. Because of this the Government will seek to transfer maintenance responsibilities from management to occupants. Where the tenants are poor and cannot or will not pay for maintenance, management will have to provide and charge for this service. Rents and mortgages will therefore be calculated to include from the outset sufficient resources for maintenance and repair.

Social Services and Community Facilities Programmes

Social services and Community facilities and other educational and recreational programmes will be of particular importance in the case of new housing settlements in urban areas. This is because the residents of such communities are likely to have migrated from rural areas and are likely to experience problems during the transition phase.

The provision of such services and facilities however does not fall within the purview of the housing sector. The Ministry of Community Development and Social Welfare will ensure that funds for making these facilities available are provided, and will take the initiative in providing such services.

Land Use and Control

Rapid urbanisation gives rise to problems of land use. The provision of land

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for housing is complicated by the fact that land has many uses other than for shelter and access, and these include industrial, commercial, administrative and recreational uses. With increasing pressure of urban population, it will be necessary to exercise control over the use of urban land through suitable planning both at the micro and at the microlevel. The situation in Malawi is different from that in other urbanised parts of the world and this calls for original planning.

In the design of housing layouts attention will be paid to the requirements of people to have vehicular access to their houses, and of space for parking their vehicles. Residents will also want to live in conditions of maximum safety and freedom from the nuisance of moving vehicles. This calls for the creation of a system of footpaths entirely separate from vehicular routes. Each house will have access on one side to a serviced road or cul-de-sac, and on the other, to the independant foot-path system. This will be in contrast to the conventional arrangement whereby pedestrians and vehicles approach on the same road.

As regards the arrangement of the houses themselves, the street front pattern has been the most common module, in which the houses line both sides of the street and access and orientation are easy and there is no ambiguity in the plan. This layout has proved to be monotonous. The advantages offered by planned unit development or cluster zoning over conventional layouts are now apparent. These include the availability of larger recreational spaces, thus preserving the natural characteristics of site, and the shorter network of roads and utilities which leads to reduced construction costs. In the design of housing estates these considerations will be taken into account.

At the macro level, effort will be made to prevent situations where people with very low-incomes will have to spend a large part of their income on transportation. More efficient layouts will be developed. To the maximum extent possible houses will be grouped into neighbourhood units of from 2,000 to 5,000 people, insulated from through traffic, bounded by open spaces or green belts or other barriers, also self contained with regard to all daily facilities except the work place. It is expected that with time these neighbourhoods will become the nucleus of future towns.

Manpower and Training

It is recognised that there will be a growing need for trained personnel if the housing programme is to be expanded rapidly. Action will be taken by the Government to remedy the lack of trained personnel in the housing and infrastructure sector through the promotion and establishment of training

programmes with the assistance of bilateral or multilateral donors. Advantage will be taken of offers fellowships whereby personnel could be trained in other countries. The Government will consider setting up degree course in architecture and engineering in the University of Malaŵi. The specific curricula in schools will be adapted to the national needs. Every effort will be made to promote the training of semi-skilled and skilled workers and to expand the labour force for self-help housing construction. Emphasis will be given to training programmes enabling unskilled or unemployed manpower to participate in simple low-cost housing schemes.

In the short run, recruitment and training of middle aged adults, will be even more urgent than recruitment of young workers through apprenticeship, in order to meet the need for skilled labour. To this end, vocational training and retraining will be organised on the job, or in vocational training centres for adult workers who have no occupational qualifications. The Ministry of Works and Ministry of Education training programmes will be expanded to cater for this need.

The Housing Authority

Prior to 1963 housing in Malaŵi has been mainly directed towards the provision of housing for civil servants. Very little effort had been directed towards the provision of housing for the population as a whole. It is only since 1963 when the Malaŵi Housing Corporation was established that greater attention was directed towards the provision of housing for the general population. Some Government Ministries and various other institutions continue to build housing for their staff. This practice has lead to a situation where there is a lack of uniformity between houses built by the same organisation and where the standards seem to be quite often arbitrary. This approach to housing has been one of the factors which has pushed up the cost of housing beyond available resources. It has also tended to breed dicontent among persons housed by the various organisations.

There can no longer be any question as to the need for vesting the Malaŵi Housing Corporation with greater responsibility and authority for seeing to all housing needs in the country. The Housing Corporation must be comprehensive in nature and must have authority to promote, supervise and co-ordinate the various institutions in the country engaged in any aspect of housing. The Corporation will also be concerned with the work of the agencies that are employed in mobilising and distributing capital for the housing sector. This applies to entirely public operations as well as to wholly private financial institutions such as privately owned and operated mortgage companies. The

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Housing Corporation will be represented or consulted in all matters taken up by the Government that could affect the flow of funds into housing.

Action will be taken by the Government to vest the Malawi Housing Corporation with these additional responsibilities and powers.

I. Introduction

Housing in Malaŵi as in many other developing countries is a serious problem.

Although mainly being considered as a social problem, lack of adequate housing has a detrimental effect on the economic development of the country as well.

In its 'Housing Policy 1978 to 2000' Malaŵi Housing Corporation provided the frame work for a housing policy till the year 2000, based on the policy as laid down by the Malaŵi Government in its 'Statement of Development Policies' in 1971, emphasising the main problems in this field: a high increase in the urban population and the limitation of the financial resources.

In this report, Malaŵi Housing Corporation intends to extend on and to go into a more detailed study of the development of Site and Services Schemes, mentioned in the Statement as the most suitable means for the implementation of the housing policy 'for the greater majority of the Urban Population who cannot afford housing of permanent materials.'

Site and Service Schemes offer the following advantages:-

(a) At relatively low costs the schemes provide basic infrastructure such as gravel roads, pitlatrines, water reticulation to water selling points, and additionally schools, health units, markets etc.

(b) Because of low costs more units can be provided from the limited funds available.

(c) The planned areas provide legal security for the tenants, prevent squatting while upgrading at a later stage can easily be carried out, such as individual water and electrical connections, roads to all weather standard, water borne sanitation and sewerage, etc.

Malaŵi Housing Corporation as an agent of the Government has to date developed 13,000 plots while 7,000 are presently under construction in various parts of the country, but concentrated in Blantyre.

The increasing demand, however, exceeds the supply by far, causing a further growth of unplanned settlements in many parts of the country but again mainly in Blantyre.

The levels of the present Site and Service Schemes are deliberately kept to a minimum and have to be raised especially in the main urban centres, to attract the "borne urban dweller" who would otherwise prefer to squatter nearer his job and/or the city centre and the same is true for the upgraded unplanned

settlements, where people may prefer to move to other unplanned areas, if the level of upgrading is not attractive for them to stay.

In this paper, Malawi Housing Corporation presents its thinking in which fields and to what level future Site and Service Schemes could be developed giving a full range of possibilities from the existing Site and Service Schemes levels to sewered cores units complete with tarmac roads and street lighting in order to try to satisfy a variety of wishes of future tenants, covering the very lowest to the medium income group and so creating an environment where every Malawian can satisfy his or her own individual housing wish.

II. Scope

The field under consideration for this programme will cover the whole scale of human settlements from unplanned areas to permanent core units, but excluding permanent housing and so providing a solution of the housing problems of the very low, low and medium income groups.

Three main fields of operation can be distinguished although in practice overlapping will occur:-

(a) Upgrading of unplanned settlements.

(b) Upgrading of existing Site and Service Schemes, old style.

(c) New Site and Service Schemes developments.

All fields have their specific problems and merits, as will be discussed in the following paragraphs, and differ greatly in magnitude, unplanned settlements and existing Site and Services Schemes being a fraction compared to the number of plots required. The various levels of development will be discussed in a different paragraph as well as social infrastructure and cost aspect.

(1) *Upgrading of unplanned settlements*

It is difficult to give a clear definition of unplanned settlements, but by lack of anything better the legal aspect will be used and all settlements in zones planned for urban development will be called unplanned, as long as they are not incorporated in a planned area.

In Blantyre alone 18,000 structures are considered unplanned, outside Blantyre no figures are available, but could be in the range of 10,000 - 15,000 structures.

Specific Problems in this field are the payment of compensation and resettlement of part of the population. It is therefore essential that for the success of such schemes (combined with upgrading of unplanned areas) new plot are created very near the upgraded areas and to the same standards the upgraded plots.

The Specific Merits of such schemes is that most people can remain in their familiar environment and at the same time will be provided with basic services, while resettled people can enjoy the nearby facilities.

(2) *Upgrading of existing Site and Service Schemes*

Existing Site and Service Schemes and the ones currently under construction are provided with very basic services, such as gravel roads, water kiosks for every 200-250 plots and an individual pitlatrine, covered with a concrete slab.

This low level of development enables Malaŵi Housing Corporation to construct a total of 25,000 plots in Malaŵi of which over 17,000 are in Blantyre and more are still being constructed by the Corporation. As a result of improving Malaŵi's economy, tenants in the existing Site and Service Schemes are already asking for and surely can afford higher levels. In various areas in Blantyre every other house has already an individual water connection while electricity connection become more and more common. In some areas bus routes have been tarmaced to provide for all years bus services. Problems in this field are to determine which higher levels have to be introduced and what the individual tenant can afford. The merit of such schemes is that after upgrading, these areas become more urbanised and as such become more attractive for the urban dweller resulting in an increased speed of integration of the areas involved in the total city complex.

(3) *New Site and Service Schemes Developments*

According to the draft Housing Policy 1978 to 2000 a total of approx. 200,000 plots are to be developed in that period in order to house every urban family by the year 2000, in addition to approx. 130,000 permanent dwellings. It has long been felt as a serious shortcoming that there exist too wide a gap in quality between the present Site and Service Schemes level and the smallest permanent housing unit and that the often heard demand of variety cannot be satisfied. It is therefore strongly recommended that future Site and Service Schemes should be developed in such a way that this

variety in levels will be available so that every future tenant can start off at the level he can afford and improve thereon in later stages. Detailed surveys in each area involved should be carried out to establish what levels of variety should be offered and in what numbers while pilot schemes could be developed in areas where certain basic facilities are already available to keep costs within limits.

III Levels of Development

The aim of Site and Service Schemes is to create housing estates with such basic infrastructure that the schemes ultimately will develop into permanent urban settlements with all appropriate facilities and services. The higher the initial level of a scheme the sooner this target will be met.

To establish a policy which is sufficiently flexible to cope with a variety of situations e.g. due to availability of funds levels of existing infrastructure, etc. Malawi Housing Corporation has devised a range of levels of development listed according to priorities, which in every combination could be adopted in a specific scheme to produce an optimum combination of available means and public demand.

The levels adopted are:—

(1) Levels of existing Site and Service Schemes which would be the minimum standard of upgraded unplanned settlements. Over and above the present levels;

(2) 100% water reticulation so that every tenant could apply for an individual plot connection;

(3) Street lighting for security reasons;

(4) Bus routes tarmaced to provide all weather roads bus connections essential for integration in city life;

(5) 100% electrical reticulation, so that every tenant could apply for individual plot connection;

(6) All roads tarmac to provide all weather accessibility to all plots, for the individuals as well as for services, like firefighting, ambulances, refuse collection etc;

(7) Waterborne sanitation and sewer, to reduce health hazard to a bare minimum;

(8) Core units e.g. wet units (in combination with No. 7) which the tenant can extend on self help basis according to his own needs, following certain standard layouts provided by Malawi Housing Corporation;

(9) Material loans, not so much a level but an instrument which in combination with any of the above levels enables each individual tenant to acquire the needed capital on terms he can afford, with which he can achieve his individual optimum for his self help shelter and so bring the scheme nearer to its ultimate target.

IV. Social Infrastructure

A human settlement can only function properly if a complete set of social facilities is provided.

Schemes up to 1000 plots should be provided with a primary school and a dispensary; schemes up to 5000 plots with proper health unit and a secondary school. Each scheme should have a market place and a small scale industrial area or industrial plots; community halls etc. The social facilities for each individual scheme should be decided upon in close relation with existing facilities in the neighbourhood and extended thereon. Omission of the essential social infrastructure would leave the schemes unlivable and a waste of money.

V. Cost Aspects

The main problem encountered in housing in general is the limitation of available funds.

To make optimum use of the available funds proper costing and controlling of expenditure is essential.

For the various levels of upgrading, the following costs are involved (based on 1980 prices):—

(1) Cost per plot on present Site and Service scheme level, excluding compensation and social infrastructure — K300.00.

(2) Additional cost per plot for 100% water reticulation providing the existing reticulation can cope with the extension — K250.00.

(3) Additional cost per plot if street lighting is provided throughout the scheme, providing a nearby powerline — K50.00.

(4) Additional cost per plot if the main bus route is tarmaced — K140.00.

(5) Additional cost per plot for 100% electrical reticulation provided that the existing reticulation can cope with the extension — K250.00.

(6) Additional cost per plot if all roads are tarmaced — K800.00.

(7) Additional cost per plot if a core unit is provided consisting of a shower, W.C. and kitchen, similar to an E3 and E4 type house — K2,500.00 and consequently a sewage scheme K1,500.00 which includes the sewage lines and treatment pond, total cost K4,000.00 per plot.

Costs are as exact as possible but should be verified for each individual scheme. Costs for the social infrastructure depends completely on the extent of the services provided, and have to be estimated for each individual scheme.

SUMMARY OF PROPOSALS SUBMITTED BY MALAWI HOUSING CORPORATION ON HOUSING POLICY FOR THE PERIOD 1978 TO 2000

1. EXISTING SITUATION

In order to comply with the statement of Government Development Policies issued in 1971 which aimed at solving four main urban housing problems in Malawi namely: urban population increase; the problems of the emerging squatter areas, the reluctance of investors to invest in low cost permanent housing projects and the limitations on the supply of financial resources, the Government policy has therefore been directed towards the following important activities:-

(i) The development of site and service schemes for the great majority of the urban population who could not afford housing of permanent materials;

(ii) A greater investment in small and medium sized permanent houses demand for which was expected to rise rapidly as a consequence of general economic development;

(iii) A determined effort to increase the sources of finance for housing both from local and foreign resources; and

(iv) Eliminating the rent subsidy given to Civil Servants in order to encourage home ownership by Civil Servants.

2. PROPOSED NEW HOUSING POLICY

Due to high rate of migration from rural to urban areas where economic infrastructure services such as better housing, piped water, electricity and waste disposal are readily available, the urban population is growing at an alarmingly high rate resulting in shortage of suitable housing accommodation in the urban areas based on waiting lists for houses as at 31st December, 1976, the deficit for houses amounts to 44,000 units. This situation has led to the

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proposal for a broad long range housing policy for the country by the Malawi Housing Corporation for the period 1978 to 2000. The new housing policy as proposed by the Malawi Housing Corporation is stated as follows:-

(i) To house every urban family by the year 2000 in house, the minimum standard of which will represent an improvement over current level of living by the bulk of the people; and

(ii) To provide electricity, water and sanitation excluding housing per se, for rural communities, and to provide educational and technical guidance, so that they can improve their housing standards.

This statement calls for the following specific objectives in relation to housing in urban areas:-

(a) To eliminate the existing deficit in housing by the year 2000;

(b) To replace obsolescent dwellings;

(c) To provide housing for the future urban population;

(d) To vigorously pursue a policy of gradual removal of subsidies and

(e) To encourage home ownership.

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3. HOUSING NEEDS AND REQUIREMENTS

The minimum standards of housing will be set at a level which will represent an improvement in the present level of living of the bulk of the population, but not so high as to be unattainable or even to maintain in the near future.

In view of the large gap between the desired standard and the resources available, and in a situation where a large proportion of the population are living in temporary housing and their economic situation is such that they are unlikely to be able to afford permanent housing in the foreseeable future, emergency standards for the improvement of temporary dwellings to a minimum level of livability and the provision of new dwellings within minimum facilities will be encouraged.

Emphasis will be placed on self-help programmes capable of bringing non-monetary resources into action and thus increasing the ratio of minimum standard new dwellings to population. Consideration will be given to the involvement of Youth Week programmes in housing construction.

On the basis of the present rate of population growth and housing demand, a total of 94,600 dwelling units will be required in 1985 and this means that at least 12,000 houses should be constructed every year beginning from 1978 to 1985.

4. FINANCING CONSTRUCTION OF HOUSES

As lack of funds is the main contributory factor to the present shortage of houses in the country particularly in urban areas, the proposed housing policy by Malawi Housing Corporation includes a suggestion to the effect that Government should device means of providing financial assistance to individuals wishing to build their own houses. Such assistance would be through the following methods:

(a) Government to arrange negotiations with monetary institutions on behalf of individual members of the public for loans to be repaid on long term basis to enable individuals to buy building materials including timber, cement, doors, windows and corrugated iron sheeting. Materials obtained in this manner would enable individuals to build houses through self help schemes - a cheap method of house construction.

(b) Government to direct major employers in the country to introduce a scheme for home ownership within their respective organisations and that Malawi Housing Corporation would make arrangements with such employers to build houses for such organisations. The organisations would eventually meet the full cost of the houses and such full cost would then be treated as a loan to the employee and recoverable at a nominal charge during the employee's working life.

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(c) Steps to be taken by Government to raise capital for construction of housing and infrastructural works by the issue of local registered stock, and the Malawi Housing Corporation would be given statutory authority for marketing bonds directly.

(d) In addition to the organisation and establishment of machinery for financing housing programmes as described above, the Government would supply all the capital, in the form of grant for technical infrastructural works such as roads, water supply, sewage system and electricity without any obligation on the part of the Malawi Housing Corporation to pay principal or interest. The Ministries and appropriate Authorities responsible for providing these services would make sure that adequate funds are provided in their budgets to provide for these facilities.

(e) For the financing of housing and infrastructure in the rural areas, the Government would institute housing finance programmes which would be linked to agricultural and rural development projects. Decentralised credit institutions which could effectively reach households planning to make investments in housing would be promoted. The Government would lay down broad policy directives for the housing credit operations to be performed by institutions at district and village level. Loans and credit would also be made available by Commercial Banks to Co-operative Credit Institutions at regional or village level to enable them to establish a revolving fund for rural housing and to extend loans.

The Government would also take steps to widen the range of acceptable collateral securities for credit to include, in the case of agricultural households, the crops as well. This would be the rural equivalent of recoveries from the pay of wage earners and salaried persons.

5. HOUSING SUBSIDY AND ITS DISADVANTAGES

Housing subsidy in Malawi is not universal. Apart from the small element of subsidy in site and service projects to plot holders, subsidisation is confined mainly to civil servants and employees of some of the larger firms.

Housing subsidy has a number of disadvantages and these include:-

(i) The scheme is confined to a few privileged working class composed of many persons who can afford to provide their own housing without a subsidy;

(ii) It does not encourage home ownership on the part of the few privileged persons;

(iii) It is sub-economic and becomes a continuous drain on a country's financial resources for an indefinite period;

(iv) It does not encourage construction of more housing units by authorities responsible for housing a nation because most of the available financial resources are used for payment of subsidy in favour of a few privileged persons.

Recommendation for the Elimination of Housing Subsidy

In view of the housing subsidy disadvantages as described above, Government is requested to introduce a housing policy aimed at gradual elimination of housing subsidy. The method of implementing the policy would be to charge all civil servants living in Government housing projects full market rents and the surplus returns would be ploughed back into the housing fund. The Government would ask or direct employers also to fall in line with this policy.

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6. HOUSING STANDARDS

Lack of housing standards in Malaŵi has led to lack of uniformity between houses built by different organisations, and sometimes even lack of balance between the different aspects of housing built by the same organisation.

The present standards of houses appear to have been based more on the subjective experience of administrators. The standards have been arbitrary and do not appear to have been based on systematic research into local patterns, family organisation or resource availability.

Recommendation for Consideration

Since the peace meal approach to housing standards in the country has pushed the cost of housing beyond available resources, it is recommended that housing standards and services to be adopted by all institutions responsible for public housing be made mandatory and be related to the environment, economic, technical and social conditions as well as the quantity and quality of the available resources.

Minimum standards relating to public health and safety would be safeguarded. The standards set would not only be measures of absolute quality but they will also reflect values of social acceptability.

For the construction of technical infrastructure for new dwellings, factors such as climate, custom, space, density, health and cost will be taken into account while for certain areas such as squatter settlements, temporarily acceptable standards below minimum acceptable standards will be set.

7. MAINTENANCE OF HOUSES

In a situation where management and tenants are both responsible for the proper maintenance of the housing stock, there are shortcomings such as tenant respect for property, management's lack of administrative measures to enforce rules on the house maintenance and

the insufficient provision of funds for replacement, maintenance and repair work. This being the case, it is recommended that Government should consider the transfer of maintenance responsibilities from management to occupants. Where tenants are poor and cannot afford to pay for maintenance, management would have to provide and charge for the service. Rents and mortgages would have to be calculated to include from the outset sufficient funds for maintenance and repair of houses.

8. MANPOWER AND TRAINING

In order to meet the present growing demand for housing both in urban and rural areas, trained personnel in housing and infrastructure sector is a prime need for the country and should be given serious thought and consideration as part and parcel of the housing policy. Bearing this fact in mind, it is suggested that Government should consider the setting up of degree courses in architecture and engineering in the University of Malaŵi.

In addition to producing University graduates from the University of Malaŵi, emphasis be given to training programmes enabling unskilled or unemployed manpower to participate in simple low-cost housing training schemes. In this connection, it will be necessary to recruit and train middle aged adults in order to meet immediate need for skilled labour.

9. THE HOUSING AUTHORITY

Before the establishment of the Malaŵi Housing Corporation in 1963, housing in Malaŵi was mainly directed towards the provision of housing for civil servants. Very little effort was made in order to provide housing for the entire population.

Despite the fact that the Malaŵi Housing Corporation was established with the object of providing housing needs for the population in general, some Government Ministries and Departments as well as various other institutions continue to build housing for their staff. This practice has lead to a situation

where there is lack of uniformity between houses built by the same organisation and where the standards seem to be quite often arbitrary. This approach to housing has been one of the factors which has pushed up the cost of housing in this country beyond available resources. It has also tended to breed discontent among persons housed by the various organisations.

In view of the situation described above, there is a need of vesting responsibility and authority for housing needs in one organisation. It is therefore, suggested that such authority and responsibility be vested in the Malaŵi Housing Corporation. Given such authority, the Corporation would supervise and co-ordinate the various institutions engaged in any aspect of housing in the country. The Corporation would also be concerned with the work of agencies that are employed in mobilising and distributing capital for the housing sector. This would apply to entirely public operations as well as to wholly private financial institutions such as privately owned and operated mortgage companies. The Housing Corporation would be represented or consulted in all matters taken up by the Government that could affect the flow of funds into housing.

In its closing remarks on this proposed housing policy, the Malaŵi Housing Corporation seeks additional responsibility and power in housing to be vested in the Corporation.

SUMMARY OF COMMENTS MADE BY SECRETARY FOR WORKS AND SUPPLIES ON THE PROPOSED HOUSING POLICY BY MALAŴI HOUSING CORPORATION

(Comment Number 1)

The following comments made by the Secretary for Works and Supplies on the proposed Housing Policy by M.H.C. are in a summarised form. The Secretary for Works and Supplies is commenting on behalf of his own Ministry and Capital City Development Corporation since he is the Chairman of the Corporation. The main points raised by Secretary for Works are as follows:-

1. Existing Situation

While the Secretary for Works and Supplies agrees that there is need for considering the revision of the present housing policy in view of the present housing back log which has been created as a result of the rapid growth of the urban population, he does not agree that there should be any cause for panic and alarm as expressed on page 2 of the proposed M.H.C. Housing Policy (Folio 40A). The Secretary for Works and Supplies further considers that the housing back log particularly affects the lower income brackets but he is convinced that the situation regarding rapid growth of urban population is at present under control.

2. Strategy as Proposed in the Policy Document of Malawi Housing Corporation (Folio 40A)

The Secretary for Works and Supplies considers that the strategy proposed in the policy document is not in line with the financial resources of Malawi. He disagrees with and deplores bold statements appearing in the proposed housing policy such as: "such technical infrastructure as electricity, piped water supplies, footpaths, drainage and sewage disposal will have to be made available by the Malawi Housing Corporation and the Ministries and authorities concerned will ensure that adequate funds are available for such facilities in their own programmes." (Page 11 paragraph 48 of the proposed policy document at folio 40A).

3. Finance, Housing Standards etc.

On finance and Housing Standards etc., the Secretary for Works and Supplies advises the Government and the private sector to give careful consideration to what he terms "Marxism Statements" and to avoid any taint of these statements. The statements as quoted by the Secretary for Works and Supplies are as follows:-

"Government will direct such institutions to invest a greater percentage of their funds in housing" (Page 13 paragraph 57 of proposed policy paper);

"Government will take steps to direct major employers in the country to introduce a scheme for home ownership" (Paragraph 63 of the proposed housing policy on folio 40A page 14);

"Government will direct employers to fall in line with this policy" (Paragraph 73, page 16 of proposed housing policy paper);

"The Ministries and Authorities responsible for these services will make sure that adequate funds are provided in their budgets for these facilities" i.e. infrastructure for Malawi Housing Corporation who will not pay principle or interest. (Paragraph 65 on page 15 of the proposed housing policy);

Income Tax Concessions to Housing Investors

Despite the disagreement expressed in various sections of the policy document above, the Secretary for Works and Supplies wholeheartedly supports the section dealing with Tax relief, i.e. paragraph 60, sections 1 - 4 on pages 13 and 14 of the proposed housing policy paper. The above sections deal with proposed tax concessions to housing investors.

In his closing comments on the proposed housing policy document, the Secretary for Works and Supplies and Chairman of the Capital City Development Corporation expresses his appreciation of the contents of the proposed housing policy as submitted by Malawi Housing Corporation and recommends that the paper be considered in detail since there is much to be digested.

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SUMMARY OF COMMENTS MADE BY CHIEF ECONOMIST

ON THE PROPOSED HOUSING POLICY

BY MALAWI HOUSING CORPORATION (Folio 38)

(Comment No.2)

In his opening statement of his commentary remarks on the proposed policy paper submitted by Malawi Housing Corporation, the Chief Economist (Economic Planning Division of this Office), expresses his broad agreement with the paper. He has at the moment confined his comments to general issues leaving other technicalities to be resolved by the housing policy Committee to be formed in due course. His comments are as follows:-

1. Absence of Data

The paper is considered to have one major deficiency which is the exclusion of the income variable, an indicator of ability to pay. In the absence of any better data, the whole statement is based on figures obtained from the Town Planning Department which centre on family unit size to derive demands for houses. Future requirements are projected from population figures and no income variable is included at all. This leads to cost estimates which are so high that the objective of housing the nation by 2000 will be difficult to attain. There is also little information on housing per se, and it is still felt that the projection method is weak.

2. Housing Needs and Requirements

The idea of holding a Housing Census is acceptable by Economic Planning Division since it will show what people earn; it will give an idea of what housing they can afford to pay for as home ownership is a function of ability to pay.

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3. Definition of Housing Policy

Throughout the document, policy and objective are used interchangeably and it would be useful if both policy and objective were spelt out. This is typically exemplified by the proposed policy statement paper on pages 3 and 4.

One also gets the impression that the policy will have an urban bias, a criticism Malaŵi Housing Corporation levied on the existing housing policy. It would therefore be worthwhile for the statement to include other areas of the country as mentioned in comments from other Ministries and minutes of meetings on housing policy.

4. Creation of Financial Institutions

While the language used in the proposed policy paper is not suitable in some respects, the ideas of creation of financial institutions are sound and the Housing Committee would be an appropriate forum to discuss the technicalities involved.

Since the paper points out the areas of main thrust as far as finances are concerned, it would have been suitable if alternate strategies were proposed. The sums involved are high and with the country's limited resources, it would be worthwhile noting what an alternate strategy would be to achieve the policy objectives by 2000.

SUMMARY OF COMMENTS MADE BY CHIEF DEVELOPMENT OFFICER (DEVELOPMENT DIVISION, O.P.C.) ON THE PROPOSED HOUSING POLICY BY MALAWI HOUSING CORPORATION

(Comment No.3)

The Chief Development Officer who considers that the paper on the proposed housing policy as submitted by Malawi Housing Corporation forms a commendable attempt to formulate a housing development strategy in Malaŵi, has concentrated his comments on the following points:-

(a) Housing Survey

The Chief Development Officer agrees with the idea of undertaking a housing survey in order to confirm some issues based on what Malaŵi Housing Corporation calls "rule-of-thumb guide lines" (Paragraph 3 of M.H.C. letter MP.14 of 22nd December, 1977 refers).

(b) Housing Subsidy

The Chief Development Officer entirely agrees with the idea of discouraging housing subsidies presently granted to a few privileged civil servants and company employees as proposed by the Malaŵi Housing Corporation. He considers that the present housing subsidies discourage home ownership on the part of the privileged individuals.

(c) Loans for Housing and Related Incentives

The Development Division is not in a position or competent to comment on above subject as the goals and objectives as proposed in the housing policy document involve a lot of financial implications which require a good understanding.

(d) Housing Standards

It is felt by the Chief Development Officer that there is a prima facie case for the standardization of housing being constructed by the private sectors, Government, Capital City Development Corporation, Malaŵi Housing Corporation and Malaŵi Development Corporation in the country. The present classification of houses whereby there are many different designs and types in one class is very confusing; e.g. there are about 11 different Class "E" houses. Aid donors on housing often remark on this confusing state of housing classification.

(e) Building Materials

Summarising paragraphs 80 to 85 inclusive of the proposed housing policy document (pages 17 and 18 at folio 40A), the Development Division supports the proposal for the establishment of a local building industry as it is considered that such action would probably reduce housing costs and also create more employment as well as providing savings on foreign exchange. It is felt that the private sector could be more ideal in setting up these industries as the Government normally finds difficulties in attracting external funds for "commercial type" of projects.

(f) Site and Service Schemes

Despite the fact that external donors find the site and service schemes most appropriate and popular as a quick solution to the country's housing needs, the Development Division would like to ask the Government to make cautious approach to these schemes with regard to their locations in urban centres. This concern is based on experience as it sometimes happens that funds invested in these schemes become a complete waste when the schemes turn into slums within a very short period following their establishment. The improvement of these sites, the provision of infrastructure and payment of compensation in future may well become an insurmountable hurdle as is the case in West Africa today. This being the case, these schemes should be located with care in future.

(g) Machinery for Controlling Rents etc. at National Level

Although the housing policy document has made no mention of a proposal for the establishment of a rental control machinery, it is felt that this should be incorporated in the Housing Policy. It will no doubt be appreciated that the soaring costs of building houses, the acute shortage of houses and the lack of rental control measures have induced house owners, especially in the private sector, to charge exhorbitant rents for houses, shops etc.

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SUMMARY OF COMMENTS MADE BY THE SHELTER SECTOR ASSESSMENT

(Under the auspices of the Office of the United States Agents for International Development)

ON THE PROPOSED HOUSING POLICY BY MALAWI HOUSING CORPORATION

(Comment No.4)

1. EXISTING SITUATION - MAJOR SHELTER POLICIES

The basic housing policy of Malawi is laid down in the Government's statement of Development Policies 1971 - 80, issued in December, 1971. In this document Government lists form characteristics of the urban housing problems in Malawi which lead Government to determine housing policy. The form characteristics listed are as follows:-

(a) Population Increase

The Government estimate that the average urban growth rate would be around 8% per annum, a figure which has been confirmed by the Population Census conducted in 1977. This figure may be compared with the total annual average population growth rate of 2.92% between 1966 and 1977.

(b) Squatting

The Government observed that the squatting development in the larger urban centres posed a considerable health and social hazard and added that most of the people migrating from rural areas earn too little to afford housing permanent materials.

(c) Speculative Housing Development

It was noted that the reluctance of speculators to invest in low-cost permanent housing projects for general rental or sale is because of unprofitability of housing in the sector. The Government also noted that in the past a substantial contribution to the urban housing stock was made by a number of large private firms who built residential estates for their employees.

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(d) Finance

The Government advised that there are severe limitations on the supply of financial resources for the shelter sector. Private domestic savings can only supply a very limited amount of investable resources in a country at Malawi's stage of development and there is also considerable reluctance among major foreign donors to finance housing development.

Stemming from this analysis of the housing problem, the Government determined its basic housing policy for the present decade as follows:-

(i) Traditional Housing

The further development of the "Site and Service scheme, begun in 1964, for those dwellers - the great majority - who cannot afford housing of permanent materials (e.g. fired brick, concrete flooring). The demand for Traditional Housing Area (THA) plots has consistently out-run the supply over the years. The Traditional Housing Area scheme was rated as the only feasible and relatively inexpensive way of defeating the problem of growing and unplanned squatter areas.

This "Site and Service" development, which is described below, is considered by Government to constitute the most important objective of housing policy.

(ii) Permanent Housing

The Government also expects the demand for small and medium size permanent houses to use rapidly as a consequence of general economic development and, as a second aspect of policy, will continue to invest in these types of dwelling units.

(iii) Finance

The third aspect of housing policy involves a determined effort to increase the sources of finance-savings for housing development. To this end the Government has sought external finance (and in recent years obtained loans for permanent housing construction and Traditional Housing Area infrastructure development from British and West Germany sources).

An important contribution is to be made by the Government which, while paying full economic rental for houses occupied by Government employees, currently subsidizes the housing cost for Civil Servants. The Policy is ultimately to eliminate this subsidy. Removal of rent subsidy will provide an important incentive to the extension of home ownership, which will remain a major objective in attempting to raise more internal finance for housing.

Government responsibility for providing housing is thus largely confined to the main urban centres of Blantyre and Lilongwe, apart from the obvious need to accommodate Civil Servants required to live in specific outlaying places. In the absence of significant private sector investment, it will be necessary to continue to make funds available for housing from the public sector, in order to avoid the creation of unhealthy and unsanitary conditions in urban areas, which could retard the pace of economic development.

2. HOUSING NEEDS AND REQUIREMENTS

According to Table II of a preliminary report prepared by the Shelter Sector Assessment Team (page 34), it is clear that housing production for urban centres in Malawi is not meeting housing demand as it shows an estimated total annual housing deficit of 4,179 units. If the current deficit situation continues, the situation will become quite serious for Malawi.

An assessment of the present housing delivery system in Malawi, such as the one being conducted by the Shelter Sector Assessment Team; and a careful evaluation of suggestions for changes in the Shelter delivery system is considered by the team to be vital for Malawi.

All projections of 1985 urban population, upon which projections of future housing demand are based, are rough estimates which assume an 8% annual growth rate for all existing urban population centres. Such growth estimates do not account for diverse expansionary pressures in individual centres such as proposed industrial developments, tourism projects, decentralization of Government among regional and/or district centres, or

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other factors relevant to future growth rates.

Such refined analysis is beyond the scope of this study. Careful analysis of potential developments and other factors influencing growth rates in each of the urban areas should be performed; but such analysis takes time and resources, as the Malawi Government and, in particular Sites Town Planning Unit are aware.

Facts which present themselves from analysis of census dates and projections, and from dates showing persons on waiting lists in the table referred to above, however, show that the present housing stock is grossly inadequate for meeting even current housing needs.

Furthermore, the housing delivery system has not shown the capability or flexibility to date expanding at the needed rate, and is in great danger of falling woefully behind if the present rates of urban population growth in Malawi continue.

As population projection figures for urban areas indicate, the housing shortage situation can potentially become much worse, and developing an explosive situation where people are forced to settle in illegal unplanned areas because of lack of adequate planned Shelter facilities.

In summary, if population projections are at all accurate, indicators are that the existing urban housing stocks must at least double by 1985 in order to accommodate an estimated population of 864,462 persons; nearly 400,000 more than reside in urban areas in 1977.

3. HOUSING SUBSIDY AND ITS DISADVANTAGES

The provision of adequately scaled housing, particularly of the low-cost variety, is a problem found almost everywhere in the world today. In Malawi, the problem extends up to through high cost housing (locally termed "low density" because of the wide-spread unwillingness and/or financial ability of both Malawians and expatriates to buy or build housing for themselves. The latter prefer to lease from Government housing agencies and, in the case of Civil Servants, to continue enjoying heavily subsidized accommodations, a carry-over from colonial days when British Civil Servants were provided housing by their Government whilst posted in Malawi.

Regardless of what has been obtained in the past, and the present urban housing demand/supply in balance, the future presents an even more grim and serious picture.

Because of the widespread - public and private-subsidy element, what the true expressed demand might be is unknown, at least for Government built permanent-type housing. A Civil Servant, for example, who by virtue of his grade has entitlement to a Class "C" house, in the absence of subsidy and left to his own choice, might opt for a Class "D" or "E" accommodation or even a Class "F" depending on his family circumstances and/or desire to augument his income from rental or rooms. Whatever else may be said, as the U.N.D.P. Mission (to the Malawi Housing Corporation) pointed out, there is a major misallocation of housing resources in the public sector in Malawi. Furthermore because of this, the Government has had considerable difficulty in obtaining foreign supplied and indeed private locally supplied) funds for the housing sector. Speculatively built housing, i.e. units for sale or rental, is still a rarity in Malawi today and certainly confirned only to the larger cities.

4. FINANCING CONSTRUCTION OF HOUSES

The financial institution constraints affecting the housing sector in Malawi include:-

(a) The lack of any institution, public or private, serving the needs of the low and medium income population. The New Building Society caters only higher income classes.

(b) The Commercial Banks do not consider private housing loans even on a shorter term basis. They are catering to very short term requests and these are principally from the Agricultural export sector.

(c) Private companies are showing a marked reluctance to finance from internal or external funds housing construction for their employees. Rather they are seeking rental units from the Malawi Housing Corporation and Capital City Development Corporation.

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The Financial resources constraints may be enumerated as follows:-

(i) The general lack of interest on the part of foreign lenders. The last such loans were obtained by Malawi Housing Corporation in 1976 (K250,000) from South African Old Mutual Insurance Company, both carrying 9% interest charges.

(ii) The low level of private domestic savings except for such requirements as are reflected in self-help construction in Traditional Housing Areas. There is no knowledge, however, of what might be actually available from rural and urban domestic sources or from Malawians working outside the country.

(iii) Low cost recovery by Malawi Housing Corporation and Capital City Development Corporation from ground rent charges in the Traditional Housing Areas and possibly high and medium density permanent housing with respect to the actual development costs.

(iv) The failure of the present level of rents paid to the Malawi Housing Corporation by the Government for Civil Servants quarters to generate sufficient funds for new housing starts - for public or private rental.

5. MAINTENANCE AND CONSTRUCTION OF HOUSES

The Shelter Sector Assessment team recommends a programme which should aim at achieving three important objectives namely:-

(i) To increase the life expectancy of housing now considered semi-permanent;

(ii) To advance the level of expertise of Malawi contractors;

(iii) To instill a higher value in home ownership for Malawians. The intent is to safe-guard future low cost housing investment in construction through a needed Technical Assistance Programme that would initiate training on three levels as indicated below:-

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(a) Training of petty contractors in improved techniques of construction and basic material production (e.g. earth block manufacture, footing and foundation alternatives, septic tank construction alternatives etc.); also covered should be job management and fundamental cost control practices.

(b) The Malawi Young Pioneers might be used to create a pool of workers trained in the areas mentioned above to provide government sponsored, minimum cost, self help assistance groups for the construction of low cost houses in Traditional Housing Areas.

(c) Training of additional Malawi Housing Corporation staff to carry forward this construction assistance programme.

This recommendation would require 2 to 3 man years of technical consultants and is estimated at K200,000.

6. TECHNICAL CONSTRAINTS AND BUILDING DESIGN

The standards imposed by the regulating authorities in Site and Service Schemes are in tune with the level of construction taking place and do not impede any level of house type because of complexity or technical severity. (Appendix - Public Health Act (Cap.34:01) Minimum Building Standards for Traditional Housing Areas). The design of buildings in their various stages often enveloping older ones which are then demolished. There is no building permit or plan control except for site inspection. Difficulties are encountered, however, in the level of expetise of the petty contractors servicing these schemes. Poor construction techniques are encountered in several areas of house construction:

(a) Proper foundation constructions in keeping with the Kwacha level of house constructed, is lacking and often resulting in severe wall settling and cracking of sundried earth block construction within a few years.

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(b) Earth block manufacture often does not utilise sufficient straw binders, resulting in a fragile block. The intermediate technology of earth block production using ram techniques could be investigated.

(c) Improper placement of and securing of roofing elements occasionally cause roofing efforts to be carried away by moderate to high winds.

The design level of Sites and Service Schemes by Malawi Housing Corporation is satisfactory and is under constant evolutionary process readily apparent upon viewing past projects, utilizing technical assistance programmes, and responding to user preferences.

8. Permanent house construction in the private sector comes under plan approval and inspection by municipal bodies. Permanent houses let out to contract by Malawi Housing Corporation/Capital City Development Corporation/Ministry of Works and Supplies are controlled during construction through adequate inspection systems.

SUMMARY OF COMMENTS MADE BY THE SECRETARY TO THE TREASURY ON THE PROPOSED HOUSING POLICY BY MALAWI HOUSING CORPORATION

(Comment No.5 Extracted from Folio 60 on File 25/01/10/Vol.IV)

1. HOUSING NEEDS AND REQUIREMENTS

Like the Chief Economist in his letter No. EPD.32.02.01 of 30th January, 1978, the Secretary to the Treasury fully agrees with the proposal put forward by the Malawi Housing Corporation to the effect that a housing census be conducted in order to establish the country's housing needs. He also observes the deficiency in the estimation of the demand for housing as reflected in the Malawi Housing Corporation proposed Housing Policy Paper Number MP 14 of 22nd December, 1977. What worries the Secretary to the Treasury is that total investment requirement in housing is also based on this particular projection. If this is taken as public investment, as the paper implies, great strains would be felt on available resources.

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2. THE STRATEGY

The Secretary to the Treasury is in general agreement with the broad strategies in terms of rural and urban housing as expressed by Malawi Housing Corporation in its proposed housing policy paper in paragraph 48 of folio (40A) on this file No. 25/01/10/ Vol.IV.

3. IMPLEMENTATION OF PROPOSED POLICY

The cost of implementing the objective as implied in the Malawi Housing Corporation Paper has two aspects to it. In the first place, if the total investment cost was to be born by Government, for example in the last fiscal year, and using the corresponding figures, even if this was on lent to a statutory corporation, this would constitute 36 per cent of the Development Budget on the revised estimate for the year. This would inevitably indicate a change in priorities. Alternatively, if this were to be taken as a net addition to the Development Budget, Government's local resource requirements would probably increase proportionately, if not more, because it is common knowledge that housing is less attractive to external financing. This would obviously produce strains on domestic credit and hence its adverse implications on external balances.

It is suggested in the Paper that the strategy for consideration by Government would be to increase the ratio of investment in housing from the present 2 per cent to 8 per cent. It is not clear whether the increase in this ratio is to be contributed by public investment only. The Paper however, seems to indicate that public investment will, in fact, increase this ratio..

4. FINANCING OF PROPOSED HOUSING PROJECTS

The Secretary to the Treasury observes that the Malawi Housing Corporation Paper has made a number of references of possible financial sources. Financial savings, intermediated through institutions like the Post Office Savings Bank and other such financial intermediaries, have been invested in Government stock. These have increasingly contributed to Government's local resources requirements mainly for the development programme. The propositions in this connection, therefore,

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should be considered with extreme caution because increases in domestic credit has its own limitations and serious implications on external balances. At this stage, it is difficult to see a sizeable reduction in domestic credit to Government with the Development Budget increasing by the years.

The Ministry of Finance hold some reservations as to whether fiscal incentives will induce private sector investment in housing as recommended in the paper. However, the Ministry is prepared to examine these if it is established that this is a necessary pre-condition.

5. PROVISION OF CAPITAL TO M.H.C. FOR INFRASTRUCTURAL DEVELOPMENT

The Secretary to the Treasury has noted the Malawi Housing Corporation's suggestion as indicated in its paper to the effect that Government should provide capital to the Corporation as a grant for infrastructural development. He does not however, support this suggestion and would instead prefer that the pricing structure reflects the cost of borrowing for infrastructural development as these developments add value to land and this needs to be recouped at some stage.

6. ELIMINATION OF RENT SUBSIDY

The Secretary to the Treasury has noted need for considering the elimination of house rent subsidy granted to civil servants but he feels that the matter requires a detailed and careful examination of all its implications before the proposal is implemented.

Finally, the Secretary to the Treasury is convinced that the Malawi Housing Corporation Paper has provoked a lot of discussion judging from the number of comments made by various interested parties. He has therefore submitted his comments in the same spirit and is willing to participate in any further discussions on the matter in order to amplify on some of his points as well as add to what has not been covered in his submission.

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COMMENTS BY THE CHIEF HOUSING OFFICER ON MALAŴI HOUSING CORPORATION PROPOSED HOUSING POLICY PAPER FOR THE PERIOD 1978 TO 2000

(Comment No.6)

1. HOUSING REQUIREMENTS BASED ON EXISTING WAITING LISTS

While it is appreciated that there is a great demand for housing accommodation by urban population at all urban centres in this country and that there is need to increase the construction of housing units at all big urban centres in Malaŵi in order to cope with the growing demand for housing the public generally, it is considered that the annual figure for housing requirements as based on the current waiting lists maintained by Malaŵi Housing Corporation, appears to be somewhat exaggerated. Considering the fact that there is a tendency among individual members of the public to submit several applications for different types of housing accommodation on different occasions when one is in actual fact seeking to secure only one house, the possibility of inflating figures for the waiting lists through duplication of applications, cannot be ruled out. This being the case, the need for conducting a housing census as recommended by Malaŵi Housing Corporation, is strongly supported by this Section.

2. HOUSING NEEDS AND REQUIREMENTS

As the new housing policy as proposed by Malaŵi Housing Corporation aims at providing every urban family with a house by the year 2000, and in view of limited available financial resources at the disposal of the various organisations responsible for providing housing accommodation to the nation, it will be necessary to set minimum and low-cost housing standards which the majority of the working class will afford to acquire. This Section therefore agrees with the proposals submitted by the Malaŵi Housing Corporation in this respect.

3. FINANCING CONSTRUCTION OF HOUSES

In order to provide housing requirements for the country, Malaŵi Housing Corporation suggests five possible means of financing housing projects namely:

(i) Government to negotiate with monetary institutions in order to provide funds on loan to individual members of the public for construction of housing accommodation on long term loans;

(ii) Government to direct major employers in the country to introduce and encourage home ownership schemes through which employers would build houses for their employees and the latter would buy the houses through monthly instalment deductions from employees' salaries on loan term basis;

(iii) Raising of capital by government for construction of housing and infrastructural works by the issue of local registered stock and by authorising the Malawi Housing Corporation to market bonds directly;

(iv) Government to supply all the capital in the form of grant for technical infrastructural works such as roads, water supply, sewage system and electricity without any obligation on the part of the Malawi Housing Corporation to pay principal or interest. Government would ensure that Ministries and appropriate Authorities responsible for providing the above services were fully funded in order to provide for the required facilities.

(v) For the financing of housing and infrastructure in the rural areas, the Malawi Housing Corporation proposes that government would institute housing finance programmes which would be linked to agricultural and rural development projects. Decentralised credit institutions which could effectively reach households would be promoted. Government would lay down broad policy directives for the housing credit operations to be performed by institutions at district and village level.

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Apart from proposal 3(i) above, I feel that the rest of the above four proposals would not work as financial savings intermediated through all financial institutions in the country including Banks and Post Office Savings Banks, are geared to meet the requirements of the development programme for the country. This being the case and depending upon the willingness of both foreign and local monetary institutions to provide funds on long term loan-basis, only proposal 3 (i) would produce satisfactory results in providing funds for housing projects in the country. Accordingly, I [illegible] port the [illegible]wi Housing Corporation

4. HOUSING SUBSIDY AND ITS DISADVANTAGES

Judging from the four disadvantages as listed in the summary of policy proposals by Malawi Housing Corporation on page 5 of these series, I strongly support the proposal for the elimination of housing subsidy to civil servants. What government is now paying in subsidy, could be put into a revolving housing fund for individual housing loans. Such a revolving fund could in addition to the above purpose, be used to assist the majority of the civil servants in different ways whereas the present subsidy system is beneficial to a few civil servants who are lucky to secure government pool and institutional houses.

5. HOUSING STANDARDS

While it is appreciated that there should be some kind of uniformity in housing standards between houses built by different statutory organisations, I do not agree with the proposal made by Malawi Housing Corporation that housing standards and services provided by all institutions responsible for public housing be made mandatory. Since funds for construction of houses by different institutions are not provided from one source, there should be some kind of flexibility in house design. Standardised housing design might become monotonous and might not encourage individual enterprise - Soweto African township in South Africa is widely quoted as the most notorious example of standardised housing design.

6. MAINTENANCE OF HOUSES

The proposal that tenants should be responsible for maintenance of houses occupied by them on rental basis, would in my opinion prove difficult to implement unless the houses would be owned by the tenants in the final analysis. There would be no incentive in maintaining a house which one knows does not belong to him. In the circumstances, I would maintain that the maintenance of houses should remain the responsibility of the housing Authorities except for those houses under the home ownership schemes.

7. MANPOWER AND TRAINING

Although it is acceptable that trained personnel is a prime need in housing and infrastructure sector, this Housing Section does not feel that the setting up of degree courses can feature in the Housing Policy as this important requirement has already been taken care of by the appropriate Ministry.

8. THE HOUSING AUTHORITY

Considering the present high demand for housing in the country, especially in the urban areas, the proposal that the responsibility and authority for providing housing needs be vested in the Malaŵi Housing Corporation alone does not have the support of this Housing Section. The disparities in housing standards as mentioned by Malaŵi Housing Corporation in the proposed housing policy, can be ironed out if only standard designs are agreed upon. It is possible for the Corporation to undertake the provision of all government housing needs but I fail to see how the Corporation can co-ordinate the work and needs of private institutions in the country.

A.M. Chipendo
CHIEF HOUSING OFFICER

Office of the President & Cabinet
29th July, 1978

MAURITIUS

	PUBLIC SECTOR			PRIVATE SECTOR
MINISTRIES	HOUSING	FINANCE	SOCIAL SECURITY	INFORMAL
AGENCIES	CENTRAL HOUSING AUTHORITY	MAURITIUS HOUSING CORPORATION	SUGAR INDUSTR LABOUR WELFARE FUND.	INSURANCE COS
TARGET GROUP	DISASTER RELIEF 2 LOWEST INCOME	MEDDLE INCOME	AGRICULTURAL WORKERS.	ALL INCOME Groups.
DELIVERY	LAND & BUILDING	FINANCING. BUILDING.	LAND & BUILDING.	FINANCING BUILDING.

SHELTER
TRAINING
WORKSHOP
November 5-30, 1979

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MEXICO

DIAGNOSIS

The population of Mexico has registered an accelerated growth rate. At the beginning of this century, the country had 13,600,000 inhabitants, which is only slightly higher than the population of the metropolitan area of Mexico City today. According to estimates, this year the population of Mexico is 65,800,000 inhabitants.

In addition to this numerical change, there is another type of change in the population: inhabitants are rapidly becoming city dwellers rather than country dwellers.

The migration from the country to the city is one of the most important aspects of this phenomenon. Inhabitants in this country are settling more and more in cities, where they attempt to find jobs and services that they were unable to find in the rural environment. This migration process is aimed at a few urban centers - Mexico City in particular. Thirty per cent of the total population of Mexico City is made up of persons who migrated to the city.

Thus, while approximately 20 per cent of the population of Mexico is concentrated in the metropolitan area of Mexico City, 37.7 per cent of inhabitants live in over 95,000 towns with a population of less than 2,500 inhabitants. This situation reflects the two extremes that characterize the problem of human settlements: urban concentration and the scaterred rural population.

Towns with a population of between 50,000 and 1,000,000 inhabitants make up only 16.9 per cent of the population of the country. This means that there are not enough medium-sized population centers to allow for a more stable urban system.

Moreover, the geographical distribution of urban centers is also uneven. The majority of the inhabitants in the country and of productive activities are located on the plateau. Only 85 towns with over 15,000 inhabitants, which represent 29 per cent of the population living in this type of towns, are located at altitudes of under 500 meters above sea level, where there is a better supply of water and energy sources. There are 95 towns, however, located at altitudes of over 500 meters above sea level, which make up the remaining 71 per cent. Approximately 60 per cent of the population and 80 per cent of industrial

activities are located in the plateau, but only between parallels 18 and 22 (between Aguascalientes and Puebla) at altitudes of over 500 meters.

The shape of the current urban structure makes it difficult to effectively furnish services and infrastructure to support production, tap productive resources efficiently and improve the quality of life for the urban and rural population.

As of 1940, the accelerated urbanization rate was accompanied to a large extent by a sustained growth in economic activity. Support to import substitutions as a policy to promote the industrial development of the country led to the practice of furnishing equipment, infrastructure and services to those industrial centers offering an important development of their markets.

The distribution of public investments over the national territory shows a marked concentration of resources invested in the central plateau area. The metropolitan area of Mexico City, in particular, absorbs large amounts of public investment, aimed at areas such as furnishing and up-dating potable water systems, housing and the construction and expansion of transportation systems. Likewise, the size and location of markets fostered industrial growth and the growth of services in the metropolitan area of Mexico City. As a result of this phenomenon, in 1975 the Distrito Federal and the State of Mexico contributed almost 44 per cent of the gross national product of our country. In comparison, Nuevo Leon contributed 7 per cent, Varacruz 6.5 per cent and Jalisco 4.8 per cent; while on the other extreme, seven states contributed less than 1 per cent each.

The majority of human settlements in the country, the large cities in particular, share several characteristics such as an irregular use of the soil, speculation and the high cost of land; a lack equipment and infrastructure and problems in finding adequate housing facilities for a majority of the population.

There has also been a lack of planning agencies, integrated policies, of coordination among agencies and a limited framework of instruments, specially in the sphere of housing and urban land.

The installed capacity of equipment and infrastructure is concentrated in the large cities, and at times it is underused and subject to deterioration processes.

In 1970, thirty-five per cent of the urban population and 84 per cent of the rural population lacked potable water, while 57 per cent of the total population had no sewerage services. The demand for urban land totals over 17,000 hectares for the growth of cities, establishment of reserves and solving existing problems. The accumulated housing deficit has been estimated at a minimum of 2,300,000 units.

Estimates by the National Population Council show that if the current trend continues, with no family planning policy, the 65,800,000 inhabitants currently in the country will rise to 77,000,000 in 1982, and to almost 130,000,000 in the year 2000.

Likewise, if the current trend toward urban growth continues, the population will be concentrated in the three largest cities in the country (the metropolitan area of Mexico City, Guadalajara, and Monterrey), owed to the natural growth of their population and the migratory trends that will continue to increase the number of inhabitants, which should represent 29 per cent of the population of the country in 1982 and over 37 per cent (48.5 million inhabitants) in the year 2000.

The metropolitan area of Mexico City would continue to be the main attraction of migration, and it would therefore go from the 13,200,000 inhabitants it has currently to 16,500,000 in 1982 and approximately 35,000,000 in the year 2000. It is important to mention that this area is growing at an annual rate of 5.6 per cent, which represents a higher rate than any other city with a population of over five million inhabitants in the world. The cities of Guadalajara and Monterrey will also receive strong currents of migrators which, added to the natural increase in population, would bring their population to 2,800,000 and 2,400,000 in 1982, and to 7,200,000 and 6,700,000 in the year 2000, respectively.

This phenomenon would continue to restrict the growth of other cities; thus in the year 2000, there will only be another 10 cities (in addition to Mexico, Guadalajara and Monterrey) with populations of over one million inhabitants, which would represent only 12 per cent of the national total. There would also be a small number of medium-sized cities, housing approximately 22 per cent of the country's population.

The uneven geographical situation would continue to exist, since 62 per cent of the total inhabitants grouped in cities with more than 15,000 inhabitants would be living at altitudes of over one thousand meters and only 38 per cent of the cities of this size would be located at altitudes of

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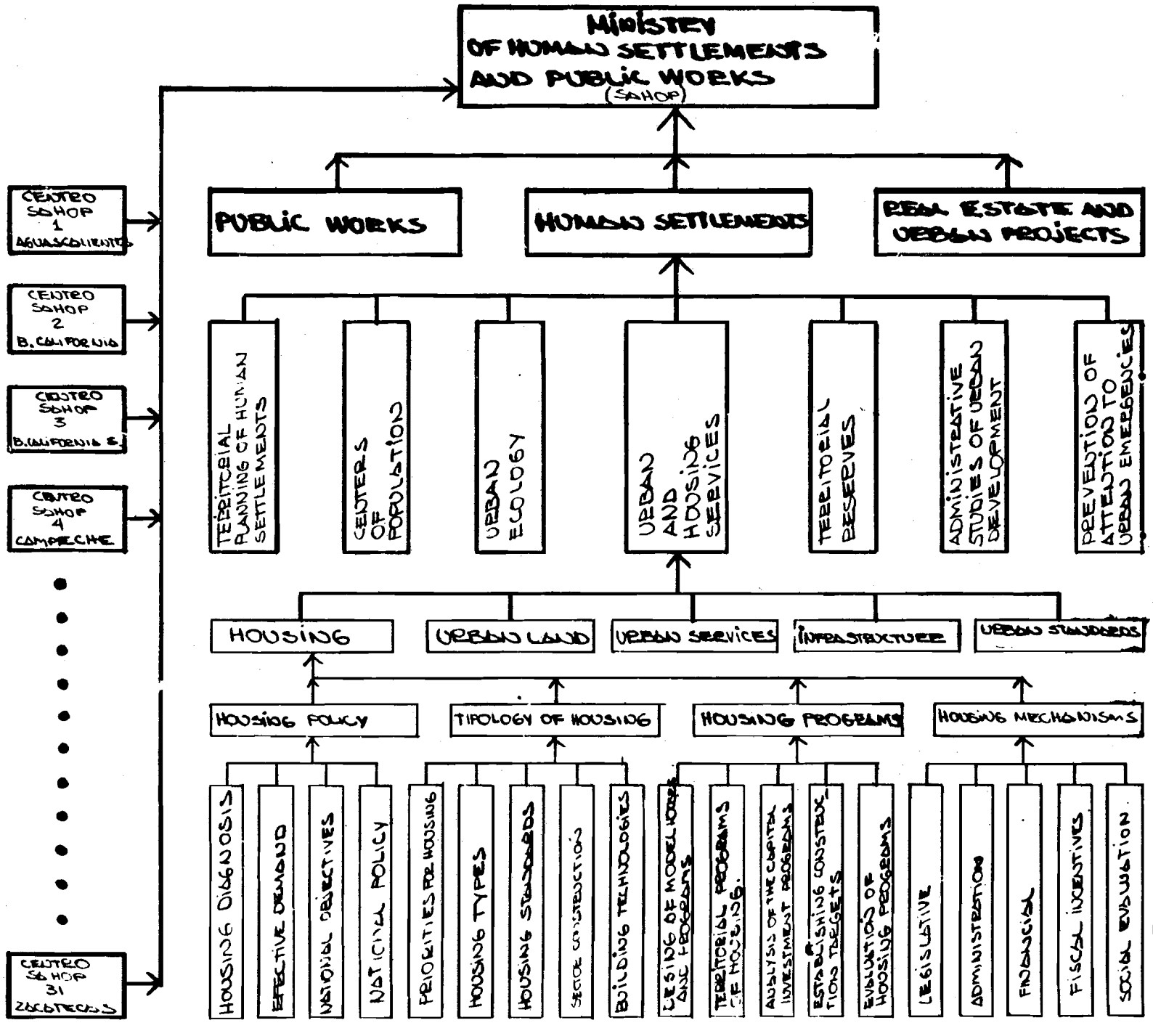
under one thousand meters, which is where resources abound.

Moreover, without proper planning, the inhabitants in rural villages will continue to suffer from a lack of services.

This is the forecast for a Mexico with a population of 130,000,000 inhabitants, no family planning and no rational plan for the use of its territory, in which current imbalances in the urban system would become worse.

MÉXICO



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MEXICO

MINISTRY OF HUMAN SETTLEMENTS AND PUBLIC WORKS.

ADMINISTRATIVE ORGANIZATION.

WITHIN THE LEGISLATIVE PROCESS CONCERNING HUMAN SETTLEMENTS ONE MORE STEP WAS TAKEN WITH THE ENACTMENT OF THE ORGANIC LAW OF THE FEDERAL PUBLIC ADMINISTRATION ON DECEMBER 24, 1976.
THIS LEGAL STRUCTURE ESTABLISHES THE ORGANIZATIONAL BASIS FOR THE CENTRALIZED AND STATE-AFFILIATED FEDERAL PUBLIC ADMINISTRATION, AND PROVIDES FOR THE GROUPING OF PUBLIC ENTITIES SO THAT THEIR RELATIONS WITH THE FEDERAL EXECUTIVE BRANCH MAY BE CARRIED OUT THROUGH THE STATE MINISTRIES OR THE APPROPRIATE ADMINISTRATIVE DEPARTMENTS FOR EACH ACTIVITY SECTOR OF THE FEDERAL GOVERNMENT.
AT THE FEDERAL LEVEL, THE MINISTRY OF HUMAN SETTLEMENTS AND PUBLIC WORKS HAS THE FOLLOWING RESPONSIBILITIES, INTER ALIA: TO FORMULATE AND DIRECT GENERAL POLICIES FOR HUMAN SETTLEMENTS IN THE NATION; TO PLAN DISTRIBUTION OF THE POPULATION AND THE STRUCTURING OF NATIONAL TERRITORY; TO PROMOTE COMMUNITY DEVELOPMENT; AND TO FORMULATE AND DIRECT HOUSING AND CITY PLANNING PROGRAMMES.
THIS MINISTRY OF STATE IS DIVIDED INTO THREE UNDERMINISTRIES: PUBLIC WORKS, REAL ESTATE AND URBAN PROJECTS, AND HUMAN SETTLEMENTS. THE UNDERMINISTRY OF HUMAN SETTLEMENTS HAS BEEN DIVIDED INTO SEVEN GENERAL ADMINISTRATIVE OFFICES; TERRITORIAL PLANNING OF HUMAN SETTLEMENTS, CENTERS OF POPULATION, URBAN ECOLOGY, URBAN AND HOUSING SERVICES, TERRITORIAL RESERVES, ADMINISTRATIVE STUDIES OF URBAN DEVELOPMENT, AND PREVENTION OF ATTENTION TO URBAN EMERGENCIES.
IN EACH OF THE 31 STATES OF MEXICO A CENTER FOR THE MINISTRY OF HUMAN SETTLEMENTS AND PUBLIC WORKS (CENTRO SAHOP) HAS BEEN ESTABLISHED AS A DECENTRALIZED ADMINISTRATIVE BODY, UNDER THE MINISTRY OF HUMAN SETTLEMENTS AND PUBLIC WORKS. THIS ADMINISTRATIVE BODY WAS GRANTED DECENTRALIZED JURISDICTION WITHIN THE TERRITORY OF EACH STATE, A BUDGET AND THE AUTHORITY TO CARRY OUT PROGRAMMES, IN ADDITION TO TECHNICAL AND HUMAN RESOURCES, BY THE MINISTRY OF HUMAN SETTLEMENTS AND PUBLIC WORKS.
IN ACCORDANCE WITH THE DIVISION INTO SECTORS OF THE FEDERAL PUBLIC ADMINISTRATION, THE HUMAN SETTLEMENTS SECTOR BRINGS TOGETHER 108 STATE-AFFILIATED ENTITIES, AMONG WHICH ARE THE NATIONAL INSTITUTE FOR COMMUNITY DEVELOPMENT AND LOW-INCOME HOUSING AND SEVERAL TRUSTS FOR THE CONSTRUCTION, ADMINISTRATION OR OPERATION OF URBAN PROJECTS.
IN 1977 THE NATIONAL COMMISSION FOR URBAN DEVELOPMENT WAS ESTABLISHED. ITS MAIN OBJECTIVE IS TO ACT AS AN INSTRUMENT OF COORDINATION, COMMUNICATION AND COLLABORATION AMONG THE VARIOUS BRANCHES AND ENTITIES WITHIN THE FEDERAL PUBLIC ADMINISTRATION SO THAT THE POLICIES OF HUMAN SETTLEMENTS WILL BE COMPATIBLE WITH OTHER SECTORAL POLICIES OF THE FEDERAL GOVERNMENT, AND TO PROMOTE IMPLEMENTATION OF THE NATIONAL URBAN DEVELOPMENT PLAN.
SIX COMMISSIONS FOR INTERSTATE CONURBATION HAVE BEEN ESTABLISHED, MADE UP OF REPRESENTATIVES FROM THE THREE GOVERNMENTAL LEVELS CONCERNED WITH ZONES DECLARED TO BE CONURBATIONS BY THE PRESIDENT OF MEXICO.
AT STATE AND MUNICIPAL LEVELS LOCAL PUBLIC ADMINISTRATION HAS STRENGTHENED ITS ADMINISTRATIVE ORGANIZATION SINCE LAWS FOR URBAN DEVELOPMENT WERE ENACTED. OTHER PUBLIC ENTITIES HAVE BEEN ESTABLISHED, SUCH AS: OFFICES FOR CITY PLANNING OR ITS EQUIVALENT, COMMISSIONS FOR COORDINATION AND CONSULTATION REGARDING URBAN PLANNING, MUNICIPAL COMMITTEES FOR URBAN DEVELOPMENT, MUNICIPAL COUNCILS FOR THE COORDINATION OF PROJECTS AND PUBLIC SERVICES, AND NEIGHBORHOOD COMMITTEES.

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MATRIZ DE FUNCIONAMIENTO DEL SUBSECTOR EN VIVIENDA MÉXICO

COORDINACIÓN DE:

SECRETARÍA DE HACIENDA Y CRÉDITO PÚBLICO
SECRETARÍA DE ASENTAMIENTOS HUMANOS Y PRESUPUESTO Y OBRAS PÚB.
SECRETARÍA DE ASENTAMIENTOS HUMANOS Y OBRAS PÚB.
SECRETARÍAS DE ESTADO

ORGANISMOS EJECUTIVOS

FUNCIONES	1. DGEUV	2. DGPT	3. DGRT	4. DGCP	5. DGEU	6. DGOMU	7. DGTA	8. BANOBRAS	9. FOVI	10. FOGA	11. FOVISSSTE	12. INDELO	13. INFONAVIT	14. ISSFAM	15. CODEUR	16. FICOTA	17. FIOSCER	18. PIDER	19. CUC	20. IVB	21. SIUAREDA	22. FOMEBREY	23. BANRURAL	24. BANFOVI	25. NACIFINSA	26. CORETT
PLANEACIÓN																										
OBJETIVOS DE VIVIENDA																										
POLÍTICA DE VIVIENDA																										
TIPOLOGÍA DE VIVIENDA																										
DEMANDA DE VIVIENDA																										
GRUPOS SOCIALES SEGÚN INGRESOS																										
DEMOGRAFÍA																										
DENSIDADES HABITACIONALES																										
COSTOS DE EDIFICACIÓN																										
COSTOS DE URBANIZACIÓN																										
CAPACIDAD INSTALADA / INDUSTRIA DE LA CONST.																										
MECANISMOS FINANCIEROS																										
INSTRUMENTOS LEGALES																										
INSTRUMENTOS ADMINISTRATIVOS																										
NORMAS DE EDIFICACIÓN																										
NORMAS DE URBANIZACIÓN																										
EVALUACIONES																										
PROGRAMACIÓN																										
PRIORIDADES TERRITORIALES																										
PRIORIDADES ECONÓMICAS																										
PRIORIDADES SOCIALES																										
METAS DE VIVIENDA																										
INVERSIONES / DISPONIBILIDAD DE RECURSOS																										
GENERACIÓN DE EMPLEOS / IMPACTOS																										
TECNOLOGÍAS ALTERNATIVAS																										
OTROS IMPACTOS ECONÓMICOS Y SOCIALES																										
FINANCIAMIENTO																										
FINANCIAMIENTO DE VIVIENDA																										
DISPONIBILIDAD DE SUELO PARA USO HABITACIONAL																										
BOLSA DE INVERSIÓN PARA LA VIVIENDA																										

REALIZADO POR:

ELABORACIÓN DE:

SÍMBOLOGÍA

- ■ COORDINACIÓN Y DECISIÓN
- ◪ PARTICIPACIÓN
- □ SIN RELACIÓN

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MÉXICO

GLOSARIO DE SIGLAS DE LOS ORGANISMOS EJECUTIVOS.

1. DGEUV — DIRECCIÓN GENERAL DE EQUIPAMIENTO URBANO Y VIVIENDA.
2. DGPT — DIRECCIÓN GENERAL DE PLANEACIÓN TERRITORIAL DE LOS ASENTAMIENTOS HUMANOS.
3. DGRT — DIRECCIÓN GENERAL DE RESERVAS TERRITORIALES.
4. DGCP — DIRECCIÓN GENERAL DE CENTROS DE POBLACIÓN.
5. DGEU — DIRECCIÓN GENERAL DE ECOLOGÍA URBANA.
6. DGOMU — DIRECCIÓN GENERAL DE OBRAS DE MEJORAMIENTO URBANO.
7. DGTA — DIRECCIÓN GENERAL DE TECNOLOGÍAS PARA LA AUTOCONSTRUCCIÓN.
8. BANOBRAS — BANCO NACIONAL DE OBRAS Y SERVICIOS PÚBLICOS S.A.
9. FOVI — FONDO DE OPERACIÓN Y DESCUENTOS BANCARIOS A LA VIVIENDA.
10. FOGA — FONDO DE GARANTÍA Y APOYO A LOS CRÉDITOS PARA LA VIVIENDA DE INTERÉS SOCIAL.
11. FOVISSSTE — FONDO DE VIVIENDA DEL INSTITUTO DE SEGURIDAD Y SERVICIOS SOCIALES PARA LOS TRABAJADORES DEL ESTADO.
12. INDECO — INSTITUTO NACIONAL PARA EL DESARROLLO DE LA COMUNIDAD Y DE LA VIVIENDA.
13. INFONAVIT — INSTITUTO DEL FONDO NACIONAL DE LA VIVIENDA PARA LOS TRABAJADORES.
14. ISSFAM — INSTITUTO DE SEGURIDAD SOCIAL PARA LAS FUERZAS ARMADAS MEXICANAS.
15. CODEUR — COMISIÓN PARA EL DESARROLLO URBANO.
16. FICUDIA — FIDEICOMISO PARA LA CONSTRUCCIÓN DE CASAS PARA OBREROS DE LA INDUSTRIA AZUCARERA.
17. FIDUCER — FIDEICOMISO PARA OBRAS SOCIALES A CAMPESINOS Y CAÑEROS DE ESCASOS RECURSOS.
18. PIDER — PROGRAMAS DE INVERSIONES PÚBLICAS PARA EL DESARROLLO RURAL.
19. CUC — CONVENIOS ÚNICOS DE COORDINACIÓN (FEDERACIÓN - ESTADO - MUNICIPIO).
20. IVE — INSTITUTOS DE VIVIENDA DE LOS ESTADOS (31).
21. SIDERSA — FIDEICOMISO SIDERÚRGICO LÁZARO CÁRDENAS.
22. FOMERREY — FONDO METROPOLITANO DE MONTERREY.
23. BANRURAL — BANCO NACIONAL DE CRÉDITO RURAL, S.A.
24. BANFOCO — BANCO NACIONAL DE FOMENTO COOPERATIVO, S.A. DE C.V.
25. NAFINSA — NACIONAL FINANCIERA S.A.
26. CORETT — COMISIÓN PARA LA REGULACIÓN DE LA TENENCIA DE LA TIERRA.

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national plan for urban development summary

GENERAL DIRECTION FOR THE TERRITORIAL PLANNING OF HUMAN SETTLEMENTS

Under-Direction General for the Planning of the National Urban Development

English Translation
by
Ana Flaschner

REGULATIVE LEVEL

Introduction

It is provided by the juridical frame on Human Settlements that the managements and regulations in this area shall be carried out through the Urban Development Plans, to be elaborated and issued, within the respective boundaries of competence of the three governmental branches. Accordingly, as stipulated in articules 4, 10, 11 and 14 of the General Law of Human Settlements, the Executive Branch acting through the Secretary of Human Settlements and Public Works in coordination with the National Commission for Urban Development, and the relative bodies and offices of the Federal Public Administration, proceeded to formulate the National Plan for Urban Development.

This Plan was submitted to a wide process of consultations with the Governments of the States, and with those public institutions directly involved in this field; and their reflections and suggestions were gathered and incorporated into the National Plan for Urban Development that was approved by the President, on May 12, 1978.

In the Presidential Decree issued in the *Diario Oficial* of May 19, 1978, the objectives and policies contained in it are duly set forth. The latter entail the bases through which the Federation will participate in the planning tasks of human settlements as well as in the regulation of Urban Development within the national territory.

At the same time, there is a listing of the fundaments and guidelines for the coordination, control and implementation of the actions to be taken by the government, including the handling of the investments needed, in order to achieve the objectives expected of the Plan. By virtue of the foregoing, in accordance with article 4 of the General Law of Human Settlements wich provides that the Plans shall be published in an abridged form in the official newspapers and other periodicals with a broader scope of circulation; a summary of the contents of the National Plan for Urban Development is hereby presented in four sections.

Fundaments for the Formulation of the Plan.

The National Plan for Urban Development is an integral part of the nation's overall planning of the country inasmuch as it is determined by its general development process. But, at the same time, it influences said development, for it becomes the element of its geographical expression.

At present, the true function of the Urban Development is to support the economic development, thus, the National Plan for Urban Development shall provide alternate solutions to the demands arising from the location of the actions claimed by the various sectors, besides contemplating those considered as mobiles which must be, therefore, circumscribed within the outlines of the Plan.

The Urban Development Planning has been registered within the economic development planning, as an element that fosters the achievement of National objectives while it is fed back with planning policies from the various sectors.

The solution of the urban problem calls for a full and extensive regional development. For it deals not only with economic and social integration. Consequently, the Plan can be placed within the Regional Development policy, besides its position in relation to the planning at National Level.

Characteristics and fundaments for the formulation of the Plan.

8

- It shall be mandatory for the public sector to take into consideration the objectives and policies set forth by the National Plan of Urban Development, while each office of entity defines its investment actions and projects converging with the urban development.

- In case of actions and investments not foreseen in the objectives and policies of the Plan, which are, however, duly justified by economic and social planning guidelines, and are considered at the moment to be of greater urgency or of higher priority, the decision shall rely upon the evaluations of cost and benefits of the corresponding projects.

- In accordance with the powers conferred by the General Law of Human Settlements to the Secretary for Human Settlements and Public Works, the Secretaries for Programming and Budget and of Finance and Public Credit shall assist, within the scope of their respective competence, to the implementation and evaluation of the Plan.

- The Master Coordinating Agreements shall become the instrumentations through which the Federation and the States shall regulate the decisions taken regarding urban development.

- The programatic mechanisms already existing in the States as well as the Promotional Committees for the Socio-Economic Development of the Entities (Coprodes), shall be used, as a forum for exchanging opinions and information. And the corresponding propositions shall be either presented or requested.

- In each State, the Secretary for Human Settlements and Public Works, as a member of these committees, shall provide technical advise in the field of urban development, in order to fulfill the National Plan for Urban Development, and, when applicable, to facilitate its updating.

- The objectives and policies set forth by the Plan shall be taken into consideration in the excercise of the administrative powers for the granting of concessions, permits, licences and the like.

- The joint-action programs pertaining the Plan, shall be formulated in accordance with the regulations issued by the President of the Republic; they shall be integrated into the existing programmation and budgetary mechanisms, with the participation of the respective sectorial coordinators, in conformity with the atributions conferred to them by law.

- Finally, it is established that amendments of the general principles of the Plan, shall be made possible, when it is the case, every two years starting from December 1st, 1978. The budget and programmation derivated from the Plan shall be prepared annually, following the procedures set forth by the regulations in force.

Diagnosis

The population of Mexico has an accelerated growth index. The volume of inhabitants of the whole country, at the beginning of this century, was the same that the one shown today by the metropolitan area of Mexico City. According to estimates, the population of the country reaches today, 65.8 million inhabitants.

The population is quickly changing from rural into urban, while the inhabitants of the country concentrate themselves in rather few urban centers. Mexico City emerges as the most sought after place, with its population including 30% of immigrants.

Approximately 20% of the Mexicans are concentrated in the metropolitan area of Mexico City, and 37.7 in more than 95 thousand localities with less than 2.500 inhabitants, while 16.9% concentrate themselves in local cities of 50 thousand up to a million inhabitants. Thus displaying the extremes of the problem: urban concentration and dispersion of the rural population as well as an insufficient number of medium size population centers.

The geographical distribution of the population centers also discloses a lack of equilibrium; inhabitants as well as productive activities are located in the high plateau, while the natural resources are to be found in greater quantities, below the cota of 500 meters above sea level. An unbalanced condition can also be appreciated in the plateau, for only between the 18th and 22nd parallels (that is between Aguascalientes and Puebla), 60% of the population as well as 80% of the industry are concentrated.

The shortcomings in the distribution of the economic activities bring forth, among other things, that the 44% of the gross domestic product of the country should be generated in the Federal District and the State of Mexico, while there are states which produce less than 1%.

10 The unbalance in the urban structure of the country reflects itself, internally, in the population centers, bringing about the disarticulation of the policies which provide infrastructure, housing and urban soil settings as well as the mishandling of the already existing services, thus converging all the aforementioned factors in the bad quality of life of the urban population.

Prognosis

According to estimates of the National Population Council, Mexico's present population of 65.8 million will grow to 77 million in 1982 and to 130 million in the year 2000, given present trends and without family planning policy.

Likewise, if this urban growth trends continue the same way, the concentration in the three biggest cities of the country shall prevail, the metropolitan area of Mexico City from 13.2 million today will go up to 16.5 in 1980 and 35 million by the year 2000; Guadalajara and Monterrey shall increase their population in 1982 to 2.8 and 2.4 millions and by the year 2000 to 7.2 and 6.7 million inhabitants, respectively.

With this, the inadequate geographical distribution of the population and the economical activities, could aggravate the already existing unbalances of our urban system.

Objectives

As an answer to the foregoing Diagnosis and Prognosis, the long term objectives of the National Plan for Urban Development are defined below:

- To rationalize the distribution of the economic activities and the population throughout the national territory, locating them in the country's areas of greatest potential.

- To promote the integral and well balanced urban development in the population centers.

- To propiciate favorable conditions, so that the populations may solve its needs of urban land, housing, public services, infrastructure and urban equipment; and

- To improve and preserve the environment shaped by the human settlements.

Policies

In order to attain the above mentioned objectives, three normative levels are set forth:

- Policies on territorial organization to meet inter-urban problems, both of regional and national character.

- Policies on urban development for population centers, applicable, internally, to each locality.

- Policies related to the elements, components and actions of the human settlements sector, for satisfaying the demands in this field.

The application of these policies shall be carried out in accordance with the geographical priorities indicated in the corresponding tables.

Policies on Territorial Organization.

In this subject, the Plan proposes to organize and regulate the urban structure of the country, as set forth by the long range objectives.

The goals proposed by the National Family Planning have been adopted. According to them, if the annual demographic growth index is reduced

from 3.2% in 1976 to 2.5% in 1982, up to about 1% by the year 2000 the country would have 104 million inhabitants approximately.

The rational distribution of these 104 million inhabitants implies the decrease in the growth of the metropolitan area of Mexico City, in order to avoid this figure exceeding the 20 million. Within this frame, Guadalajara and Monterrey would oscillate between 3 and 5 million people each, and there would also be other 11 cities with more than one million inhabitants. Likewise, there would exist 17 cities of 500 thousand to one million inhabitants and 74 towns with 100 thousand to 500 thousand.

For attaining the above, the Plan advises the layout of the National Urban System which would represent the basic structure of the territory, and would be shaped by various integrated urban systems, starting from cities with regional services to support the development of its areas of influence, in which there would also be a wide range of localities of different sizes, including scattered rural settlements.

The policies proposed by the Plan to orientating the organization of the territory and the distribution of the population are as follows:

- To discourage the growth of the metropolitan area of Mexico City.
- To promote the industrial deconcentration as well as that of public services and other activities conducted by the private sector, orienting them towards priority areas.
- To foster the development of cities with regional services and those of medium size with potential of economic and social development.
- To promote the development of the transportation systems and inter-urban communication systems as elements in the organization of the national territory, and
- To stimulate the integration and development of centers of support for the scattered rural population.

Policies on Urban Development for Population Centers.

Concerning the population centers, the National Plan for Urban Development is oriented, fundamentally, towards the coordination of the activities

related to federal, state and municipal urban planning which shall bring forth, consequently, the formulation by the local authorities of the Plans for the urban development of those centers pointed out as having priority. The main instrument of coordination is constituted, in this case, by the urban outlines of federal action.

Said coordination shall be based on a series of policies gathered under the following concepts:

Promotional Policies

These area the ones considered as indispensable by the development strategy. They can be applied to the urban centers and rural systems to ensure the achievement of the spatial organization objectives. These policies imply the concentration of great part of the resources allocated to urban development in a reduced number of population centers for the organization of the territory assuring thereby, an effective growth simulation.

The effectiveness of these policies is directly bound to this application of consolidative as well as organization and regulative policies in other centers of the country.

Consolidative Policies

These shall be enforced in those centers whose development level, at present, calls only for the organization of its basic structure, in such a manner as to prevent probable negative effects of concentration without affecting their current dynamics. Such policies could absorb internally the potential of their development process.

Organizational and Regulative Policies

Complementary to the consolidative policies these organizational and regulative policies imply a decrease in the current growth rythm of certain urban centers, in which concentration has already been fostering acute problems of congestion and socio-economical inefficency.

Specific Policies for Rural Population Centers

Regarding the systems of rural population centers, sponsorship and strenghthening policies shall be enforced, taking into consideration the specific features of the rural milieu.

Policies related to the elements, components and actions of the Human Settlements sector

With regard to the policies for the organization of the territory and urban development of population centers, the Human Settlement sector shall promote actions concerning: land reserves for human settlements, urban land, housing, urban equipment, infra—structure and urban services, urban ecology, prevention and attention of urban emergencies, and the participation of the community in the Urban Development.

The policies for these areas are listed below:

- To ensure the purchase of the land reserves for Federal usage, in keeping with the Law as well as with long and medium term Federal programs and actions.

- To provide technical support to the states for the preparation of studies on their needs for building up land reserves.

- To formulate guidelines for the purchase, alienation, and, where applicable, the earmarking of Federal land reserves for implementing the Government's programs.

- To provide tecnical advise to the states and municipios for stipulating the uses and purposes of the land in their urban development plans.

- To broaden the alternatives of access to urban land to lowincome and non—salaried population.

- To broaden the possibilities of access to low—income housing such as programs of greater social scope that would stimulate the participation of the population in actions for progressive and improved housing.

- To strenghthen the personal construction of housing through technical advise, support programs to the adaptation of instruments, and standards.

- To standarize the use of appropiate technology, at a low cost and with a high labor absorption index in the building of housing and production of its materials for public—sector programs.

- To orientate the loans earmarked for housing through mechanisms that will stimulate the building of housing for social welfare purposes and housing actions aimed at the low—income sectors.

- To take advantage to a maximum point of yield of the existing equipment, infra—structure and urban services, avoiding its mishandling.

- To support those prioritary population areas and centers, with new equipment, infra—structure and urban services by optimizing their location, and adjusting them to the population's needs, seeking to forsee the demand.

- To foster the supply of equipment for education, health and welfare, so that it will support the integration of systems which would be set up, in accordance with a hierarchical structure in the territory in which their elements are complementary.

- To propiciate the recycling of urban wastes.

- To ensure that the economic and social costs of pollution and environmental deterioration are borne by the sources producing them.

- To promote the establishment of standards seeking the harmony between spaces, uses and structures as well as the natural settings of the population centers.

- To provide technical advise to local authorities in the establishment of restrictions on factors that pollute or deteriorate the milieu whether of physical, chemical, visual or hearing origin.

- To determine the vulnerability of existing human settlements with greater risks of facing disaster and to recommend feasible preventive means.

- To contribute to mitigating the effects of inforeseen events, cataclysms, emergencies and urban disasters, and to see to it that normal activities are re—established, insofar as possible.

- To foster urban development in safe areas and to supervising that of vulnerable areas in existing human settlements, as well as in those new ones to be established.

- To advise, at the request of the states and municipal authorities, on forms of community organization that encourage civil participation in the execution of the actions pertaining urban development, the evaluation of the problems affecting the community, and determining the formulation that shall help to solve them.

- To encourage the gathering of opinions and suggestions regarding the National Plan for Urban Development, from all the sectors of the country, and to establish the mechanisms for obtaining and evaluating them in subsequent versions.

Priority Areas and Population Centers

There are a large number of needs associated with urban development that cannot all be met at the same time. It is therefore, necessary to assign preferences in the allocation of the resources earmarked for this purpose.

Consequently, a group of priority areas and population centers has been established in order to be proveded with support before others, so as to attaining the objectives and policies of the Plan.

Ten areas have been so chosen for the following reasons; their capacity for population absorption, their location with regard to natural resources, and the favorable outlock for their ability to generate jobs. As a factor of the accelerated development of the various economic sectors in said areas. The Plan also defines three areas that should undergo organizational and regulative policies, due to their growth features. Likewise, it establishes the population centers in which the regional services shall be concentrated.

The Plan sets forth promotional, consolidative and organizational and regulative policies for priority centers, to be taken into consideration by state and municipal authorities while formulating urban development plans.

In the process of reviewing the updating the National Plan for Urban Development, the priorities to be set forth, in due course, by the Plans for Urban Development of the States, shall be given consideration with respect to the rest of the population centers (see annexed table).

The rural systems belonging to the following areas shall be promoted:

Los Mochis, Mazatlan, Tarahumara, Durango—Santiago Papasquiaro, Carbonifera del Rio Escondido, Nayarit, Norther Jalisco, Manzanillo, the

Bajio, the Toluca Valley. The Puebla—Iguala Corridor, Poza Rica—Tuxpan, Chicontepec, Cordoba—Zongolica—Orizaba, Lazaro Cardenas, Tierra Caliente, the Isthmus, Puerto Angel, Puerto Escondido, and the new ejido—population centers in the Ukum and Edzna Valleys.

Consolidative policies shall be applied to the rural systems belonging to the following areas: Mexicali Valley, Tijuana Valley, Ensenada Valley, Yaqui—El Mayo Valley, Mulege—Comondu, La Laguna, Reynosa—Matamoros, Nuevo Laredo, Ciudad Victoria—El Mante, Cuautla—Cuernavaca, Tlaxcala, The Mountain Range of Guerrero (Tlapa), the Costa Chica of Guerrero (Ometepec), the Mixteca area of Oaxaca and Guerrero, the Lacandonian Jungle—heights of Chiapas, Soconusco, Mixe and Merida.

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JOINT SECTORIAL RESPONSABILITY

Programs

In order to ensure that its main purposes are fulfilled, the Plan establishes, from a strategic standpoint, the need of introducing and developing programs of various kinds which are grouped under the following heading, as per their nature, objectives, and administrative mechanisms, and according to which they will be structured and carried out.

a) Joint--action programs.
b) Support programs for sectorial priorities, to deal with the policies for the territorial organization.
c) Programs to be agreed upon with the Governments of the States, regarding the urban development of their population centers;
d) Five - year program for the Human Settlements Sector 1978 - 1982, related to the instrumentation and fulfillment of the direct sector actions.

A) The joint—action programs are born out of the necessity of creating programmatic mechanisms that shall deal with the specific problems arising from the urban development of the country, and wich require a multisectorial participation. This programs shall be operated on the basis of specific regulations from the President, within the framework set up by the Secretary of Programming and Budget;

- Federal Public Administration Program for Territorial Deconcentration.
- Incentive Program for the Territorial Deconcentration of Industrial activities.
- Integration Program of Regional Urban Services.
- Interurban Liaison Systems Program.
- Program for the Supply of Concentrated Rural Services.
- Program for the utilization, preservation, development and regeneration of Natural Resources involved with Human Settlements.

B) The programs of support for sectorial priorities are aimed at backing up with infra—structure and urban equipment, the localities where activities considered as prioritarian by the various sectors of the Federal Public Administration are located.

These programs are:

- Infrastructure Program for Fishing Communities.
- Infrastructure Program for Turism Centers.

- Infrastructure Program for the Support of Energy Resources.
- Infrastructure Program for Prioritarian Industrial Centers and Support of Industrial Ports.
- Marketing Equipment Program.

C) The purpose of the programs to be agreed upon with the Governments of the States is to provide the bases by which the Federal and States actions should be coherent and would foster the integral urban development of the population centers.

These programs are:

- Urban Development Programs for Population Centers (with specific promotional, consolidative and organizational and regulative modalities).
- Program for the Integration of Rural Population Centers.
- New Population Centers Program.

D) Regarding the Five—Year Program of the Human Settlements Sector 1978—1982, it covers the actions that the Secretary for Human Settlements and Public Works shall execute jointly with the other bodies that integrate this sector, within the frame of the Organic Law of the Federal Public Administration.

The most important measures that have been programmed are oriented towards providing the basic infra—structure for the development of population centers, namely, potable water supply and sewerage, roads, urban equipment and housing, among other elements.

These programs are:

- Human Settlements Planning Program.
- Urban Land and Real Estate Program.
- Administration and Support Program.
- Potable Water and Sewerage Program.
- Industrial Cities Program.
- Infra—structure and Urban Roads Program.
- Progressive Housing Program.
- Housing Renovation Program.
- Completed Housing Program.
- Cultural Equipment Program.
- Public Services Equipment Program.
- Recreational and Sports Equipment Program.
- Community Participation and Development Program.

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STRATEGIC LEVEL

Obligations

The implementation of the National Plan for Urban Development requires that the proposed policies presuposses the obligation of expressing how, in terms of time, funds and instrumentation means, the various sectors of the Public Administration will direct their actions towards that end.

The obligations lead to consecutive and linked decisions that will enable the channeling of funds to priority areas, to discouraging the growth of the Conurban Zone of the center of the country, and to increasing the access to services on the part of the rural population.

Investments to be made by the sectors of the Federal Public Administration during 1978--1982, fully agree with the short and medium—term policies and strategies set forth by the National Plan for Urban Development in channeling, to an important extent, the funds towards the prioritarian areas earmarked in it.

The sectorial actions tender preference to the Conurban Area of the Mouth of the Panuco River and the Huasteca Potosina; the Coastal Zone of Southern Sonora and Northern Sinaloa, the Conurban Zone of the Mouth of the Ameca River; the Conurban Zone of Manzanillo—Barra de Navidad; and the Conurban Zone of the Mouth of the Balsas River and the Guerrero Coast.

The investments are allocated mainly to irrigation, fishing, oil and petrochemicals, electricity, steel—mills, fertilizers, turism, roads and airports.

Funding and Goals 1976—1982

The enforcement of the policies set forth by the National Plan for Urban Development, rests mainly, in the channeling of the funds belonging to the Human Settlements Sector into Human Settlements Planning Programs; potable water and sewerage; housing, land and real estate; urbanization; industrial cities; cultural, recreational and public—services facilities; participation of the community in urban development highways and airports; the latter in accordance with the Communications and Transportation Sector.

The public expenditure stipulated by the Public Sector Action Program for 1978—1982 for the aforementioned sectors amounts to 161 billion pesos. From this amount, 91 billion will be allocated to the Human Settlements Sector, and 70 billion will be allocated to the Communications and

Transportation Sector for the building of highways and airports. These ciphers constitute an initial frame of reference and they shall undergo annual perusals as provided by the Public—Sector Programming System.

An important part of the programmed investment shall be allocated to the prioritarian areas referred to in the National Plan for Urban Development, and special attention shall be given to the Coastal Zones of the Gulf and Isthmus of Tehuantepec, the Conurban Area of the Mouth of the Panuco River and the Huasteca Potosina, the bordering strip of Baja California as well as the Bajio area.

On the other hand, said funds shall be channelized, in a significative way, to federative entities having the best possibilities of contributing to the economic development of the country and to attracting the migrating population, particularly that in which the actions of other sectors coincide. The states of Veracruz, Tamaulipas, Sonora, Sinaloa, Guerrero, Oaxaca, Michoacan, Guanajuato, Jalisco and Colima shall absorbe a large part of the multisectorial effort.

The goals for the five—year period 1978—1982 cover the provision and improvement of housing for 789 thousand families, potable water for 6.14 millions inhabitants and sewerage for 3.62 million as well as the construction of 3,800 kms. trunk—roads network, 63,700 kms. of feeding and arterial—roads networks, slightly over 250 kms, of urban highways and the construction and maintainance of 52 airports.

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LEGAL INSTRUMENTS

Decision for the Formulation of the Territorial Deconcentration Program of the Federal Public Administration

On January 16, 1978, the President of the Republic approved the Territorial Deconcentration Program of the Federal Administration, thus instrumenting the mechanisms for its formulation and operation. The Program presupposes the re—location in various cities of the Republic, of those governmental decentralized and stately administrative units whose functions and actions should not necessarily be carried out at the Metropolitan area of Mexico City. This is aimed at the strengthening of the federal structure and to achieve a better balance in the distribution of the population in the National Territory.

By Presidential Decree, the Secretary for Human Settlements is responsible for preparing the National Program for the Territorial Deconcentration by the Federal Public Administration. In collaboration with the Secretary of Programming and Budget and the Office for the Coordination of Administrative Studies of the President's Offices, it will integrate the studies and diagnosis now being carried out by the public organizations so as to plan their own deconcentration. This integration shall be enriched with the opinions of the sector Coordinators, so that the draft Program may be delivered to the President within the time limit set by the Decree.

Master Coordinating Agreements with the States

The Master Coordinating Agreements between the Federal Government and the States reached at the beginning of the present administration for increasing the States' investment capacity, are true instruments for orienting and channeling the actions of the Federation and the local governments.

The actions and investments in the field of Human Settlements proposed by the Plan are contained in a document of the Master Agreement entitled: "Programatic Obligations of the Human Settlement Sector".

This instrument will make it possible to bring state and municipal plans for urban development and those of the population centers and the conurban zones into conformance with the National Plan; to provide technical advise to state and municipal authorities; to sucessfully carry out the organizational and regulative actions in the field to Human Settlements in each entity; and, to rationally apply federal and states' investments.

Other instruments may also be agreed upon with the states and municipios for facilitating the planning endeavors. The National Plan for Urban Development includes two of them: Urban Schemes for Federal Action and Common—Planning Bases for Population Centers.

The function of the Urban Schemes for Federal Action is to integrate the planning system for the population centers, in accordance with the group of integrated actions to be implemented by the federal bodies, in the process of changing and developing these centers.

With regard to the Common--Planning Bases for Population Centers their objective is to support the States and Municipios on technical questions that may arise during the planning of population centers.

Decree approving the National Plan for Urban Development

In order to legaly formalize the application of the National Plan for Urban Development, a Presidential Decree was issued approving the Plans as a ruling instrument by which the Federal Governments shall participate with the States and Municipios in organizing and regulating the Human Settlements within the country, an it is stipulated that it is obliging for the Federal—Public Sector to fulfill its measures.

Included in the above decree are de Plans objectives, the main policies set up for its operativeness, through joint actions with other sectors of the Federal Public Administration and local authorities, as accorded in the Master Coordinating Agreements between the Federal Governments and the States. In order to ensure that the Plan will be carried out, the Decree provides, among other important issues, that the Secretary of Programming and Budget shall take into account the Plan's objectives and policies while preparing the program of the Federal Public Expenditure and the Draft Expenditures Budget of the Federal Government, in accordance with the national, sectorial as well as regional economic and social development plans.

The same Secretary shall compatibly allocate the funds for current expenditure and federal public investments authorizations, except in duly justified instances, with the provisions of the Plan. It is also stipulated that the Secretary of the Treasury and Public Credit shall take the appropriate measures in the fields of credit and fiscal policies, and in the formulation of the Public Sector Financial Program, on the bases of which the public debt will be administered, for the purpose of achieving the proper congruence with the Plan's measures.

It is likewise provided that the Federal Public Administration bodies that are empowered to grant permits, licences, and concessions connected with the implementation of actions related to the subjects covered by the Plan, shall verify, prior to heir issuance, that such activities or works are in conformity with the Plan.

Finally, the Decree itself provides that amendments to the Plan and its disemmination shall be implemented, in a formal manner, through the Records Unit established for this purpose, and which shall have the following functions:

I. Keeping the Record of the Plan;
II. To register the amendments to the Plan;
III. To provide information on the Plan to any interested party;
IV. To disemminate the Plan's contents, and
V. Any other functions assigned or indicated by other legal provisions or by the Secretary for Human Settlements and Public Works.

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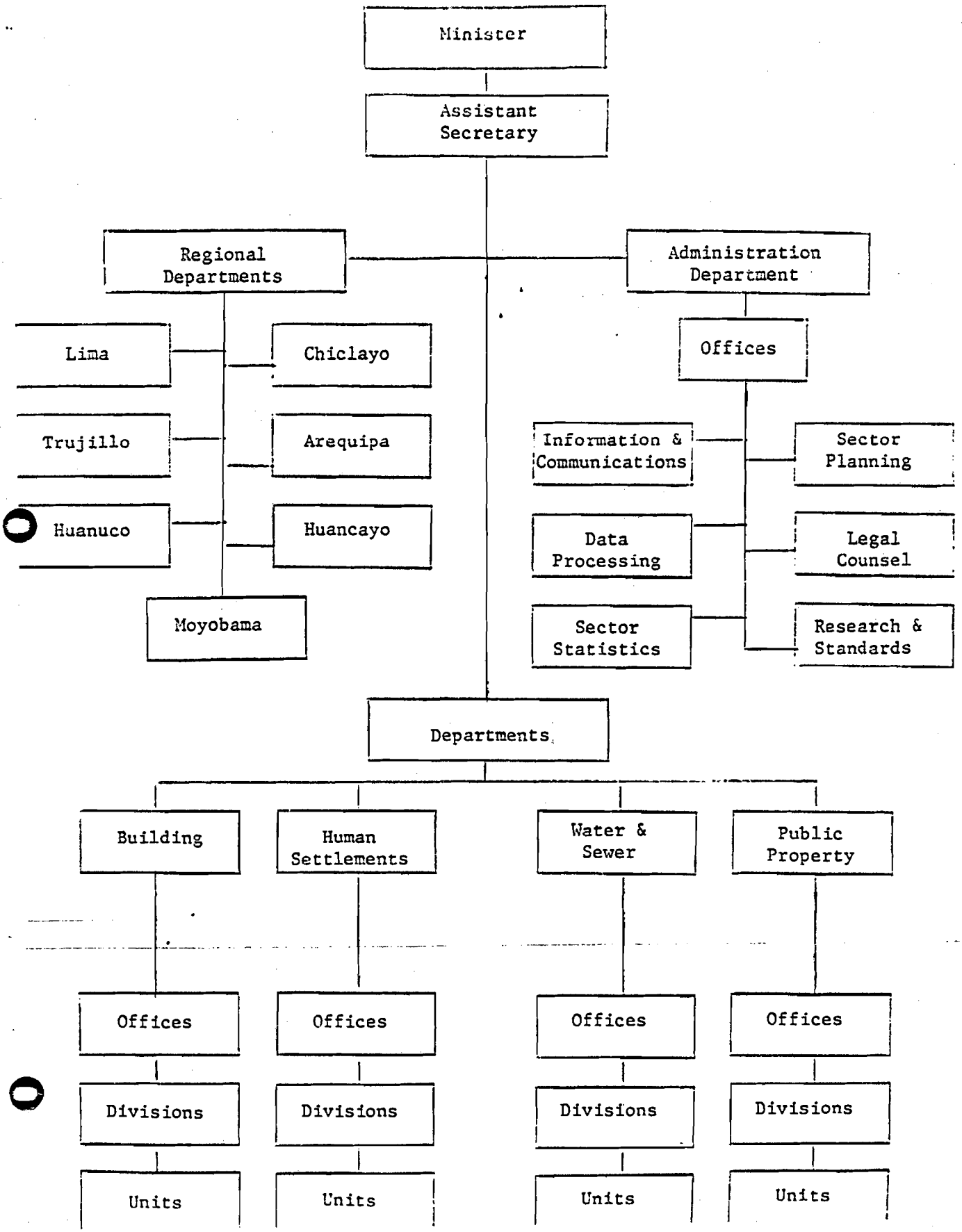
MINISTRY OF HOUSING AND CONSTRUCTION



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THE PHILIPPINES

FACTS AND FIGURES

1. Location:

The Philippines, an archipelago of 7,100 islands, is 966 kilometers or 600 miles off the southeast coast of Asia.

2. Area:

The land area is approximately 300,000 square kilometers or 30 million hectares. The greatest length north to south is 1,861 km., and the gretest breadth east to west is 1,107 km.

There are two pronounced seasons, the dry season and the wet season. The dry season generally runs from November to April until the wet season occurs during the rest of the year. Temperature ranges from around a low of 21°c in June.

4. Physical Constraints:

The entire region is exposed to typhoons. But it is the northern part of the archipelags which frequently gets the more devastating storms.

The Philippines is also a country prone to earthquakes. The country is rocked on the average by one perceptible earthquake every two days and many now tremors that are too week to be felt by persons but are strong enough to be picked up by seismographs.

5. Population (1975):

Total - 41 Million

Urban - 31.8%
Rural - 68.2%

Density - 142 persons / square kilometer
Rate of Browth - 2.66% (1903 to 1975)

6. Political Situation. Division and Subdivisions:

Martial law was declared in 1972 and is still in force. The Philippines, however, is not under a military regime. Policy-making is vested on the President and Prime Minister and his Cabinet. The legislative function is with the Enterim National Assembly and the President.

The Philippines is composed of three major island groups: Lyzor, Visayas and Mindanao which is turn are devided into regions and provinces; the provinces into cities, municipalities and municipal districts; and the municipalities or municipal districts into barries. The smallest political units formerly called barriea were deceased barangays by Presidential secrie No.557 approved on September 21, 1974 to enable the people to participate more actively in government affairs under the new society.

Office of Housing
Agency for International Development

SHELTER TRAINING WORKSHOP

November 5-30, 1979

Philippines

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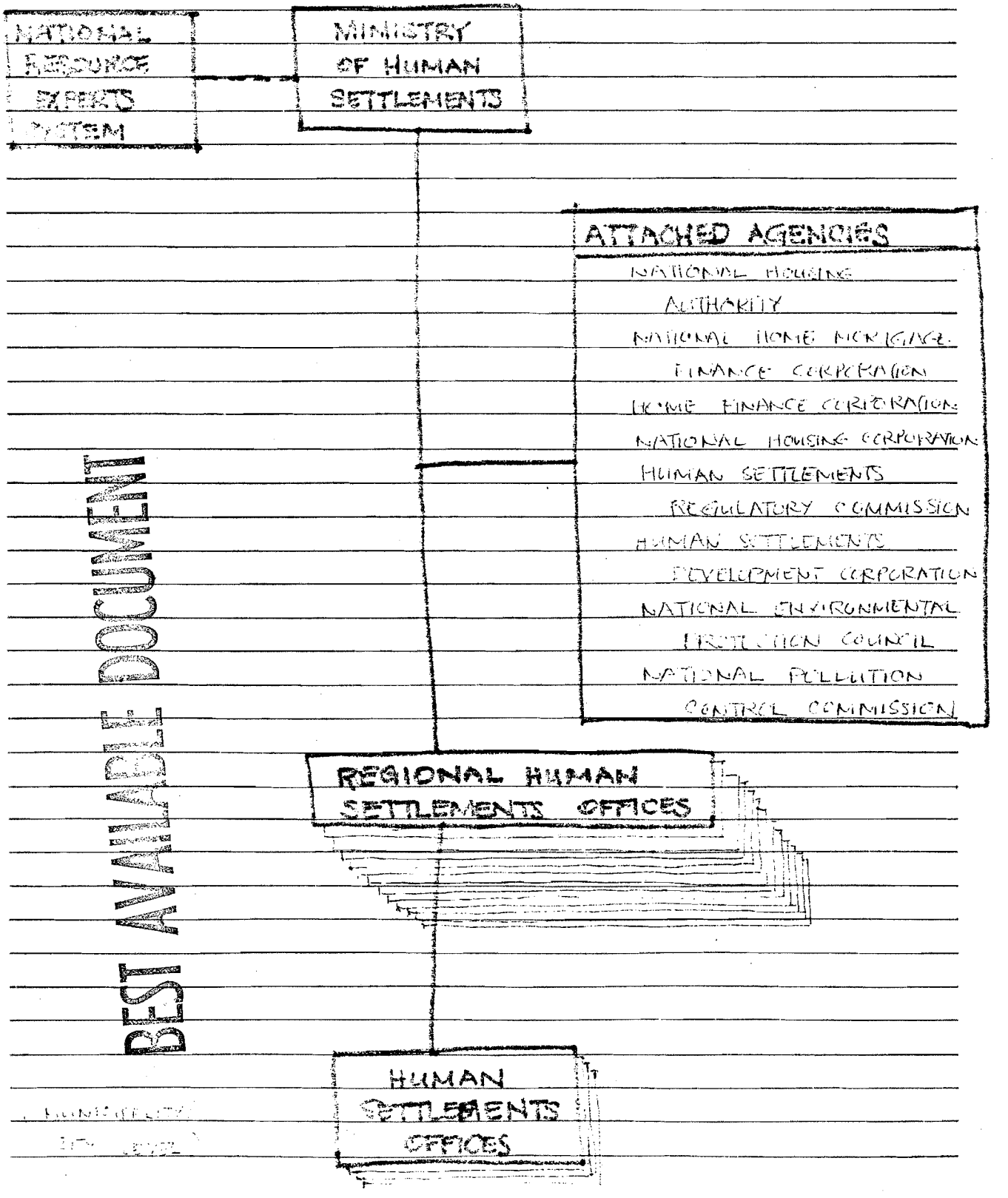

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SHELTER
TRAINING
WORKSHOP

November 5-30, 1979

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ACTUAL HOUSING PROJECT DATA SHEET:

NAME OF PARTICIPANT T. SIBUCAO & E. N. RARALIO

NAME OF COUNTRY PHILIPPINES

This form should provide information on one housing project recently constructed which was designed for low-income people. The information will be used during the Shelter Training Workshop in a participant study exercise.

1. General Information

a. Name of the project: Purok Madera Imelda

b. Location of the project (city): Tadlak, Los Baños, Laguna

c. Year of construction: March- June 1979

d. Number of units in project by size (square meters):

No. of Units	Size (in m^2)
77	40 m^2

e. Annual income range of households in project area:

Lowest: ₱ 150.00/Household Highest: ₱ 1,000/household

f. If possible, indicate what percentage of households in the city where the project is located have an annual income higher than the average income of households in the project.

[illegible] %

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g. What is the average number of persons per household?

five (5)

h. What is the average population density in the project?

50 / ha.

2. Housing Finance Terms

a. List the monthly payments required by each house type (listed in Item 1d above).

Size of Unit	Monthly Payment
40 m^2	1 fish a day (1/2kg) at P.V. ₱ 4/day

b. If the housing units were sold, List:

(1) Sales price of the unit by size: 5,475 fishes or 2,737.50 kgs. of fish or ₱ 21,900 at present present value of fish*

(2) Downpayment required as a percent of sales price:

NONE %

(3) Loan (mortgage) amount as a percent of sales price:

100 % %

(4) Annual interest on the mortgage loan in percent:

None. However, inflation or changes in PRices of fish could be expected to cause a 9% -12% pa. a increase in the value of collection %

(5) The number of years for mortgage loan payment:

15 years

* value of fish at period of turn over was set at ₱ 8.00/kg.

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3. Unit Cost Data on Project

a. What was the total size of the project in square meters?

approx. 70,000 m^2

b. What was the average cost per square meter for the raw land (total project site raw land cost divided by number of square meters):

about ₱ .71/m^2 pro-rated

c. What was the total cost for on-site infrastructure (grading, water, sewer, roads, drainage, etc.) for the project?

₱ 381,700 plus minor inputs of assisting agencies w/c value ~~we have not yet estimated (anywhere from ₱ 50,000-₱ 100,000)~~

d. What was the total cost of off-site infrastructure (investments required to bring water, sewers, roads, or drainage to the site itself, but not on to the site)?

roads - ₱ 800,000-for 3 barrios (not directly due to the project)

e. What was the average construction cost per square meter of the housing units?

₱ 520/ sq. meter

f. What plot sizes were used by frontage and depth and total square meters?

Plot Size	Frontage	Depth
land is communal		

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g. What were the amounts of money charged for connections per plot by item (like water connection, electric connection, gas connection and/or sewer connection)?

Water _____

Electric These are all subsumed in the cost of

Gas housing.

Sewer _____

Other _____

h. Were construction costs of public facilities (such as schools, health clinics, or special recreation facilities) charged to the households? no If yes, what were the total costs of these facilities for the total project?

Catwalks valued at ₱ 300,000 for all clusters

i. Was there any special construction on each plot besides the house unit (for example, a boundary wall or septic system or latrine)? yes If yes, what was the total cost per plot of these special items?

Catwalks valued at ₱ 300,000 for all clucters

4. Physical Standards

a. What percentage of the total project site is in parks or open space?

about 22 %

b. What is the percentage of land area used for schools, health clinics, or other community facilities (plot area is desired, not area covered by buildings)?

4%

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c. What percentage of the project area is used for roads and footpaths?

2% (note: roads does not form an exclusive portion of the project and is not included in estimate) %

d. What is the width, in meters, of streets or footpaths by the types used in the project?

Catwalks at 1.2 meters, Dike walks at 2 m, footpaths are vaiable access road is 8 meters wide.

e. What is the average block length? 65 meters

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TADLAC FACT SHEET

Why the place is called Tadlac - early settlers of the place used to refer to themselves as "Na Sadlak" Tagalog words which mean thrown by chance. Words were later shortened to "Tadlac".

Geographical Features

- Location - five kilometers from the municipality of Los Baños, Laguna. It is bounded by Laguna de Bay on the northeast and the Alligator Lake on the southwest.
- Area - about 7.5 hectares.
- Terrain - a foreshore land with the area along Laguna de Bay almost devoid of vegetation.

Socio-Economic Profile

- Population - about 94 families with an average number of seven members per family.
- Main source of livelihood - 67% are in small scale fishing; 53% are in small scale businesses like sari-sari stores, vegetable and poultry raising; 7.4% are full time employees and teachers.
- Average monthly income of resident workers - ₱300.00.
- Educational attainment - 48% reached intermediate level (grades V and VI); 10% obtained primary education (grades I to IV); 12% reached high school but didn't finish; 10% finished high school; 4% finished college and 1% obtained vocational education.
- Household size - largest has 12 members; average household has 5 members.

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SHELTER
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November 5-30, 1979

SOMALIA

BRIEF NOTES ON HOUSING AND HUMAN SETTLEMENT IN

SOMALI DEMOCRATIC REPUBLIC

1. INTRODUCTION

The following brief notes have been prepared to supplement the film presentation on Nomadic Settlement which resulted from widespread drought. These brief noted donnot necessarily follow the style nor the methods suggested in the country workshop presentation. There is not much discussion of the Housing Program that face us both in the urban and the rural sectors, because the Nomadic Settlement has need of all the attention available.

For further details a document on "Nomadic Settlement" and its problems and progress has been included by the faculty as reading material for the workshop.

2. BACKGROUND

The Somali Democratic Republic comprises of the former British Somaliland and the United Nations Trusteeship of Somalia which united on 1st July 1960.

It is a Constitutional Socialist Republic, Somali Democratic Republic is a member of the United Nations, Non-Aligned Organisation, Organisation of African Unity, and Arab League. It is also an associate member of the European Economic Community.

The Somali Democratic Republic is situated in the Horn of Africa (See the attached map). The area of the Republic is 638,000 square kilometres of which 2.8 and 28.8 million hectares are suitable for cultivation and livestock raising respectively.

The population of the Somali Democratic Republic is about 5 million of which over 60% are nomads and the rest are urban (16%) and rural settled. The Capital City is Mogadisho with population of 600,000.

3.2.2

3. INSTITUTIONAL ISSUES

The Housing Policy of the Somali Democratic Republic is oriented to:-

a. Increase the availability of safe, sanitary shelter affordable by low-income and middle-income families by expanding the production of low-income and middle-income shelter through the resources of the employing agencies and institutions.

b. Improve living conditions in the existing low-income settlement by availing potable water, sanitary sewrage, drainage and reasonable means of transport to work places.

c. Increase and seek the flow of resources ear-marked to improving shelter condition of low-income families by establishing National Housing System and institutions through which the Housing Policy is implement.

4. EXPERIENCES

The cities in the Somali Democratic Republic like many sister cities in the developing countries is going through one of these phases where a large percent of the urban population live in shelters of sub-standard and no urban development can make sense without doing something about the sub-standard conditions.

One attempt was made sometime back where an institution called "Casa Populare" was inacted. This institution built shelter complete with all services for low-income families of all target groups. This institution has been in operation since the Nomadic Settlement started.

As the problem of Nomadic Settlements is time consuming and at the same time resources exhausting, all other shelter solutions are left to individual agencies, institutions and Ministeries.

5. LAND USE

In the Somali Democratic epublic the land belongs to the people and the State can request any land which would be used for the good of all. If somebody's land is taken for the good of all, the owner is compensated for the improvement undertaken by him.

6. THE NOMADIC SETTLEMENT OR HUMAN SETTLEMENT

During this period Somalia was severely affected by a widespread drought. The drought was particularly devastating in the northern and central protions of the country where the majority of the population are nomads following their herds in search of water and grass. Livestock losses were immense and many families were left destitute with no means of support.

In 1975, the government established 21 relief camps throughout the most severely affected area to provide havens for the destitute nomads where they could receive food and medical assistance. Ultimately, the government decided that these camps could never be a permanent solution since the people living there had no means of livelihood. Therefore, in view of their long-term policy of encouraging the sedentarization of nomadic and semi-nomadic groups, they adapted the solution of resettling these people to areas of the country where they could be provided with the means to earn a reasonable living. The nomads from the 21 relief camps were settled into three agricultural villages, two on the Shebelli river and one on the Juba, and into three coastal fishing villages. Relief activities continued in the resettlement villages but emphasis was placed on the permanent nature of the new settlements and on the development of an economic base in the villages.

Kurtunwaare, with settlement of some 4,000 families, was one of the three agricultural villages established under the resettlement program by the Settlement Development Agency (SDA). The SDA has emphasized a comprehensive approach to development in the resettlement villages. Agricultural development provides the means of livelihood for the people while social services, such as health and education, serve as strong incentives to popular participation up to the time the economic incentives are more evident. Infrastructure programs, such as access roads and the proposed housing program, are being instituted to make the villages more permanent and pleasant. Ultimately the productive activities will eliminate the need for relief activities and the village will become self-sufficient.

In Kurtunwaare the agricultural program has been begun with joint financing from the IBRD and the Arab League. Initially 3,000 ha. of irrigat. land and 3,000 ha. of dryland crops are planned with ultimate expansion up to 15,000 and 30,000 ha., respectively, under cultivation. Land is presently under development with 800 ha. completed and is being farmed collectively. Long-term plans call for the land to be subdivided into three hectare individual plots for irrigated land and six hectare plots for rainfed land after sufficient land is developed to allow complete and equitable distribution to all villagers. Present crops range from fruits and vegetables to oil seeds and cotton and include substantial areas of subsistence cereal crops. Ultimate plans call for the village to be more than self-sufficient in cereals and to produce significant cash crops.

In the education sector, the existing village is providing primary and middle school education for all. It is planned that primary education will be provided on a decentralized basis in each satellite village while higher level education will be centralized in the principal village. Plans call for the construction and staffing of a vocational school within the next year and expansion of the existing educational facilities.

The health sector has, up to the present, been addressed through the construction and staffing of a 140 bed temporary hospital and the training of 400 Community Health Workers in a crash program. This proved effective in the emergency program necessitated by the debilitated physical state of the nomads when they were initially resettled. However, at present, a greater emphasis on training and supervision of health workers to begin incorporating preventive medicine in a primary health care module is needed. The Ministry of Helath will begin this transformation utilizing funds from their annual budget, from UNICEF Programs and from USAID Title I local currency proceeds.

In addition to the agriculture production program and social services required for the village, it is essential to provide the villagers with minimum standard housing before the village can become truly permanent in nature. Their present units are temporary shelters built of mud and wattle in very crowded conditions. They were constructed as a suitable short-term solution and now need to be replaced with a permanent shelter unit.

The crude temporary units were built rapidly with little or no planning due to the need to move the people from tents into some form of longer lasting, temporary shelter. The mud and wattle is rapidly deteriorating due to insect damage and heavy rains over the past two years. Several of these units have reached a point where they no longer offer sufficient protection from the elements and are virtually uninhabitable.

When the houses were built, grading and site work was not undertaken so drainage is causing severe problems. Insufficient provision was made for waste disposal which represents a serious health hazard. In short, the present village was intended to solve the short-term shelter problems with the objective of establishing permanent structures as the long-term solution. The A.I.D. Project begins implementing an acceptable long-term solution.

The settlement project was one of the first projects identified when AID became reinvolved in Somalia's development program. In October of 1978 an architect planner and a construction engineer were brought to Somalia to design the project. After surveying the social and physical situation the design team developed a master plan for the entire village integrating the housing of 5,000 families with existing facilities and existing and proposed agricultural development. The village was designed as a principal

settlement with three satellites. Each area is divided into neighborhoods and wards according to the social structures defined.

The design of the residential units required considerable innovative thinking due to the difficult physical conditions and the need to meet acceptable standards at low cost. Numerous alternatives were considered by the AID consultants and the Settlement Development Agency. Prefabricated units were not available locally, drainage and sanitation were extremely difficult due to the flat topography and the high water table and the soils over much of the area expand and contract greatly with wetting and drying making foundations difficult.

The alternative which was selected addresses these problems in what is felt to be the most cost effective method. The residential unit itself consists of a plot of approximately 180 square meters surrounded by a small wall. The plot includes a two-room house of 31 sq. meters with space for a third room if desired in the future, a cooking area, a toilet, an outdoor living area and a small garden area. The use of local materials is maximized in the construction of the units.

They will be constructed of locally produced CINVA ram blocks laid on a cyclopean, mortarless foundation of coral rock topped by a grade beam. In black cotton soils where expansion is likely to cause undue cracking of the walls, the grade beam will be set on bored piles rather than the rock footing. Cross ventilation is provided for by the orientation of the house perpendicular to the prevailing winds and adequate windows and vents. The roof will be constructed of dimension lumber rafters and local wattle purlins topped by tar paper and local thatching. Plot walls will be of local mud and wattle construction with the possibility of using a living fence of acacia shrubs. The cooking area will consist of a water

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basin and charcoal grill with a flue for fire protection and will be roofed. The toilet will be an individual aerobic digester fabricated on site.

The project is based on training Somalis as both craftsmen and supervisors so that they will be capable of replicating the project in the future with minimal external assistance. The project emphasizes labor-intensive methods and appropriate technologies. AID financing in the amount of $2.1 million is provided for technical assistance, heavy equipment for grading, and imported materials. The government of Somalia is providing $1,220,000 to pay laborers and provide food for work and $500,000 from the proceeds of the sale of PL 480 Title I commodities for local materials and costs. These funds will allow the construction of 400 housing units which will be sufficient to demonstrate the validity of the design and construction methodologies and to train the local craftsmen and supervisors. Additional units could be constructed for approximately $2,500 per unit or slightly over $8 per square foot.

The initial prototype unit has generated great interest and enthusiasm among the people of the village and the project is gathering momentum even before beginning on a full scale. The project intends to make the most of this enthusiasm in getting the construction off to a rapid start. By December of 1979 the project will be completing 10 units per week and all 400 will be complete by Autumn of 1980.

7. ONE FINAL THOUGHT ON SHELTER

Research and surveys by well meaning institutions inform us up to 70% of the poor cannot afford even cheapest shelter produced by Public Agencies; and what is more depressing of all, too often so called low-income housing is to expensive for the poor and ends up being middle income house.

No developing country can ignore undertaking an immense program of public housing and its most difficult to know where rural stops and urban starts.

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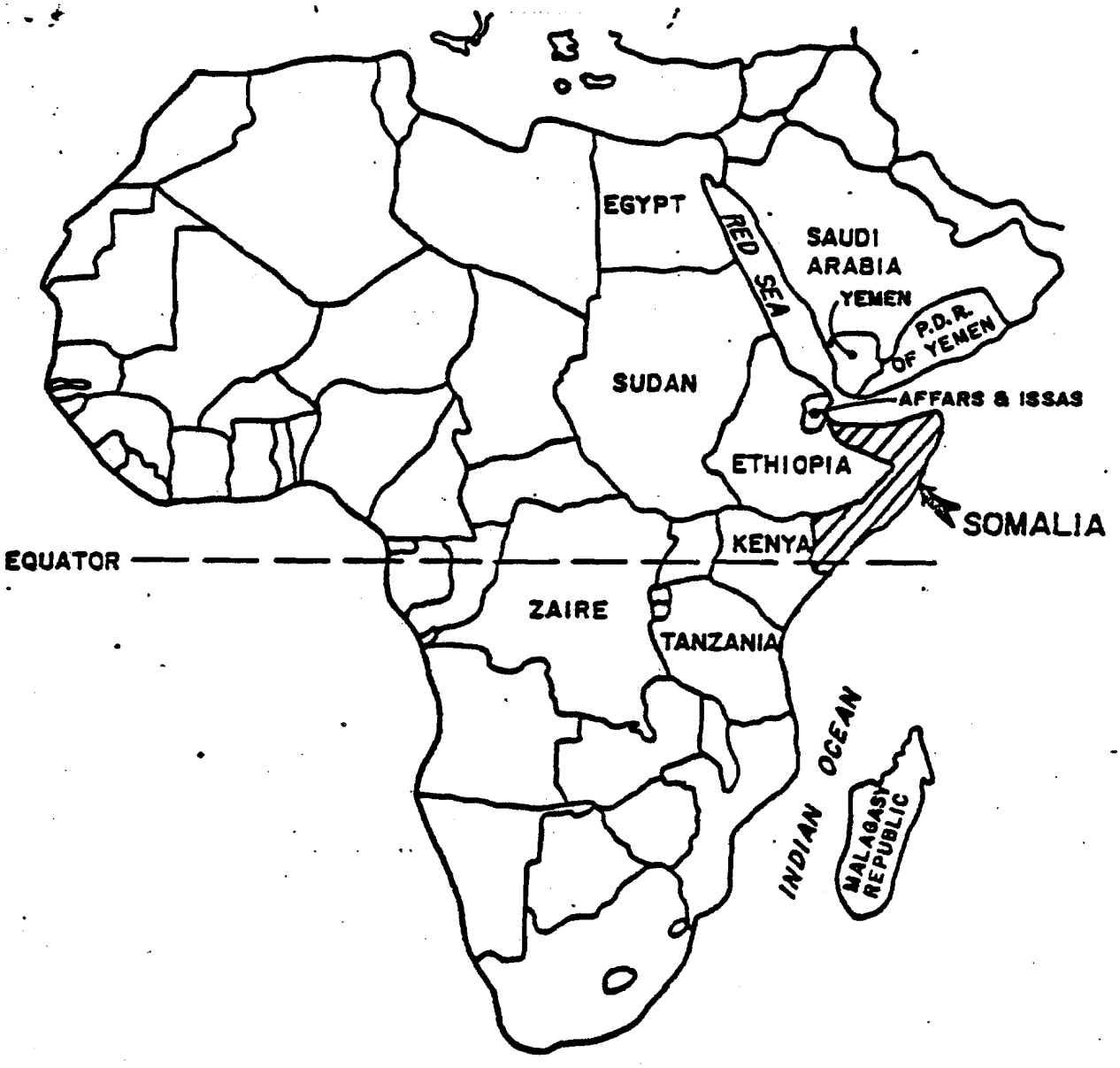
EGYPT
RED SEA
SAUDI ARABIA
YEMEN
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SUDAN
AFFARS & ISSAS
ETHIOPIA
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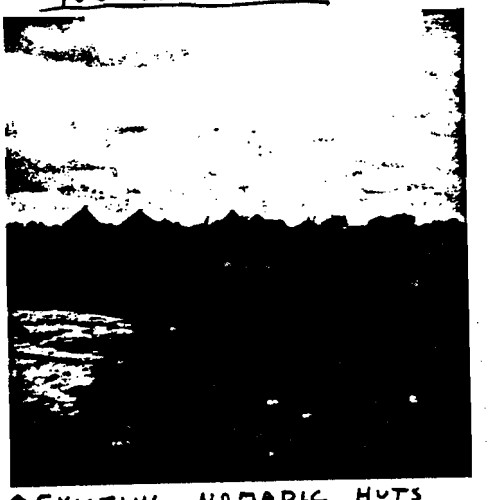
KENYA
EQUATOR
ZAIRE
TANZANIA
INDIAN OCEAN
MALAGASY REPUBLIC

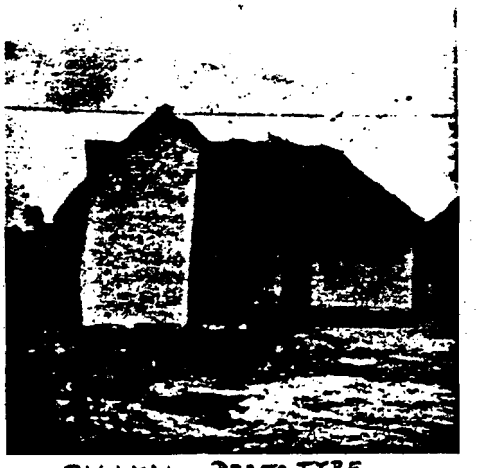
KURTUN WAARE HOUSING



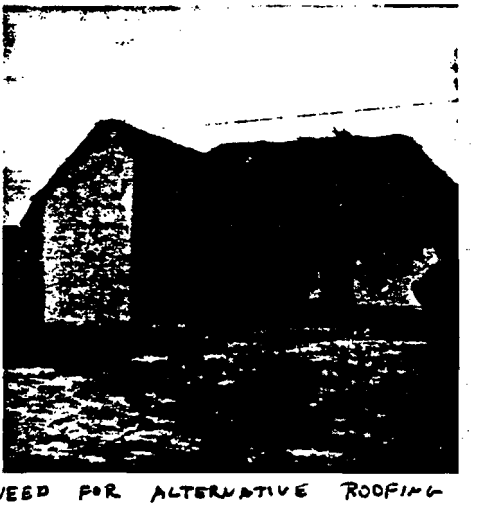
↑EXISTING NOMADIC HUTS

↑SITE LAYOUT FOR PROTOTYPE

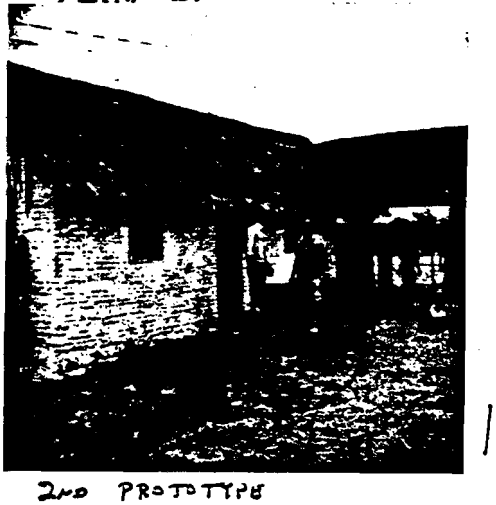
SDA PROJECT MGR. REVIEWING WORK



ORIGINAL PROTOTYPE /WITH WIND DAMAGE



NEED FOR ALTERNATIVE ROOFING



2ND PROTOTYPE

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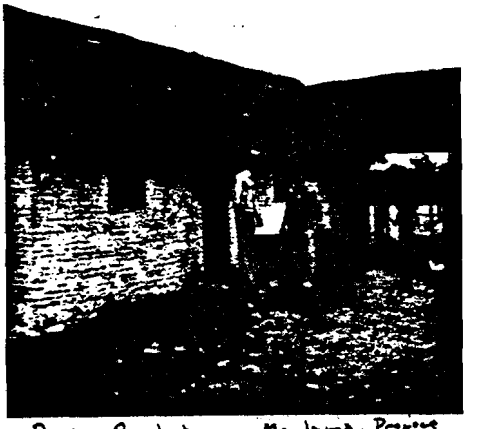
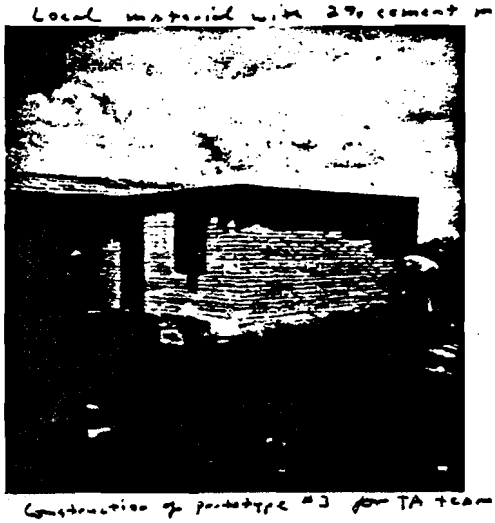
Traditional Housing in Area

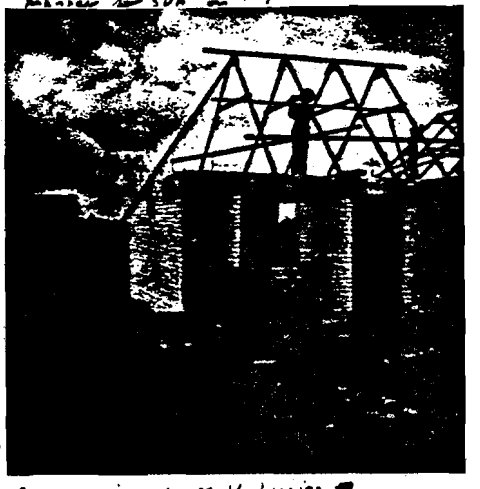
Note hand-made bricks using local material with 2% cement mix.



2nd Prototype - Mr. James, Project Manager for SDA on right.



Construction of prototype #3 for TA team use



Construction of staff housing of improved prototype

Staff housing being completed using prototype basis.

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KURTUNWAARE

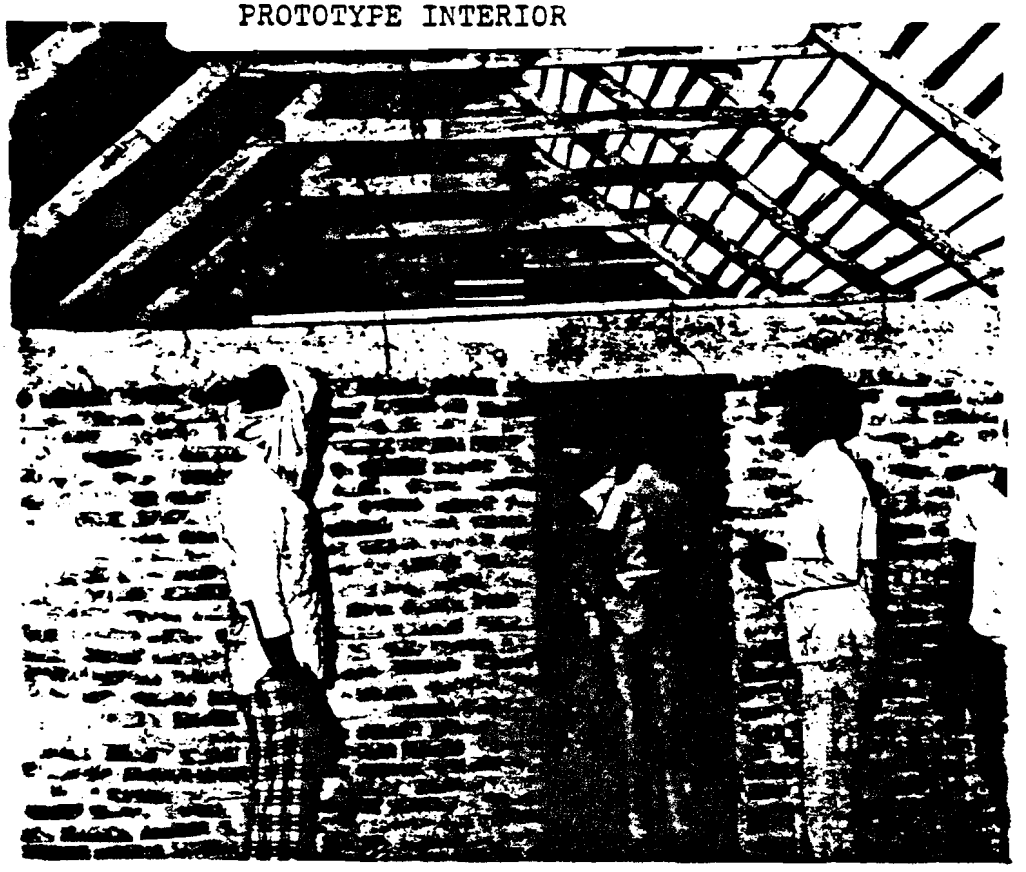
KORANIC SCHOOL

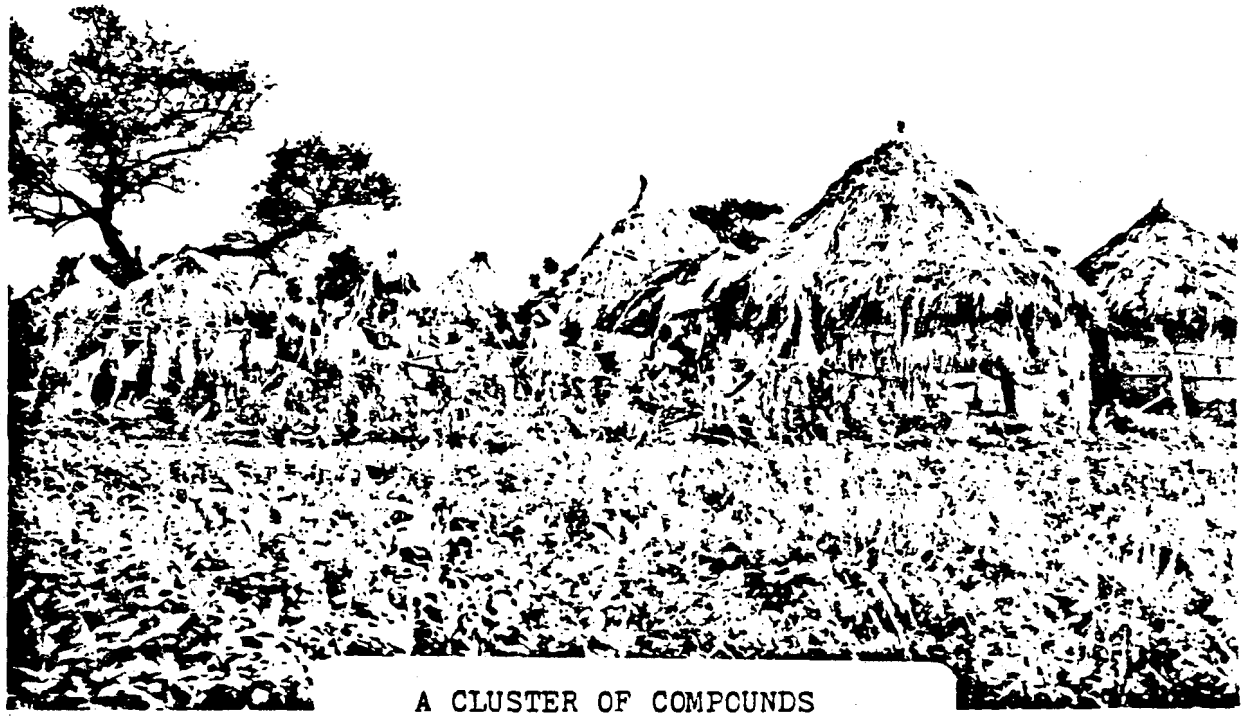
333

FROM THE COURTYARD WITH
THE CONSTRUCTION CREW

****

PROTOTYPE INTERIOR

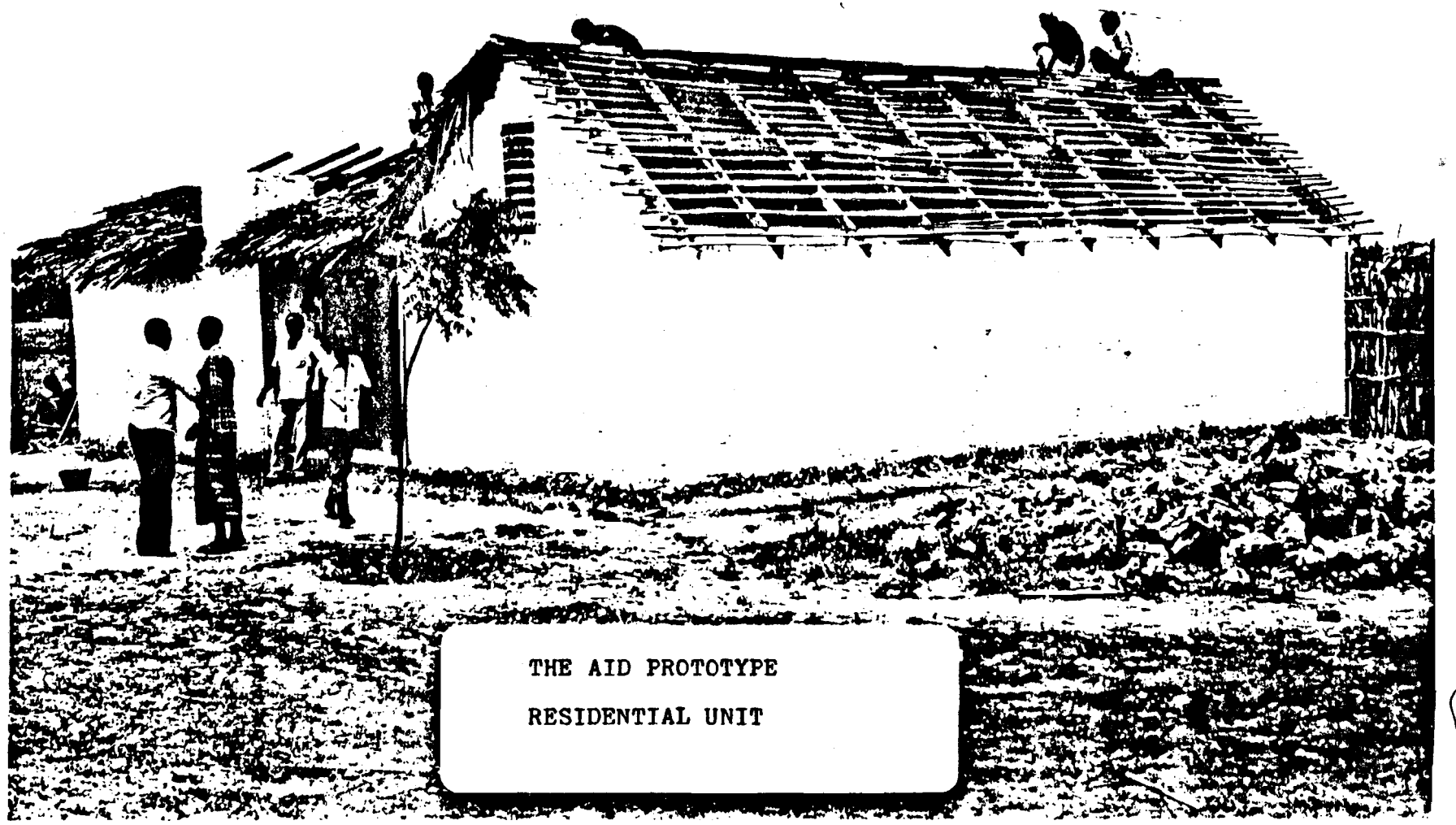




A CLUSTER OF COMPOUNDS

****

TYPICAL HOUSE OF WATTLE



THE AID PROTOTYPE

RESIDENTIAL UNIT

336

A SCENE IN THE EXISTING

KURTUNWAARE VILLAGE

A TYPICAL EXISTING

RESIDENTIAL COMPOUND

TWO ROOM COMPOUND

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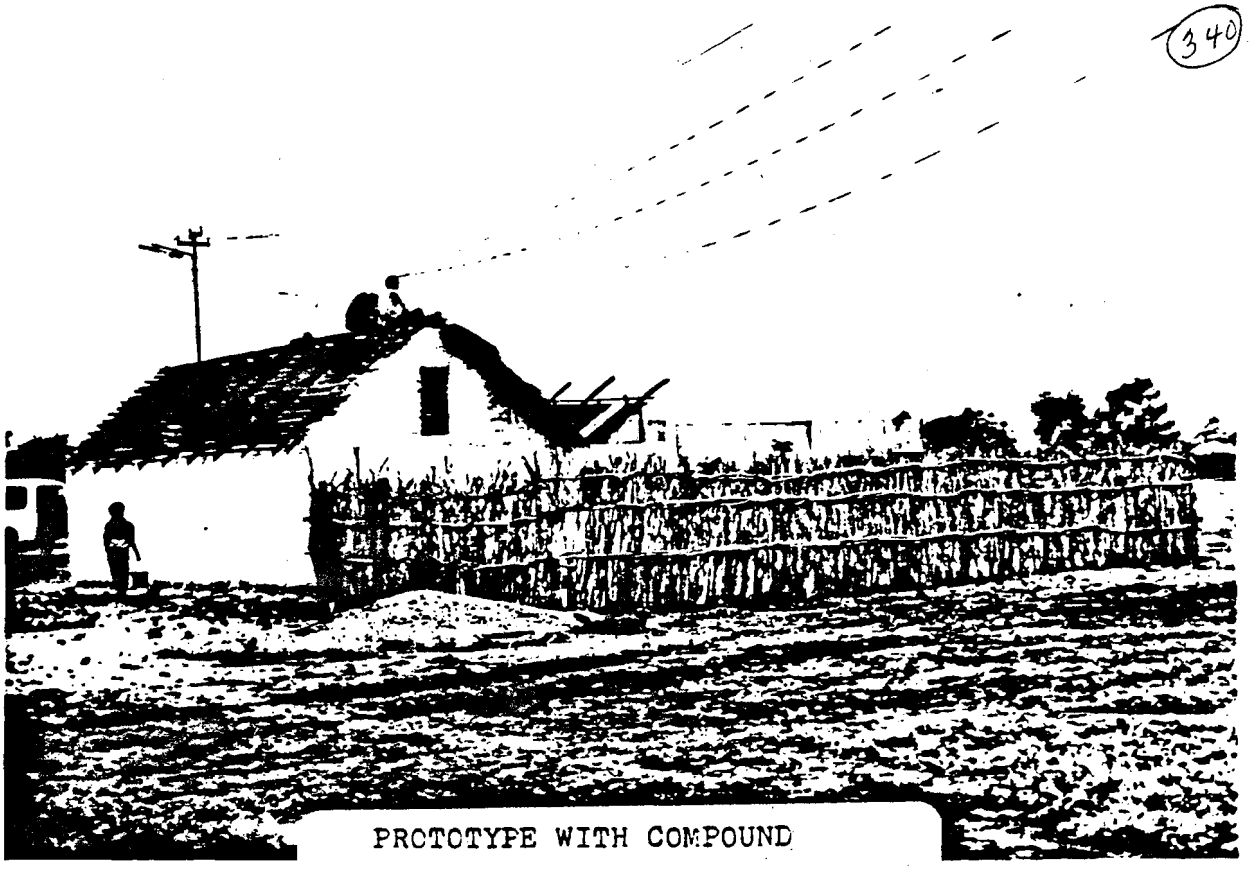
ENTRANCE TO AID PROTOTYPE



PROTOTYPE WITH COMPOUND

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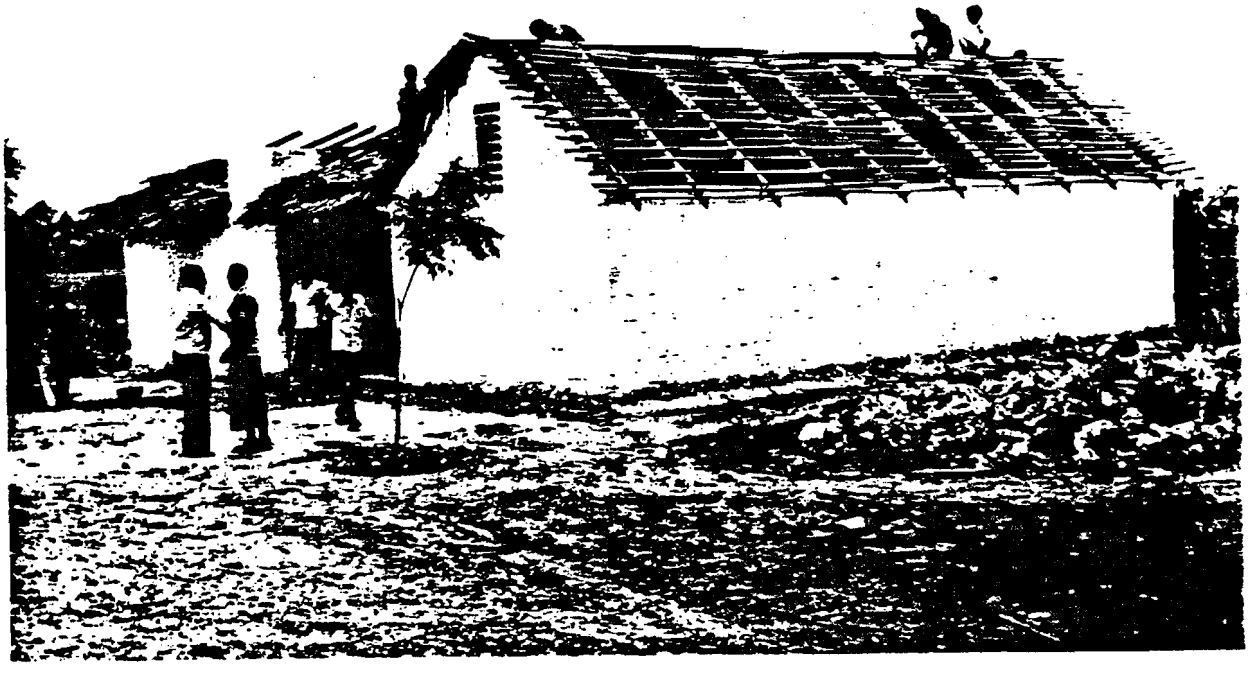
PROTOTYPE EXTERIOR



EFFECTS OF THE RAINY SEASON

****

SLIGHTLY IMPROVED HOUSE

TRADITIONAL NOMAD HUT

****

RESIDENTIAL COMPOUND

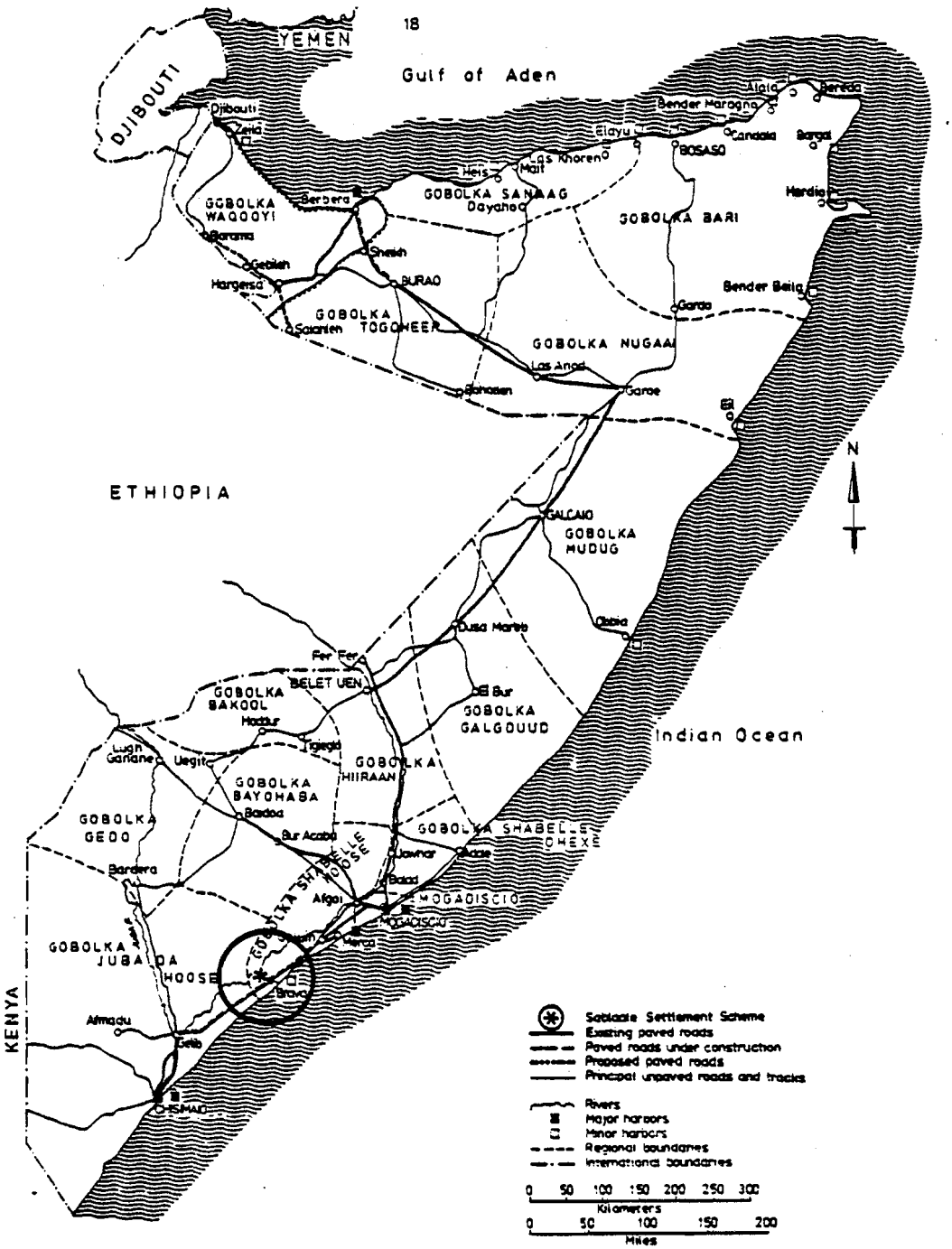


FIG. 1. LOCATION OF SABLAALE SETTLEMENT SCHEME

I. BACKGROUND & SUPPORTING INFORMATION

A. Justification of the Project

Somalia, one of the least developed countries has an area of 637,000 square kms and estimated population as 3.5 million. Per capita income is estimated to be US$ 80.00 per year. About two third of the population are nomads herding cattle, camel, sheep and goats. The Country is mostly arid, semi-desert and only about one eighth of total area is cultivable. Most of this land is located between two rivers in the Southern Region - the Shabelli and Juba. A small fraction of cultivable land is currently under cultivation-used primarily as banana and sugar plantation . Banana and livestock is the main export - over 80% of the country. Before the Revolution of 1979, the illiteracy rate was over 90% and education enrollment as about 5% only.

A high proportion of nomad population with poor transportation and communication system is the biggest problem of the country to achieve economic and social development. The task of development efforts is very difficult because of trade deficit and heavy dependence upon imports of food-stuffs, clothings and manufactured goods and machinery. To overcome this serious problem, maximum effort is to be made to use the manpower and available local material in the country for development purpose. Therefore, the Government favours Labour-Intensive Special Public Works Programme launched by ILO in different developing countries.

B. Basic Problem

The failure of rains and serious drought in 1973 and 1974 caused serious disaster in large parts of Central and Northern Somalia. This disaster caused many deaths of people and destruction of over 25% of livestock of the country. The Government had to bear the burden of feeding about 250,000 effected people in relief camps and to resettle about 120,000 of them into Agricultural & Fishery Settlements. In fact nomads settlement is the unique problem of Somalia among all other developing countries.

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Somalia's development strategy, in common with many other developing countries, had emphasised infrastructural investment. However, such investment generally requires considerable length of time before becoming productive. However, there is strong need for construction and maintenance of infrastructural public works.

II. NOMADS SETTLEMENT SCHEMES

After serious dorught, the government had to take up the urgent need of settlement of drought effected people on emergency basis. This involved:

i) Providing relief to the people

ii) Arranging their settlement on prosperous areas where people could be productive and self-supporting.

iii) To provide land and cultivation facility to the settlers for earning their livelihood in the long-run.

Therefore 3 settlement areas were selected :

a) KURTUNWAARRY SETTLEMENT SCHEME

About 150 kms from Mogadishu, situated on Shabelli River. Under Phase I, planned to settle 26000 people on 6,000 Ha of cultivable land - 3,000 Ha Irrigated and 3,000 Ha rainfed.
At present about 22,000 nomads i.e. about 4,500 families have settled.

b) SABLALE SETTLEMENT SCHEME

About 270 kms from Mogadishu situated on Shabelli River. Under Phase I, planned to settle 29,000 people on 6,000 Ha of cultivable land - 3,000 Ha Irrigated and 3,000 Ha rainfed.
At present about 24,000 people or about 5,100 families have settled.

c) FANOLE SETTLEMENT SCHEME

This scheme is about 500 kms from Mogadishu situated on Juba River. Originally Dujuma was selected for Settlement scheme but later on the investigation and soil analysis by Hunting Company, UK, it was found that the land is not suitable for agriculture and thus the government decided to shift the Settlers to Fanole area.

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Under Phase I, planned to settle 30000 people ultimately on 18,000 Ha of land - 9,000 Ha irrigated and 9,000 Ha rainfed.

On completion of phase I, the total area to be brought under cultivation in 3 settlement schemes would be 30000 hectares, i.e. 15000 Ha irrigated and 15000 rainfed. Breakdown would be as under:

a)	Irrigated	Hectares
	Fanole	18000
	Kurtunwaarey	6,000
	Sablaale	6,000
	Total	30,000
b)	Rainfed:	15,000

Under phase II, more land will be developed and brought under cultivation,

Keeping in view the emergency of settling the drought stricken nomads and to provide necessary relief, the Government decided to take up these 3 settlement schemes on highly capital and equipment intensive basis so that the maximum land is cleared, levelled and brought under cultivation in minimum possible time. At the same time to ppovide relief and necessary facilities to the nomads to adopt settled life. This included:

i) Clearing and levelling land
ii) Providing irrigation system
iii) Agriculture equipment and transport
iv) Building - office, workshop and stores etc.
v) Seeds, fertilizer and fuel etc.
vi) Food for settlers
vii) Water, health and education facility
viii) Essential main access roads etc
ix) Working capital etc

This whole programme to develop land fully as planned is estimated to be completed in 8 years i.e., phase I from 1976-1979 and Phase II from 1980 to 1983.

Total fiancial requirement for Phase I and II is estimated at So.Shs.1,510,559,000 i.e. So.Shs.739,116,000 for Phase I and So.Shs. 771,543,000 for Phase II.

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Aid and grant worth So.Shs.689,380,000 has already been committed by Arab Fund, IDA, WFP, EEC, FDR and African Ddvelopment Bank for Phase I.

WFP ASSITANCE: (Agriculture Production Projects - including training element - Project No.2294).

WFP has approved food assistance worth US$21,408,500 for feeding named drought victims in 3 settlement areas for 3 years ending 1980. This assistance is expected to go beyond 1980. The purpose of this project is to provide relief, initial training, Settlement and early production, thus reducing the cost to government whilst ensuring an adequate diet to the settlers and their families.

IMPLEMENTATION

Currently feeding 83,000 Settlers - about 18,500 families. This food can be considered in relating to permanent job creation or for infrastructure Public Works Programme in the Settlement areas.

The government is serious to employ the available manpower on settlement areas for useful infrastructural Labour-intensive Public Works Programme.

The availability of manpower in the 3 settlement areas is estimated as under:

DETAIL	SABLEALE	KURTUNWAREY	FANOLE
Approximate no of families	5,300	4,500	6,000
Estimated available workers	10,000	9,000	12,000
Labour estimated for Agricultural development and cultivation	5,000	4,000	2,000
Labour available for Labour-Intensive SPWP	5,000	5,000	10,000

Therefore, at present about 20,000 workers are available Labour-Intensive SPWP throughout the year. More labour may be available for Public Works Projects for part of the year when it is not engaged on cultivation and other agriculture works in these areas.

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Under WFP Project No.2294, food is being provided to the workers but full work is not yet provided to the people. The government is very anxiyous to employ people on useful infrastructure Public Works in these settlement areas.

At the same time, there is great necessity of construction and maintenance of infrastructural work in the 3 settlement areas viz., construction and/or improvement of feeder roads, low cost housing for settlers and digging wells for water supply etc.

For both these reasons, Somalia had participated in the UNDP/ILO Interregional Project on Planning & Administration of Special Public Works Schemes (INT/74/022), the main long-range objective of which is to assist government to build up staff trained in the formulation and implementation of Labour-Intensive Public Works Schemes aiming at longer term employment promotion. The immediate objectives of that project include, inter alia, helping interested countries to organiwe and execute such schemes by making available to them an advisory service and, if requested, expert assistance, and possible generating an increased flow of resources from bilateral and international donors in support of proposed Public Works Schemes.

Under the Interregional Project, an Inter-Ministerial research team prepared a country report on the planning and Administration of Special Labour Intensive Public Works Schemes in Somalia, Volume I and II, In May 1976, which put forward recommendations and proposals for Public Works Schemes in the following 3 projects:

i) 3 Agriculture Settlement areas at Kurtunwaarey, Sablaale and Dujuma (Lower Shebelle).
ii) Agriculture Crash Programme
iii) Integrated Agricultural & & Livestock Pilot Ranches

The aim being to create employment for 69,000 persons i.e., 41,500 on scheme (i), 27,000 on scheme (iii) and 800 in scheme (iii) above.

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These recommendations, together with those of 10 other English speaking countries participating in the project, were discussed at a technical meeting which took place at Kathmandu (Nepal) in September 1976. Subsequently the recommendations by the national team were considered by the Government and it was decided that due to acute shortage of technical personnel and skilled manpower, it would be difficultu to organise and implem labour intensive special works programme on 3 projects(mentioned above) scattered in different parts of the country. Therefore, to make a start on Pilot Project basis, only one project i.e., Agriculture Settlement area at Fabole, Sablaale and Kurtunwaarey has been selected for first 3 years. On successful implementation of first experiment, SPWP would be expanded subsequently in other areas and on other project, ultimately covering the whole country.

The selection of Agriculture Settlement areas for Labour-Intensive Public Works Programme in Somalia is based on the fact that a considerable large amount of labour force is available and it is highly desirable to engage it on useful infrastructure Public Works Programme in those areas.

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SUMMARY - LABOUR-Intensive Works Programme in 3 settlement Areas

I. NECESSITY OF PROGRAMME

The drought stricken nomads planned to be settled in three agriculture settlement areas at Fanole, Kurtunwaarey and Sablaale are clustered at one place without proper houses to live in and other essential amenities. Ultimately, these people are supposed to cultivate vast area of land for agriculture produce within their settlements, therefore, it is planned that:

a) The Settlers be scattered in different villages, each about 1,000 families, in different parts of the Settlement areas so that they can easily cultivate and control the agriculture land around.

To do this, it is essential to:

i) layout the villages properly with houses, local market and other community necessities;

8/...

ii) to provide assistance to the settlers to build houses to live in;

iii) to link the villages with each other and with central market etc., by feeder roads;

iv) to provide water supply wells;

v) to provide employment to the settlers till the agriculture land is fully developed and they are self-supporting.

2. ESTIMATED VOLUME OF LABOUR-INTENSIVE WORK PROGRAMME

Keeping this in view, it is determined that the following works will be carried out:

i) Feeder roads

Total length in 3 settlement areas, including link roads, village roads and improvement of existing tracks to the three settlement areas ets. about 600 kms (It is supposed that on the average one culvert will be required in each one km length of road). Some small bridges may also be required.

ii) Residential Houses for Settlers

It is estimated that about 18,500 families would need low cost houses in three settlement areas. Each family would have average 5 members. It is proposed to build houses in blocks of 4 houses, each consisting of 2 living rooms, and one small kitchen and one small toilet with open compound. Therefore, total requirement of housing blocks would be 18,500/4 = 4,650 no other necessary buildings, i.e., school, health centre, community buildings, store, market etc would be built under bilateral multi-lateral aid laredy secured for these settlement areas). The government has already entered into agreement with USAID and Netherland government for survey, design, construction and supervision of houses at Kurtunwaarey and Sablaale areas. There are assistance for 6000 houses required at Fanole is requested in this project.

iv)

iv) Developing Labour-Intensive Burnt Brick Kiln

At present cement concrete blocks are used for construction of all structures. Cement is imported and stone aggregate is very expensive. Therefore, the concrete block construction is very costly and involves considerable foreign exchange. Therefore, it is proposed to develop one burnt brick kiln in each settlement area. Moulds would be supplied and Settlers trained to make clay bricks, which after burning in kilns would be provided for construction of houses, roads culverts and wells etc. This would be a very cheap substitute for cement blocks and would provide employment to the people in settlement areas.

v) To carry out above proposed programme, a considerable number of skilled workers viz., masons, carpenters, blocksmiths etc., are required. UNDP assistance to train the potential workers in these skills is required. These skilled workers once trained can help to train other people and can be carefully employed for similar development programme in other parts of the country. Short-term courses (including at site training) with indigenous tools would be very useful. The training programme would be coordinated with IDA who are providing vocational schools for this purpose and also with ILO Project on Technical Education and Vocational Training P Programme at Mogadishu.

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III. APPROXIMATE REQUIREMENT OF LABOUR & FINANCE FOR IMPLEMENTATION OF PROPOSED PROGRAMME

Implementation of the above outlined work-plan for 3 years would generate employment of about 5.6 million man/days and would need finance of about US$ 6.0 million for equipment, material, tools etc. Abstract of estimated cost, labour requirement is enclosed as Appendix I. The required manpower would be easily available within the settlement areas.

The government is planning to establish an adequate organisation set up in the settlement Development Agency (SDA) to implement this programme)Proposed Administrative and Organisation set up is enclosed as appendix II).

UNDP technical assistance to support this organisationfor successful implementation of the programme would be very necessary. With WFP food assistance, the nomad settlers would be working on self-help basis on this programme. As already explained WFP Food Project No.2294 is providing food assistance with US $ 21, 408,500 for 3 years ending 1980 with possibility of further extension, which would be a strong augumentation to implement this important programme.

The requirement of funds, excluding unskilled labour, for equipment, material and skilled workers etc would be US$ 6.0 millions, which the Government would have to seek from different International and bilateral donor agencies. It is hoped that this assistance would be available from different agencies who are already supporting and financing the agriculture development programme in these 3 settlement areas. UN capital Development Fund has already shown interest to consider financial assistance for US$ 2.0 millions and request for this already prepared by the government.

II. OBJECTIVE OF THE PROJECT

A. LONG OBJECTIVES

The long-range objectives of the project are:

a) To assist the government to strengthen the capacity of the staff at the Head Quarters of SDA and at the 3 settlement areas in the scrutiny, evaluation, selection Survey, design and implementation of Labour-intensive projects aiming at long-term employment promotion and income generation.

b) To develop a set of agreed principles regarding the selection design impoementation and evaluation of such projects as par to overall employment planning.

c) To promote the practical knowlege of productive Labour-intensive techniques using indigenous tools, equipment and maximum locally available material

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in order to promote employment programme in rural areas including self-help projects.

B. IMMEDIATE OBJECTIVES

The immediate objectives of the project are:

a) To advise on project selection to provide manimum needs to the nomads settling in the three settlement areas and also to provide employment to the settlers who were seriously drought-stricken and are being supported by the government and foreign aid agencies.

b) To carry out technical study and surveys of social & economic costs and benefits of projects selected in different categories implemented under the programme, to define the basic data to be collected and a methodology appropriate to local conditions taking account of the information available.

c) To consolidate the findings of socio-economic feasibility surveys including methodology to be used at the disposal of the government.

d) To fill up the gap of shortage of technical know-how in the SDA to identify study, design and implement labour-intensive Public Works Programme in 3 settlement areas.

e) To inform possibly through short training courses, technical high level staff of the possibilities and requirements of labour-intensive techniques in the categories of projects included in the programme and to experiment such techniques on site including on self-help ppjects.

f) To participate in training of site supervisors, technicians of different skills to meet the requirement and to acquaint them with the organisation and technical requirements on labour-intensive construction methods.

g) To promote the use of simple indigenous tools and materials to meet the needs of the programme.

h) To consolidate the findings of the technical activities proposed under (d), (f) and (g) above and to put them at the disposal of the government.

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1. After reconsideration, the Government decided that due to the accute shortage of technical staff and skilled workers, labour intensive SPWP would be taken up on pilot project basis in Nomads Settlement Areas at Kurtunwaarey, Sablaale and Dujuma where sufficient manpower is available to take up this programme successfully. The Government feels that labour-intensive projects in the area would cover:

   i) Feeder or link roads in the bridges and culverts-600kms
   ii) Residential house for Settlers at Fanole 6000 No (houses at Kurtunwaarey and Sablaale to be financed by USAID and Netherland)
   iii) Shallow wells for water supply - 40 No
   iv) Developing burnt brick kiln at Fanole(3 No) to substitute the costly cement concrete blocks for building structures.

   The labour-intensive projects formulated are for 3 years and this programme will generate employment of about 5.6 million mandays.

   It is proposed to start the project from 1st July 1973.

2. Estimated Programme Cost

	(million) So.Shs.	US$
a) Estimated total cost(with housing III Altern.	123.0	20.0
b) Amount to be met from Government budget(for self help and wage labour and staff, etc)	67.0	11.0
c) i) Assistance by WFP for food	17.0	3.0
ii) Assistance required from donor agencies	39.0	6.0

   d) The financial assistance required from different donor agencies would be for imported equipment, transport labour tools and material etc. UNCDF has shown interest to finance about $2.0 millions for this programme. Therefore balanced assistance from other source is only for 4.0 millions.

3. UNDP/ILO Technical assistance required

   a) 2 Experts for 2 years

      Public Works Expert - Experienced Civil Engineer with souund background in Public Work Programme i.e buidlings, roads etc. One Planning and training expert - an economist experienced in programming and organisation and arranging training programme

   b) Advisory Review mission by ILO in different fields of

proposed Work programme to study and advise on special problems.

c) Construction Supervisors to be based in settlement areas for assisting government staff in survey, construction and controlling the projects.

4. The Government is anxious to utilize the manpower available at the Settlement areas to develop infrastructure so that Settlers can take up agriculture and be self-supporting, at the earliest. Many agencies eg WFP, Arab Fund, IBRD, EEC and German Assistance Programme are providing financial assistance to Somalia for development of agriculture in 3 settlement areas. The programme framed under SPWP is in addition to the assistance obtained from different donor agencies and would be implemented with UNDP with cordination of other agencies.

Settlement Development Agency
Planning Department

Labour Intensive Public Work Scheme

I. Introduction

Somalia experienced a severe drought in the period between 1973-75. The drought effected harmfully the northern areas of the country. 600,000 nomadic people suffered from the drought and they got big losses in crops and livestock.

The Government established several relief camps. The relief programme had saved the rest of their herds. The relief programme was only crash solution for immediate needs. The right solution is to face the drought phenomemnon with long-term based programmes. One of these is to settle some of population of that usually effected areas in new areas.

Early 1975, the Government decided to close the relief camps and settle the nomadic people in agricultural Settlements. Three areas were chosen to be the new settlements. The three areas are*Fanole, Sablaale and Kurtunwaarey.

The Government drafted an ambitious settlement scheme which comprises of land reclamation of 30,000 ha. from bush land and to establish in it a new rural society.

In the middle of 1975 the Government sited about 105,000 nomadic poeple in the 3 areas and started to establishing the new rural society.

3/....

*Originally this settlement was at Dujuma, but after detailed soil study it was found that Dujuma

series of activities like agriculture, health, education, housing, public utilities services and infrastructure works.

The Government negotiated with different international finance agencies to finance the scheme. The WFP agreed to provide food for the settlers. Arab Fund and IDA agreed to finance the agricultural part of the scheme. African Development Bank finance the health part. The Common Market finance the education, the World Bank finance a vacational training programme.

Description of the 3 settlements areas are as follows:

1. Kurtunwaarey settlement area:

It is located on the Shabelle river about 150 km from Mogadishu. Area to be reclaimed is 6,000 ha, half of it under irrigation and the other half under rainfed agriculture. In the area, there are settled about 22,000 people in 4,570 families. By now 2500 ha has been cleared from bush, and 500 ha cultivated under irrigation. The rest is cultivated under rainfed. Number of the families in the settlement can provide at least two working persons per family i.e. 9,000 workers are available in the settlement. The work in the settlement now do not need more than 2,000 workers. Available for public work scheme about 7,000 workers. In the full development of the agricultural Project, the requirements will not exceed 6,000 worker and not for all the year. Still a surplus will be available for such labour intensive public work projects.

2. Sablaale settlement area:

The settlement located on the Shabelle river 300 km from Mogadishu. Their project is to reclaim 6,000 ha, 3,000 under irrigation and 3,000 under rain ed agriculture. In this area about24,200 persons were settled. The settlers comprises 5190 families. From the agricultural project only 2,000 ha has been cleared and 400 ha from it under irrigation and the rest under rainfed agriculture. The available labour force in the settlement is estimated between 10-11,000 workers. The labour requirements for the different activities in the Settlement is about 2,000 workers. Surplus is about 8-9000 labourer.

In full development of the agricultural project labour requirements are estimated as 6,000 workers. There will be a surplus of about 4-5000 persons in the future for the labour intensive public works.

3. Jerole Settlement Area

The Settlement located on the juba river about 500 km from Mogadishu. It consists of 18,000 ha land reclamation project. In this area there will be about 41,000 settlers comprised in 8,500 families. The settlers will be shifted from Dujuma ina few months when soil survey & investigation is completed. In the full development of the project about 10,000 workers will be needed. There would be about 20,000 workers available in the settlement. Surplus of workers are available for labour intensive public works projects.

The total surplus labour force in the settlement now available for labour intensive public work is between 30-40000 workers.

To implement the settlement scheme, the Government established the settlement Development Agency(SDA) to carry on this job. The plan of the SDA for the settlement scheme several activities needed to establish rural sociaty like agriculture, education, health, public utilities and infrastucture projects. One of the priorities of this plan is to create productive jobs for the unemployed and under employed settlers. Several projects are drafted as labour intensive public work scheme. Following projects are choosen to be implemented in the next 3 years started in Jyly 1978.

1. Feeder Roads within the settlement areas and link roads between the settlements roads and the nearest main road.
2. Housing programme to build residential houses for settlers.
3. Dug wells for drink water for animals and for washing purposes.
4. Burnt brick kilns to produce red bricks for construction purposes.

As shown before, the settlements can provide about 35000 labourer for work. At full development of the agriculture project, the needs will not exceed 30,000 workers and not all over the year 10,000 worker will be always available looking for jobs. Now about 35000 workers are looking for jobs.. If we get an average in the next 3 years we will find 22,000 workers available for labour intensive public works. These amount is 3 years(250 working day)equal to 16.5 million Man/day.

As explained in the details of the projects, its total labour requirements are as follows:

Feeder roads	2,562,000
Low cost Housing for nomads	4,070,000(including Kurtunwarey & Sablaale to be constructed by USAID and Netherland government respectively
Dug wells	478,000
Brick kilns	2,389,000
Total	9,495,000 man/day

still about 7 million mand day are looking for other productive jobs. The skilled labour from this amount estimated as follows:

Feeder roads	120,000
Housing	1,110,000(for all the settlements)
Dug wells	1,000
Bricks kilns	135,000
	1,366,000 man/day

This amount of skilled labour force will be provided through the vocational training centres in the settlement.

The SDA will execute these labour intensive public works within the organization set up of the SDA.
The following chart expplains the organization set up of the labour intensive public work scheme. These organization will be functional provided the international agencies participate also with the technical assistance and technical personnel required for these organization set up.

II. Proposed Feeder road project

Description

The 3 settlement areas are located in the inter riverine region. One of the major probelem which hamper the development of this area is the transport problem. The existing condition of the roads throughout the settlement areas and the link roads to the nearest main roads is very poor. Most of the roads are earth tracks without any adjustment. Now transport within the settlements and with other areas is extremely difficult. The activities of the settlement scheme are hampered most of the time in the year due to problems of roads specially in the rainy seasons. The project will concentrate on the feeder roads within the settlement areas and the link roads to the nearest main roads.

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The project will comprise of about 600 km roads. 320 km will connect the settlement with the nearest main roads is improving the the existing earth roads or tracks. 280 km is new roads, of which 108 km within the villages of the 3 settlements and 172 km between the villages with the settlement.

The road will have 4 m width sided by 2 x 2m ditches will be covered with 10 cm gravels and 2-3 cm fine road to secure its smoothness.

From these roads 280 km in Dujuma Settlement area, 120 km in Kurtunwaarey settlement area and 100 km in Sablaale settlement area.

The roads will be constructed with most labour intensive techniques, i.e cutting the gravels, loading, unloading levelling, compacting, digging the ditches, moving the earth and etc. will be done with labour force. The project will need trucks, levelling equipments, compact equipments, axes, spades, hoes and wheel burrows. The hand tools can be produced locally and some equipments have to be imported.

The time schedule of the project is 3 years for implementation 200 km will be constructed every year.

The design, technical information labour requirements and cost analysis and the benefits of the project are attached.

Location and length of the roads

(See the attached maps.)

The location of the villages is temporary and it can be changed. But the number of the villages will remain as it is, then the total length of the roads will stay near the 600 km.

The roads will be in the 3 settlements areas as follows:

1. Dujuma Settlement area

Road			Length
Now main feeder road from Jelib to new Settlement Fanole			40
= do =	V. 4. to V.5	(assumed)	5
= do =	V. 3 to V. 4	"	5
= do =	V. 3 to V. 2	"	4
= do =	V. 2 to V.1	"	5
= do =	V. 1 to V. 6	"	4
= do =	V. 6 to V. 7	"	4
= do =	V. 7 to V. 8		8

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Link road from V. 7 to main road	(assumed)	4
= do = V.6 = do =	"	5
= do = V. 1 = do =	"	3
= do = V. 2 = do =	"	2
= do = V.3 = do =	"	4
= do = V.5 = do =	"	4
Roads within the villages 8 x 5		40
Improvement of Jelib to Barave road to reach Fanole farm		40
Improvement of link road from Fanole by hydropower to Dujuma		40
Improvement of road from Fanole to Dujuma & to Saka dam		160
		377
		Say 380 kms

2. <u>Kurtunwaarey settlement area</u>

Feeder road from V.1 to V. 2	13
= do = V.2 to V.3	6
= do = V.3 to V.4	6
= do = V.4 to V.5	5
= do = V.5 to V.1	6
= do = V.4 to V.1	10
= do = V.5 to V.3	6
= do = V. 5 to V.2	29
Link road from V. 1 to main road(Lismayo road)	29
Roads within the villages	30
Total	120

3. <u>Sablaale settlement area:</u>

Feeder road from V. 1 to V. 2	5
= do = V. 2 to V.3	6
= do = V.3 to V. 4	6
= do = V.4 to V.5	6
= do = V.5 to V. 6	5
= do = V. 6 to V.1	6
= do = V. 1 to V.5	5
= do = V. 1 to V. 4	5
= do = V. 1 to V.3	6
Total	50
Improving the existing road from Sablaale to Kismayo road	20
Roads within the villages 6-5	30
	100

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The Cost estimate

The cost estimate for the feeder roads depends on

- Digging, loading and unloading the gravel and sand what will be done by labour force and transported by the trucks made available to the project.
- the red bricks needed for building culverts. The bridges will be provided from the proposed burnt bricks kilns in the scheme and transported to the site with the project trucks.
- the unskilled labour requirements calculated according to the norms of Somali labour in the same activities of the project is as follows:
- earth moving 2 m^3 man/day
- earth levelling 4.5 m^3 man/day
- gravelling digging and loading 1 m^3 man/day
- gravelling unloading and spreading 1 m^3 man/day

Since the labourers in the project are originally nomadic, their efficiency estimated is as 60% from that average. The most of labour per day is estimated as 8 So.Sh. from it is 3 So.Shs.will be food rations.

- Skilled labour costs is estimated as the average wages and salariesfor such work in the country.
- the material and equipment cost estimated as local price.

The total cost of the project is 30,111,000 So.Shs.from it 29,936.000 So.Sh. Cost of labour force with 77% of the total and 8,175,000 machinery, tools equipments materials and costs of fuel and maintenance with 23% of the total cost. This rate compares very satisfactory for labour intensive public works scheme and the project is acceptable from this point.

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Labour requirements and cost

Operation	Unit	Number of Units	Labour requirements-unskilled man/day	Cost of Labour S. Sh. and So. Sh.
1. Such clearing on the sides of roads	ha	.180	6,000	. 48,000
2. Digging and ditcher	M^3	1800,000	600,000	4,800,000
3. Earth moving and levelling	"	1800,000	400,000	4,800,000
4. Earth compacting	KM	.600	3,000	. 24,000
5. Digging and loading the gravels	M^3	315,000	315,000	2,520,000
6. Unloading and levelling the gravel	"	.315,000	315,000	2,520,000
7. Compacting the gravel	"	3,000,000	3,000	24,000
8. Digging and loading the sand	"	135,000	45,000	360,000
9. Unloading and levelling the sand	"	135,000	45,000	360,000
10. Construction of cultivarts	Unit	600	12,000	96,000
11. Total labour and cost requirement			1,744,000	13,952,000
12. No. of labour force actually required supposed the efficiency of the labour force 60% from the average in this activities(unskilled)			2,442,000	19,536,000
13. Skilled labour	Man/day	120,000	120,000	2,400,000
14.			2,562,000	21,936,000

Equipment, tools and materials requirements and its cost

Item	Unit	Number of Units	Cost/ Unit So.Sh.	[illegible]
1. Trucks 8-10 tons	Unit	28	200,000	5,60
2. Land Rover long box	"	3	80,000	240
3. Roller attached by track	"	3)		
4. Water tank	"	3)	70,000	210,000
5. Tractor 140 hp	"	3)		
6. Cement	Ton	600	800	480,000
7. Spades	Unit	4,000	20	80,00
8. Pick axes	"	2,000	30	6,000
9. Wheel burrows	"	2,000	200	40,000
10. Axes.	"	1,000	20	20,000.
11. Fuel,oil,greeze and maintenance So.Sh.				1,500,000
Total cost				8,176,00
Bricks	Unit	120,000		

Total cost of labour	21,936,000
Total cost of equipments, tools and materials	8,176,000
Cost of material and labour	30,112,000
20% for project administration	6,022,000
Total cost	36,133,00

Labour cost - 61% of the total cost, and
77% of the administration cost calculated at labour cost

The laborers will get food for 3 So/Day from the donnation of W.F.P.

W.F.P. assistant = 3 x 2.562,000 = 7,686,000 So.Sh.

Government participation = 20,273,000 So.Sh.

Amount have to be financed from doner agencies = 8,176,000 So.Sh.

Cost per/km roads = 60,225 So.Sh. = 9,714 US$

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III. Proposed Housing (for settlers) project

Description

At the time of siting the people in the 3 settlem: temporary african huts (munduls) were built from wood (show with the coloparation between Settlers and the settlement Agency. However, every famil have now one mundul, the housing condition is very poor. Common desire of the settlers is to construct appermenent house for every family 5 persons is the average size of the family. This family needs for adequate housing a house consist of 2 rooms and its services. The house proposed to be constructed will consist of 2 rooms, kitcken bath and compound, The floor and walls from burnt clay brickets.

The roof from corrigated iron sheets. The kitchen and bath floor from cement. The walls will be covered with cement layer. The area of the house will be about 160 m^2. To minimize the cost of construction and the materials ended, a block of 4 houses is suggested.

The population of the 3 settlements now is about 87,000 consisting of 18.500 families. 4,650 block will have to be build . The housing at Kurtunwaarey and Sablaale will be built by USAID and Netherland government respectively. We propose only 6000 houses (1500 blocks) at new Fanole near for this project. The project proposed 3 years as implementation time. 500 blocks will be constructed every year. The government will participate with providing the houses for the the staff and the required labour force. The design of the houses and blocks, technical information and labour requirements, cost estimates and benefits analysis are attached. Details design, drainings and cost estimation will be prepared by the Engineer to be provided under UNDP/ILO technical assistance project.

Cost Estimate

The costs of housing scheme depends on following:

- The burnt bricks needed for construction of walls on to put the foundation in forms of brickets ballast will be provided from the proposed burnt brick kilns in the settlement.
- The sea soil needed to the foundation will be provided by the labour force and transported to the site by the trucks provided to the project.

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- Unskilled labour estimated as 140% from the average norms of the workers in construction activities in Somalia. The cost per man/day 8 So.Sh.
- skilled labour estimated as the normal average and the cost equal to the actual wages paid to such workers in the country.
- to avoid the high cost of mortar and reinforced cement mortar and reinforced cement mortar the engineers agreed to replace the bricks ballast(gravelled red bricks with cement) in more quantities instead of cement mortar.
  The cost reduced from So.Sh. 1,500 to 65 Sh. for $1m^3$ of reinforced cement mortar and from So.Sh.350 to So.Sh.65 from cement mortar.

Technical information on the houses and the costs for housing I.

The houses will be rural houses for the Settlers. The design take in consideration the climate condition and availability of materials. The house have to be cheap as much as possible and use. Locally produced materials. The Construction will depends on labour force in every operation Burnt bricks will introduced from the proposed kilns in every Settlement. Transport of materials will done with the trucks made available for the project. The houses will construct in blocks every block will have 4 houses.

A - Labour requirements and costs

1 - Unskilled labor

8 persons for 20 days for every house
160 man day are the requirements of every house
total requirements - 160 x 6000 = 960,000 man/day
Cost of labour - 960,000 x 8 = 7,680,000 So.Sh.

2 - Skilled labour

3 labourers for 20 days for every house = 60 man day
Total requirements = 60 x 6000 = 360,000 man day.
Costs of labour = 360000x 30 = 10,800,000 So.Sh.

3- Total labour requirements 1,320,000 man day

4- Total costs of labour = 18,480,000

B. Materials requirements and costs

1. Timber for one house = 0.322 m^3x 1500 Sh. = 483 Sh.Shs.
2. Cost for all houses = 483 x 6000 = 2898,000 So.Shs.
   Quantity of Timber needed for houses = 0.322 x 600 = 1932 m
3. Carrugated asbestos roofs for one house=52m^2 x 110 Sh. 5.72
   cost of roofing for all houses=5720 x 6000 = 34,320,000 Sh.
   Amount of carrugated asbestus = 52 x 6000 = 312,000 m^2

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.. Brick gravels for one house = 6.15 m^3

" " for all houses = 6.15 x 6000 36900 m^3

The brick gavels will obtained from the brick kiln project in the scheme. Its costs will be covered in the kiln project and it will be transported with the scheme trucks and gravelled with the labour force.

5. Walls: The walls will be build from red bricks and cement mortar. The bricks needed for the walls are 37.26 m^2 say 40 m^3

Bricks needed to build one house $\frac{40}{2.5}$ = 16.000Nos.

Bricks needed for all houses 16.000 x 6000 = 96,000.000

96 million bricks.

6. Sand for Construction

40 m^3 x 6000 x 0.36 = 86, 400 m^3

will be available by the trucks of the project

7. Cement

For every 1000 bricks 3 bags of 50 kg. 150 kg.

cement needed for one house 16.x.15 = 2.4 Ton

Cement for the houses = 2.4 x 6000 = 14,400 Ton

Say 15000 Ton cement

Cost of cement = 15000 x 800 = 12,000,000 Sh.

8. Sea Soil

For the house 5 m^3

For all houses 5 x 6000 = 30000 m^3

The sea soil will made available with the project labour force and trucks.

Total cost of puchased materials = 49,218,000 Sh.

c. Machinery, equipment and Tools required and its cost

1. Trucks 6 Tons 8 unit

- Costs of trucks - Price 8 x 200.000	=	1,600,000 Sh.
- Maintenance operation cost	=	400,000 "
Total		2,000,000 "

2. Hand Tools

- Axes 2000 x 20 Shs.	=	40,000 Sh.
- Pick axes 1000 x 30 Shs.		30,000 "
- Spaes 1000 x 20 Shs.		20,000 "
- Wheel barows 3000 x 300 Shs.		90,000 "
- Building tools 3000 x 100 Shs.		30,000 "
Total		210,000 Shs.

Total cost of the Project =	18,480,000	labour
	49,218,000	Purchased mate[illegible]
	2,000,000	Machinery
	210,000	Tools

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=

20% administration	13,540.000 So.Shs.
Total	81,238.000 So.Shs.

Labour Cost + 23%

Total Cost = 40% if administration cost added to lab

cost per one house = 13540 So.Sh.

= 2,173 US$

The participation of W.F.P will be equal to the quantity of food distributed for every member every day.

The amount will be equal to 3 sh/day

The total W.F.P participation = 3 x 1.320,000

= 3x960,000 So.Sh.

The participation of the government will be equal to

32020,000

The amount needed from the donor agencies to finance the Project = 45268.000 Sh.

Cost estimation in housing II Alternative

However the cost per unit from the purchased items in reasonable the cost component (labour force cost to material inputs cost) is not within the limit of the labour intensive public work project. The reason behind that is the high cost of the imported items especially the coorugated asbestus sheet which rather expensive. The idea here is to construct a factory for producing these sheets. If a local factory implementation co of the carrugated sheets can be reduced to 1/5 of its to-day c Then the cost of as asbestus sheets will be reduced to about 6.869.000 Sh. Also if the cement factory under construction will start production. Then the cost of cement can reduced from 800 Sh. per ton to 300 sh. per ton. Then the cost of c for the programme will reach 15,000 x 3000 = 4,500,000 Shs.

In addition to 20% administration cost = 10,107.000 Shs.

∴ Total cost 50,534,000 Shs.

Labour Cost % = 30% of the total cost, or

= 47 if administration cost is added to labor co

This ration can be acceptable for labor intensive project.

Cost per one house = 10.107 = 1.622 US$¼

Under this assumption the needs for the donor agencies to finance the project will be about 17,.80,000 So.Shs.

The government share will increase to 26,464,000 Shs.

In this case the country will need a donor agency to finance the carrugated asbestus sheets factory to produce it locaal

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From the first view the quantity of sheets needed for this programme and different construction activites in the Settlement make the factory economically feasible. The raw material for the factory is available in the country specially when the cement factory starts production.
Feasibility study for the cement aspestus sheets is required.

Estimation for housing III Alternative with G.G.I Sheet for

All other material, except for C.G.I. Sheets, the labor and requirements etc will be the same as shown in housing II alternative.
The cost C.G.I. sheets at present at site is about So.Shs.15.0/S
/.·. Cost of C.G.I Sheet roofing in 6000 houses
would be 312,000 x 15 = 4,680,000 Shs.
Total cost including labour and other material would therefore be about 2.6 million So.Shs. less than shown in housing II. Alternative i.e. total cost would be 45,283,000 million So.Shs.
Total material cost would be 19.2 million So.Shs.
Percentage of labour Cost (including administration Cost)
58%

IV. Proposed Digging wells for Cattle Drinking and Other Uses Except Drinking for people

To Settlers are originally nomadic. They are accustomed to have their own animals. The number of family owned animals in the Settlement increase day by day. The Settlement agency planned to have its public owned herd. The number of cattlee now is about 12000 head. It is well known the born effect of the river water on the animal health. It is proposed to dig wells with 40 m average depth in the settlement for the purpose of bringing water for Cattle and for other uses except drinking by the people. The wells will constructed by labor and the water taken from the well manually. It is estimated that the total families who will benefit from these wells is about 20.000 in all the 3 settlements. Every well can serve 500
The total number of wells about 40.
The work will need only hard tools for digging.
The construction material will be available locally.
The project will be in need for experienced man in digging such wells and to train people on the construction of wells and how to maintain them.

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Design of the well, technical information, labour requirement, and costs estimates are attached.

Labour Requirement

Unskilled

1. Earth digging for the well 32000 m^3
   Earth moving to clean the well area = 3200 x 3 9600 m^3
   Total earth moving = 9600 x 40 = 384.000 m^3
   Total labor requirements $\frac{384.000}{1\ m^3/day}$ = 384.000 man/day

2. Eath compact surrounding the well
   3200 x 2 x 40 = 128.000 m^3
   Labor requirements = $\frac{128.000}{3\ m^3/day}$ = 43.000 man/day

3. Building from stones, bricks and gravelling the bottom
   60 x 40 = 2400 man/day

4. Providing materials quantities
   a - bricks - 140.000 brickts per well
   on 140.000 x 40 = 5.600.000 brikts
   One labor for one thousand = 5600 man/day
   b - Stones 275 m^3 per well one labourer for one thousand=5600 man/day
   275x40 = 11.000 m^3 stones /m^3 stones
   c - Gravel 250 m^3 per well
   250x40 10.000 m^3 gravel
   Stone labourer for one m^3 20,000
   Labour requirements : 47.600 man/day
   Total unskilled labor = 477.000 man/day
   cost of labor = 477.000 x 8 = 3.816.000 Sh.
   Skilled labor = 25 per well x 40 = 1000
   Cost of skilled labour = 1000 x 30 = 30.000 Shs.
   Total Cost of labor = 3.846.000 Sh
   Total labor requirements = 478.000 man/day

Material

- Brikts will be available from settlement kiln
- Stones and gravels will obtained with labour from its local resources while transport with the owned trucks by settlement..
- Cement (imported)
  80 ton per well x 40 = 3200 ton
  Cost 3200 x 800 = 2.560.000 Shs.
  Cost of material and labor = 6.406.000 Shs.
  2% cost of administration = 1.281.000 Shs
  Total cost 7.687.000
  Cost per well = 192.175 Sh = 31.000[illegible]

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Labor Cost = 50% of the total cost , or
= 66.7% if administration cost added to labor

The food will distributed to the labourers for 3 Sh/day from W.F.P
W.F.P assist = 3 x 478.000 = 1.434.000 Sh.So.
Government participation in the Project 3.693.000 So.Shs.
Amount have to be financed from financing agencies

= 2.560.000 Shs.

V. Brick kiln Industry

Since many construction activities in this labor intensive Public works scheme have to be executed, construction materials will be needed. It is proposed to develop 6 burnt kilns in the Settlement. The kiln will use the mud and clay as raw material and the fuel will be petrol. The capacity of every kiln 60.000/- All the operations required will be done manually with labor digging earth, mixing soil and water and straw, moulding brikets, drying, loading in kiln, burning unloading from kiln and stocking are all labor intensive operations with help of simple hand tools.
Sketch, labor requirements, cost and benefits estimatic are attached.

Requirements and costs

A. Labor requirements

1. Unskilled labor

For one kiln 500 x 250 days	=	125.000
" " " 3 years	=	375.000
3 kilns " "		1,125,000 man/day
Cost of labor unskilled 1125000x8	=	9,000,000 Sh.

2. Skilled labor

For one kiln 30 man/day x 250	=	7 7.500 man/day
" " 3 years	=	22.500 "
" 3 kins 3 years	=	67500 "
Cost of skilled labour	=	135.000 x 3 = 3.500

Total cost of labour = 11025 Shs.
Total cost No. of labour = 1192500 man/day

B. Materials

1. Burnt bricks to build the kilns
   100.000 for every kiln
   300,000 for 3 kilns
   Cost 300,000 x 500 Shs. 150,000 Shs.
2. 100 m iron tube (35 m for one kiln) as
   Cost 100 x 1000 Shs. 100,000 Shs.

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3. Fuel

4 Ton/day for 1000 day = 4000 ton for

for 3 kiln 12000 x 500 Shs. 6,000,000 Sh.

4. 4 Thell cars for the transport the mould and pulled donkeys

50 for every kiln

150 for 3 kilns

Cost 150 x 500 Shs. 5,000 Shs.

5. Donkeys

60 for every kiln

180 - 3 kiln

Cost 180 x 100 18000 Shs.

6. Tools

Axes 50 x 20 Shs. 1000 Shs

Spades 50 x 20 Shs. 1000 Shs

Carriers 100 x 10 Shs. 1000 Shs

For 3 kilns 16000 Shs

7. Wood desks (110 x 150 x 110)

15 in every kiln

45 in 3 kilns

Cost 45 x 200 9,000 Shs.

8. Wood Frames for bricks

90 in every kiln

270 in 3 kilns

270 x 30 Shs.

8,100 Shs.

9. Iron parts for the kiln

5 ton for every kiln

15 ton for 3 kilns

Cost 15 x 3000 Shs. 45,000 Shs

10. Iron Barrels with Valves

150 for one kiln

450 for 3 kilns

Cost 450 x 50 22,500 Shs

11. Fuel Tanks for 100 tons in every kiln

3 x 10.000 30,000 Shs.

12. Other expences : 5000 Sh. x 3 = 15,000 Shs.

total cost of materials. Sh.6,475,600

Cost of the project = 6,475.600 Sh. material

11,025,000 labour

17,500,000 Shs.

20% admins. Cost 3,500,000

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Total Cost 52% of labour cost

Total cost = 69% if administraction cost added to labour cost

The laborers will get food for 3 Sh/day from W.F.P.

The participation of W.F.P. in the project=

1192500 x 3 = 3577500 Shs

Partictpation of the government=14525000 Shs

Amount to be financed from donor agencies = 2.9 millions

Cost per 1000 brikts = 140 So.Shs.

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					Labour Cost (000) Sc.Sh.	Material, Equipment and Tools Cost (000) Sc.Sh.	Total Cost of Work (000) Sc.Sh.							
					21.[illegible]	5.170	[illegible]							
					10.100	[illegible]								
					10.100	[illegible]								
					10.000	[illegible]								
					3.[illegible]	[illegible]								
					11,025	[illegible]	[illegible]							
[illegible] Housing I	5.00[illegible]	[illegible]	649	15,255	55,257	66.110	121.7[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38	[illegible]	[illegible]
Housing III	[illegible]	[illegible]	519	15,255	55.227	49.204	104.571	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11,653	[illegible]
[illegible]	[illegible]	[illegible]	519	15,255	55.207 or [illegible]	47.100 or [illegible]	[illegible]						[illegible] or [illegible]	[illegible] or [illegible]

U$6.874 U$7,560 [illegible]

Say 9.000 Say$7500 Sa[illegible]

Housing III is most [illegible] difference in total numbers due [illegible] the figures

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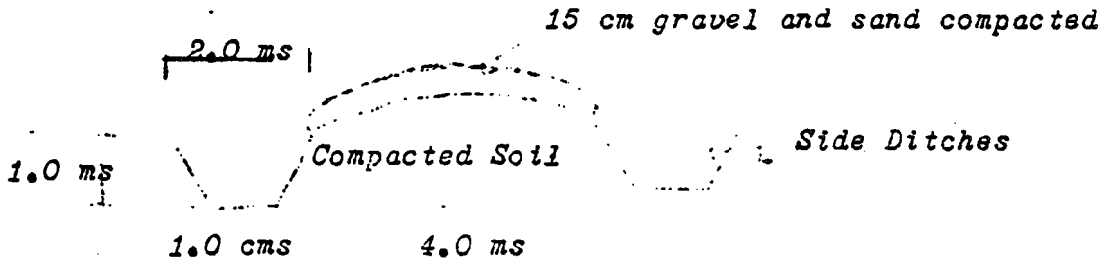
TYPICAL SECTION
FOR
PROPOSED OF LINK ROADS
ROADS CROSS SECTION



Excavation Quantities/one km

$1000 \frac{(2 \times 2+1)}{3} = 3 \times 1 \times 1000 = 3000 \ m^3$

Gravel $1000 \times 5 \times 0.15 \times 0.7 = 525 \ m^3$

Sand $1000 \times 5 \times 0.15 \times 0.3 = 225 \ m^3$

Quantities/600 km

Excavation $= 600 \times 3000 = 18 \times 10^6 \ m^3$

Gravel $= 600 \times 550 = 0.33 \times 10 \ m^3$

Sand $= 600 \times 250 = 0.15 \times 10^6 \ m^3$

Weights of Material

Gravel $= 0.33 \times 10^6 \times 1.6 = 0.53 \times 10^6$ tons

Sand $= 0.15 \times 10^6 \times 2 = 0.3 \times 10^6$ tons

Area to be compacted $= 5 \times 1000 \times 600 = 3 \times 10^6 \ m^2$

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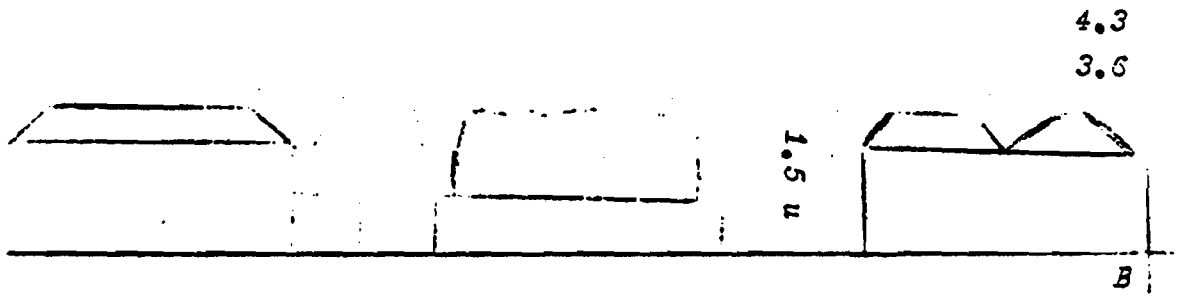
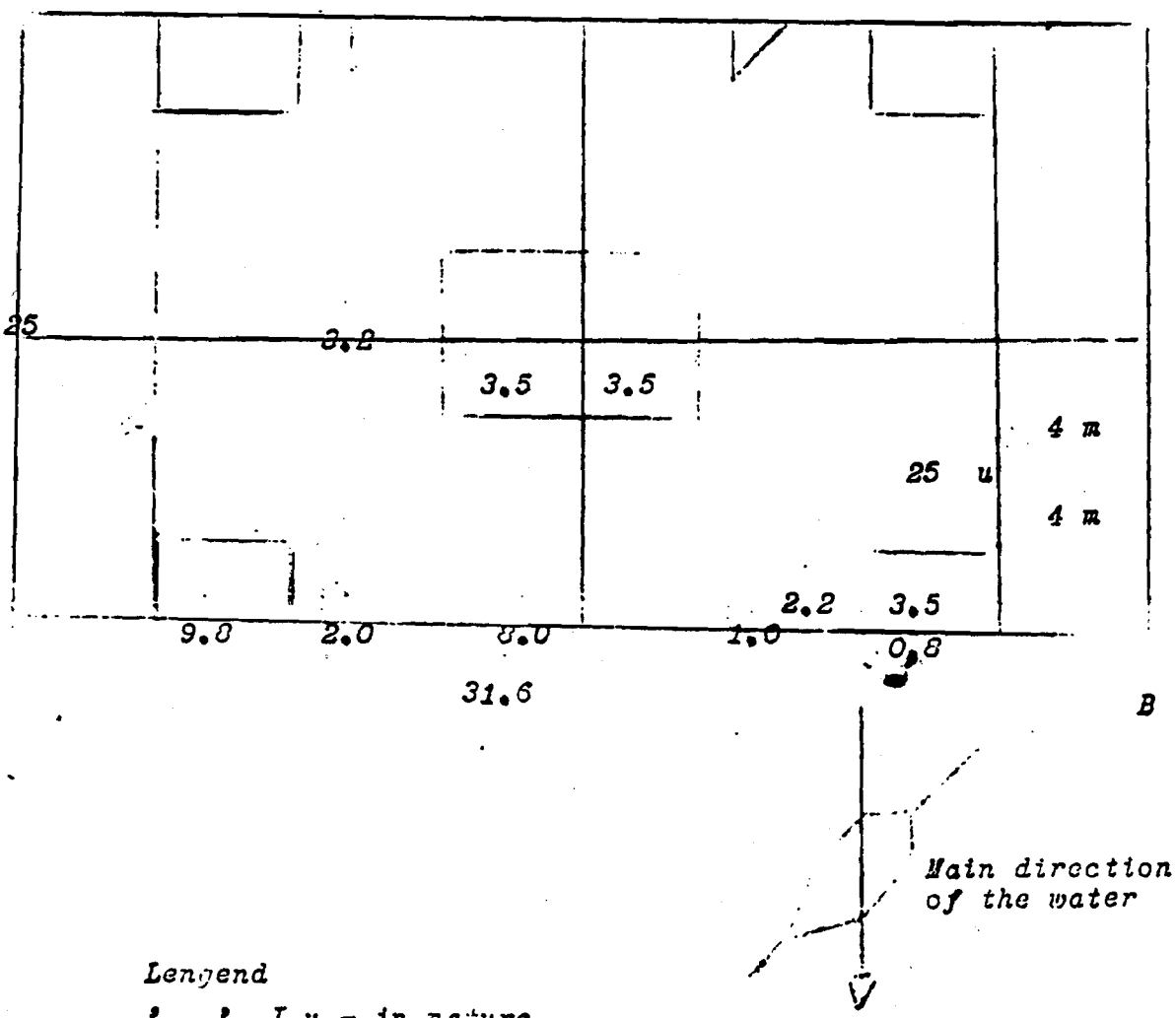
SKETCH PLAN OF PROPOSED HOUSES IN 3 SETTLEMENT AREAS

Scale (M 1:100) : A-B



"Observation"
The width of all walls are : 25 cm

Scale (M1:200)



Lengend

: ____ : I u - in nature

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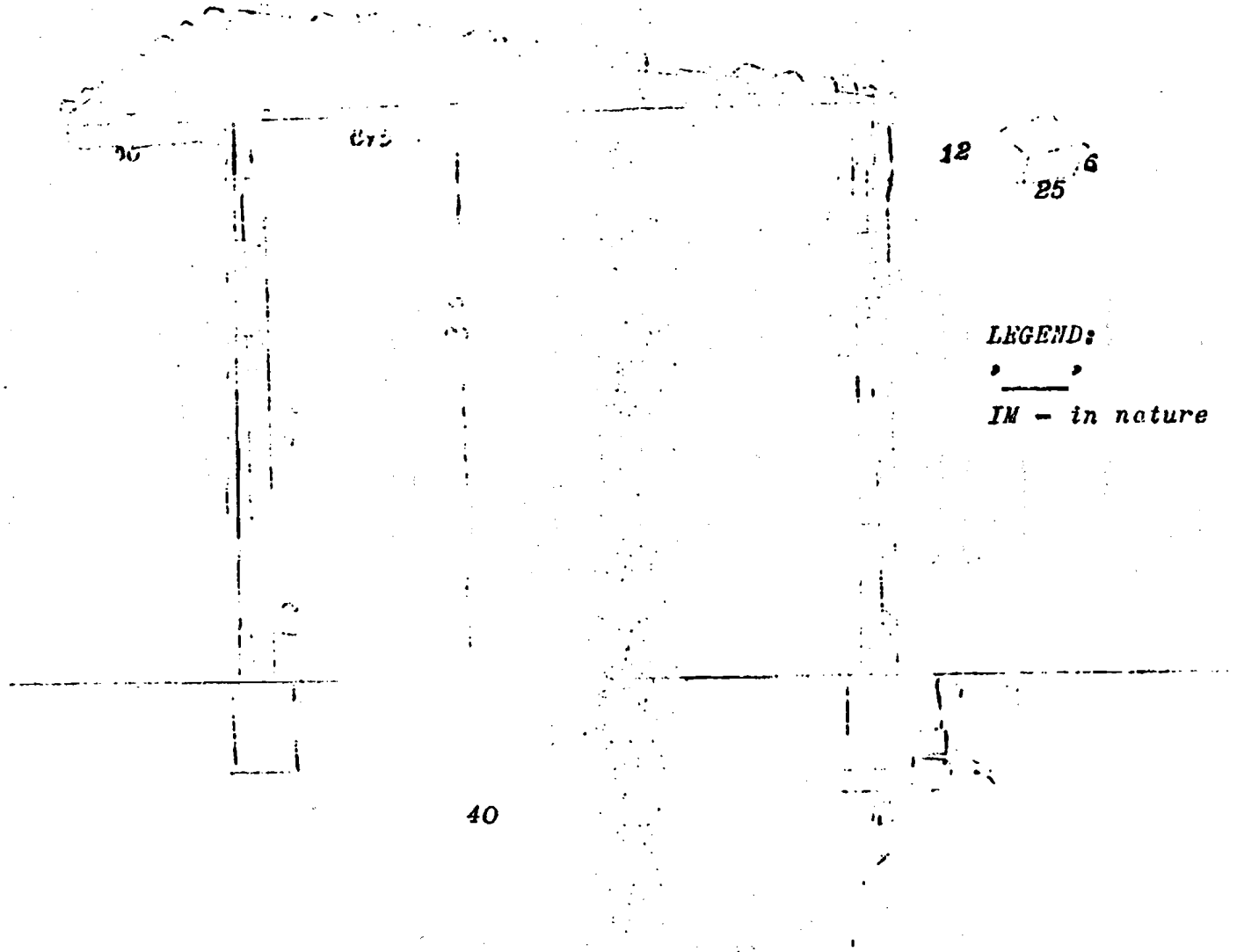
DETAIL OF PROPOSED HOUSES IN 3 SETTLEMENT AREAS

Section A-A
4.3

Scale (M1:20)

Odsi
in 1 U^3 of wall; is to
be watered 138 ones



LEGEND:

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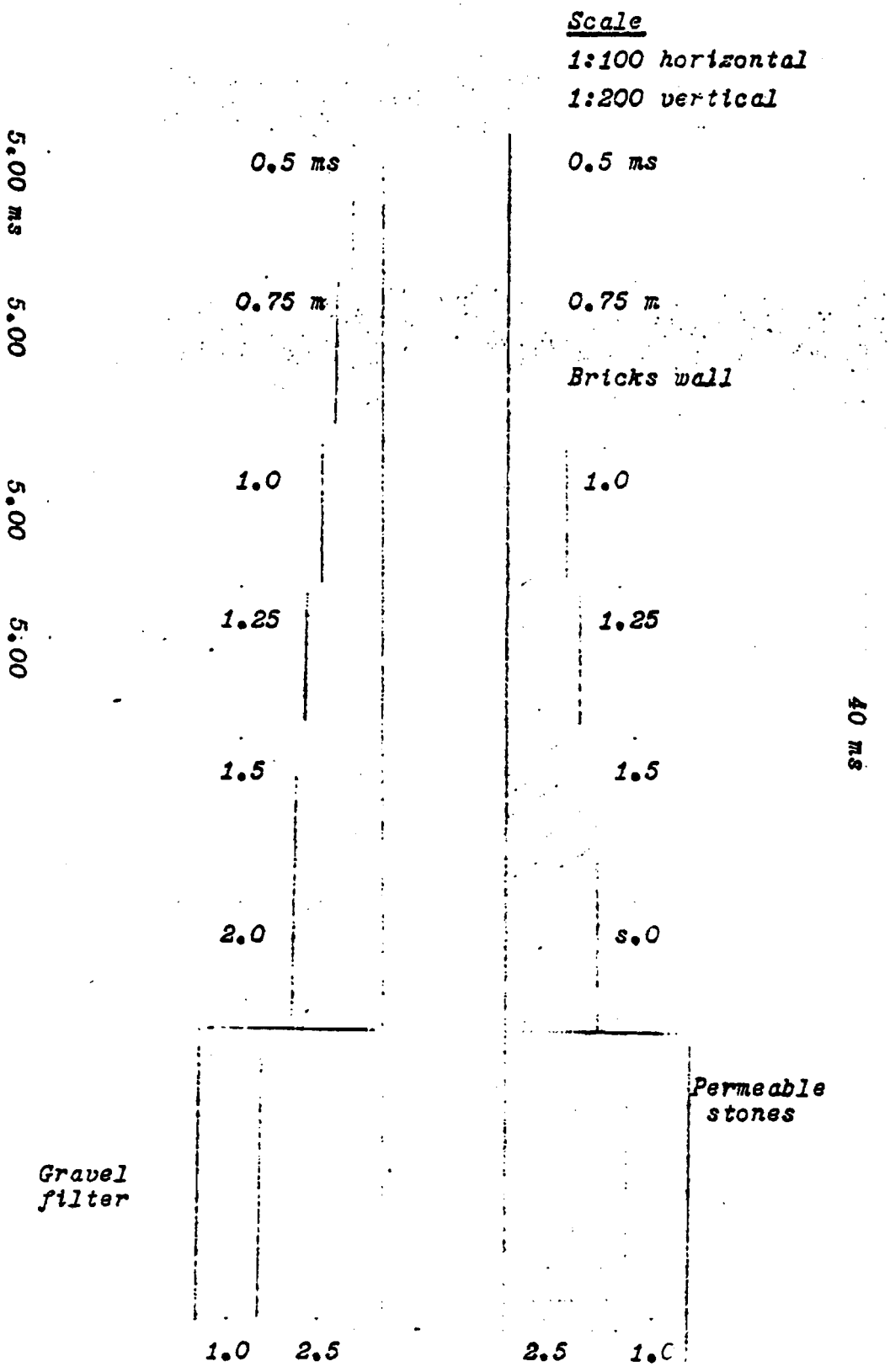
PROPOSED SHALLOW WELLS IN 3 SEETLEMENT AREAS

Gross - Section of Wells



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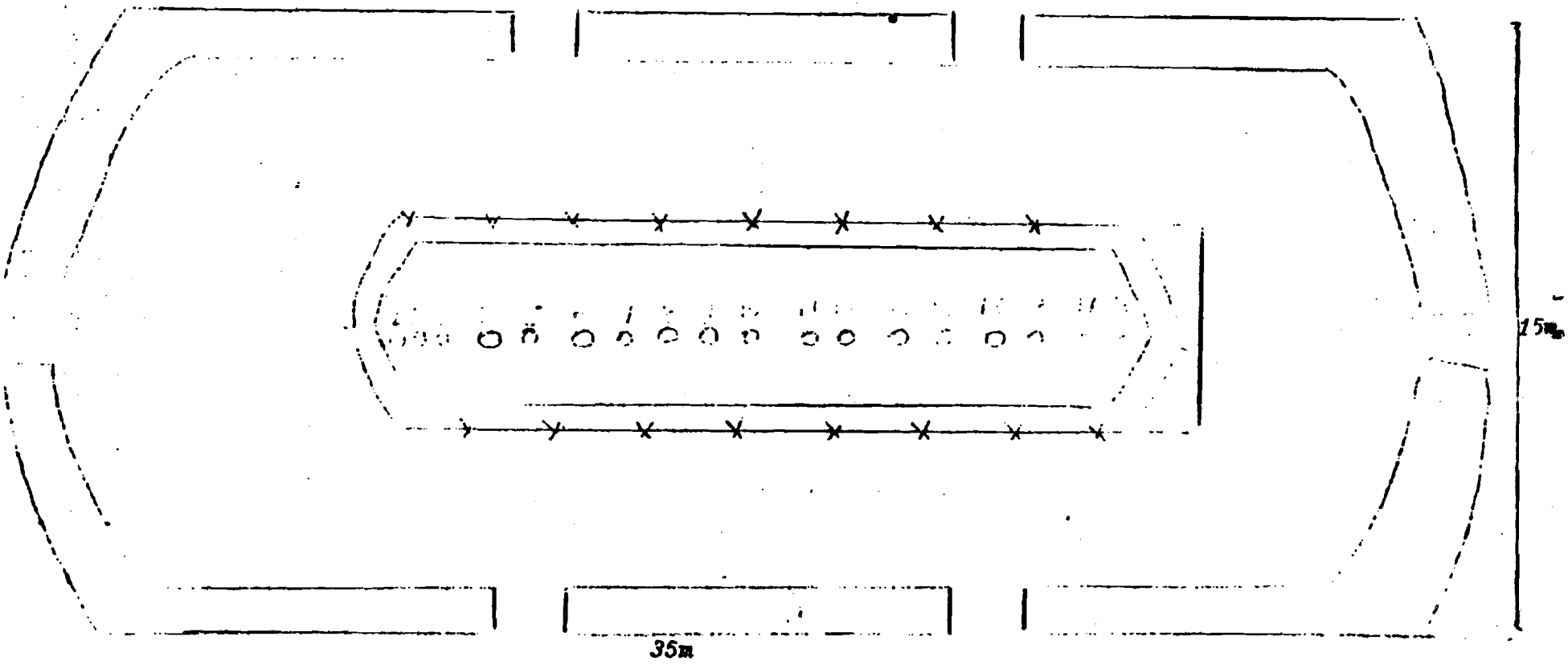
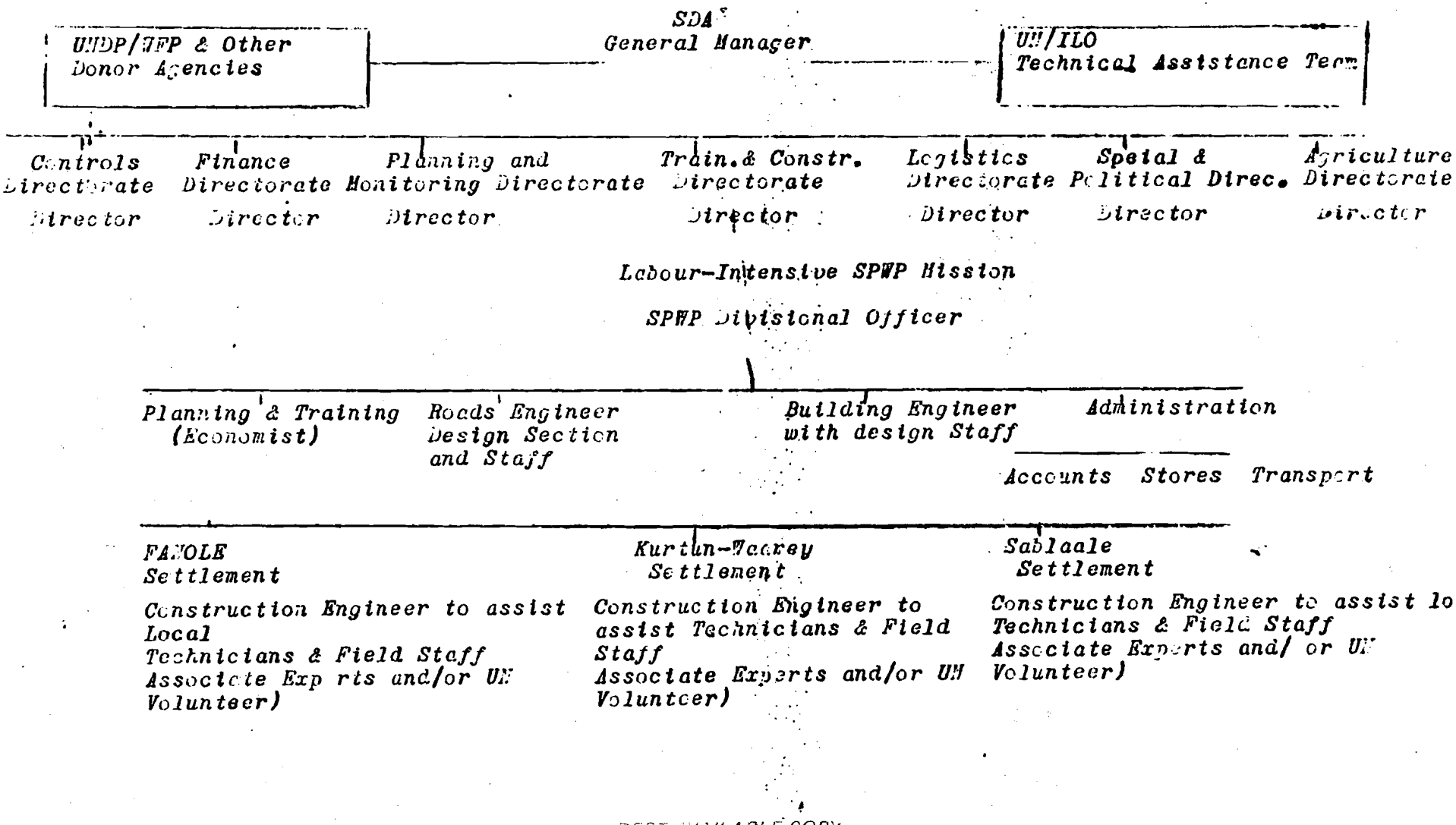
PLAN OF PROPOSED BURNT BRICK KILNS IN 3 SETTLEMENT AREAS



PROPOSE ADMINISTRATION & ORGANISATION SET UP
IMPLEMENTATION OF LABOUR-INTENSIVE SPECIAL PUBLIC WORKS
PROGRAMME IN SETTLEMENT DEVELOPMENT AUTHORITY

SETTLEMENT DEVELOPMENT AUTHORITY (SDA)



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SRI LANKA COUNTRY PRESENTATION MATERIAL

POLICY PAPER

SLUM AND SHANTY UPGRADING IN COLOMBO MUNICIPAL COUNCIL

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Ministry of Local Government, Housing and Construction
Urban Development Authority

18 September, 1979

POLICY PAPER

Slum and Shanty Upgrading in Colombo M.C.

This paper has three aims:

1. To establish, in specific terms, the Government's commitment to upgrading as a major component of its overall housing policy.

2. To identify, and as far as possible resolve, the conflicts between this programme and others in Colombo M.C.

3. To lay the foundations for the development of a detailed work programme and enable foreign financial assistance to be obtained.

Section 1	Presents the case for adopting upgrading as a major component of the Ministry's housing policy.
Section 2	Identifies alternative courses of action in the slum and shanty areas.
Section 3	Sets out simple criteria on which to determine appropriate action in each slum or shanty area.
Section 4	Specifies the action to be taken in each area (shown on an accompanying map).
Section 5	Identifies the major policy issues to be resolved, and puts forward proposals for their resolution.

PREFACE

This Policy Paper was prepared for the Ministry of Local Government, Housing and Construction by a sub-committee of three.

It draws heavily upon initial conceptual work done by Dr Michael Joachim and Mr K.A.H. Ranaweera as consultants to Polytechna/Terplan, contractors for the Colombo Master Plan Project. Surveys, project designs and further work were carried out under the direction of Mr Selvarajah of the Urban Development Authority.

1. INTRODUCTION

In 1977 the population of Colombo M.C. was 616,000. Almost 50% of these people either lived in decaying and under-serviced slums or squatted illegally in semi-permanent shanties.[1] The crowding of so many of Colombo's population into such areas derived from the lack of affordable alternative accommodation. In this respect Colombo conforms to the experience of numerous other urban areas of the developing world. Typically the situation of physical blight co-exists with other aspects of poverty and under-development. Accordingly the residents of Colombo's slums/shanties generally compose those with the lowest income level. Such communities also manifest high rates of unemployment/underemployment and a proportionately greater incidence of malnutrition and disease than other communities. In short, their numbers constitute Colombo's urban poor - a stratum of society that both governments of developing countries and international aid donor agencies currently recognise should receive more attention and a greater allocation of resources.

While the proportions of the problem must elicit official concern it need not cause despair. Most certainly the magnitude of the problem should not be the occasion for official inaction in the belief that nothing can be done. For unlike otherwise similar Third World cities Colombo M.C. is not experiencing a rapid urbanization generated by an influx of migrants. Between 1946 and 1971 the city's annual rate of growth (1.8%) was less than for Sri Lanka as a whole (2.6%).[2] Since all estimates indicate that the rate of growth of slum/shanties is similar to that of the city as a whole, the initiation of a housing policy for the existing urban poor will have a substantial impact for many years. In short, the slum/shanty problem in Colombo M.C. is manageable. Its creative solution is possible, given available resources, and can be considered a major contribution to the promise of 100,000 houses

during the medium-sector plan. Finally, as Marga's comprehensive study of housing in Sri Lanka has demonstrated, it is precisely the lowest income sector which provide 80% of the demand for any proposed increase to the existing housing stock.

Since poverty forms the basis of the current malaise of the urban poor there is the logical necessity for a commitment to a comprehensive (integrated) programme which would provide improved housing and infrastructure at a reasonable cost, together with economic initiatives in the area of employment creation. Assistance to small scale cottage industries and the creation of producer co-operatives, preferably in the area of residential habitation, will contribute to this latter requirement. Concomitantly, this programme requires some community development to foster cohesiveness and participation in the proposed redevelopment process. The creation and recognition of slum/shanty - based Development and Welfare Committees in other developing countries have provided for an expanded role of the urban poor in determining their own future. Such organizations must allow for the universal participation of residents and provide a democratic election of their own officers.

While the need for such a general programme is evident there is the stark reality that substantial costs will be involved. Before we consider the order of magnitude of these costs consider some of the benefits. For this target population - the urban poor - cannot be conceived as merely an underprivileged sector of society which deserves more. The reality of the existing urban economy is that a significant number of the labour force (and certainly the majority of slum/shanty dwellers) find employment (often under-employment) outside of formal wage labour in an 'informal' sector which provides cheap mass consumer goods and services, inputs to larger industries and an efficient means of distribution. In this sense these 'informal' sector workers, who generally populate Colombo's slum and shanties, compose an important productive segment

of the urban labour force. They represent a valuable current and potential asset for development, working in a sector with considerable labour absorption capacity. Resources allocated for their benefit will beget both increased productivity for this sector and assist in solving Sri Lanka's unemployment problem.

But, what of the real costs involved in such a programme? Assuming that some programme is desirable, this question must be considered as a choice among alternative possibilities which would provide the most comprehensive coverage and minimize costs. Two possibilities are currently open to government: slum/shanty clearance with their replacement by direct construction flats; or an upgrading scheme which generally leaves existing units and selectively provides a mix of infrastructure and structural improvements or relocates residents elsewhere when this is not feasible. The first alternative, direct construction, is prohibitively expensive. At existing prices the unit cost of a direct construction flat is at least Rs.50,000 (and even the initial development cost of a core house could be as high as Rs.12,000). This choice would also entail considerable disruption of existing socio-economic life and require the establishment of transit camps. The second choice, a selective upgrading programme, is clearly the least - cost solution. The average unit cost would be at most Rs.5,000 and no additional socio-economic costs would arise unless existing locational and land value criteria necessitated relocation to peripheral settlements. The conclusion must be obvious to any government concerned with the optimum allocation of the limited resources. That is, a slum/shanty upgrading programme will provide 10 times the number of improved dwelling units than new flats under a direct construction scheme, minimize disruption to existing settlements, and meet the stated preferences of the target group 3.

Table I. ABILITY TO PAY FOR HOUSING COLOMBO M.C.

Monthly Expenditure (Rs.)	% of Households	Average Monthly Expend. on Housing (Rs.)	*1 Affordable Capital Sum (Rs.) (Repayment period 30 years) Interest at 9% No subsidy *2	Interest at 5% 1/3 subsidy *2	Interest at 0% 2/3 subsidy *2
0 - 199	1.7	11	1,300	2,000	4,000
200 - 399	11.4	16	1,900	2,900	5,800
400 - 599	22.0	24	2,900	4,300	8,600
600 - 799	16.6	37	4,400	6,700	13,300
800 - 999	15.2	45	5,400	8,100	16,280
1000+	33.1	177	21,200	32,000	64,000

*1 Calculated by translating the present monthly expenditures on housing into an equivalent capital sum - on varying repayment terms.

*2 By comparison with repayments at 9% over 30 years.

Note: The data in columns 1 to 3 are from the "Report on the Urban Family Budget Survey 1977", Department of Census and Statistics.

A consideration of how government could reasonably expect to recover any capital budget allocation reinforces the case for an upgrading scheme. As interpolated data from Table I demonstrate, given the existing distribution of incomes in Colombo only those earning Rs. 4,000/- month and spending Rs. 400/month on housing (i.e. 2 per cent of the population) could afford this. Even with a two-thirds government subsidy less than 20 per cent of the households could pay the Rs. 140/- month required. In short, even with massive government subsidies, none of the urban poor target population could repay as little as one-third of the cost involved in a direct construction programme. While even an upgrading programme must retain some subsidy element, only this alternative minimizes this subsidy and provides housing in a cost range where the slum/shanty dwellers could repay a reasonable portion over a 30 year period.

In assessing alternative courses of action and the financial burden they entail, policy-makers should also recognize the potential contribution of foreign aid to a well-planned programme. In general, aid donor agencies would be most predisposed to an upgrading programme which provides basic needs for the lowest income target group and contains an aided self-help component. The direct construction alternative will attract no such external resources. The current international interest in the urban poor suggests that the government could even expect aid donors to provide 100 per cent cost coverage of the slum/shanty upgrading programme. Finally, another typical donor agency assessment criterion - existence of a well-defined programme which is consistent with a government approved Master Plan - suggests that now is the time to give official sanction to a large scale upgrading programme.

Consider next, a more detailed discussion of how this upgrading programme would apply to the existing variety of spatially diffuse slums and shanties in Colombo M.C. Here we begin with the principle that shanties/slums should be upgraded wherever possible. What then are the

choices open under such a programme and what criteria should establish the priorities?

Footnotes

1. Definition of Slum and Shanties

A. Slums

(a) Old tenements - Erected to accommodate the influx of a new labour force into the city during a period when a thriving plantation industry required labour for processing, packing, storage, handling and shipping. Tenement units consist normally of a single bedroom, a small verandah and a living area with common water taps and latrine facilities. They were usually built in rows on a block of land commonly referred to as a garden. These so called "tenement gardens" contain anything between a group of two or three units and a few hundreds arranged in rows.

There are about 700 slum tenement gardens with 17,000 units that accommodate 22,600 families.

(b) Old residential buildings (slum houses) - In former residential areas - mainly in the older parts of Colombo North and Central (eg. Pettah, Hulftsdorf, Wolfendhal) - later turned into stores or apartments for low-income workers. They were sub-divided into small units, inadequately maintained and largely deprived of basic sanitary facilities.

There are about 829 slum houses with 1270 families living in them.

B. Shanties - Collection of small, single - unit improvised structures constructed of non-durable materials on vacant land throughout the city. Shanties illegally occupy crown or private land, usually with no regular water, sanitary or electric supply; the majority are built on land subject to frequent flooding. Within Colombo city 16,000 shanty units, spread over 750 locations, provide shelter for 20,000 families.

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2. It should be noted that most recent annual population growth rate of Sri Lanka is around 2 per cent, compared to an estimate 1.5% for Colombo M.C.

Although the growth of Colombo M.C. has been slow more rapid growth rates have occurred in the urban fringes. Thus, the population of Colombo Urban Area increased from 560,000 to 1,240,000 (3.42 per cent per annum) between 1946 and 1971.

3. Premiminary cost estimates of the programme

Total cost of slum/shanty upgrading in Colombo M.C. will be around Rs.230 million.

(a) Slum upgrading	-	Rs.150 million
(b) Shanty improvement	-	Rs. 80 million
		Rs.230 million

2. ALTERNATIVE COURSES OF ACTION

With regard to the existing housing stock - of slums and shanties - four alternative courses of action should be considered:

1. Permanent upgrading.

   Improvements to the physical, social and economic environment of the inhabitants - including land filling where necessary.

2. Temporary upgrading

   Minor improvements to be provided where the forecast life span of the slum or shanty is short.

3. Reclocation on site

   Provision of improved housing within the area of the slum or shanty itself.

4. Relocation elsewhere

   Provision of improved housing at an alternative site, coupled with other supporting elements including employment and community facilities - such a site to be as close as possible to the existing location.

The principle should be adopted that, wherever possible, existing housing stock - including slums and shanties - should be upgraded rather than destroyed. This principle ensures both an optimal economic use of resources for housing, and minimises the extent of disruption to residents - for whom location is the prime benefit of their present housing.

Having identified alternative courses of action, the next step is to establish criteria to assess where upgrading should take place.

3. CRITERIA FOR IDENTIFYING AREAS SUITABLE FOR UPGRADING

Upgrading shall be considered the appropriate action in all areas except the following:

Areas liable to serious flooding - in practice, only shanty areas -

a. Those areas unprotected against river floods where land filling provides no solution to the problem.

b. Those areas where major land filling is required - i.e. on a scale larger than the shanty area itself - and there are no plans to undertake such a project.

Areas unsafe for human habitation - In practice only shanty areas - Those areas, other than those liable to flood which for environmental reasons are unsafe for human habitation and location where provision of sewage disposal and other services is rendered impossible.

Areas of priority alternative use - slum or shanty areas -

a. Those areas where land is essentially required for an alternative, non-housing, public use approved by the appropriate planning authorities (e.g. roads).

b. Where land is required for commercial purposes, and it has a value which will allow the profit accruing to government through the removal of the residents to more than cover the cost of providing improved housing for these residents - and such housing is actually provided.

In all areas meeting the above criteria no upgrading will be undertaken. Relocation - either on site, or more commonly elsewhere - will provide the only way of improving their physical environment. In areas of priority alternative use, however, temporary upgrading will be provided to those areas where alternative plans are not immediate.

Subdivided slum tenements

Those slum tenements (as opposed to tenement gardens) where subdividing has occurred, rendering upgrading technically impossible. In these areas relocation on site will be the appropriate action, where densities allow. Otherwise relocation elsewhere will be necessary- unless densities can be reduced by encouraging some occupants to accept relocation.

All other areas will be permanently upgraded.

(Note: In the case of some individual buildings in slum or shanty areas, the condition may be so poor that it would be cheaper to rebuild anew. Since these form only the minority in any given area there is no question of wholesale relocation - but upgrading will be taken to include the possibility of such rebuilding where necessary. This also includes the replacement of any individual buildings which have to be removed for the upgrading of the area as a whole).

4. PROPOSED ACTION

The accompanying maps (1 and 2) show for shanties and slums respectively what the implications of these criteria are.

Map 1 - Shanties. All shanties are marked individually in black. Certain areas are distinguished:

(a) Those liable to flooding - unprotected against river floods
- major land filling required.

(b) Those which may be suitable for commercial purposes -
- requiring further detailed evaluation.

(c) Areas meeting none of these criteria are not distinguished. (Note: although a few individual plots are required for alternative public use, there are no whole areas which can be so designated).

Map 2 - Slums. All slums are marked individually in black. Certain areas are distinguished:

(a) Those which may be suitable for commercial purposes - requiring further detailed evaluation.

(b) Areas of subdivided slum houses. (A number of other slum houses exist but these are not shown since they are only individual isolated buildings).

(c) Areas meeting none of these criteria are not distinguished.

(Note: although a few individual plots are required for alternative public use, there are no whole areas which can be so designated).

The Action

In those areas where only minor land filling is required, or which are not excluded by the above criteria, the first step is to designate them for upgrading. This involves guaranteeing the occupants against removal. Where land is at present in private ownership the government will have

to acquire the land. This should be done at relatively low cost since without government intervention its alternative use value is limited.

The next step is to initiate discussions with the residents, carry out more detailed surveys, and draw up a programme for action to be carried out with local funds or foreign assistance.

For those plots, owned by government, which are required for priority alternative public use - but not in the immediate future - a programme of temporary upgrading should be initiated. The situation should be explained to the residents and a programme of improvements drawn up on the basis of the priorities expressed by the residents, and the length of time for which they are likely to remain.

In those areas which may be suitable for commercial purposes additional survey work will be carried out, and an outline plan for redevelopment drawn up, which minimises the extent of disruption to residents while providing sufficient commercial space to meet the needs for the next five year period. The remaining areas will then be upgraded. Where slums or shanties are removed for commercial development certain guarantees should be provided to the residents. They should, where possible, be rehoused on the same site. Where this is not possible they should be provided with improved housing at a site as near as possible. In the event that their source of employment is removed along with their house, alternative facilities should be provided at the new location.

In these areas requiring major land filling a technical and economic study of feasibility of reclamation (either in part or in full) should be carried out. Wherever feasible such a reclamation exercise should include the upgrading of existing shanties.

In other areas no action will be taken. The reason will be explained to the residents.

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Resolution of Conflicts with Direct Construction

The above programme is concerned only with upgrading. In order to resolve the potential conflicts between this programme and the direct construction programme it is necessary also to indicate what is proposed here.

The premise on which this proposed programme is based is that it is both wasteful of resources, and socially and economically disruptive, to destroy existing housing units which still retain some useful function and replace them with new housing units - even if these are for the same residents.

There is, however, a pressing need for space to accommodate the new houses to be built under the direct construction programme. In simple terms, the choice is between three alternatives:

a. Remove occupants of slum or shanty area A temporarily to transit camp, clear the site, and build new houses on the same site. Move occupants back from transit camp.

b. Remove occupants of slum or shanty area A permanently to alternative area B, clear the site, build new houses on the site for other occupants.

c. Leave the occupants of slum or shanty area A in the same site, with improvements. Build new houses on alternative area B for other occupants.

The third alternative is better than the first because the existing stock - of slum or shanty housing - is not destroyed but improved, and disruption to residents is minimized.

The third alternative is better than the second because the same objective is achieved - new houses for other occupants plus improved housing for residents - without destroying the existing stock and with minimum disruption to residents.

The crucial point is that the existing stock of housing - although in poor state of repair and inadequately serviced - is of considerable value to the residents themselves, most particularly by virtue of its location.

Alternative sites thus must be found for the direct construction programme. (These would have had to be found in any event, if only to accommodate those removed from slums and shanties).

On a small scale, pockets of public land may be identified within the M.C. area. On a large scale however the best solution is to select those areas where major land filling is required, when this can be achieved at relatively low cost. Such areas are shown on Map 3. Estimates will be obtained of the approximate cost of filling in these areas. Unless this is excessive they should be developed for new housing - priority being given to slum/shanty dwellers requiring relocation from adjacent areas. If costs prove excessive peripheral sites will have to be developed - entailing longer travelling distances.

5. OUTSTANDING POLICY ISSUES

5.1 Implementation: What agency will actually plan and execute the programme?

Considerations:

(1) The agencies that could be involved are the UDA, NHDA, CAB, Colombo MC, Department of Town & Country Planning, foreign donor agencies, other voluntary bodies and private sector contractors.

(2) It is preferable that the planning function be separate from the executive function.

(3) No foreign donor agency is capable of actually executing all of the programme, and the planning of such a programme should not be entirely in their hands.

(4) The CAB, as presently constituted, does not have the capacity to implement a programme on the scale envisaged, but will have the benefit of the experience with the pilot projects.

(5) Whichever agency has primary responsibility there is a need for very close cooperation and coordination with the others.

(6) If foreign finance is sought on a major scale, the quality of plan preparation required may be more exacting.

(7) Planning will not be limited to general policy decisions but will also include detailed physical planning of areas, requiring a major input of architectural and other skills.

Proposal

The UDA should be responsible for overall planning. The UDA staff will do detailed physical planning, with assistance from other bodies if required. Close coordination will be maintained, especially with NHDA. If foreign donor agencies are involved they will collaborate, and may provide additional planning staff. Execution will be the responsibility of the C.A.B., supervised by the U.D.A. In order to undertake a major programme the land acquisition and planning capacity of the UDA must be increased, and the technical capacity of the CAB considerably increased.

5.2 Standards What level of physical improvements should be provided?

Considerations:

(1) Standards can only be established in relative terms, i.e., in comparison to ongoing government projects and policy.

(2) Aided self-help housing provides for a 350 sq.ft. house. Direct construction flats provide minimally 400 sq.ft. Many in slum housing have as little as 56 sq.ft./family.

(3) Minimal standards, based on this indigenous scale, would appear to be between 350 and 400 sq.ft./family.

(4) Physical infrastructure standards presently adopted are to provide clean water @ 6 families/tap and a safe system of sewage disposal.

Proposal

Wherever possible standards should not fall below the accepted minimum in other government housing schemes, (eg. 350 sq.ft. and 6 families per stand pipe). When the imposition of such standards require some

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reduction in living densities relocation on site is preferable. Any relocation to other areas must only be initiated after agreement is reached with those so affected and should provide alternative employment in close proximity to the new residential area.

5.3 Tenure What form of tenure should be given, and for what period?

Considerations:

1. The establishment of long-term tenure rights is a pre-condition for the success of many aspects of a permanent upgrading scheme with socio-economic development. In general, there will be little commitment to either further incremental improvements (spending ones own funds) or community development unless occupants own their houses and have security of tenure.

2. If loans are provided the collateral for the loan should have a life exceeding the repayment term.

3. Any substantial charge for such land levied on occupants will create economic hardships.

4. If the householder does not have freehold tenure he assumes, rightly or wrongly, that the agency renting the property has responsibility for its maintenance.

5. If freehold is guaranteed and, at a later date, the government wishes to acquire the land it is required by law to pay the full current market value as compensation.

6. The National Housing Development Authority will have sufficient powers to acquire all privately-owned land on which there are slums or shanties.

7. Foreign donor agencies often require that the target group should receive certificates of land ownership and be given security of land tenure.

8. The issue of landlordism must be sorted out. Government funds and programmes should not be extended to those who rent out their houses to tenants. Owner occupany must be the basis of qualifying for any upgrading cum socio-economic scheme.

Proposal

Existing crown land which contains slums or shanties approved for permanent upgrading should be vested in owner occupants either as lease-hold or freehold. If necessary a minimal charge can be levied. Private land should be acquired and given over to owner-occupants on the same basis. The numerous legal complexities regarding the granting of land at less than assessed value and the taxing of shanties without the granting of freehold require further investigation and clarification. A resolution of these complexities should determine the choice between leasehold and freehold as the appropriate means to assure long-term tenurial rights. Whatever form of tenure chosen must make repayment possible and likely and assure householder's maximum commitment to upgrading.

Where temporary upgrading is to occur no long term leasehold or freehold should be granted. The existing 'de facto' status should be allowed to continue until the land is required. Compensation should be paid for improvements undertaken in the interim.

5.4 Cost Recovery. What proportion of total costs should be recovered and by what means?

Considerations:

(1) The residents of slums and shanties are, in general, poor by Colombo standards and very poor by international standards.

(2) Foreign donor agencies often seek to ensure that an upgrading is 'replicable' i.e. that it is not dependent on a subsidy that cannot be provided on a sufficient scale and on a continuing basis so as to allow the programme to provide total coverage.

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(3) A programme based on full cost recovery would, of necessity, be constrained by financial considerations to provide no more than the existing level of service to slum and shanty dwellers - except to the extent that the government can fulfil an enabling role, providing costless assistance or releasing previously untapped resources. This is the paradox that the doctrine of "replicability" leads to. Unless the poor are subsidised they are simply being forced to pay for improvements they cannot afford.

(4) By requiring one component of the whole housing programme to be self-financing the possibility of any overall cross-subsidy within the programme as a whole is removed, Since the component in question is that serving the lower income levels this prevents the programme as a whole from being in any way progressive. Indeed, where subsidies to other income groups remain, public sector intervention is in fact regressive in its effect.

(5) The possibility of generating subsidies within the housing programme itself (i.e., by charging above market rates for some houses or flats) is non-existent, since the number of high income earners is small and the public sector has no monopoly of housing.

(6) The public sector is not only a major landowner in the city, but also has the powers to intervene in numerous ways which can generate funds for financing its housing programme: through taxation of increased land values (5% levy on increased land values in Colombo in the last two years would easily cover the cost of this upgrading programme); through compulsory acquisition of vacant land suitable for commercial redevelopment; by revising Municipal Market rental rates to eliminate implicit subsidies for market traders and maximise revenues for the public sector, and even more novel initiatives such as the sale of planning permissions in those areas zoned as suitable for commercial

development. As an 'entrepreneur' the public sector is uniquely placed to generate surpluses which can subsidise its housing operations for the urban poor.

Proposal

In principle, a subsidy for the lowest income stratum should be accepted because of the numerous socio-economic benefits derived. Cost recovery should be on the basis of the target population's ability to pay, assessed by existing household expenditure on housing. The anticipated increase in the basic rates should contribute to the repayment of costs.

The slum and shanty upgrading programme should be viewed as only one component of public sector intervention in the urban sector. The whole should be financially viable, but there should be an element of cross-subsidy within it. Revenues from other sources should thus subsidize housing activities. Opportunities for generating such revenues, by taxation and other means, should be investigated as a matter of urgency.

5.5 Community Involvement How can residents be involved in and committed to the programme from an early stage?

Considerations:

(1) An upgrading programme which involves the active participation of the community will have a sustained impact over the long term.

(2) Such involvement could represent the basis for local self-help efforts and a sustained commitment to further improvements in the future. Only such consciousness-raising and active participation will assure that gains for slums/shanty dwellers are institutionalized and represent ongoing demands made on the system.

(3) An organizational structure in which the local community can universally participate is the correct means to assure such involvement.

(4) The establishment of such organizations will conform to a typical aid donor agency condition that 'bankable' projects should involve an institutionalized aided self-help component.

(5) Such an organization must not be imposed on the community nor be controlled at the executive level by government officials.

(6) Development and Welfare committees at the community level have proved useful in other areas of the developing world.

Proposal:

The government should encourage the creation of community-based Development and Welfare Committees. Minimal lump sum grants to cover operating expenses should be made. All slum/shanty residents of voting age will be eligible to participate in such Committees. The executive officers of such Committees will come from among participating residents chosen in direct ballot elections. Such Committees, once established, will receive government recognition as the official local agency empowered to initiate action in the following areas:

a. Collection of minimal fees from residents to make the Committee self-financing.

b. Small self-help projects to improve community living standards.

c. Assure that upgrading standards are maintained and improved upon. Act as a representative of residents interest to ensure an appropriate level of services from the Municipal Council and other authorities responsible.

The Government should provide a community social worker for each community to initiate the creation of such Committees. Once established, a technical officer should be attached to each committee to assist in formulating projects. Finally, the government should provide grants for the implementation of small-scale projects initiated at this basic level.

5.6 Social and Economic Improvements. What facilities should be provided and policies adopted to complement the purely physical improvements?

Considerations:

(1) Community involvement and the creation of Development and Welfare Committees may be the first step in providing a wider focus to slum/shanty upgrading.

(2) However, such socio-economic additionals should not be left to the vagaries of the success of proposed committees.

(3) In principle, the socio-economic dimension could have a very wide scope including: employment cum skills training programmes, schools health and welfare facilities (e.g. in the latter instance, child-care centres).

(4) Programmes which directly create employment or contribute to increased incomes are the priority.

(5) The 'informal' sector provides income opportunities to many and has a considerable labour-absorptive capacity.

(6) Higher incomes will enhance the ability of the target population to repay expenditure on housing and thus reduce subsidy costs.

Proposal

An employment-creating, income-raising programme should accompany the upgrading scheme. The 'informal' sector provides the most potential for employment generation and should be encouraged. Grants to producer co-operatives, and small-scale industries standardization of training/ apprenticeships periods, and employment conditions would upgrade this sector.

This socio-economic input should be part of a Colombo-wide programme which might be suitable for aid from a donor agency or voluntary body. A section of the UDA Slum/Shanty unit should be established to design and implement this programme.

APPENDIX

SHANTIES IN C.M.C. AREA

The location and number of shanties are given according to the C.M.C. wards and grouped into

(i) Unprotected areas

- Shanties located outside the flood protection bund in the northern part of the city and hence are subject to flooding of Kelani River.

(ii) Major filling areas

- Shanties located in marshy lands where large scale land reclamation more than the shanty area, is necessary.

(iii) Residual areas

- Shanties that do not fall into either of the above category and are hence upgradable.

	Units	Families	Population
(1) Mattakkuliya (Total)	1405	1651	9906
Unprotected areas:			
Ferguson Road	83	97	
Fransawatta Road	18	23	
Rawatta Lane	13	23	
Kelaniganga Mill Road	09	12	
Near Summit Pura	08	08	
Major filling areas:			
Sri Wickrama Road	22	22	
Summit Pura	102	110	
Rawatta Lane	13	16	
Hendela Ferry Road	49	79	
Modera Farm Road	77	80	
Mahawatte Lane	13	16	
Residual areas:	998	1165	

	Units	Families	Population.
(2) Modera (Total)	440	476	2856
Unprotected areas:			
Furguson Road	34	36	
Sri Punnananda Mawatha	32	32	
Aluth Mawatha Road	19	19	
Major filling areas:			
Modera Road	67	76	
Bloemendhal Road	43	48	
Madampitiya Road	14	14	
Residual areas:	231	251	
(3) Mahawatta (Total)	1719	1971	11826
Unprotected areas:			
Prince of Wales Avenue	28	31	
Nagalagam Street	05	06	
Lucas Road	72	89	
Madampitiya Road	291	326	
Furguson Road	88	93	
Major filling areas:			
Nagalagam Street	39	45	
Galmellawatta	87	103	
Prince of Wales Avenue	131	153	
Madampitiya Road	77	87	
Along the Railway Avenue	162	178	
Residual areas:	739	860	

	Units	Families	Population
(4) Aluthmawatha (Total)	292	293	1758
Major filling areas:			
Walls Lane	14	12	
Bloemendhal Road	03	03	
Aluthmawatha	31	32	
Residual areas:	244	246	
(5) Lunupokuna (Total)	602	727	4362
Major filling areas:			
Mayfield Lane	16	18	
Aluthmawatha Road	52	46	
16th Lane	107	121	
Residual areas:	427	542	
(6) Bloemendhal (Total)	873	1051	6306
Major filling areas:			
Paramananda Vihara Mawatha	100	106	
Prince of Wales Avenue	84	98	
Bloemendhal Road	598	731	
Mahawatte Road	38	60	
Residual areas:	53	56	
(7) Kotahena East (Total)	29	36	216
Residual areas:	29	36	216
(8) Kotahena West (Total)	263	445	2670
Residual areas:	263	445	2670

	Units	Families	Population
(9) Kochchikade North (Total)	99	155	930
Central area:			
Sea Beach Road	01	01	
Andival Street	48	76	
Further detail study area:			
Vivekananda Hill	29	56	
Sea Street	16	17	
Residual area:	05	05	
(10) Jintupitiya (Total)	132	244	1464
Further detail study area:			
Vivekananda Hill	87	152	
Andival Street	45	92	
Residual area:	--	--	
(11) Masangasweediya (Total)	93	120	720
Further detail study area:			
Central Road	20	30	
Mosque 2nd Lane	27	40	
Residual area:	46	50	
(12) New Bazaar (Total)	286	354	2124
Major filling areas:			
Maittribodhiraja Mawatha	89	115	
Sri Sangaraja Mawatha	45	52	
Residual area:	152	187	

		Units	Families	Population
(13)	Grandpass North (Total)	564	635	3810
	Major filling area:			
	Stace Road	109	132	
	19th Lane	66	73	
	Gamunu Lane	12	19	
	Baseline Road	53	62	
	New Road (Orugodawatta)	39	40	
	Swarnachitra Road	27	35	
	Residual area:	258	274	
(14)	Grandpass South (Total)	326	403	2418
	Major filling area:			
	Baseline Road	07	12	
	De Silva Mawatha	06	08	
	Stace Road	106	146	
	Bodiraja Mawatha	38	41	
	Maligawatta Lane	107	121	
	St. Sebastian Canal	16	23	
	Residual area:	46	52	
(15)	Maligawatta West (Total)	409	541	3246
	Major filling area:			
	Sri Sangaraja Mawatha	195	260	
	Maligawatta Jumma Masjeed Road	36	48	
	Residual area:	178	233	
(16)	Aluthkade East (Total)	311	506	3036
	Residual area:	311	506	3036

	Units	Families	Population
(17) Aluthkade West (Total)	40	60	360
Further detail study area:			
Peer Saibos Lane	40	60	
(18) Kehelwatta (Total)	115	171	1026
Further detail study area:			
Mihindu Mawatha	09	13	
Residual area:	106	158	
(19) Kochchikade South (Total)	334	414	2484
Central area:			
Central Place	17	25	
Ratnajothu Sarawanamuttu Road	44	44	
Further detail study area:			
Central Lane	35	50	
Price Place	14	15	
Peer Saibo Lane	95	125	
Dam Street	55	70	
Central Road	69	80	
Dias Place	05	05	
Residual area:	--	--	
(20) Fort (Total)	270	336	2016
Residual area:	270	336	2016 2016
(21) Kompanaweediya (Total)	304	369	2214
Residual area:	304	369	2214

		Units	Families	Population
(22)	Wekanda (Total)	171	205	1230
	Residual area:	171	205	1230
(23)	Hunupitiya (Total)	107	227	1362
	Residual area:	107	227	1362
(24)	Suduwella (Total)	72	86	516
	Residual area:	72	86	516
(25)	Panchikawatta (Total)	226	238	1428
	Major filling area:			
	Between Maligawatta Housing Scheme and Panchikawatta Road	191	202	
	Residual area:	35	36	
(26)	Maradana (Total)	97	109	654
	Residual area:	97	109	654
(27)	Maligakanda (Total)	105	136	816
	Residual area:	105	136	816
(28)	Maligawatta East (Total)	195	240	1440
	Residual area:	195	240	1440
(29)	Dematagoda (Total)	679	924	5544
	Major filling area:			
	Aramaya Place	100	111	
	Between Baseline and Railway	50	59	
	Aramaya Road	25	29	
	Perth Road	90	144	
	Kent Road	01	01	
	Residual area:	413	580	

	Units	Families	Population
(30) Wanathamulla (Total)	573	730	4380
Major filling areas.			
Dematagoda Place	19	22	
Baseline Road	36	42	
Veluwana Place	16	20	
Baseline Avenue	07	08	
Seewalie Lane	100	114	
Wanathamulla Road	96	150	
Residual areas:	299	374	
(31) Kuppiyawatta East (Total)	267	302	1812
Major filling area:			
Siridamma Mawatha	177	198	
Dematagoda Road	32	39	
Residual area:	58	65	
(32) Kuppiyawatta West (Total)	129	137	822
Residual area:	129	137	822
(33) Borella North (Total)	917	1056	6336
Major filling area:			
Serpentine Road	66	76	
Magazine Road	30	75	
Seewali Lane	75	100	
Wanathamulla Road	607	658	
Residual area:	119	147	
(34) Narahenpita (Total)	471	572	3432
Major filling area:			
Mahawatta Road	77	87	
Gajaba Path	25	33	
Mangala Path	42	58	
Baseline Road	04	06	
Bullers Road	12	12	
Castle Street	31	40	
Model Farm Road	07	07	

	Units	Families	Population
B. J. Fernando Mawatha	169	203	
Residual area:	104	126	
(35) Borella South (Total)	15	18	108
Residual area:	15	18	108
(36) Cinnamon Garden (Total)	137	173	1038
Residual area:	137	173	1038
(37) Kollupitiya (Total)	126	151	906
Residual area:	126	151	906
(38) Bambalapitiya (Total)	51	58	348
Residual area:	51	58	348
(39) Milagiriya (Total)	34	34	204
Residual area:	34	34	204
(40) Thimbirigasyaya (Total)	305	352	2112
Residual area:	305	352	2112
(41) Kirula (Total)	524	722	4332
Major filling areas			
Near Kirillapona Canal	29	42	
Residual area:	495	680	
(42) Havelock Town (Total)	150	174	1044
Residual area:	150	174	1044
(43) Wellawatte North (Total)	294	350	2100
Residual area:	294	350	2100

		Units	Families	Population
(44)	Kirillapone (Total)	448	493	2958
	Major filling area:			
	Sri Siddaratha Path	96	106	
	Somadevi Place	22	23	
	Talakotuwa Watta Road	09	10	
	Residual area:	321	354	
(45)	Pamankada East (Total)	576	707	4242
	Major filling area:			
	Stafford Avenue	70	76	
	Residual area:	506	631	
(46)	Pamankada West (Total)	138	173	1038
	Residual area:	138	173	1038
(47)	Wellawatta South (Total)	228	283	1698
	Residual area:	228	283	1698
	Total	15951	19608	117648

SLUMS IN C.M.C. AREA.

Data are compiled for each local authority administrative ward. Wherever necessary sub-totals are given on the basis of:

(1) Areas for further detail study

(2) Central area

(3) Slum houses

If total number of slums in a ward are given without any of the above grouping it is implied that the slums are upgradable.

Ward No.	Units	Families	Population
1. Mattakkuliya	183	240	1440
2. Modera	319	403	2418
3. Mahawatta	86	95	570
4. Aluthmawatha	492	580	3480
5. Lunupokuna	307	399	2394
6. Bloemendhal	150	186	1116
7. Kotahena East	79	89	534
8. Kotahena West	543	696	4176
9. Kochchikade North	1031	1137	6822

(Note: Slum houses are categorized separately irrespective whether they fall within central area or further detail study area)

Slum Houses:		
Gintupitiya Street	16	12
Sea Street	43	51
Brass Founders Street	60	69
Sri Kathiresan Street	242	270
Areas for further detail study:		
Sea Street	25	30
Ratnam Road	28	38
Jampettah Street	46	61

	Units	Families	Population
St. Anthony's Road	88	114	
Hill Street	79	121	
Jinthupitiya Road	189	218	
Central Area			
Andival Street	36	39	
St. John's Street	41	41	
Sea Beach Road	56	65	
10. Jinthupitiya Road	611	803	4818
Areas for further detail study:			
Wolfendhal Street	25	41	
Sarawanamuttu Mawatha	22	35	
Bodiraja Mawatha	78	109	
Jinthupitiya Road	179	201	
Brass Founders' Street	104	114	
11. Masangasweediya	488	1053	6318
Areas for further detail study:			
Central Road	07	11	
New Moors Street	24	41	
12. New Bazaar	615	841	5046
13. Grandpass North	279	342	2052
14. Grandpass South	549	628	3768
15. Maligawatta West	262	346	2076
16. Aluthkade East	723	988	5928
17. Aluthkade West	817	1132	6792
Area for further detail study:			
St. Sebastian Road	241	340	

	Units	Families	Population
18. Kehelwatta	689	1022	6132
Area for further detail study:			
Gomes Lane	26	34	
Muhandiram Road	140	195	
Akbar Lane	44	66	
Mihindu Mawatha	12	19	
Beira Road	26	39	
Maris Lane	167	263	
St. Sebastian's Road	119	164	
19. Kochchikade South	729	976	5856
Area for further detail study:			
St. Sebastian Road	12	18	
Price Place	13	19	
Wolfendhal Street	38	51	
Mosque Lane	60	122	
Saravanamuttu Mawatha	12	22	
Saunders Place	14	14	
Hulftsdorf Street	24	31	
Dam Street	92	117	
Central Road	127	174	
Beira Road	74	84	
Akbar Lane	78	116	
Peer Saibo Street	49	55	
Dias Place	122	143	
Central Area:			
Central Road	09	10	
20. Fort	01	01	06
21. Kompannaweediya	537	823	4938
22. Wekanda	595	867	5202

		Units	Families	Population
23.	Hunupitiya	517	762	4572
24.	Suduwella	311	365	2190
25.	Panchikawatta	1075	1517	9102
26.	Maradana	536	650	3900
27.	Maligakanda	305	391	2346
28.	Maligawatta East	344	480	2880
29.	Dematagoda	555	661	3966
30.	Wanathamulla	437	540	3240
31.	Kuppiayawatta East	292	372	2232
32.	Kuppiyawatta West	426	568	3408
33.	Borella North	413	513	3078
34.	Narahenpita	178	243	1458
35.	Borella South	327	477	2862
36.	Cinnamon Garden	106	129	774
37.	Kollupitiya	236	360	2160
38.	Bambalapitiya	103	141	846
39.	Milagiriya	64	68	408
40.	Thimbirigasyaya	173	245	1470
41.	Kirula	194	249	1494
42.	Havelock Town	89	129	774
43.	Wellawatta North	62	87	522
44.	Kirillapona	194	244	1464
45.	Pamankada East	73	87	522
46.	Pamankada West	80	124	744
47.	Wellawatta South	74	88	528
	Total	17253	23137	138822

CITY OF COLOMBO

LOCATION OF SHANTIES

Scale : 1:25,000

LEGEND

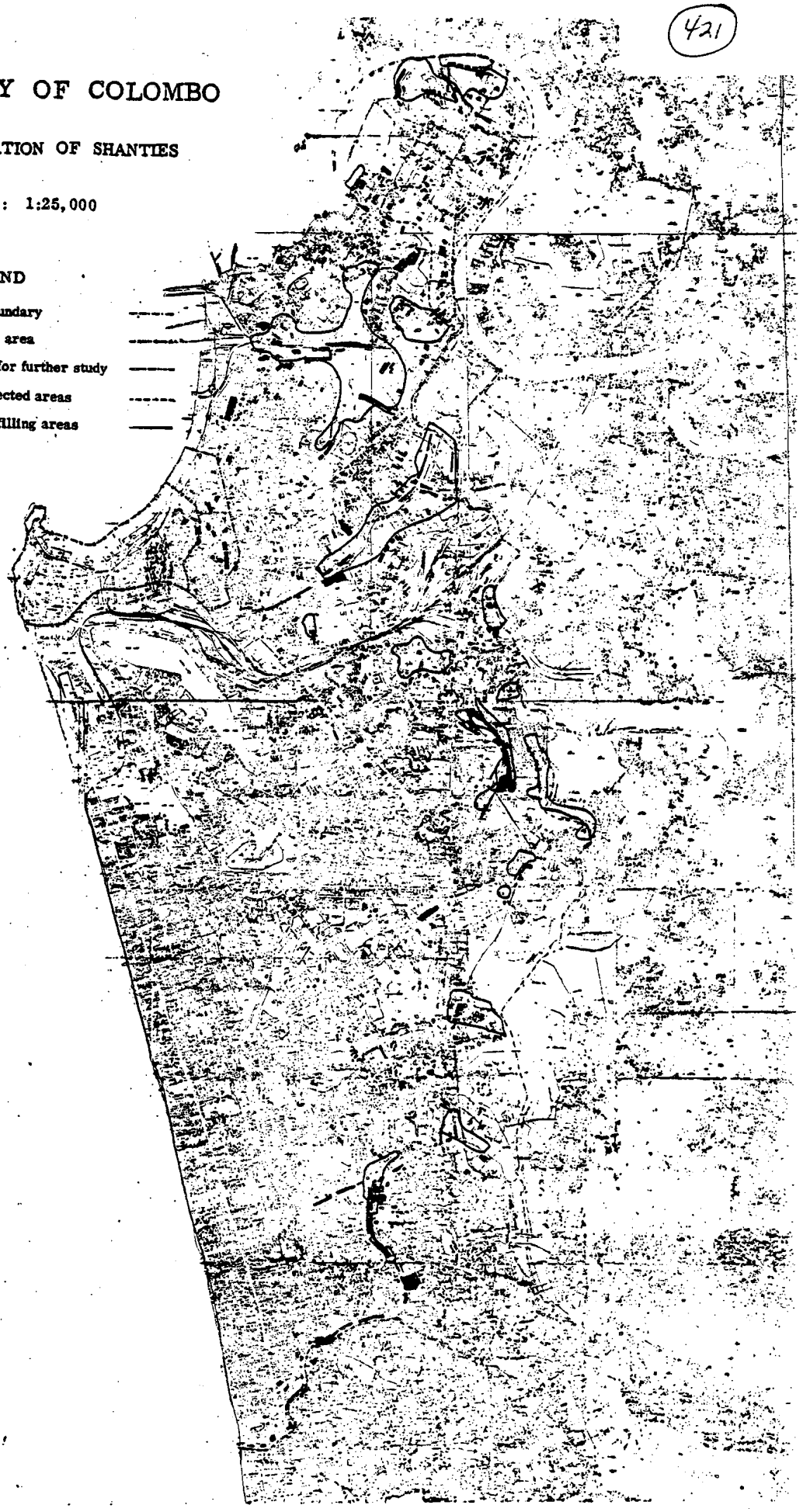
City boundary

Central area

Areas for further study

Unprotected areas

Major filling areas



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CITY OF COLOMBO

LOCATION OF SLUMS

Scale : 1:25,000

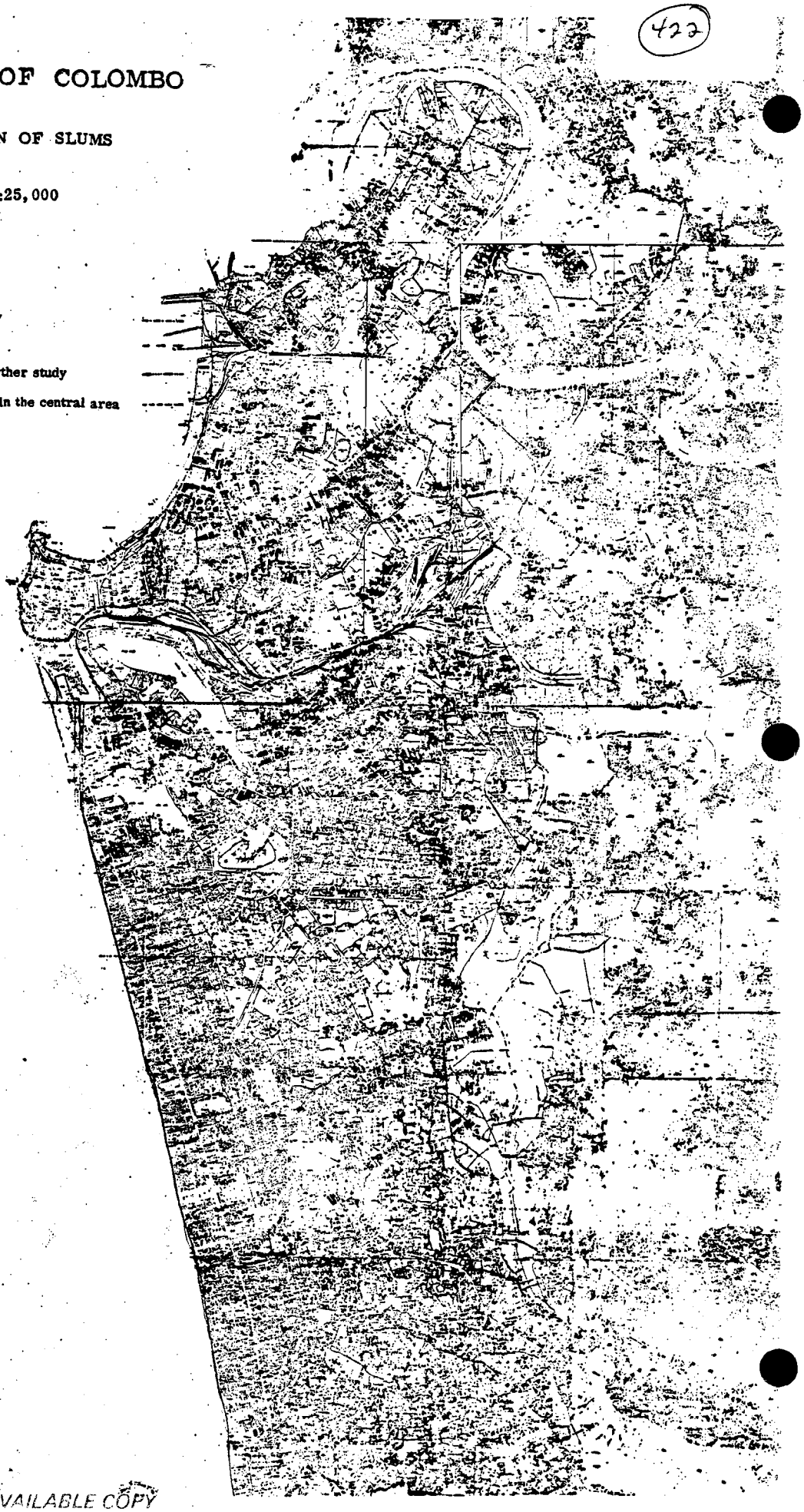
LEGEND

City boundary

Central area

Areas for further study

Slum houses in the central area



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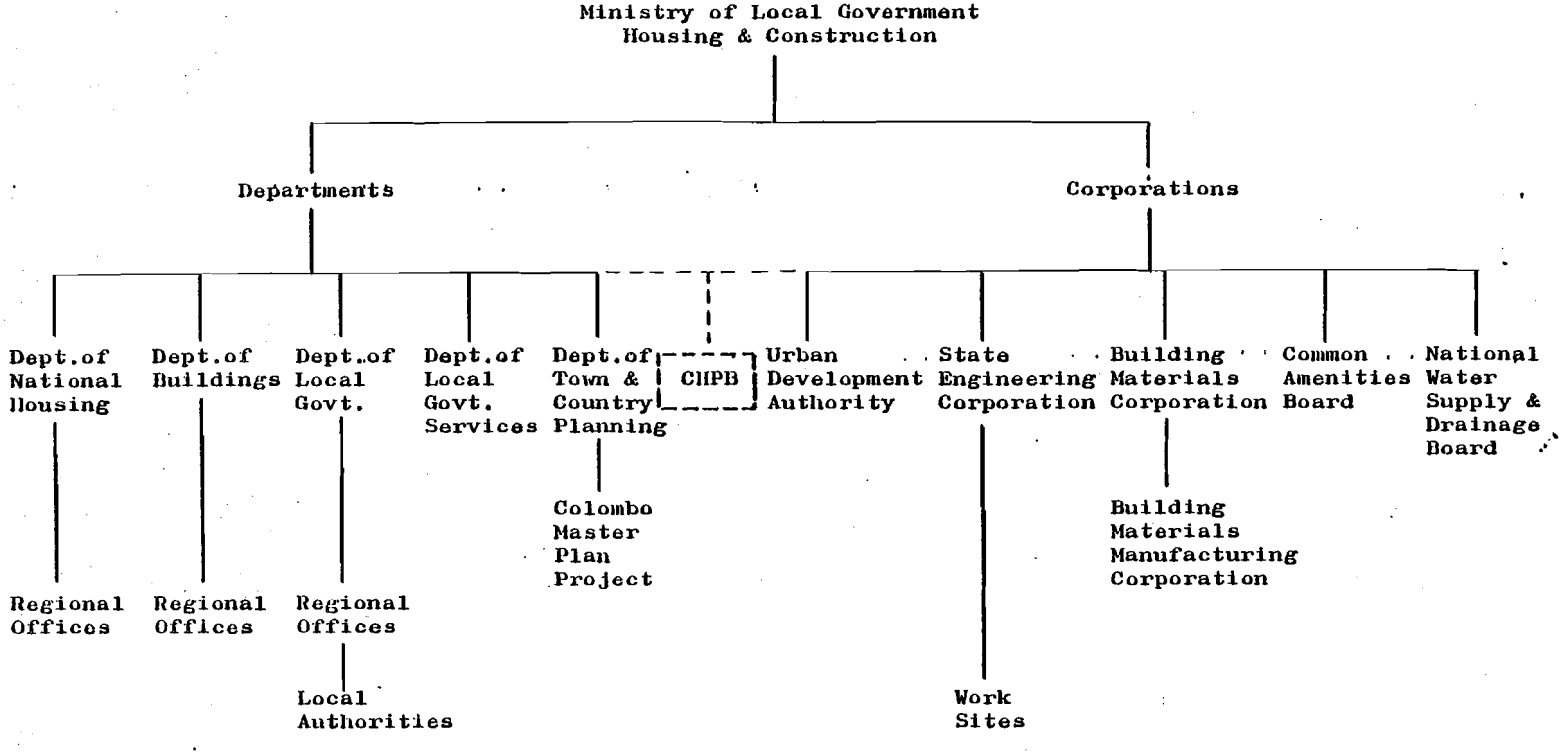
MINISTRY OF LOCAL GOVERNMENT

HOUSING & CONSTRUCTION

ORGANIZATION CHART



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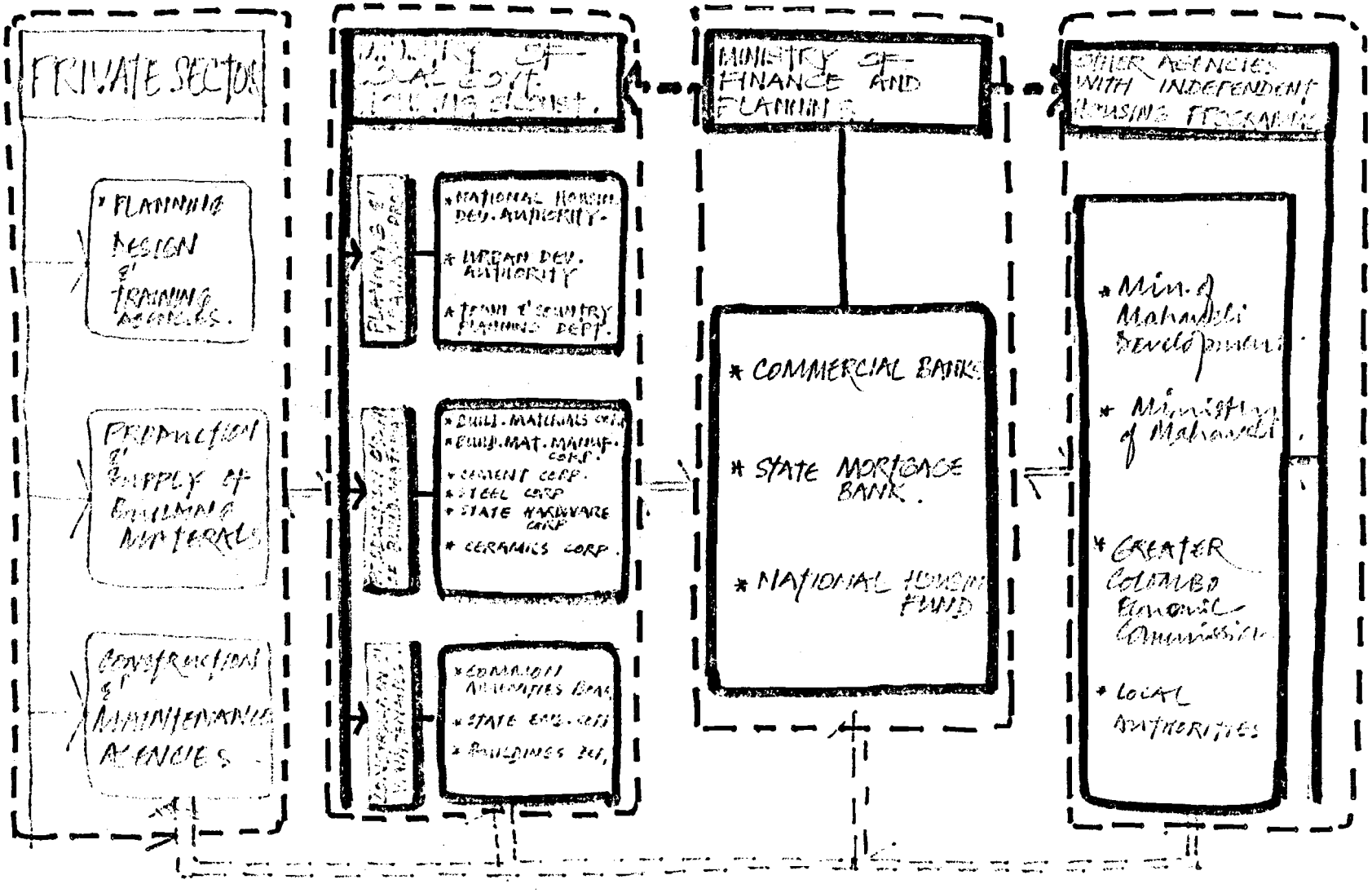
INSTITUTIONAL SYSTEMS FOR HOUSING — SRI LANKA.



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Office of Housing
Agency for International Development

SHELTER TRAINING WORKSHOP

November 5-30, 1979

ACTUAL HOUSING PROJECT DATA SHEET:

NAME OF PARTICIPANT Susil Sirivardana

NAME OF COUNTRY Sri Lanka

This form should provide information on one housing project recently constructed which was designed for low-income people. The information will be used during the Shelter Training Workshop in a participant study exercise.

1. General Information

a. Name of the project: MALWATTE AIDED SELF-HELP HOUSING SCHEME (Low Income)

b. Location of the project (city): at Kohuwela, which is a suburb of Colombo just outside its municipal limits.

c. Year of construction: 1978-79

d. Number of units in project by size (square meters):

No. of Units	Size (in m^2)
23(Low Income)	31

e. Annual income range of households in project area:

Lowest: $ 300 Highest: $ 480

f. If possible, indicate what percentage of households in the city where the project is located have an annual income higher than the average income of households in the project.

approx. 50-60 %

Office of Housing
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SHELTER
TRAINING
WORKSHOP

November 5-30, 1979

g. What is the average number of persons per household?

approx. 6

h. What is the average population density in the project?

approx. I650 people per hectare

2. Housing Finance Terms

a. List the monthly payments required by each house type (listed in Item 1d above).

Size of Unit	Monthly Payment
3I sq. m.	$ I.75

b. If the housing units were sold, List:

(1) Sales price of the unit by size: over $I000

(2) Downpayment required as a percent of sales price:

Above fihure is speculative as the houses are for repayment purchase and not for sale. %

(3) Loan (mortgage) amount as a percent of sales price:

- %

(4) Annual interest on the mortgage loan in percent:

- %

(5) The number of years for mortgage loan payment:

- years

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3. Unit Cost Data on Project

a. What was the total size of the project in square meters?

approx. 3900

b. What was the average cost per square meter for the raw land (total project site raw land cost divided by number of square meters):

$I.35

c. What was the total cost for on-site infrastructure (grading, water, sewer, roads, drainage, etc.) for the project?

$200 (only drains were needed)

d. What was the total cost of off-site infrastructure (investments required to bring water, sewers, roads, or drainage to the site itself, but not on to the site)?

Nil - already there

e. What was the average construction cost per square meter of the housing units?

$30(no labour costs)

f. What plot sizes were used by frontage and depth and total square meters?

Plot Size	Frontage	Depth
approx.I27	not available	not available

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g. What were the amounts of money charged for connections per plot by item (like water connection, electric connection, gas connection and/or sewer connection)?

Water Nil -well water is used

Electric later

Gas -

Sewer water seales latrines

Other -

h. Were construction costs of public facilities (such as schools, health clinics, or special recreation facilities) charged to the households? No If yes, what were the total costs of these facilities for the total project?

i. Was there any special construction on each plot besides the house unit (for example, a boundary wall or septic system or latrine)? _____ If yes, what was the total cost per plot of these special items?

Attached water sealed latrine - cost of materials only approx.$70

4. Physical Standards

a. What percentage of the total project site is in parks or open space?

nil %

b. What is the percentage of land area used for schools, health clinics, or other community facilities (plot area is desired, not area covered by buildings)?

nil %

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c. What percentage of the project area is used for roads and footpaths?

approx.I5-20 %

d. What is the width, in meters, of streets or footpaths by the types used in the project?

not available

e. What is the average block length?

not available.

TABLE V

	URBAN						SEMIURBAN & RURAL						
	DIRECT CONSTRUCTION			LOANS			A. S. H.			TOTAL			
		Cost			Cost			Cost			Cost		
Year	No.	Local	Foreign	No.	Local	Foreign	No.	Local	Foreign	No.	Local	Foreign	Total
1978	8,000	229	26	2,000	40.50	4.5	6,000	36	2.	16,000	305.5	32.5	338.
1979	7,700	220	25	2,300	46.57	5.17	8,000	49.1	2.5	18,000	315.67	32.67	348.34
1980	7,200	200	23	2,800	56.70	6.30	10,000	59.6	3.7	20,000	316.3	33.0	349.3
1981	6,600	189	21.1	3,400	69.85	7.65	12,000	72.2	3.8	22,000	330.05	32.	362.6
1982	6,500	186	21	3,500	70,000	7.78	14,000	84.3	4.4	24,000	340.3	33.18	373.48
	36,000	1024	116	14,000	282.62	31.41	50,000	301.20	16.40	100,000	1607.8	163.9	1771.7

50,000 Units at Rs. 1454 M.	50,000 Units at Rs. 317.6 M	100,000 Units at Rs. 1771.7 M.

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[illegible] IN SRI LANKA 1976 – 2001

	URBAN			RURAL			SRI LANKA (Total)		
	1976 (23%)	1986 (26%)	2001 (30%)	1976	1986	2001	1976	1986	2001
1. a) Population (in'000) ...	3,174	4,164	5,760	10,626	11,851	13,230	13,800	16,015	18,900
b) Household size ...	6.2	6.0	5.6	5.5	5.55	5.5	(5.73)	(5.66)	(5.53)
c) Housing requirements (a)/(b) (in'000) ...	512	694	1013	1893	2135	2405	2410	2829	3418
Less present stock ('000).. Urban: Permanent Rural: Perm. + Semi-perm ..	314	314	314	2100	2100	2100	2414	2414	2414
Balance required ('000) ..	198	380	699	-202	35	305	-4	415	1004
Add obsolete houses ('000) Urban: Perm., 50 yrs old Rural: Perm., 50 yrs old Semi-perm., 30 yrs old	46	82	136	394	456	1533	440	538	1669
Total Req. (in'000) ...	244	462	835	192	491	1838	436	953	2673
Rate of construction ... Reqd. per annum, 1976-2001 Rate per 1000 ...		33,400			73,500			106,900	
Rate from 1963-1971/a.m. .. Urban-Perm. Rural-Perm and Semi-perm. per 1000		(3.16)			(7.53)			(6.62)	
Shortfall to be bridged/annum 1000 population		(4.32)			-(0.37)			-(0.08)	

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THE AIDED SELF-HELP HOUSING PROGRAMME OF SRI LANKA AND THE FRUITS OF DECENTRALISATION.

I. The ASH Programme and Its Main Features

-rural oriented

-mainly low income(US$ 10-30):on reduced scale middle income (US$30-50):ratio about 95:5.

-all labour and construction by beneficiaries

-repayment:cost of house spread over 30 years and token land rent of 3% (without interest

-Government contribution:land — all materials on site(houses, internal roads,wells)

lay out plans

house type plans

-material supplies:monopoly channel(Building Materials Corporation)

2. Programme and Targets

Accounts for 50% of total govt. housing programme of 100,000 between 78-82.

Targets:

1978/79 -	6000
1979/80 -	8000
1980/81 -	10000
1981/82 -	12000
1982/83 -	14000
	50000

3. Background and Evolution

Modelled on first project done at Hokitta in 73-74.Between 1970-77,about 1900 ASH houses were completed.New govt. elected in July 77,decided to expand programme.Ample experience available.

4. Story before Dentralization(pre April 79)

-VERY POOR PERFORMANCE - only about 600 houses under construction by end 78

-Poor distribution electoratewise -out of 168 electorates,projects in only 15

-Programme run by National Housing Dept.,doing both regulatory and construction work.

-NHD had only 7 regional officers :operations centralised.

-No real programme:only long list of projects in varying stages of implementation

-By April 79,about 1500 houses under construction

5. NHDA Set Up

-National Housing Development Authority set up and takes over construction

-Recruits and trains 23 District Managers,one for each district:opens District offices(May and mid June)

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6. Decentralization

-end June, District Managers go to districts with very clear instructions that
+programme is TOTALLY DECENTRALIZED
+ they PLAN AND IMPLEMENT PROJECTS WITHOUT REFERENCE TO COLOMBO
+ main objective is to STEP UP PERFORMANCE

-In July, DECENTRALIZATION WAS FORMALISED STRATEGY FOR 1979 WORKED OUT, and INDICATIVE TARGETS GIVEN :that is, 100 houses by mid August, another 100 by December, in each electorate: on the basis of experience upto September, 1979 targets fixed as 1500 houses completed
10500 houses under construction
12000

-In July and August, 1979 ASH PROGRAMME prepared by aggregating district programmes
-From July, Ministry of Housing starts monitoring performance
-NHDA monitors performance once a month with all District Managers
-With decentralization, PROGRESS CONTROL becomes MAIN FUNCTION of Head Office.
-Head Office tries to build up systems (punctual and accurate progress reporting)
-Result :DRAMATIC IMPROVEMENT IN PERFORMANCE by end of September

houses completed	376
under construction	7980
	8356

-Financial performance matches physical
-During balance 3 months, targets could be reached.

7. Shortcomings and Weaknesses

-Now that the first problem of getting the programme MOVING has been solved, we have to move on to a NEW STAGE, and SOPHISTICATE IT.
-Is $1000 house sufficiently low cost? No, so cheaper and better designs are needed.
-Programme has to be made more FLEXIBLE by catering to SEVERAL STRATA of low incomes: this can be furthered by combining new construction with UPGRADING.
-Are we building houses or 'boxes'? Different plans for different climatic areas.
-Improve methods of selection of beneficiaries.
-Continue pilot project work to extend programme to private lands also.
-Training has to be continuous.
-Rent collection to be streamlined.

8. Annexes Number 1 - Operation of Programme Diagrammatically
Number 2 - Worksteps of an ASH Project
(Examples of House Type Plans and Lay Out Plans - see Country Dossier in W'shop Office)

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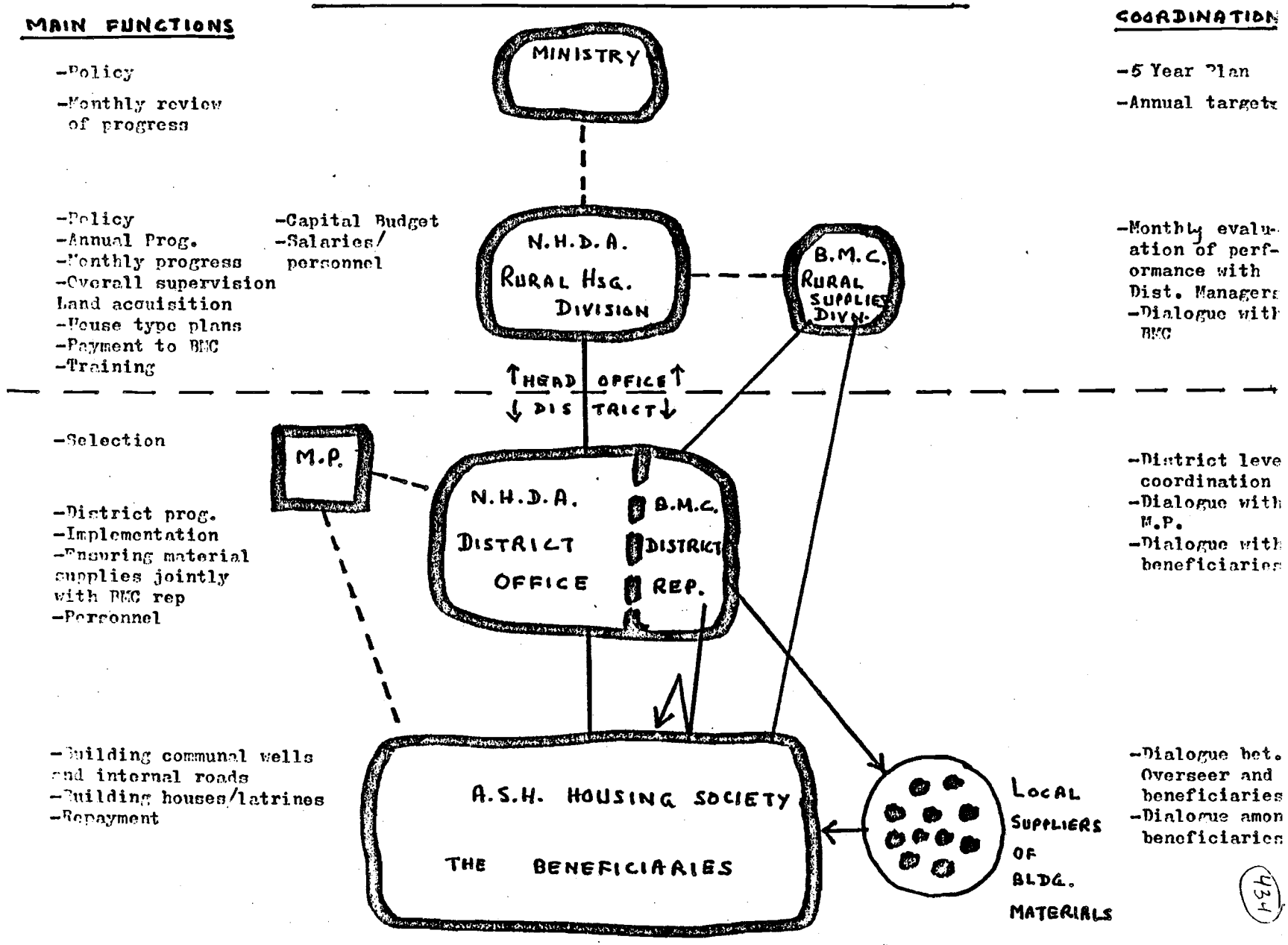
Annex 1

OPERATION OF ASH PROG. DIAGRAMATICALLY



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WORKSTEPS OF AN A.S.H. SCHEME

Annex 2

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Phase I - Pre-Construction

1. Identifying land (request/proposal).
2. M.P.'s approval.
3. Investigating feasibility.
4. Approval/rejection of scheme.
5. Fixing tentative target dates for starting and completion.
6. Informing M.P. of approval/rejection.
7. Take over/acquisition of land.
8. Survey.
9. Advance notice to B.M.C.
10. Preparing Layout Plan.
11. Selection of house-builders.
12. Deciding on Type Plan.
13. Handing material list to B.M.C.
14. Paying advance to B.M.C.
15. Distributing application forms to selectees.
16. Appointing S. Overseer.
17. Appointing watchers.
18. S.O.'s specimen signature to B.M.C.
19. Receive Affidavit/Application form.
20. Collect Deposit.
21. Forming housing society and motivating builders.
22. Fixing firm targets for starting/completing.
23. Progress reporting to Head Office.
24. Making temporary store.
25. Pegging out lots.
26. Handing over Lots to Builders.

Phase II - Construction Phase.

27. Starting work on community wells/internal roads.
28. Starting work on houses.
29. Controlling material supply and continuous dialogue with B.M.C.
30. Support of District Minister / M.P.
31. Support of G.A./A.G.A.
32. Dialogue with house-builders.
33. Motivating the stragglers.
34. Filling vacancies, if any.
35. Solving on site problems.
36. Regular field inspections.
37. Progress reporting - from site to D.M.
38. Progress reporting - from D.M. to H. Office.
39. Feedback from H. Office.
40. Fixing date for opening (when 95 % of work is over).
41. Interim Payments to B.M.C.
42. Plaque wording to H. Office.
43. Completing all work (e.g. latrines).
44. Handing over houses.
45. Signing agreements.
46. Ordering plaque.
47. Despatching plaque to D.M.
48. Organizing opening ceremony.
49. Landscaping, site clearing, erecting plaque.
50. Opening ceremony.

Phase III - Post-Construction.

1. Fixing boundary stones.
2. Closing books regarding stores.
3. Auctioning empties.
4. Collection of first rents.
5. Completing householders' ledger.
6. Final payments to B.M.C.
7. Payment of compensation.
8. Closing of site report to H. Office.

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BRIEF NOTES ON SITES AND SERVICES AND SQUATTER UPGRADING IN TANZANIA

1. Introduction:

The brief has been prepared to supplement a slide presentation. The style and content of the brief presentation is in line with the requests made at the first week workshop review session. As such the brief concentrates more on the objectives, implementation arrangements, problems encountered during implementation, criticisms, and general recommendations. Statistics provided only if it is deemed necessary to generate discussions. There is little discussion on the process of implementation. I believe this is more a function of the economic, social and political setting of each country.

For further details a paper on "Human Settlement Upgrading: Process, Problems and Solutions in Tanzania" has been included by the Faculty as general reading material for the workshop.

2. Background:

Tanzania's cities are characterized by rapid population growth, deteriorating employment situation, severe housing shortage particularly among the low income, and proliferation of inadequately serviced squatter (unplanned) settlements. The urban population, currently growing at an estimated 9% per annum, increased from 5% to about 9% of the national total during 1967 - 78, with the Bulk of the growth contributed by migrants from the countryside (The Country's population is 17 million - 1978). The economic situation of urban residents has been worsening. Average household cash incomes in urban areas fell by about 50% between 1969 and 1976 as unemployment more than doubled to its present level of about 17% of the urban labour force. The rapid growth of the cities has not been planned or accompanied by a corresponding expansion of urban services. Consequently between 40 to 70% of the residents of Tanzania's Main Towns are now living in uncontrolled, inadequately serviced squatter settlements.

Most of the squatter settlements in Tanzania Towns have grown in what used to be periurban areas. Due to extension of the Town boundaries such areas now fall within the township authorities. As such development of squatters should be seen under two phases. The first is the development which occurred before the expansion of the town boundary and secondly that which occurred with the township boundaries after such boundaries had been extended.

The socio-economic characteristics of squatter development very much influences the process of squatter upgrading. The squatters tend to gather and live in regional or even tribal groupings thus maintaining much of their accustomed lifestyle. A study carried out in 1976 in Manzese, one of the squatter areas in Dar es Salaam with a population of about 100,000 people showed that about 50% of two tribes originating from three regions (Tanzania has about 122 Tribes with 20 Administrative Regions).

Each regional grouping tends to act as a reception area for incoming rural migrants, which eases problems of urban adjustment and provides a community framework. As haw been stated before, many of the squatter areas are former sub-urban villages that have simply been swallowed by the expanding city. These village units though visually integrated with the city, retain much of their physical and social structure. The new settlers while setting the fringes of these villages, have often maintained and extended the existing structure.

Hence these expanded villages have been endowned with character and a sense of order and place, as well as a feeling of community which is irreplaceable in newly planned communities. Most of the houses in squatter areas are owned occupied, although there is also an element of renting. This factor coupled with the potential compensation factor, causes owners to keep maintenance up, hence the visual impression of squatter areas is that of constant building and rebuilding.

As regards employment, a large proportion of heads of households in the squatter settlement are employed. A study carried out in 1976 in Manzese, a settlement that is now being upgraded showed that about 65% of the household heads are employed full time in the formal sector, 22% are self-employed and the rest are unemployed. About 22% of those employed work in the manufacturing sector, and 17% work in Administrative Services. The rest work mainly in communications. Under manufacturing about 80% work as manual labourers.

Of those employed full time about 55% earned between Tsh. 380-500 (U.S. $50-65) a month, 24% earned between Tsh. 500-750 (U.S. $65-95). About 10% still earned less than Tsh. 380 (U.S. $50) a month although this figure is taken to be the official minimum wage. Such people are those working in jobs where the minimum wage regulation is not so easily enforceable. In addition to regular incomes, most of the house owners have rental incomes through sub-letting some of the rooms in their houses. About 30% of the households live in rental accommodations.

3. Policy Development:

Until 1972, when sites and services and squatter upgrading programme was launched, the government and in particular the planners deplored the unplanned somewhat disorganised character of squatter settlements.

They looked at the use of traditional housing materials as inferior and very temporaru. In other words, they considered squatter settlements to be slums. The bureaucrats insisted on high standard housing knowing very well that the demand for low cost housing was very high. Coupled with limited resources, the bureaucrats fell far back in meeting demand, and much more so, provided little or no housing on the market for the lowest income groups. The whole approach implies that while deploring squatter housing, the bureaucrats infact reinforced the growth of squatter settlements. Thus ironically, the same rising expectations that shaped governments negative view of squatting, reinforced its continued proliferation.

Extreme manpower and financial constraints have rendered Government Urban Housing inadequate and ineffective. A National Housing Programme to supply rental units produced too few and at costs far above the very low-income urban household budget. Public sector programmes to provide surveyed and serviced plots suffered form lengthy delays in processing applications and plot allocation. Because of uncoordinated national and regional responsibilities, surveyed plots went unserviced; in such cases, allotees did not build.

It was apparent that the Government had to explore a new approach toward providing housing for the low income in urban areas. This new approach was to evolve from the well established principle of "Self-Reliance". In 1973, the President directed the Ministry of Lands, Housing and Urban Development to prepare a National Sites and Services Programme for the Country's Main Regional Centres. The Programme was to be composed of newly surveyed, serviced or improved plots, with basic infrastructure and community facilities. Recognizing the importance of the self-help contribution to the housing stock, squatter settlements were to be upgraded where spontaneously organized efforts had resulted in well-constructed housing and viable neighbourhoods. This was an important departure from previous policies of squatter demolition and resettlement which the government found costly and socially disruptive. In arriving at the squatter upgrading policy, the government realised that:

a) There would be significant savings in that the domestic savings of the people represented by their investment in existing housing would not be destroyed.

b) There would be significant savings on the part of the Government, since the Government would no longer be called upon to pay large amounts of capital for compensation, nor would it have to find money for low income rental subsidies.

c) Manpower and recurrent expenditures would not have to be stretched to rapidly expand government institutions established to construct residential houses.

d) There would be savings in social costs in that existing viable communities would not be destroyed.

To make credit available, to low income household for construction loans, the government established the Tanzania Housing Bank in January 1973. A parastatal of the Treasury, its main purpose has been to mobilize domestic savings and foreign founds for financing low income housing for individuals and co-operative groups. Further the Bank promotes the use of local building materials, encourages the construction of housing types best suited to local conditions, and fosters the minimizing of building costs (See attached notes on Shelter Finance in Tanzania).

The absence of effective planning and co-ordination among agencies responsible for development has contributed to the continuing unregulated urban growth. The Ministry of Lands concentrated on reducing only the housing shortage, leaving the provision of basic infrastructure and community facilities to the concerned Ministries and local agencies as their priorities and budgets permit. Although most of the responsibilities for Land Development in Urban Areas, including the installation of basic infrastructure and community facilities was vested in the Regional authorities, the government realised the existing limited technical capacity with the authorities. As such a Sites and Services Project Unit was established in 1973 to operate as a National institution.

The Unit was assigned the responsibility of implementing a National Sites and Services and Squatter Upgrading Programme. The Unit planned to approach this National assignment in phases depending on existing resources and capabilities.

The definition as to what actually constitutes Sites and Services Project, by its very nature, can only be spelled out in broad and general terms. This is because such projects encompass a wide spectrum of premises depending on the economic level, social mores and political persuations of the various developing countries involved.

The project unit was required to provide infrastructural facilities to include roads, drainage, water supply and electricity and community facilities to include schools, health posts and markets. Both facilities were to be provided at minimum technically viable level. The intention is, that such a development will act as a gentle persuasion to the people to improve their quality of living by either building their own new houses on newly serviced areas or upgrading their houses in upgrading areas. With particular reference to squatter upgrading, the Unit was commissioned:

a) To engage in the process of Legalizing Squatter Land holdings by giving them long term leases and at the same time remove the stigma of "temporary classification" from squatter houses. This would totally legalise the status of current squatters and remove

forebodance of future clearance. With this load lifted one would expect to see housing improved beyond the minimum standards required for compensation.

(b) To prepare layouts for squatter areas respecting existing commities and to provide substatial services to include roads, drainage, water supply, and electricity and community facilities to include community education centres, markets and health posts.

(c) To find some means of getting low interest funds to low income people who wish to upgrade their existing houses.

4. Implementation Arrangement:

The Project unit has followed the following.

Implementation Arrangements:

(a) Project Planning and Project Financing has been carried out and controlled at the Project Headquarters. During Planning however, consultations have been made with local authorities through the relevant Committees.

(b) Engineering investigations and designs have been done by hired consulting firms. Their work has been co-ordinated through the Engineering Section of the Project Unit. Local Authorities and utility agencies have been consulted throughout the exercise.

(c) Construction work for both infrastructural facilities and community facilities has been done by private contractors. Suppervision of construction has been shared between consultants, Project Unit Staff and relevant Agencies.

(d) Maintenance and running of the facilities is the responsibility of local Authorities.

(e) The Tanzania Housing Bank has been responsible for shelter financing for Project beneficiaries in both sites and services and squatter upgrading areas. The appresal of house types has been shared between the local authorities and the Housing Bank.

(f) The collection of land rent and service charges is handled by the Treasury through its Internal Revenue Offices. The Project Unit assists in the logistics of strengthening the charging mechanism.

(g) The Project Unit together with the Housing Bank offer limited technical assistance to project beneficiaries through supply of house type designs; demonstration houses, material depets, and basic information brochures.

(h) The National Small Industrial Development Organization handles employment related activities.

5. Project Content:

The Project Unit has been implementing two Projects simultaneously. Both these projects are financed jointly by the Government and the World Bank (International Development Association (IDA).

(a) The First Project which started in 1974 involves about 9,000 sites and services plots and improvements affecting about 9,000 housing units in existing squatter -ettlements in three Towns- Dar-es-Salaam, Muranza and Mbeya. Services provided include roads, water supply, electricity, storm-water drainage and community facilities to include health posts, primary schools, and markets. Other Project components include funds for house consalidation; training, vehicles and equipment for office use and for project areas cleansing operations. The Project was planned to benefit approximately 160,000 low income residents of the three towns. This project is nearing completion.

(b) The Second Project was started in 1977. Unlike the first project at emphasizes squatter upgrading and provision of surveyed rather than serviced plots. It is felt that this approach will permit extension of benefits of the project to a large number of households in more towns. In essence, there has been a deliberate lowering of standards.

The Project is intended to provide basic infrastructure and community facilities to law income families in eleven squatter areas in five towns (Dar-es-Salaam, Morogoro, Tauga, Tabora, and Iriuga). The programme of surveyed plots for low income housing will provide about 19,000 plots satisfying about 75% of the estimated five year demand for new plots in the five towns. House improvement and construction loans; on site technical assistance for self-help housing consolidation, and support for community development will complement the provision of infrastructure and community facilities. The project has also included a pilot programme of assistance to small scale industry in the urban informal sector.

6. Experiences:

(a) In a developing country like Tanzania where quite a big proportion of the urban population live in squatter areas, urban development cannot be of any sense without touching the problems of the squatters. A good urban development policy should entail an approach which aims at aliviating the poor conditions of living among the majority of people who stay in squatter areas. It should further make available facilities which will allow people to provide for their own housing, depending on what they can afford.

(b) The design standards for infrastructure have been questioned in several instances:-

(i) The system of unlined ditches requires continuous maintenance and mosquito breeding is possible. However, this system has been worked out as an economical first stage of development. A second stage which can be embarked upon when resources allow, would be the lining of all ditches and provision of central sewerage system handling all domestic sewerage.

(ii) The design of roads assumes a local authority capable of undertaking constant maintenance, otherwise after a short span, all the investment will wasted. The Project Unit is now planning to provide minimum maintenance services following failure by local authorities. Local Authorities however, have to provide long term maintenance arrangements.

(iii) The provision of water supply through public kiosks is creating administrative and financial problems. According to government policy such water is free. The maintenance of the kiosks (fittings and the stand) is the responsibility of the local authority. It is being argued that, in the long run the maintenance bill will be too high.

(c) The implementation of low income housing, especially squatter upgrading process entail the existence of a clear urban policy. How to reconcile the technical views and the freedom of individuals is indeed a hard task. Thus the problem of displacement of squatters and their resettlement remain a major bottleneck.

For example Planners have yet to agree on what is the maximum distance a squatter is willing to be resettled from his orginal home and the degree of social and economic incoveniences he is willing to tolerate.

When squatters were displaced to make way for community facilities, roads, etc., they were expected to resettle in other areas which are normally planned. Yet, the fact is that many of them did move to these new areas but sneeked in and returned to the original areas to fit themselves in the improvement areas.

(d) The country has had a long experience on the construction of community facilities through selfhelp. The people are provided with building materials and they provide all the labour and actually organize themselves and undertake all construction work. This arrangment which has well been operated in the rural areas is not well established in urban areas especially in planned areas. There are signs of such undertaking in squatter settlements.

It has been argued that, the Project Unit could make savings if the contractors would undertake their work in partnership with residents of the squatter communities. The communities would do all the preliminary works through self-reliance. Such works would include digging ditches for the water pipes and such related works. The contractors would bring in the materials and undertake installation of the same. Such an arrangement has not yet been tried by the Project Unit. It is, however, felt that such an undertaking would be administratively cumbersome especially as regards the need for very close co-ordination between timing of the contractor and the work schedules of the local communities. Further it is argued that the squatter communities have enough work in that in addition to working as employees in either the formal or informal sector, they also have to either build their new houses or engage in rebuilding their existing houses.

(e) In the first phase of the Project experience has shown that there is a need to establish maximum co-ordination between the Project Unit and the bodies that will be responsible for the maintainance of infrastructure and community facilities. If funds are not reserved early enough so that they are available for this work immediately when construction is completed, chances are there that most of the services will degenerate quickly and it will be very expensive to bring them to good

condition again. The degeneration is attributed to the fact that most of the services offered are of low standard and need frequent maintainance.

(f) Whereas the people are expected to improve their poor houses or build new houses through the House improvement loan system, some of them fail to meet the Tanzania Housing Bank conditions. The security of employment and the running of Bank account are some of theconditions attached to the loans. Many of the people in the Low income bracket who are petty-tradesmen and casually self employed fail to get the credit facilities because they do not meet the Tanzania Housing Bank requirements.

(f) One way by which law income residents can be assisted to raise their income levels and uplift their standard of living is to create employment opportunities for them. The establishment of small scale industries in their vicinity will offer many of them jobs in singles or groups. These enterprises would comprise of re-cycling, Black-smithing, shoe-making, etc. depending on the demand of the local markets. apital, equipment and technical know-how can be lent to them on terms agreed upon to start with. The groups can later on be self supporting in their activities.

(h) The process of sites and services and squatter upgrading in particular is fundamentally an activity which touches down to the people's ways of living both socially and economically. The success of such an endeavour which aims at uplifting the well-being of the poor majority of the people in our countries' urban areas is a result of the overall consideration of national resources vis a vis our people's aspirations. Thus the justification of choosing the sites and services and squatter upgrading approach as a permanent way of solving the low income housing problem will be seen with the elevated socio-economic status of the people in the project areas and the general improvement of their standard of living.

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ANNEX 1

NOTES ON SHELTER FINANCE IN TANZANIA

1. In order to make available loan facilities for shelter, the government started a Housing Bank - The Tanzania Housing Bank in 1972. This followed the country's declaration which emphasized shelter, together with food and clothing as men's three basic necessities for sustaining a meaningful life.

The salient objectives of the Bank include inter alia

a) to mobiliase local savings and external resources for housing development.

b) to promote housing development by:

(i) making available loan or equity finance for housing development.

(ii) making available technical and financial assistance for sites and services facilities.

(iii) rendering technical, financial and other assistance for promotion and implementation of owner occupied housing schemes in urban

(iv) rendering technical, financial and other assistance for the establishment and administration of institutions, co-operative societies; etc engaged in housing development.

c) to ensure and assist in the implementation of government's policy on housing and building:- promote the use of local building materials; encourage the construction of types of houses best suited to local conditions; foster minimising of costs;

d) administering special funds as may be requested by the government.

2. While undertaking the above, the Bank has to make sure that:

a) only projects which are economically viable, socially desirable and technically feasible are financed.

b) adequate provisions for the enforcement of the repayment of the loans and repayment of interest exist:

c) a sound type and value of security or collateral to be pledged by a borrower or an applicant for quarantee exists:

d) the expected ability of the borrower to repay the loan without undue hardship exists.

e) all proceeds of any loan made are used solely for the purposes for which the loan is granted and that due attention is paid to considerations of economy and efficiency.

3. The sources of finance for the Bank include:

a) share capital paid in by the government

b) savings mobilised from individuals and institutions.

c) loans and grants.

d) a special fund - "Farmers and Workers housing development fund" - contributed by all employers.

e) loan repayments and investment income.

4. In Urban areas for security the Housing Bank uses mortgage on the property, i.e., the Borrower has to have certificate of title to the land. As such the land has to be surveyed so that the title can be registrable.

5. In order to control development, the Banking system does not finance the Project fully. Initially the borrower has to indicate his commitment by contributing at least 5% of the total cash. This could be in fees paid for the Land, materials in stock or work already done on the site. After the initial input, the Bank starts disbursing in stages. After each stage, The Bank inspectors visit the Project and write a report on materials used, work-manships and stage reached. Further loan disbursements depend on favourable reports by the building inspectors.

Normally loan repayments become due after 9 months from start of construction or the actual completion date of the house wichever comes in first.

In most cases loan repayments are made by the employers through the salary check off system. This is believed minimizes defaults - but ofcourse requires the borrower to be a regular employee with a ready income.

6. As regards to Lending for Sites and Services and squatter upgrading Project; The Act establishing the Bank clearly stated certain conditions which could not be met while lending for beneficiaries of this project. In the cause of operation The Bank realised that some of the legal lending procedures were unworkable.

(a) The Social and economic environment in which the Bank was expected to operate was that of a developing country with poor communication and a population which among other things is predominantly low income.

(b) The lending had therefore to be adapted to the Tanzania situation - the whole character and prospects of the borrower had to be reviewed. This involved reviews on loan limits, security, use of loan, and repayment of loan.

(c) There is no system for providing for legal security for loans in Squatter Upgrading areas. This is because, the Land cannot easily be dermacated to provide for individual titles. As an innovation, the Bank decided to allow the borrower to take a loan protection insurance policy. This is similar to life insurance policy. Once this is accomplished the borrower is allowed a house imp-ovement loan - Loans are not supposed to be given for new houses in squatter improvement area. This is done to discourage increasing densities.

(d) To further, cover the risks of the Bank, the Project provides for funds to pay to the Bank in case default rate becomes unbearable to the Bank.

7. As a technical assistance, the Bank, in colaboration with the Project Unit, has provided for several house type designs from which the Project beneficiaries can choose and procure at a nominal fee. The designs allow for incremental house construction. Further the Bank has established

site offices and is operating material depots for the bulky but crifical materials. Borrowers can opt for cash or material vouchers redeemable at the Bank's material depots. Construction of demonstration houses is also being undertaken.

ANNEX 2

DESIGN CRITERIOR AND STANDARDS FOR SITES AND SERVICES AND SQUATTER UPGRADING AREAS:

(a) In preparing the plan, provision was made for vehicular circulation throughout the site, allowing easy access to residential areas, community facilities and the main truck roads, while protecting the settlement from excessive through traffic. A safe convenient network of footpath's was also provided, linking plots to public areas and the transport system. In addition to utilizing open spaces for community facilities in the squatter areas, the same are grouped to take advantage of their interrelationships and permit multiple use of the buildings and surrounding areas.

(b) The design standards for infrastructure services were adopted after considering the requirements of the squatter upgrading and sites and services. project as well as the prevailing standards in the country. The standards are kept low enough to bring per plot costs within reach of the lower end of the household income scale. However, provisions are made in the design for improvement at later stages.

(1) Roads: 3 classes of roads have been provided in the project. Class A roads which are classified as collector roads, are designed to accomodate the heavy bus traffic. The road reserve is 33 metres with an initial carriageway width of 6 metres. The road will have a treated dry macadam surfacing on mechanically stabilised gravel base. Shoulders, 4.5 m. wide, are provided to allow for future expansion of the carriageway. Class B roads which are classified as Primary Roads are designed to serve as main vehicular access to the settlements. These have 20 m. roads reserve and 4.5 m. wide carrageway of rolled gravel. Shoulders of 3.25m. are provided on each side of the carriageway for cyclists and pedestrians. Class C roads classified as secondary roads are dirt roads which serve as vehicular and pedestrian access to the

individual housing units. The road has a 10 m. reserve width and a 5 m. wide roadaway which can be surfaced in the future to form a two lane.

(ii) Drainage: The drainage system is designed to carry storm water and domestic water exclusive of latrines. The system consists of open ditches with culverts at vehicular crossings. The ditches are unlined, except in steep areas where erosion could occur due to high velocities. Sanitary services are provided through improved pit latrines which are constructed by the house owners.

(iii) Water Supply: The design has assumed that ultimately all houses will have private water connections. Initially, however, the plot occupants are being served by water kiosks, one for every 50 houses or a maximum walking distance of 150 metres. Kiosks serving 50 houses are provided with 4 taps while those serving less are provided with 4 taps while those serving less are provided with 2 taps. The distribution system follows the roadlayout and is divided in different supply areas controlled by valves. There is also provision for fire hydrants.

(iv) Power Supply: The design of power supply system assumes that power will be required mainly for lighting purposes; and that ultimately, through conversion of transformers to larger units each street lights along main roads and power to community facilities is provided.

(c) In the new areas, the standard plot size is 288 m^2. This was based on studies on existing housing structures in the squatter areas and the prevailing standards.

(d) The planning for sites for community facilities (Markets, Community Education Centres, Health Posts) has bery much adhered to National Standards. These include a three streamed community education centre (1 stream contains 45 pupils) for a population of 4,500-5,000 people, a Dispensary for 15,000 people and a Health Centre for 50,000 people. The standard for education assumes 50% enrollment of the school going age. The

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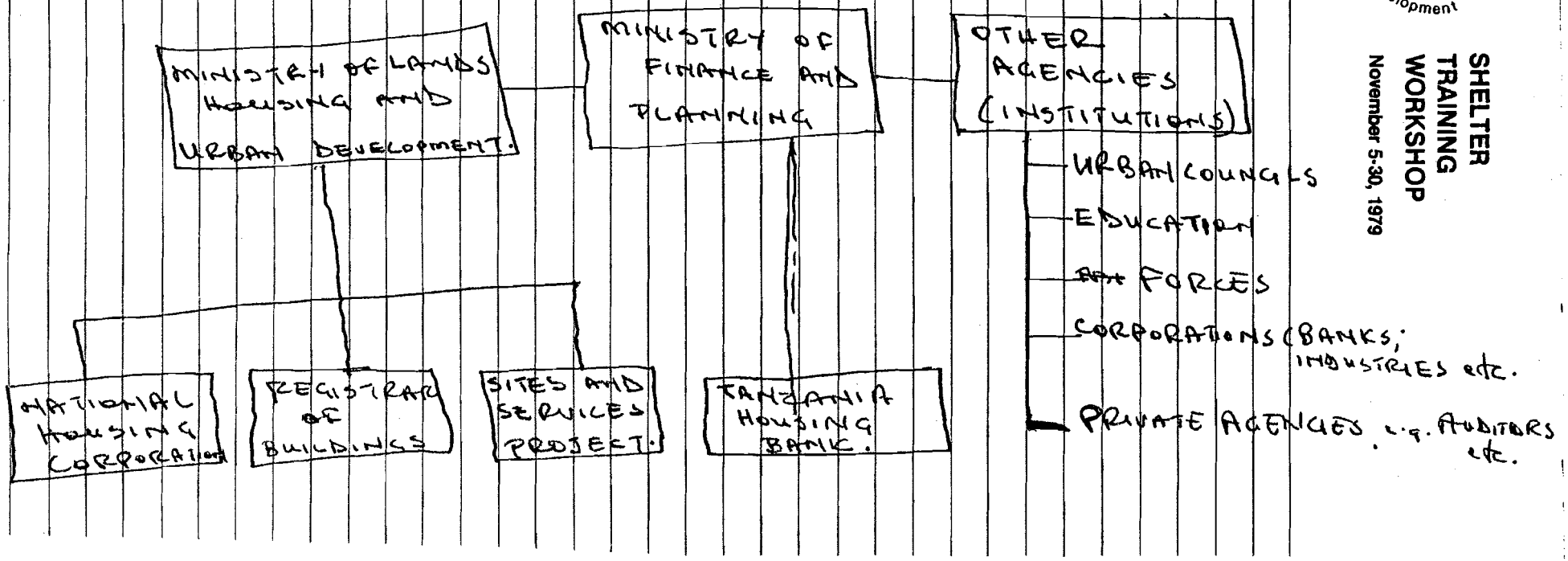
standards are now being revised following the government declaration on Universal Primary Education.

The project unit has not managed to satisfy the stated requirements. As such drawings for all the community facilities are designed to allow for future extension as and when conditions allow. In instances where even initial construction cannot be met, land has been reserved for the future.

FORMAL AGENCIES DEALING IN HOUSING.
UNITED REPUBLIC OF TANZANIA.



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THB

HOUSETYPE DESIGNS

FOR THE

SITES AND SERVICES PROJECT

IN

TANZANIA

TANZANIA HOUSING BANK • BENKI YA NYUMBA TANZANIA

The National Sites and Service Project is aimed at enhancing the living conditions of the urban poor through basic improvements in their environment. For this purpose some 28,000 serviced plots have been set aside in seven towns in Tanzania: Mwanza, Mbeya, Iringa, Morogoro, Tabora, Tanga and Dar es Salaam. The project is supported by a loan from the World Bank.

The Tanzania Housing Bank is making loans available to low-income households for house construction. In addition to that the THB's Technical Section is preparing house type designs which can be purchased by our customers for a nominal charge. The services include technical advice on choice of building materials, costing as well as site inspection.

This booklet contains a collection of seven housetypes that have been specifically designed for plotholders in sites and service areas. Type drawings, specifications and material quantities are included in the package that can be obtained from our regional offices.

This work is the result of a combined effort undertaken in collaboration with the Building Research Unit and the Sites and Services Division of the Ministry of Lands, Housing and Urban Development.

Copyright of design and specification of these seven housetypes remain with the Tanzania Housing Bank.

28.8.78

S. Kassim
General Manager

Tanzania Housing Bank
P.O. Box 1723
Dar es Salaam
Tanzania

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HOUSETYPE DESIGNS FOR THE SITES AND SERVICE PROJECT IN TANZANIA

The seven housetypes presented in this booklet have been selected by a joint 'Sites and Services Committee' consisting of representatives from the Tanzania Housing Bank, the Building Research Unit and the Sites and Services Division of the Ministry of Lands, Housing and Urban Development.

Design Criteria

The seven housetypes are so designed that

a) they fit on standard plots of sites and service areas (12 x 24 metres),

b) they can be built with locally available building materials,

c) they can be built in stages, i.e. the first stage consisting of two to three rooms which can be gradually extended up to five to six rooms. (traditional swahili house),

d) they follow the Building Rules for One Storey Houses on Surveyed Plots (draft prepared by the Ministry of Lands).

Choice of Materials

In addition to that each housetype plan is provided with a complete list of building materials required for their construction. In order to offer a certain amount of choice and to allow for regional variations, four types of wall materials have been selected:

- sand-cement blocks
- burnt bricks
- soil-cement blocks
- mud and pole

This means that four bills of quantities are attached to each of the seven housetypes, offering a choice of some 28 standard designs.

Demonstration Houses

The calculations of quantities of cement, bricks, sand or soil, roofing sheets and timber are based on the experience of an ongoing demonstration house programme carried out by the Building Research Unit. The programme is not yet completed and the tables presented in this booklet will be updated as soon as new results become available.

Feed Back

The crucial testing ground for both housetype designs and quantity tables is, of course, the experience of our clients when using these plans for building their own new house. It is then who ultimately determine which of those housetypes are most suitable and whether our calculations were right. We therefore welcome any comments or suggestions for improvements by clients, building inspectors and construction workers.

Standard Specifications

Loan Security

The Housing Bank requires financial security for its loans. The newly built house is usually taken as collateral for the loan. Under these circumstances it is important that the house itself does not deteriorate before the end of the repayment period. The THB therefore demands certain minimum standards in terms of durability of the house. A dwelling is considered durable, if it is built with:

a) proper foundations made of water-resistant material,
b) a floor slab which is raised 15 cm above ground level,

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c) loadbearing walls of 15cm thickness with a water repellent surface on the outside,

d) waterproof roofing with a 50cm overhang to protect the walls,

e) doors and windows of such a finish that they protect the occupants against bad weather and burglaries.

Minimum specifications

The specifications developed for these seven housetypes are minimum specifications. This was done in order to arrive at some sort of minimum cost level, so that we can demonstrate the cheapest possible way of constructing houses which satisfy above standard.

The specifications therefore do not include such extra items as glazed windows, suspended ceilings, waterborn sanitation, electric wiring etc. Although it is assumed that occupants may be able to install these items at a later stage, they are not considered essential as security for a low-cost hous ing loan.

Agreement with client

This important condition has to be explained to loan applicants who only qualify for a small loan to build their house. It must be pointed out to them that they have to stick to these minimum specifications, otherwise they will not manage to construct the house for the estimated amount of money. Failing this will be considered a breach of agreement between THB and borrower and may have serious reperoussions for the latter.

The following specifications have been used as a basis for calculating the amount of building materials required for each housetype:

Footing

The foundation trench has to be 45cm deep and 30cm wide. The bottom of the trench is then filled with a 15cm thick footing. A concrete footing (mix 1:3:6) is suggested for houses made of sand-cement blocks and burnt bricks. A soil-cement footing (mix 11:1) is suggested for houses made of soil-cement blocks.

Mud and pole houses do not require a footing as such. In this case the footing is embedded with the foundation wall which is made of 60cm deep and 20cm wide compacted soil cement (mix 11:1).

Foundation Walls

Foundation walls only need to be of 14-15 cm thickness except for cases where burnt bricks are used. Foundation walls made of burnt bricks are 23cm thick.

The wall materials selected for foundation walls are the same as for rising walls with the exception of soil-cement blocks. Foundation walls made of soil-cement blocks need a higher cement content (mix 11:1) than blocks used for other parts of the building (mix 16:1)

Rough Floor

It is common to build floor slabs of 10cm thickness in this country. This seems somewhat wastefull and therefore unnecessary for low-cost houses. A 5cm floor slab of concrete or soil-cement is adequate for the purpose provided that the soil underneath is well compacted. The suggested mix for concrete slabs is 1:3:6 and for soil-cement 11:1.

Walls

Material requirements for walls have been calculated according to the following specifications:

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Wall material	External walls	Internal walls
sand-cement blocks (8:1)	15cm	10cm
burnt bricks	23cm	11cm
soil-cement blocks (16:1)	14cm	14cm
mud and poles	20cm	20cm

For block sizes see bills of quantities.

Roofs

Roofs for housetypes SS-1 to SS-6 are gable roofs as per drawing. This rooftype has been chosen, because it is less timber consuming than the more common hip-roof. Only for the traditional six-room swahili housetype a hip-roof with braced girders has been suggested. Timber requirements for this roof are quite high, therefore adding considerably to the cost of the building.

Corrugated iron sheets are suggested as roofing material for all housetypes. However, corrugated aluminium sheets can be used as well.

Housetypes SS-4, SS-5 and SS-6 have been so designed that there is no need for rafters as roof support structure. The c.i sheets are supported by purlins only which span across the loadbearing walls. This design measure results in considerable savings in timber.

Doors and windows

In most urban areas doors and windows can be purchased ready-made from a carpentry workshop. Standard sizes have been used for all housetypes (see drawings and bills of quantities). In cases where a client finds it cheaper to hire a carpenter, the material requirements for making the respective number of doors and windows are listed separately (see Appendix I).

Plaster

It is considered sufficient to apply lime of plaster on internal walls only, except for mud and pole houses, where both sides of the walls have to be plastered. The following specifications have been used in calculating the materials needed:

Wall material	Plaster
sand-cement blocks	sand-cement 6:1
burnt bricks soil-cemet blocks mud and poles	sand-cement-lime 12:1:1

Floor screed

A thin layer of cement spread on the wet floor is suggested as floor finish for all housetypes. Cement requirements for floor screed are entered separately into the bill of quantities.

Drawings and Bill of Quantities

Standard Format

Drawings are presented in standard A3 format. They are drawn in scale 1:100 and show floor plan, roof plan, one typical section and four elevations. A door and window schedule is given at the bottom of each drawing. When applying for a building permit a drawing of this format is acceptable.

The Dar es Salaam City Council, for instance, has approved all seven house-types as standard type designs. This means that the issuing of a building permit is a simple routine and applicants submit only two copies of the type drawings (instead of previously four).

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Different Designs

Three of the seven housetypes have been designed by the Technical Section of the Tanzania Housing Bank (SS-1 to SS-3) and three have been designed by the Building Research Unit (SS-4 to SS-6). The traditional six-room Swahili housetypes (SS-7) has been included, because of its great popularity. The latter housetype h as been adapted to sites and services conditions by the City Engineers Office of the Dar es Salaam City Council.

Bill of Quantities

In the first column of the bill of quantit ies, the construction process is broken down into 8-12 stages depending on the type of wall material.

For instance, blockmaking has been entered as a separate heading for those houses where sand-cement or soil-cement blocks are used as wall material. This was done in order to leave it open whether to buy the blocks ready-made or whether to make them yourself. In the case of buying, the required number of blocks are costed and the amount of cement and sand/soil needed for making them can be neglected.

Stage payments

The stages of the bill of quantities roughly corresponds to the sequence of works on the site and they can thus be used as a guideline for stage payments by the Accounts Section of the Housing Bank. However it is recommended to further simplify the break down of construction work and reduce it to the following five stage payments:

1. Foundation up to rough floor level,
2. Construction up to wall plate level,
3. Roofing
4. Doors and Windows,
5. Plastering and completion

Material and Quantity

The next column specifies the material and the third column gives the quantities needed for the construction of the respective housetype. The quantities are calculated in such a way that they already include wastage (generally 10%, timber 30%).

Unit Price

The up to date prices of materials are to be entered in column four. Since it is not possible to do this for all regions, we had to leave this task to our regional building inspectors. Apart from that it is often difficult to keep track of price fluctuations and it is therefore necessary to update this column permanently.

Cost of Material

The cost of material can then be entered in the fifth column by multiplying quantity with unit price.

Cost of Labour

The last column should give an estimate of the cost of labour. This is often difficult to establish, because different fundis or contractors organise their work differently. They will often only tell the time it will take them to complete the work and the amount of money they want for it. In order to work out realistic stage payments, however, it is necessary to break down labour costs into the same five stages mentioned above. As a rule of thumb, the total cost of labour works out to be ⅓ of the total cost of materials.

Summary of costs

Once the columns for material cost and cost of labour are completed, the sums can be entered under summary of costs at the bottom of the sheet.

Cost of Transport

The cost of transport will have to be added to these two figures in order to obtain the total cost of construction.

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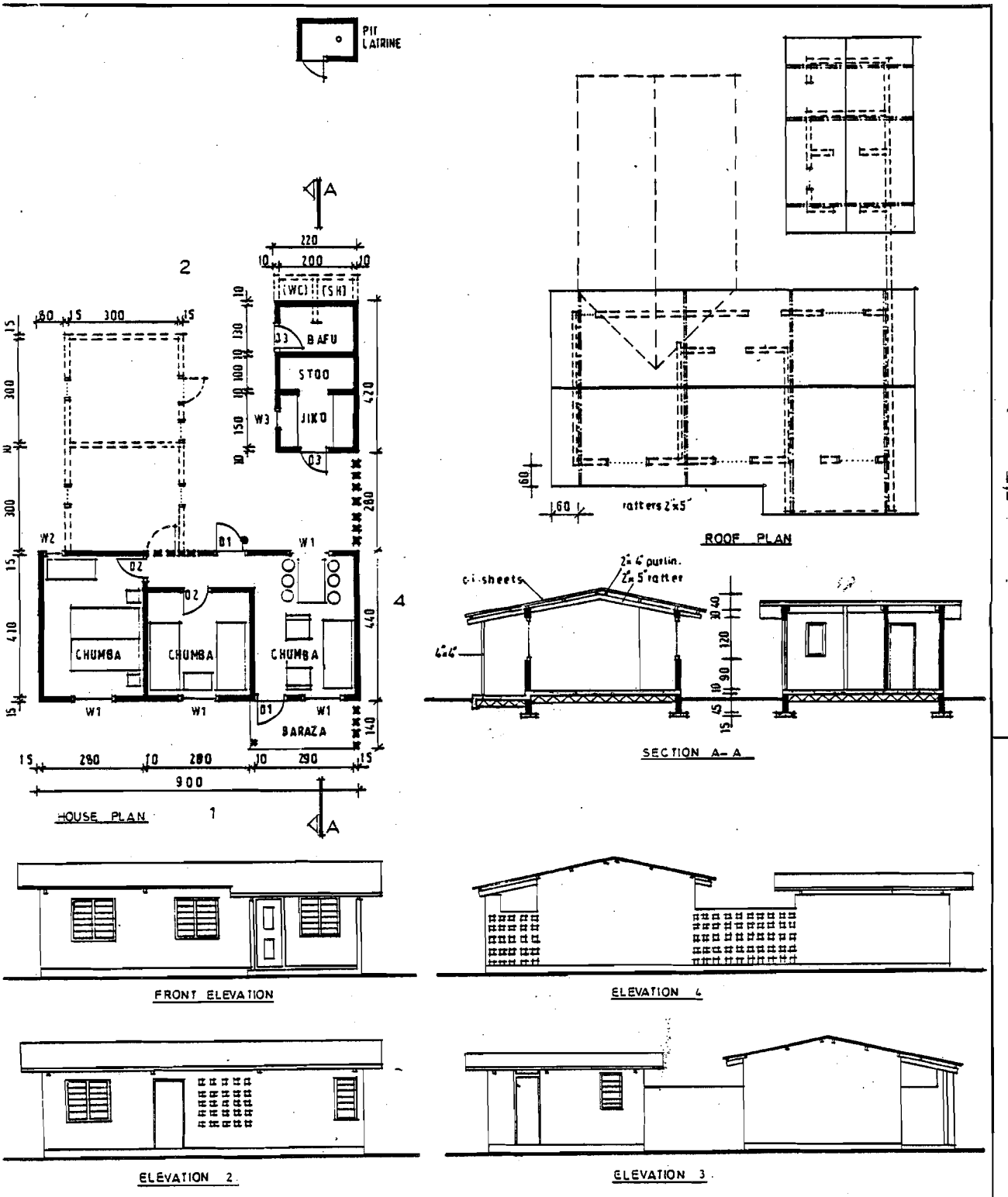
As a rough guide the total weight of materials to be transported is given in brackets. The figures clearly show that soil-cement and mud and pole constructions are less transport consuming, because the soil is taken from the site or some place nearby. Sand and bricks on the other hand have to be transported from far away.

Contingencies

In order to be on the safe side, it is recommended to add a certain percentage for contingencies to t he total cost of construction. This is to cover any losses due to unforeseen events, such as bad weather, theft, lack of transport etc. At normal times when material supplies are guaranteed, this does not have to be more than 10%. In cases where long delays are expected due to shortages, this can amount up to 25% of the total construction costs.



ANZANIA HOUSING BANK
TYPE DESIGN.

S.S.-1.

SCALE 1:100.

NAMBARI YA VYUMBA	3	MADIRISHA:		MILANGO:	
CHOO (P.L)	1	W1	120 × 120 cm	D1	210 × 90 cm
ENEO:		W2	120 × 60 cm	D2	210 × 80 cm
NYUMBA KUBWA	39.6 M^2	W3	100 × 60 cm	D3	210 × 70 cm
NYUMBA YA NYUMA	9.2 M^2				
BARAZA	4.5 M^2				

PROPOSED RESIDENCE FOR _____ TO BE BUILT ON
PLOT Nº. ____ BLOCK ____ AREA _____ TOWN _____.

Housetype: SS-1

No. of rooms: 3 + outbuilding Wall Material: Sand - cement Blocks

Area: 53.3 sq.m

	Material	Quantity	Unit Price	Material cost	Cost of labour
1. Footing 30x15cm concrete 1:3:6 (trench 45cm deep)	sand aggrate cement	1.8 tons 3.4 tons 11½ bags			
2. Blockmaking Sand-cement blocks 46 x 23 x 15cm mix 8:1	blocks sand cement	250 no. 4.8 tons 16 bags			
3. Foundations walls 2 layers mortar 6:1	sand cement	0.6 tons 1½ bags			
4. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	2.0 tons 3.8 tons 12 bags			
5. Blockmaking sand-cement blocks 46 x 23 x 15cm and 46 x 23 x 10cm, mix 8:1	l. block s. block sand cement	700 no. 600 no. 22.4 tons 73 bags			
6. Walls mortar 6:1	sand cement	2.4 tons 6½ bags			
7. Roof c.i. sheets gauge 26	sheets 10' sheets 6' ridge timber 2"x3" timber 2"x4" roof nails wire nails	33 no. 16 no. 10 no. 115m 50m 350 no. 2 kg			
8. Doors batten doors timber frame 2" x 4"	dimension 210 x 90cm 210 x 80cm 210 x 70cm	2 no. 2 no. 2 no.			
9. Windows wooden shutters timber frame 2" x 3"	dimension 120x120cm 120 x 60cm 100 x 60cm	4 no. I no. 1 no.			
10. Plaster 1cm on internal walls sand-cement 6:1	sand cement	3 tons 8½ bags			
11. Floor screed thin layer of cement spread on wet floor	cement	5½ bags			
12. Sundries	wood-preservative yale locks pit latrine	4 liters 4 no. 1 no.			
			Total		

Summary of Costs:

material cost
labour cost
transport (51 tons)
contigencies

Housetype: SS-1
No. of rooms: 3 + outbuilding Wall material: Burnt Bricks
Area: 53.3sq.m

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing - 30x15cm concrete 1:3:6 (trench 45cm deep)	sand aggregate cement	1.8 tons 3.4 tons 11½ bags			
2. Foundation walls 6 layers of burnt bricks 23x11x6.5cm mortar 6:1	bricks sand cement	2800 no. 2.7 tons 7½ bags			
3. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	2.0 tons 3.8 tons 12 bags			
4. Walls burnt bricks 23 x 11 x 6.5cm mortar 6:1	bricks sand cement	11500 no. 10.2 tons 29 bags			
5. Roof c.i. sheets gauge 26	sheets 10' sheets 6' ridge timber 2"x3" timber 2"x4" roof nails wire nails	33 no. 16 no. 10 no. 115 m 50 m 350 no. 2 kg			
6. Doors batten doors timber frame 2" x 4"	dimension 210 x 90cm 210 x 80cm 210 x 70cm	 2 no. 2 no. 2 no.			
7. Windows wooden shutters timber frame 2" x 3"	dimension 120 x 120cm 120 x 60cm 100 x 60cm	 4 no. 1 no. 1 no.			
8. Plaster lon on internal walls sand-cement-lime 12:1:1	sand lime cement	3.0 tons 225 kg 4½ bags			
9. Floor screed thin layer of cement spread on wet floor	cement	5½ bags			
10. Sundries	wood-preservative yale locks pit latrine	4 liters 4 no. 1 no.			
			Total		

Summary of Costs:
Material cost
labour cost
transport (30 tons + 15000 bricks)
contingencies

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Housetype: SS-1
No. of rooms: 3 + outbuilding Wall material: Soil-cement Blocks
Area: 53.3 sq.m.

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm Soil-cement 11:1 (trench 45cm deep)	soil cement	(4.8 tons) 8½ bags			
2. Blockmaking soil-cement blocks 46 x 23 x 15cm mix 11:1	blocks soil cement	550 no. (7 tons) 10 bags			
3. Foundation walls 3 layers mortar 8:1	soil cement	(0.8 tons) 2 bags			
4. Rough Floor 5cm soil-cement mix 11:1	soil cement	(4.5 tons) 13 bags			
5. Blockmaking soil cement block 46 x 23 x 15cm mix 16:1	blocks soil cement	3000 no. (36.4 tons) 42 bags			
6. Walls mortar 8:1	soil cement	(4.0 tons) 9 bags			
7. Roof c.i. sheets gauge 26	sheets 10' sheets 6' ridge timber 2"x3" timber 2"x4" roof nails wire nails	33 no. 16 no. 10 no. 115 m 50m 350 no. 2 kg			
8. Doors batten doors timber frame 2" x 4"	dimension 210 x 90cm 210 x 60cm 210 x 70cm	 2 no. 2 no. 2 no.			
9. Windows wooden shutters timber frame 2" x 3"	dimension 120 x 120cm 120 x 60cm 100 x 60cm	 4 no. 1 no. 1 no.			
10. Plaster 1cm on internal walls soil-cement-lime 12:1:1	soil lime cement	(3.0 tons) 225 kg 4½ bags			
11. Floor screed thin layer of cement spread on wet floor	cement	5½ bags			
12. Sundries	wood-preservative yale locks pit latrine	4 liters 4 no. 1 no.			
			Total		

Summary of costs:

Material cost
labour cost
transport (5tons)
contingencies

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Housetype: SS-1
No. of rooms: 3 + outbuilding Wall material: Mud and Pole
Area: 53.3 sq.m.

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Foundation soil-cement 60cm and 20cm wide mix 11:1	soil cement	(6.3. tons) 32½ bags			
2. Rough Floor 5cm soil-cement mix:1	soil cement	(4.5 tons) 13. bags			
3. Walls mud and poles 20cm thick 4 poles per m	poles fito sisal twine clay soil lime	220 no. 70 bundles 7 rolls (36.4 tons) 100 kg			
4. Roof o.i. sheets gauge 26	sheets 10' sheets 6' ridge timber 2"x3" timber 2"x4" roof nails wire nails	33 no. 16 no. 10 no. 115 m. 50 m 350 no. 2 kg			
5. Doors batten doors timber frames 2" x 4"	dimension 210 x 90cm 210 x 80cm 210 x 70cm	 2 no. 2 no. 2 no.			
6. Windows: wooden shutters timber frame 2" x 3"	dimension 120 x 120cm 120 x 60cm 100 x 60cm	 4 no. 1 no. 1 no.			
7. Plaster 1cm on internal and external walls soil-cement line 12:1:1	soil lime cement	(4.5 tons) 320 kg 6½ bags			
8. Floor screed thin layer of cement spread on wet floor	cement	5½ bags			
9. Sundries	wood- preservative yale locks pit latrine	 4 liters 4 no. 1 no.			
			Total		

Summary of Costs:
Material cost
labour cost
transport (3tons)
contingencies.

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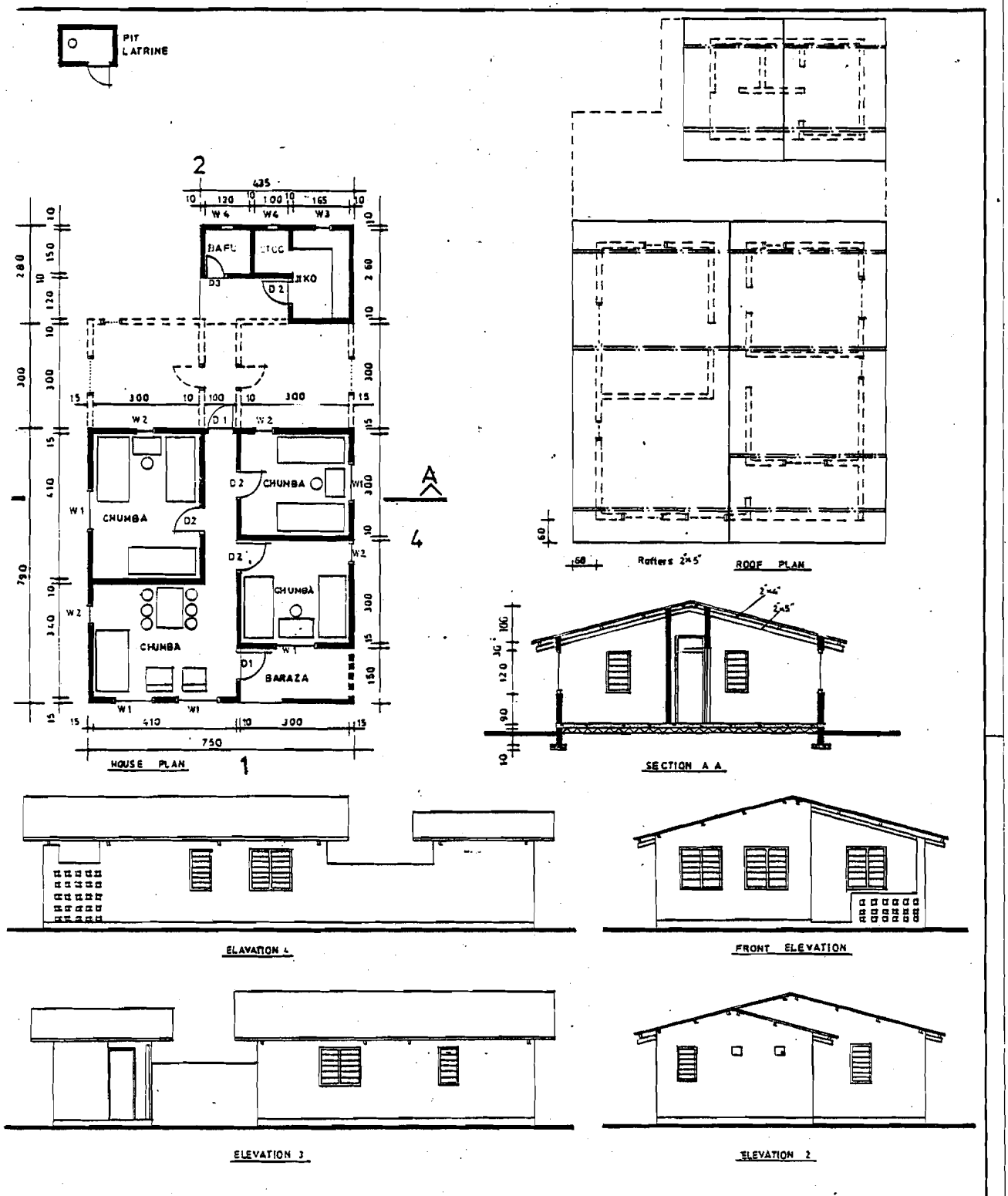

ANZANIA HOUSING BANK
TYPE DESIGN
SS-2
SCALE 1:100

NAMBARI YA VYUMBA	4	MADIRISHA		MILANGO	
CHOO (RL)	1	W 1	120 x 120 cm	D 1	210 x 90 cm
ENEO		W 2	120 x 60 cm	D 2	210 x 80 cm
NYUMBA KUBWA	54·5m²	W 3	100 x 60 cm	D 3	210 x 70 cm
NYUMBA YA NYUMA	8·5m²	W 4	30 x 30 cm		
BARAZA	3·5m²				

PROPOSED RESIDENCE FOR _____ TO BE BUILT ON
PLOT No. _____ BLOCK _____ AREA _____ _____ TOWN _____

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Housetype: SS-2

No. of rooms: 4 + outbuilding Wall Material: Sand -cement blocks

Area: 66.5 sq.m.

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm concrete 1:3:6 (trench 45cm deep)	sand aggregate cement	2.1 tons 3.6 tons 13 bags			
2. Blockmaking sand-cement blocks 46x23 x 15cm mix 8:1	blocks sand cement	280 no. 5.5 tons 18½ bags			
3. Foundation walls 2 layers mortar 6:1	sand cement	0.6 tons 2 bags			
4. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	2.4 tons 4.8 tons 15 bags			
5. Blockmaking sand-cement blocks 46 x 23 x 15cm and 46 x 23 x 10cm mix 8:1	l. blocks s. blocks sand cement	770 no. 810 no. 26.7 tons 87 bags			
6. Walls mortar 6:1	Sand cement	2.8 tons 8 bags			
7. Roof c.i. sheets gauge 26	sheets 10' sheets 6' ridge timber 2"x3" timber 2"x4" roof nails wire nails	40 no. 28 no. 9 no. 130 m 60 m 450 no. 3 kg.			
8. Doors batten doors timber frame 2" x 4"	dimension 210 x 90cm 210 x 80cm 210 x 70cm	 2 no. 4 no. 1 no.			
9. Windows wooden shutters timber frame 2" x 3"	dimension 120 x 120cm 120 x 60cm 100 x 60cm 30 x 30cm	 5 no. 4 no. 1 no. 2 no.			
10. Plaster 1cm on internal walls sand - cement 6:1	sand cement	3.5 tons 10 bags			
11. Floor Screed thin layer of cement spread on wet floor	cement	7 bags			
12. Sundries	wood-preservative yale locks pit latrine	6 liters 4 no. 1 no.			
Summary of Costs:			Total		

Material cost
Labour cost
Transport (60 tons)
Contingencies

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Housetype: SS - 2
No. of rooms: 4 + outbuilding Wall Material: Burnt Bricks
Area: 66.5 sqm.

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30 x 15cm concrete 1:3:6 (trench 45cm deep)	sand aggregate cement	2.1 tons 3.6 tons 13 bags			
2. Foundation walls 6 layers of burnt bricks 23 x 11 x 6.5cm mortar 6:1	bricks sand cement	3200 no 3.1 tons 8½ bags			
3. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	2.4 tons 2.8 tons 15 bags			
4. Walls burnt bricks 23 x 11 x 6.5cm mortar 6:1	bricks sand cement	14000 no 11.9 tons 34 bags			
5. Roof c.i. sheets gauge 26	sheets 10' sheets 6' ridge timber 2"x3" timber 2"x4" roof nails wire nails	40 no 28 no 9 no 130 rm 60 rm 450 no 3 kg.			
6. Doors batten doors timber frame 2" x 4"	dimension 210 x 90cm 210 x 80cm 210 x 70cm	 2 no 4 no 1 no			
Windows wooden shutters timber frame 2" x 3"	dimension 120 x 120cm 120 x 60cm 100 x 60cm 30 x 30cm	 5 no 4 no 1 no 2 no			
8. Plaster 1cm on internal walls sand-cement-lime 12:1:1	sand lime cement	3.5 tons 250 kg. 5 bags			
9. Floor Screed thin layer of cement spread on wet floor	cement	7 bags			
10. Sundries	wood-preservative yale locks pit latrine	6 litres 4 no 1 no			
			TOTAL		

Summary of Costs:
material cost
labour cost
transport (36 tons + 17500 bricks)
contingencies.

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Housetype: SS-2
No. of rooms: 4 + outbuilding **Wall material:** Soil-cement Blocks
Area: 66.5 sq.m.

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm soil-cement 11:1 (trench 45cm deep	soil cement	(5.3 tons) 9 bags			
2. Blockmaking soil-cement blocks 46 x 23 x 15cm mix 11:1	blocks soil cement	620 no. (7.7 tons) 11 bags			
3. Foundations walls 3 layers mortar 8:1	soil cement	(0.7 tons) 2 bags			
4. Rough Floor 5cm soil-cement mix 11:1	soil cement	(5.6 tons) 16 bags			
5. Blockmaking soil cement blocks 46 x 23 x 15cm mix 16:1	blocks soil cement	3500 no. (44.8 tons) 51 bags			
6. Walls mortar 8:1	soil cement	(4.9 tons) 11½ bags			
7. Roof c.i. sheets gauge 26	sheets 10' sheets 6' ridge timber 2"x3" timber 2"x4" roof nails wire nails	40 no. 28 no. 9 no. 130 m 60 m 450 no. 3 kg			
8. Doors batten doors timber frame 2"x4"	dimension 210 x 90cm 210 x 80cm 210 x 70cm	 2 no. 4 no. 1 no.			
9. windows wooden shutters timber frame 2" x 3"	dimension 120 x 120cm 120 x 60cm 100 x 60cm 30 x 30cm	 5 no. 4 no. 1 no. 2 no.			
10. Plaster Ion on internal walls soil-cement-lime 12:1:1	soil lime cement	(3.5 tons) 250 kg 5 bags			
11. Floor Screed thin layer of cement screed on wet floor	cement	7 bags			
12. Sundries	wood-preservative yale locks pit latrine	6 liters 4 no. 1 no.			
			Total		

Summary of costs:
Material cost
labour cost
transport (6 tons)
contingencis

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Housotype: SS-2
No. of rooms: 4 + outbuilding Wall material: Mud and Pole
Area : 66.5 sq.m

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Foundation soil-cement 60cm and 20cm wide mix 11:1	soil cement	(10.5 tons) 37 bags			
2. Rough Floor 5cm soil-cement mix 11:1	soil cement	(5.6 tons) 16 bags			
3. Walls mud and poles 20cm thick 4 poles per m	poles fito sisal twine clay soil lime	250 no. 80 bundles 8 rolls (27.8 tons) 100 kg			
4. Roof c.i. sheets gauge 26	sheets 10' sheets 6' ridge timber 2"x3" timber 2"x4" roof nails wire nails	40 no. 28 no. 9 no. 130 m 60 m 450 no. 3 kg			
5. Doors batten doors timber frame 2" x 4"	dimension 210 x 90cm 210 x 80cm 210 x 70cm	 2 no. 4 no. 1 no.			
6. Windows: wooden shutters timber frame 2" x 3"	dimension 120 x 120cm 120 x 60cm 100 x 60cm 30 x 30cm	 5 no. 4 no. 1 no. 2 no.			
7. Plaster 1cm on internal and external walls soil-cement-lime 12:1:1	soil lime cement	(5.3 tons) 400 kg 8 bags			
8. Floor Screed thin layer of cement spread on wet floor	cement	7 bags			
9. Sundries	wood- preservative yale locks pit latrine	 6 liters 4 no. 1 no.			
			Total		

Summary of Costs:
Material costs
labour cost
transport (4tons)
contingencies

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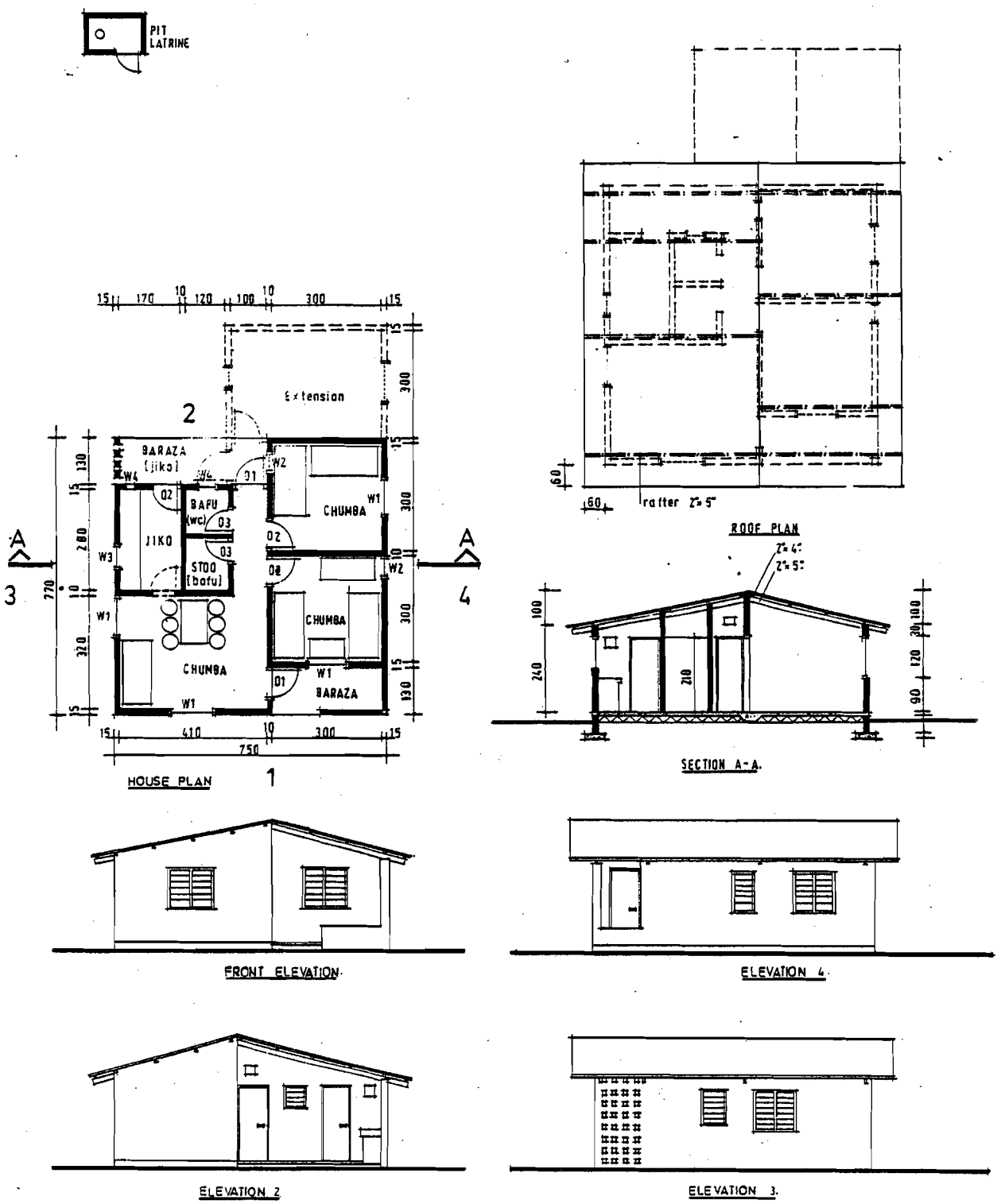

TANZANIA HOUSING BANK.
TYPE DESIGN.
SS-3. P.L. S.T.
SCALE 1:100.

NAMBARI YA VYUMBA	3	MADIRISHA:		MILANGO:	
CHOO (PL)	1	W 1	120 × 120 cm.	D 1	210 × 90 cm.
ENEO:		W 2	120 × 60 cm.	D 2	210 × 80 cm.
NYUMBA KUBWA	45.5 m²	W 3	100 × 60 cm.	D 3	210 × 70 cm.
BARAZA	9.5 m²	W 4	30 × 30 cm		

PROPOSED RESIDENCE FOR _____ TO BE BUILT ON PLOT Nº ____ BLOCK ____ AREA _____ TOWN _____.

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Housetype: SS-3
No. of rooms: 3 Wall material: Mud and Pole
Area: 55 sq.m.

	Material	Quantity	Unit Price	Material cost	Cost of labour
1. Foundation soil-cement 60cm and 20cm wide mix 11:1	soil cement	(78 tons) 28 bags			
2. Rough Floor 5cm soil-cement mix 11:1	soil cement	(4.6 tons) 13½ bags			
3. Walls mud and poles 20cm thick 4 poles per m	poles fito sisaltwine clay soil lime	200 no. 60 bundles 6 rolls (30 tons) 75 kg.			
4. Roof c.i. sheets gauge 26	sheets 10' ridge timber 2"x3" timber 2"x4" roof nails wire nails	49 no. 6 no. 100 m. 50 m 350 no. 2 kg			
5. Doors batten doors timber frames 2" x 4"	dimension 210 x 90cm 210 x 80cm 210 x 70cm	 2 no. 3 no. 2 no.			
6. Windows: wooden shutters timber frame 2" x 3"	dimension 120 x 120cm 120 x 60cm 100 x 60cm 30 x 30cm	 4 no. 2 no. 1 no. 2 no.			
7. Plaster 1cm on internal and external walls soil-cement-lime	soil lime cement	(4.0 tons) 280 kg 5½ bags			
8. Floor Screed thin layer of cement spread on wet floor	cement	5½ bags			
9. Sundries	wood-preservative yale locks pit latrine	5 liters 3 no. 1 no.			
			Total		

Summary of Costs:
Material cost
labour cost
transport (3tons)
contingencies.

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Housetype: S3-3
No. of rooms: 3
Area: 55 sq.m.

Wall material: Soil-cement Blocks

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm soil-cement 11:1 (trench 45cm deep)	soil cement	(3.9 tons) 6½ bags			
2. Blockmaking soil-cement blocks 45 x 23 x 15cm mix 11:1	blocks soil cement	470 no. (6.0 tons) 8½ bags			
3. Foundation walls 3 layers mortar 8:1	soil cement	(0.7 tons) 1½ bags			
4. Rough Floor 5cm soil blocks mix 11:1	soil cement	(4.6 tons) 13½ bags			
5. Blockmaking soil cement blocks 45 x 23 x 15cm mix 16:1	blocks soil cement	2600 no. (32.2 tons) 37 bags			
6. Walls mortar 8:1	soil cement	(3.6 tons) 8 bags			
7. Roof c.i. sheets gauge 26	sheets 10' ridge timber 2x3" timber 2x4" roof nails wire nails	49 no. 6 no. 100 m 50m 350 no. 2 kg			
8. Doors batten doors timber frame 2" x4"	dimension 210 x 90cm 210 x 80cm 210 x 70 cm	 2 no. 3 no. 2 no.			
9. Windows wooden shutters timber frame 2" x 3"	dimension 210 x 120cm 210 x 60cm 100 x 60cm 30 x 30cm	 4 no. 2 no. 1 no. 2 no.			
10. Plaster lon on internal walls soil-cement-lime 12:1:1	soil lime cement	(2.5 tons) 200 kg 4 bags			
11. Floor Screed thin layer of cement spread on wet floor	cement	5½ bags			
12. Sundries	wood-preservative yale locks pit latrine	5 liters 3 no. 1 no.			
			Total		

Summary of costs:
Material cost
labour cost
transport (5 tons)
contingencies

BEST AVAILABLE COPY

Housetype: SS-3
No. of rooms: 3
Area: 55 sq.m.

Wall material: Burnt Bricks

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm	sand	1.5 tons			
concrete 1:3:6	aggregate	2.7 tons			
(trench 45cm deep)	cement	9½ bags			
2. Foundation walls					
6 layers of burnt	bricks	2500 no.			
bricks 23x11x6.5cm	sand	2.4 tons			
mortaer 6:1	cement	6½ bags			
3. Rough Floor	sand	2.0 tons			
5cm concrete	aggregate	4.0 tons			
mix 1:3:6	cement	12½ bags			
4. Walls					
burnt bricks	bricks	11500 no.			
23 x 11 x6.5cm	sand	10.0 tons			
mortar 6:1	cement	28½ bags			
5. Roof	sheets 10'	49 no.			
c.i. sheets					
gauge 26	ridge	6 no.			
	timber 2"x3"	100 m			
	timber 2"x4"	50 m			
	roof nails	350 no.			
	wire nails	2 kg.			
6. Doors	dimension				
batten doors	210 x 90cm	2 no.			
timber frame	210 x 80cm	3 no.			
2" x 4"	210 x 70cm	2 no.			
7. Windows	dimension				
wooden shutters	120 x 120cm	4 no.			
timber frame	120 x 60cm	2 no.			
2" x 3"	100 x 60cm	1 no.			
	30 x 30cm	2 no.			
8. Plaster Ion	sand	2.5 tons			
on internal walls	lime	200 kg			
sand-cement-lime	cement	4 bags			
12:1:1					
9. Floor Screed					
thin layer of					
cement spread on	cement	5½ bags			
wet floor					
10. Sundries	wood-preservative	5 liters			
	yale locks	3 no.			
	pit latrine	1 no.			
			Total		

Summary of Costs:
Material cost
Labour cost
transport (29 tons + 14000 bricks)
contingencies

BEST AVAILABLE COPY

Housetype: SS-3
No. of rooms: 3
Area: 55 sq.m.

Wall Material: Sand - cement Blocks

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30 x 15cm Concrete 1:3:6 (trench 45cm deep)	sand aggregate cement	1.5 tons 2.7 tons 9½ bags			
2. Blockmaking sand-cement blocks 45 x 23 x 15cm mix 8:1	blocks sand cement	210 no. 4.1 tons 14 bags			
3. Foundation walls 2 layers mortar 6:1	sand cement	0.6 tons 1½ bags			
4. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	2.0 tons 4.0 tons 12½ bags			
5. Blockmaking sand-cement blocks 45 x 23 x 15cm and 45 x 23 x 10cm, mix 8:1	l. blocks s. blocks sand cement	800 no. 400 no. 21 tons 67½ bags			
6. Walls mortar 6:1	sand cement	22 tons 6½ bags			
7. Roof c.i. sheets gauge 26	sheets 10' ridge timber 2" x3" timber 2"x4" roof nails wire nails	49 no. 6 no. 100m 50 m 350 no. 2 kg			
8. Doors batten doors timber frame 2" x 4"	dimension 210 x 90cm 210 x 80cm 210 x 70cm	 2 no. 3 no. 2 no.			
9. Windows Wooden shutters timber frame 2" x 3"	dimension 120 x 120cm 120 x 60cm 100 x 60cm 30 x 30cm	 4 no. 2 no. 1 no. 2 no.			
10. Plastering on internal walls sand-cement 6:1	sand cement	2.5 tons 7½ bags			
11. Floor Screed thin layer of cement spread on wet floor	cement	5½ bags			
12. Sundries	wood-preservative yale locks pit latrine	5 liters 3 no. 1 no.			
			Total		

Summary of Costs:
material cost
labour cost
transport (47 tons)
contingencies

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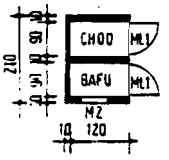
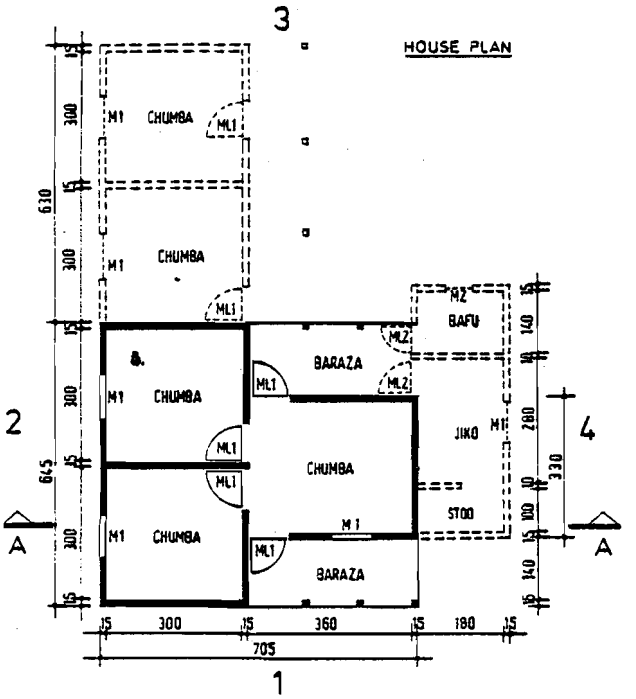
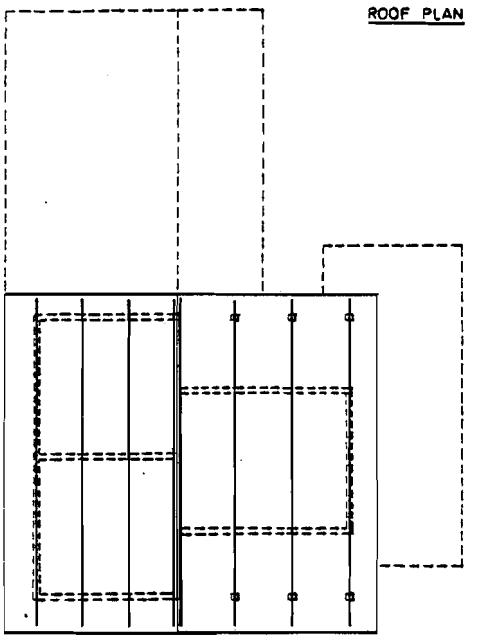
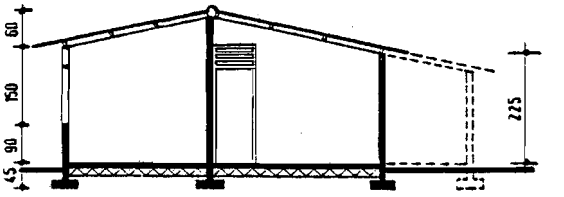
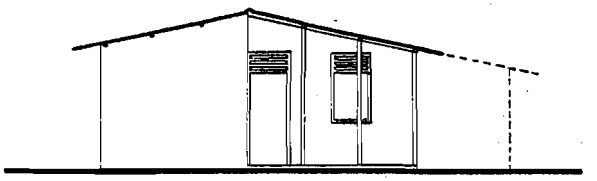
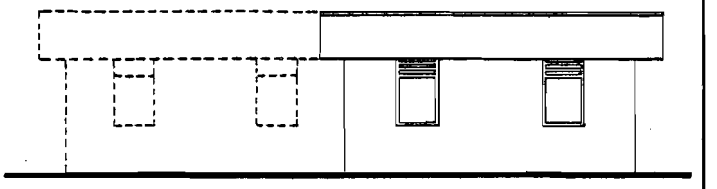


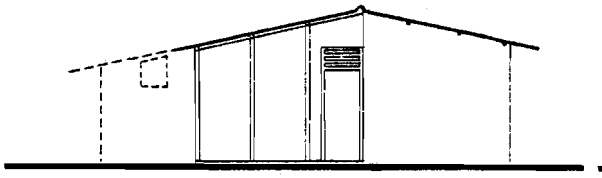


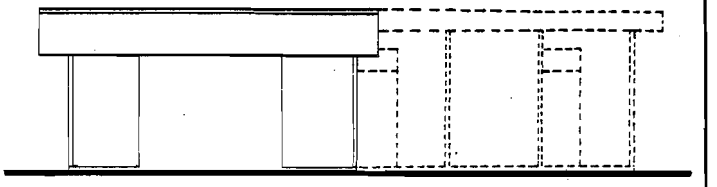












BUILDING RESEARCH UNIT
TYPE DESIGN
SS-4( )
SCALE 1:100

NGAZI 1:	NJUMBA	33.5 m²	NGAZI 2:	NYUMBA	46.5 m²	NGAZI 3:	NYUMBA	67.1 m²
	BARAZA	11.6 m²		BARAZA	11.6 m²		BARAZA	11.6 m²
	JUMLA	45.1 m²		JUMLA	58.1 m²		JUMLA	78.7 m²

MADIRISHA: M1 90 × 120 cm
M2 60 × 60 cm

MILANGO: ML1 90 × 210 cm
ML2 90 × 210 cm

PROPOSED RESIDENCE FOR _____ TO BE BUILT ON PLOT Nº _____ BLOCK _____ AREA _____ TOWN _____

Housetype: SS – 4

No. of rooms: 3 Wall Material: Sand – cement Blocks

Area: 45.1 sqm

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 20cm x 15cm concrete 1:3:6 (trench 45cm deep)	sand aggregate cement	1.0 tons 2.0 tons 6½ bags			
2. Blockmaking sand-cement blocks 46 x 23 x 15cm mix 8:1	blocks sand cement	150 no. 2.8 tons 9½ bags			
3. Foundation walls 2 layers mortar 6:1	sand cement	0.3 tons 1 bag			
4. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	1.7 tons 3.2 tons 10 bags			
5. Blockmaking sand-cement blocks 46 x 23 x 15cm and [illegible] x 23 x 10cm, mix 8:1	l. blocks s. blocks sand cement	630 no. 120 no. 14.0 tons 47½ bags			
6. Walls mortar 6:1	sand cement	1.5 tons 4½ bags			
7. Roof [illegible] sheets gauge 26	sheets 10' ridge timber 2"x3" bushpoles roof nails wire nails	36 no. 5 no. 80 rm 6 no. 300 no. 2 kg.			
8. Doors batten doors timber frame 2" x 4"	dimension 210 x 90cm	4 no.			
9. Windows wooden shutters timber framd 2" x [illegible]	dimension 90 x 120 cm	3 no.			
10. Plaster [illegible] on internal walls sand - cement 6:1	sand cement	1.5 tons 4½ bags			
11. Floor Screed thin layer of cement spread on wet floor	cement	4½ bags			
12. Sundries	wood-preservative yale locks pit latrine	3 liters 2 no. 1 no.			
			Total		

Summary of Costs:
material cost
labour cost
transport (33 tons)
contingencies

BEST AVAILABLE COPY

Housetype: SS - 4

No. of rooms: 3

Area: 45. 1 sqm

Wall material: Burnt Bricks

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm concrete 1:3:6 (trench 45cm deep)	sand aggregate cement	1.2 tons 2.0 tons 6½ bags			
2. Foundation walls 6 layers of burnt bricks 23x11x6.5cm mortar 6:1	bricks sand cement	1800 no. 1.7 tons 10 bags			
3. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	1.7 tons 3.2 tons 10 bags			
4. Walls burnt bricks 23 x 11 x 6.5cm mortar 6:1	bricks sand cement	8500 no. 7.4 tons 21 bags			
5. Roof c.i. sheets gauge 26	sheets 10' ridge timber 2"x3" bushpoles roof nails wire nails	36 no. 5 no. 80 rm 6 no. 300 no. 2 bags			
6. Doors batter doors timber frame 2" x 4"	dimension 210 x 90cm	4 no.			
7. Windows wooden shutters timber frame 2" x 3"	90 x 120cm	3 no.			
8. Plaster 1cm on internal walls sand-cement-lime 12:1:1	sand lime cement	1.5 tons 125 kg. 2½ bags			
9. Floor screed thin layer of cement spread on wet floor	cement	4½ bags			
10. Sundries	wood-preservative yale locks pit latrine	3 liters 2 no. 1 no.			
			Total		

Summary of Costs:
Material cost
labour cost
transport (22 tons + 11000 bricks)
contingencies

Housetype: SS - 4

No. of rooms: 3

Area: 45.1 sqm

Wall material: Soil-cement Blocks

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm soil-cement 11:1 (trench 45cm deep)	soil cement	(2.8 tons) 5 bags			
2. Blockmaking soil-cement blocks 46 x 23 x 15cm mix 11:1	blocks soil cement	330 no. (4.2 tons) 6 bags			
3. Foundation walls 3 layers mortar 8:1	soil cement	(0.6 tons) 1 bag			
4. Rough Floor 5cm soil-cement mix 11:1	soil cement	(3.8 tons) 11 bags			
5. Blockmaking soil cement blocks 46 x 23 x 15cm mix 16:1	blocks soil cement	1700 no. (21.0 tons) 24 bags			
6. Walls mortar 8:1	soil cement	(2.4 tons) 5½ bags			
7. Roof c.i. sheets gauge 26	sheets 10' ridge timber 2"x3" bushpoles roof nails wire nails	36 no. 5 no. 80 rm. 6 no. 200 no. 2 kg.			
8. Doors batten doors timber frames 2" x 4"	dimension 210 x 90cm	4 no.			
9. Windows wooden shutters timber frame 2" x 3"	dimension 90 x 12cm	3 no.			
10. Plaster 1 cm on internal walls soil-cement-lime 12:1:1	soil lime cement	(1.5 tons) 125 kg. 2½ bags			
11. Floor screed thin layer of cement spread on wet floor	cement	4½ bags			
12. Sundries	wood-preservative yale locks pit latrine	3 liters 2 no. 1 no.			
			Total		

Summary of costs:
Material cost
labour cost
transport (3 tons)
contingencies

BEST AVAILABLE COPY

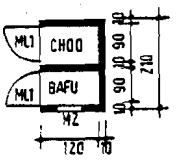
Housetype: SS - 4

No. of rooms: 3 Wall material: Mud and Pole

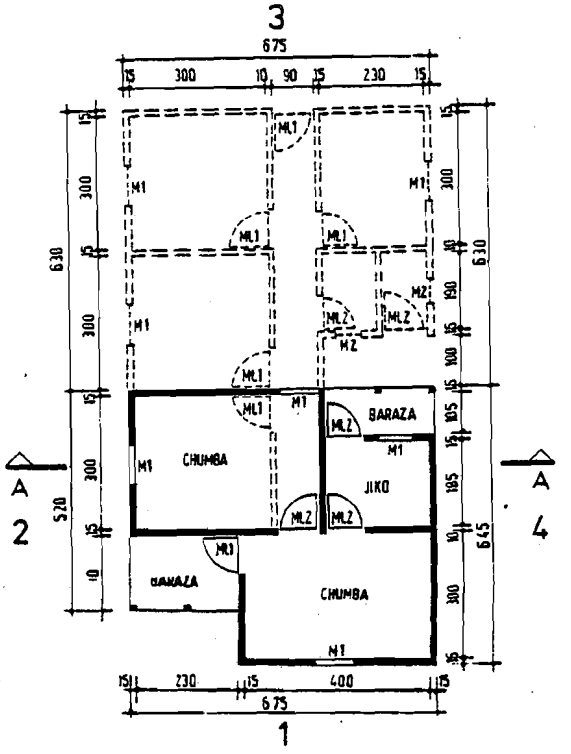
Area: 45.1 sqm

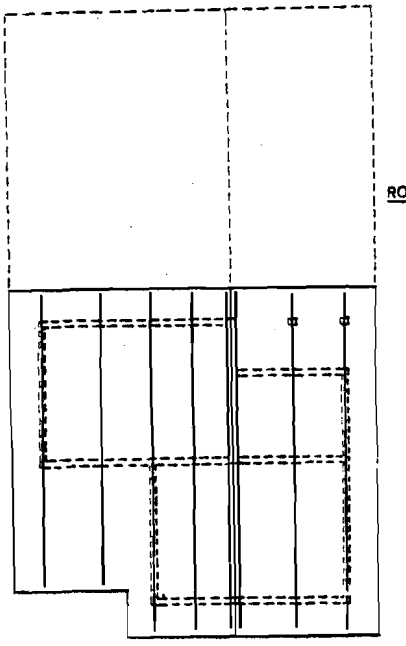
	Material	Quantity	Unit price	Material cost	Cost of labour
1. Foundation soil-cement 60cm and 20 cm wide mix 11:1	soil cement	(5.6 tons) 19½ bags			
2. Rough Floor 5cm soil-cement mix 11:1	soil cement	(3.8 tons) 11 bags			
3. Walls mud and poles 20cm thick 4 poles per rm.	poles fite sisal twine clay soil lime	140 no. 45 bundles 5 rolls (21.0 tons) 50 kg.			
4. Roof c.i. sheets gauge 26	sheets 10' ridge timber 2"x3" bushpoles roof nails wire nails	36 no. 5 no. 80 rm 6 no. 300 no. 2 kg.			
5. Doors batten doors timber frames 2" x 4"	dimension 210 x 90cm	3 no.			
6. Windows: wooden shutters timber frame 2" x 3"	dimension 90 x 120cm	3 no.			
7. Plaster 1cm on internal and external walls soil-cement-lime 12:1:1	soil lime cement	(2.7 tons) 180 kg 4 bags			
8. Floor Screed thin layer of cement spread on wet floor	cement	4½ bags			
9. Sundries	wood-preservative yale locks pit latrine	3 liters 2 no. 1 no.			
			Total		

Summary of Costs
Material cost
labour cost
transport (2 tons)
contingencies.

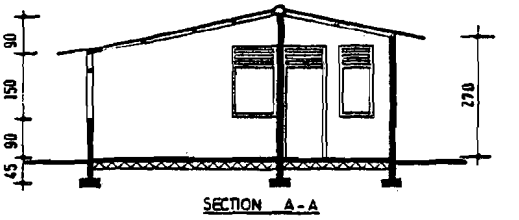


HOUSE PLAN

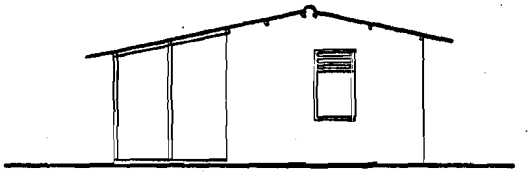




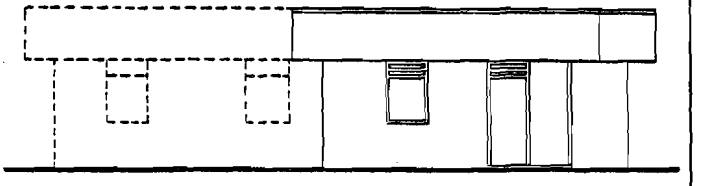
ROOF PLAN



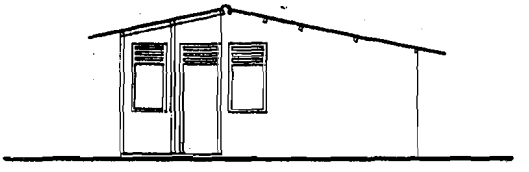
SECTION A-A



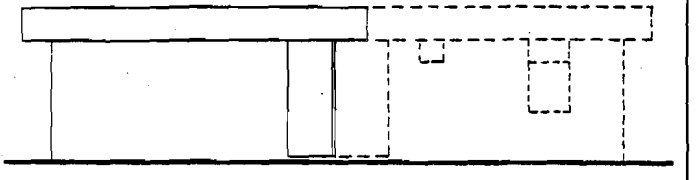
ELEVATION 1



ELEVATION 2



ELEVATION 3



ELEVATION 4

BUILDING RESEARCH UNIT

TYPE DESIGN

S S-5( )

SCALE 1:100

NGAZI 1:	NYUMBA	32·5 m²	NGAZI 2:	NYUMBA	62·0 m²	NGAZI 3:	NYUMBA 72·0 m²
	BARAZA	7·5 m²		BARAZA	16·0 m²		BARAZA 9·9 m²
	JUMLA	40·0 m²		JUMLA	78·0 m²		JUMLA 81·9 m²

MADIRISHA: M1 90 × 120 cm; M2 60 × 60 cm

MILANGO: ML1 90 × 210 cm; ML2 80 × 210 cm

PROPOSED RESIDENCE FOR _____ TO BE BUILT ON PLOT N° _____ BLOCK _____ AREA _____ TOWN _____

Housetype: SS - 5

No. of rooms: 3 Wall Material: Sand - cement Blocks

Area: 40 sqm

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm concrete 1:3:6 (trench 45cm deep)	sand aggregate cement	1.2 tons 2.0 tons 6½ bags			
2. Blockmaking sand-cement blocks 46 x 23 x 15cm mix 8:1	blocks sand cement	150 no. 2.8 tons 9½ bags			
3. Foundation walls 2 layers mortar 6:1	sand cement	0.3 tons 1 bag			
4. Rough Floor 5 cm concrete mix 1:3:6	sand aggregate cement	1.4 tons 2.8 tons 9 bags			
5. Blockmaking and-cement blocks 46 x 23 x 15cm and 46 x 23 x 10cm, mix 8:1	1. blocks a. blocks sand cement	660 no. 140 no. 15.0 tons 50½ bags			
6. Walls mortar 6:1	sand cement	1.7 tons 4½ bags			
7. Roof c.i. sheets gauge 26	sheets 10' sheets 8' ridge timber 2"x3" bushpoles roof nails wire nails	22 no. 12 no. 5 no. 75 rm 4 no. 250 no. 2 kg.			
8. Doors batter doors timber frame 2" x 4"	dimension 210 x 90 cm 210 x 80cm	 1 no. 3 no.			
9. Windows wooden shutters timber frame 2" x 3"	dimension 90 x 120 cm	 4 no.			
10. Plaster lem on internal walls sand - cement 6:1	sand cement	1.5 tons 4½ bags			
11. Floor Screed thin layer of cement spread on wet floor	cement	4 bags			
12. Sundries	Wood-preservative yale locks pit latrine	3 liters 2 no. 1 no.			
			Total		

Summary of Costs:
material cost
labour cost
transport (33 tons)
contingencies

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Housetype: SS – 5

No. of rooms: 3 Wall material: Burnt Bricks

Area: 40 sqm

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm concrete 1:3:6 (trench 45cm deep)	sand aggregate cement	1.2 tons 2.0 tons 6½ bags			
2. Foundation Walls 6 layers of burnt bricks 23x11x6.5cm mortar 6:1	bricks sand cement	1800 no. 1.7 tons 4½ bags			
3. Rough Floor 5 cm concrete mix 1:3:6	sand aggregate cement	1.4 tons 2.8 tons 9 bags			
4. Walls burnt bricks 23 x 11 x 6.5cm mortar 6:1	bricks sand cement	900 no. 7.8 tons 22½ bags			
5. Roof c.i. sheets gauge 26	sheets 10' sheets 8' ridge timber 2"x3" bushpoles roof nails wire nails	22 no. 12 no. 5 no. 75 rm 4 no. 250 no. 2 kg.			
6. Doors battén doors timber frame 2" x 4"	Dimension 210 x 90cm 210 x 80cm	 1 no. 3 no.			
7. Windows Wooden shutters timber frame 2" x 3"	dimension 90 x 120cm	4 no.			
8. Plaster 1cm on internal walls sand-cement-lime 12:1:1	sand lime cement	1.5 tons 125 kg. 2½ bags			
9. Floor Screed thin layer of cement spread on wet floor	cement	4 bags			
10. Sundries	wood-preservative yale locks pit latrine	3 liters 2 no. 1 no.			
			Total		

Summary of Costs:
Material cost
labour cost
transport (21 tons + 11000 bricks)
contingencies

Housetype: SS - 5

No. of rooms: 3 Wall material: Soil-cement Blocks

Area: 40 sqm

	9999 Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm Soil-cement 11:1 (trench 45cm deep)	soil cement	(2.8 tons) 5 bags			
2. Blockmaking soil-cement blocks 46 x 23 x 15cm	blocks soil cement	330 no. (4.2 tons) 6 bags			
3. Foundation walls 3 Layers mortar 8:1	soil cement	(0.6 tons) 1 bag			
4. Rough Floor 5 cm soil-cement mix 11:1	soil cement	(3.4 tons) 10 bags			
5. Blockmaking soil cement blocks 46 x 23 x 15cm mix 16:1	blocks soil cement	1800 no. (22.4 tons) 26 bags			
6. Walls mortar 8:1	soil cement	(2.5 tons) 6 bags			
7. Roof c.i. sheets gauge 26	sheets 10' sheets 8' ridge timber 2"x3" bushpoles roof nails wire nails	22 no. 12 no. 5 no. 75 rm 4 no. 250 no. 2 kg.			
8. Doors batten dorrs timber frames 2" x 4"	dimension 210 x 90cm 210 x 80cm	 1 no. 3 no.			
9. Windows wooden shutters timber frame 2" x 3"	dimension 90 x 120cm	4 no.			
10. Plaster 1cm on internal walls soil-cement-lime 12:1:1	soil lime cement	(1.5 tons) 125 kg. 2½ bags			
11. Floor Screed thin layer of cement spread on wet floor	cement	4 bags			
12. Sundries	wood-preservative yale locks pit latrine	3 liters 1 no.			
			Total		

Summary of costs:
Material cost
labour cost
transport (3 tons)
contingencies

Housetype: SS - 5
No. of rooms: 3
Area: 40 sqm

Wall material: Mud and Pole

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Foundation soil-cement 60 cm and 20 cm wide mix 11:1	Soil cement	(5.6 tons) 19½ bags			
2. Rough Floor 5 cm soil-cement mix 11:1	soil cement	(3.4 tons) 10 bags			
3. Walls mud and poles 20cm thick 4 poles per rm.	poles fite sisal twine clay soil lime	140 no. 45 bundles 5 rolls (21 tons) 50 kg			
4. Roof c.i. sheets gauge 26	sheets 10' sheets 8' ridge timber 2"x3" bushpoles roof nails wire nails	22 no. 12 no. 5 no. 75 rm 4 no. 250 no. 2 kg.			
5. Doors batten doors timber frames 2" x 4"	dimension 210 x 90cm 210 x 80cm	 1 no. 3 no.			
6. Windows woodon shutters timber frame 2" x 3"	dimension 90 x 120 cm	 4 no.			
7. Plaster lem on internal and external walls soil-cement-lime 12:1:1	soil lime cement	(2.7 tons) 200 kg 4 bags			
8. Floor Screed thin layer of cement spread on wet floor	cement	4 bags			
9. Sundries	wood-preservative yale locks pit latrine	3 liters 2 no. 1 no.			
			Total		

Summary of Costs:
Material cost
labour cost
transport (2 tons)
contingencies,

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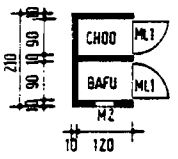

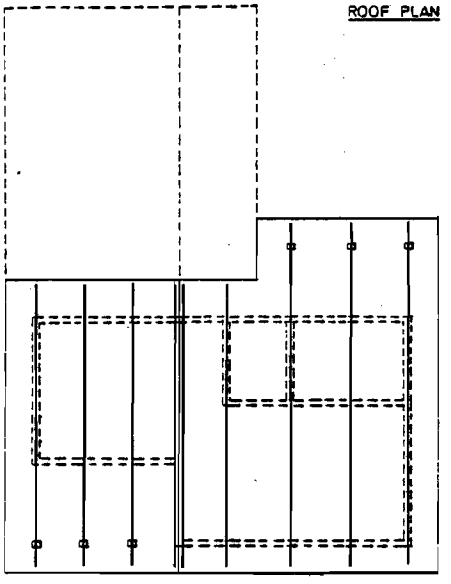

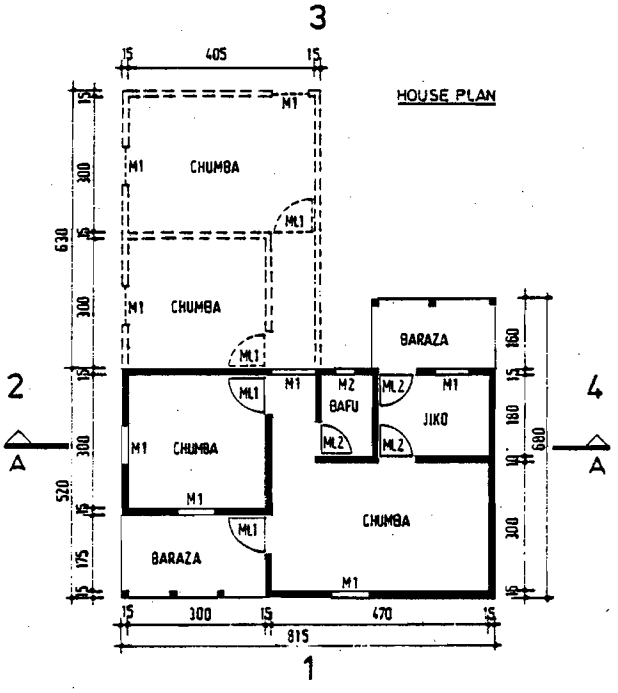

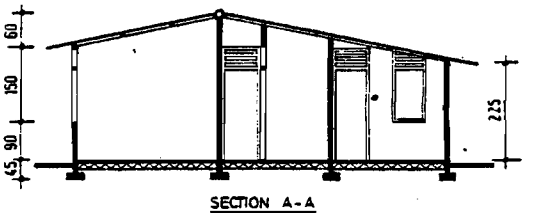

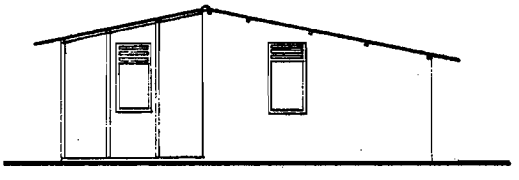

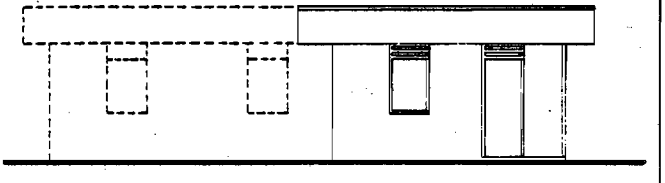

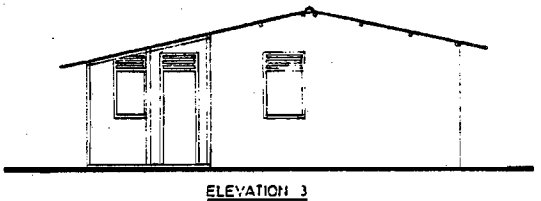

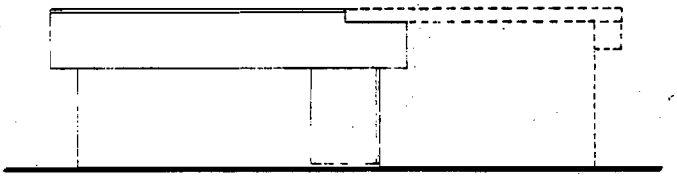

BUILDING RESEARCH UNIT
TYPE DESIGN
SS-6( )
SCALE 1:100

NGAZI 1	NYUMBA	36.4 m²	NGAZI 2	NYUMBA	49.9 m²	NGAZI 3	NYUMBA	63.4 m²
	BARAZA	9.9 m²		BARAZA	9.9 m²		BARAZA	9.9 m²
	JUMLA	46.3 m²		JUMLA	59.8 m²		JUMLA	73.3 m²

MADIRISHA M1 90 × 120 cm
M2 60 90 cm

MILANGO ML1 90 × 210 cm
ML2 80 × 210 cm

PROPOSED RESIDENCE FOR _____ TO BE BUILT ON
PLOT N° _____ BLOCK _____ AREA _____ TOWN _____

HOUSETYPE: SS-6
No. of Rooms: 3
Area: 46.3 sq. m.

Wall Material: Sand - cement Blocks

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm concrete 1:3:6: (trench 45cm deep)	sand aggregate cement	1.3 tons 2.3 tons 8 bags			
2. Blockmaking sand-cement blocks 46x23x15cm mix 8:1	blocks sand cement	170 no. 3.2 tons 11 bags			
3. Foundation walls 2 layers mortar 6:1	sand cement	0.4 tons 1 bag			
4. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	1.7 tons 3.4 tons 10½ bags			
5. Blockmaking sand-cement blocks 46x23x15cm 46x23x10cm mix 8:1	1 blocks s. blocks sand cement	600 no. 220 no. 15 tons 50 bags			
6. Walls Mortar 6:1	sand cement	1.7 tons 4½ bags			
7. Roof c.i. sheets gauge 26	10' sheets ridge bushpoles timber 2"x3" roof nails wire nails	40 no. 5 no. 6 no. 80 rm 300 no. 2 kg.			
8. Doors batten doors timber frame 2"x4"	dimension 210x90cm 210x80cm	 2 no. 3 no.			
9. Windows wooden shutters timber frame 2"x3"	dimension 90x120cm 30x30cm	 5 no. 1 no.			
10. Plaster 1cm on internal walls sand-cement 6:1	sand cement	1.8 tons 5 bags			
11. Floor Screed thin layer of cement spread on wet floor	cement	5 bags			
12. Sundries	wood-preservative yale locks pit latrine	4 liters 2 no. 1 no.			
			TOTAL		

Summary of Costs
material cost
labour cost
transport (36 tons)
contingencies

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Housetype: SS-6

No. of rooms: 3 Wall material: Burnt Bricks

Area: 46.3 sq. m.

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	Material	Quantity	Unit Price	Material cost	Cost of labour
1. Footing 30x15cm concrete 1:3:6 (trench 45 cm deep)	sand aggregate cement	1.3 tons 2.3 tons 8 bags			
2. Foundation walls 6 layers of burnt bricks 23x11x6.5cm mortar 6:1	bricks sand cement	2,000 no. 1.8 tons 5½ bags			
3. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	1.7 tons 3.4 tons 10½ bags			
4. Walls burnt bricks 23x11x6.5cm mortar 6:1	bricks sand cement	9,500 no. 7.6 tons 21½ bags			
5. Roof c.i. sheets gauge 26	sheets 10' ridge timber 2"x3" bushpoles roof nails wire nails	40 no. 5 no. 80 rm. 6 no. 300 no. 2 kg.			
6. Doors batten doors timber frame 2"x4"	dimension 210x90cm 210x80cm	 2 no. 3 no.			
7. Windows wooden shutters timber frame 2"x3"	dimension 90x120cm 30x30cm	 5 no. 1 no.			
8. Plaster 1cm on internal walls sand-cement-lime 12:1:1	sand lime cement	1.8 tons 125 kg. 2½ bags			
9. Floor Screed thin layer of cement spread on wet floor	cement	5 bags			
10. Sundries	wood preservative yale locks pit latrine	4 liters 2 no. 1 no.			
			TOTAL		

Summary of Costs:
Material cost
labour cost
transport (23 tons + 12,000 bricks)
contingencies

Housetype: SS-6

No. of rooms: 3

Area: 46.3 sq.m.

Wall material: Soil-cement Blocks

		Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm soil-cement 11:1 (trench 45cm deep)	soil cement	(3.2 tons) 5½ bags			
2. Blockmaking soil-cement blocks 46x23x15cm mix. 11:1	blocks siol cement	370 no. (4.6 tons) 7 bags			
3. Foundation walls 3 layers mortar 8:1	soil cement	(0.6 tons) 1½ bags			
4. Rough Floor 5cm soil-cement mix 11:1	soil cement	(3.9 tons) 11 bags			
5. Blockmaking soil cement blocks 46x23x15cm mix 16:1	blocks soil cement	1,800 no. (23 tons) 26½ bags			
6. Walls mortar 8:1	soil cement	(2.5 tons) 6 bags			
7. Roof c.i. sheets gauge 26	sheets 10' ridge timber 2"x3" bushpoles roof nails wire nails	40 no. 5 no. 80 rm 3 no. 300 no. 2 kg.			
8. Doors batten doors timber frame 2"x4"	dimension 210x90cm 210x80cm	 2 no. 3 no.			
9. Windows wooden shutters timber frame 2"x3"	dimension 90x120cm 30x30 cm.	 5 no. 1 no.			
10. Plaster 1cm on internal walls soil-cement-lime 12:1:1	soil lime cement	(1.8 tons) 125 kg 2½ bags			
11. Floor Screed thin layer of cement spread on wet floor	cement	5 bags			
12. Sundries	wood-preservative yale locks pit latrine	4 leters 2 no. 1 no.			
			TOTAL		

Summary of costs:
Material cost
labour cost
transport (4 tons)
contigencies

Hjusetype: SS - 6
No. of rooms: 3
Area: 46.3 sq.m.

Wall material: Mud and Pole.

	Material	Quantity	Unit	Materialcost	Cost of labour
1. Foundation soil-cement 60cm and 20cm wide mix 11:1	Soil cement	(6.3 tons) 22 bags			
2. Rough Floor 5cm soil-cement mix 11:1	soil cement	(3.9 tons) 11 bags			
3. Walls mud and poles 4 poles per rm. 20cm thick	poles fito clay soil sisal twine lime	160 no. 50 bundles (22.4 tons) 5 rolls 50 kg.			
4. Roof c.i. sheets gauge 26	sheets 10' ridge timber 2"x3" bushpoles roof nails wire nails	40 no. 5 no. 80 rm 6 no. 300 no. 2 kg.			
5. Doors batten doors timber frame 2"x4"	dimension 210x90cm 210x80cm	 2 no. 3 no.			
6. Windows: wooden shutters timber frame 2"x3"	dimension 90x120cm 30x30cm	 5 no. 1 no.			
7. Plaster 1cm on internal and external walls soil-cement-lime 12:1:1	soil lime cement	(2.8 tons) 200 kg 4 bags			
8. Floor Screed thin layer of cement spread on wet floor	cement	5 bags			
9. Sundries	wood-preservative yale locks pit latrine	4 leters 2 no. 1 no.			
			TOTAL		

Summary of costs:
Material cost
labour cost
transport (3 tons)
contingencies.

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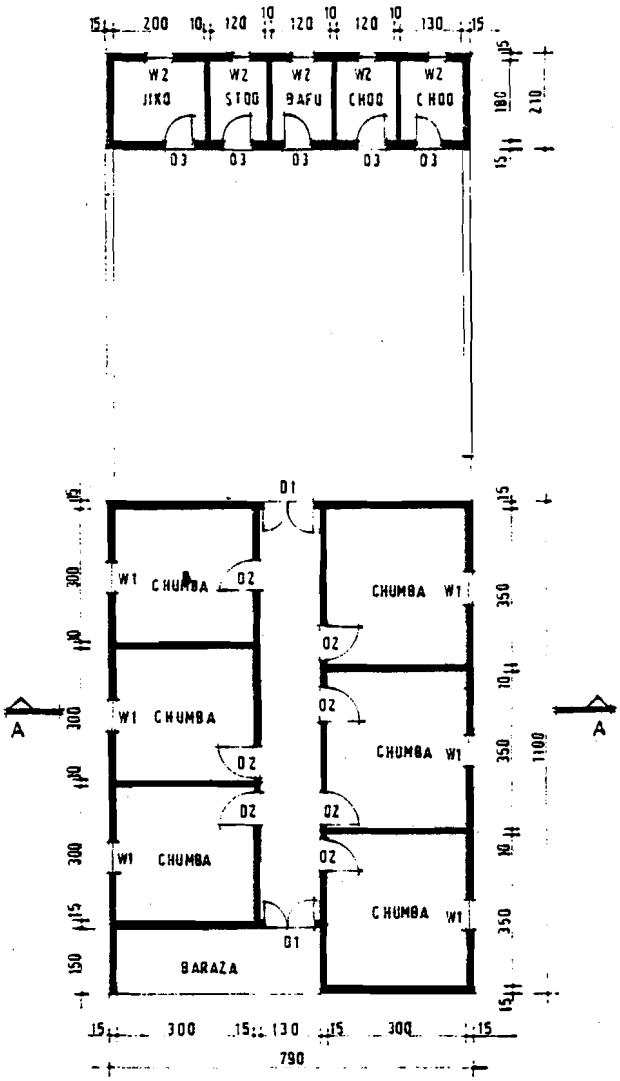
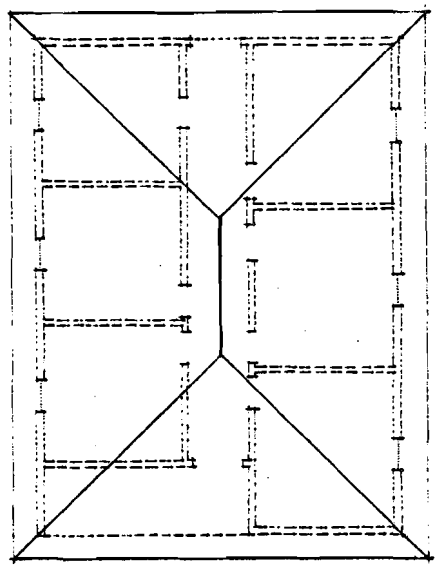
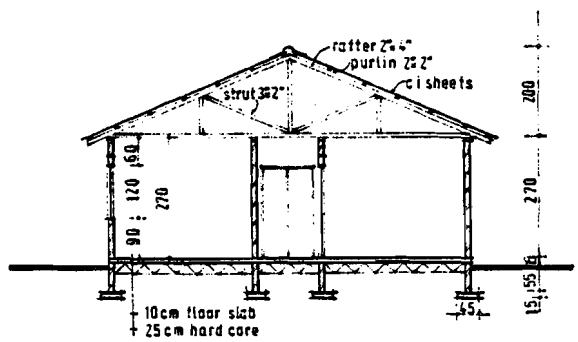


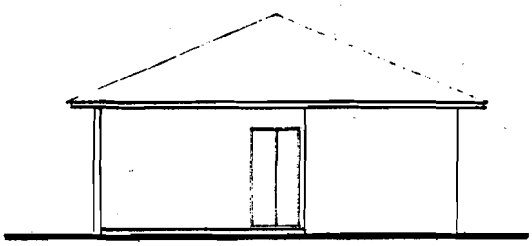
HOUSE PLAN.



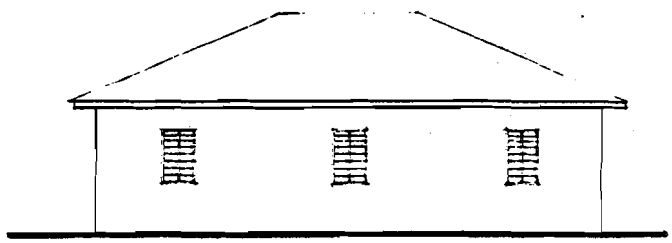
ROOF PLAN.



SECTION A-A.



FRONT ELEVATION



SIDE ELEVATION

COUNCIL'S TRADITIONAL HOUSE TYPE DESIGN.

SS-7.

SCALE 1:100.

ENEO:		MADIRISHA:		MILANGO:	
NYUMBA KUBWA	85.3 m²	W1	120 × 70 cm.	D1	210 × 110 cm
NYUMBA YA NYUMA	16.6 m²	W2	120 × 50 cm.	D2	210 × 80 cm.
				D3	210 × 70 cm.

PROPOSED RESIDENTAL HOUSE FOR _____ TO BE BUILT ON PLOT Nº _____ BLOCK _____ AREA _____ TOWN _____

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Housetype: SS - 7

No. of rooms: 6 + outbuilding Wall Material: Sand - cement Blocks

Area: 101.9 sqm.

	Material	Quantity	Unit price	Material cost	Cost of labour
I. Footing 30x15cm concrete 1:3:6 (trench 45cm deep)	sand aggregate cement	2.8 tons 5.3 tons 18½ bags			
2. Blockmaking sand-cement blocks 46 x 23 x 15cm mix 8:1	blocks sand cement	420 no. 8.3 tons 28 bags			
3. Foundation walls 2 layers mortar 6:1	sand cement	0.8 tons 2½ bags			
4. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	3.6 tons 7.4 tons 23 bags			
5. Blockmaking sand-cement blocks 46 x 23 x 15cm and 46 x 23 x 10cm, mix 8:1	l. blocks s. blocks sand cement	1250 no. 860 no. 36.5 tons 121 bags			
6. Walls mortar 6:1	sand cement	4 tons 11 bags			
7. Roof c.i. sheets gauge 26	sheets 10' sheet 8' ridge timber 2"x3" timber 2"x4" roof nails wire nails	55 no. 40 no. 20 no. 210 rm 180 rm 650 no. 8 kg.			
8. Doors batten doors timber frame 2" x 4"	dimension 210 x 110cm 210 x 80cm 210 x 70cm	 2 no. 7 no. 5 no.			
9. Windows wooden shutters timber frames 2" x 3"	dimension 120 x 70 cm 120 x 50 cm	 6 no. 5 no.			
10. Plaster 1cm on internal walls sand - cement 6:1	sand cement	5 tons 14½ bags			
11. Floor screed thin layer of cement spread on wet floor	cement	10½ bags			
12. Sundries	wood-preservative yale locks pit latrine	10 liters 7 no. 2 no.			
			Total		

Summary of Costs:
material cost
labour cost
transport (85 tons)
contingencies

Housetype: SS - 7

No. of rooms: 6 + outbuilding Wall material: Burn Bricks

Area: 101.2 sqm

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm concrete 1:3:6 (trench 45cm deep)	sand aggregate cement	2.8 tons 5.3 tons 18½ bags			
2. Foundation walls 6 layers of burnt bricks 23x11x6.5cm mortar 6:1	bricks sand cement	5000 no. 4.6 tons 13 bags			
3. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	3.6 tons 7.4 tons 23 bags			
4. Walls burnt bricks 23 x 11 x 6.5 mortar 6:1	bricks sand cement	19000 no. 17.4 tons 50 bags			
5. Roof c.i. sheets gauge 26	sheets 10' sheet 8' ridge. timber 2"x3" timber 2"x4" roof nails wire nails	55 no. 40 no. 20 no. 210 rm 180 rm 650 no. 8 kg			
6. Doors batten doors timber frame 2" x 4"	dimension 210 x 110cm 210 x 80 cm 210 x 70 cm	 2 no. 7 no. 5 no.			
7. Windows wooden shutters timber frame 2" x 3"	dimension 120 x 79cm 120 x 50cm	 6 no. 5 no.			
8. Plaster 1cm on internal walls sand-cement-lime 12:1:1	sand lime cement	5 tons 360 kg 7½ bags			
9. Floor Screed thin layer of cement spread on wet floor	cement	10½ bags			
10. Sundries	wood-preservative yale locks pit latrine	10 liters 7 no. 2 no.			
			Total		

Summary of Costs:
Material cost
labour cost
transport (53 tons + 24000 bricks)
contingencies

Housetype: SS - 7

N. of rooms: 6 + outbuilding Wall material: Soil-cement Blocks

Area: 101.9 sqm

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm soil-cement 11:1 (trench 45cm deep)	soil cement	(7.7 tons) 13 bags			
2. Blockmaking soil-cement blocks 46 x 23 x 15cm mix 11:1	blocks soil cement	920 no. (11.8 tons) 17 bags			
3. Foundation walls 3 layers mortar 8:1	soil cement	(1.4 tons) 3 bags			
4. Rough Floor 5cm soil-cement mix 11:1	soil cement	(8.8 tons) 25 bags			
5. Blockmaking soil cement blocks 46 x 23 x 15cm mix 16:1	blocks soil cement	4700 no. (59 tons) 58 bags			
6. Walls mortar 8:1	soil cement	(6.6 tons) 15 bags			
7. Roof c.i. sheets gauge 26	sheets 10' sheets 8' ridge timber 2"x3" timber 2"x4" roof nails wire nails	55 no. 40 no. 20 no. 210 rm. 180 rm. 650 no. 8 kg.			
8. Doors batten doors timber frame 2" x 4"	dimension 210 x 110cm 210 x 80cm 210 x 70cm	 2 no. 7 no. 5 no.			
9. Windows wooden shutters timber frame 2" x 3"	dimension 120 x 70cm 120 x 50cm	 6no 5 no.			
10. Plaster lem On internal walls soil-cement-lime 12:1:1	soil lime cement	(5 tons) 360 kg 7½ bags			
11. Floor Screed thin layer of cement spread on wet floor	cement	10½ bags			
12. Sundries	wood-preservative yale locks pit latrine	10 liters 7 no. 2 no.			
			Total		

Summary of costs:
Material cost
labour cost
transport (8 tons)
contingencies

Housetype: SS - 7

No. of rooms: 6 + outbuilding Wall material: Mud and Pole

Area: 101.9 sqm

	Material	Quantity	Unit Price	Material cost	Cost of labour
1. Foundation soil-cement 60cm and 20cm wide mix 11:1	soil cement	(16.1 tons) 56 bags			
2. Rough Floor 5cm soil-cement mix 11:1	soil cement	(8.8 tons) 25 bags			
3. Walls: mud and poles 4 poles per rm.	poles fito sisal twine. clay soil lime	400 no. 120 bundles 12 rolls (56 tons) 150 kg.			
4. Roof c.i. sheets gauge 26	sheets 10' sheets 8' ridge timber 2"x3" timber 2"x4" roof nails wire nails	55 no. 40 no. 20 no. 210 rm 180 rm 650 no. 8 kg.			
5. Doors batten doors timber frame 2" x 4"	dimension 210 x 110cm 210 x 80cm 210 x 70cm	 2 no. 7 no. 5 no.			
6. Windows: Wooden shutters timber frame 2" x 3"	dimension 120 x 70cm 120 x 50cm	 6 no. 5 no.			
7. Plaster 1cm on internal and external walls soil-cement-lime 12:1:1	soil lime cement	(7.1 tons) 500 kg. 10 bags			
8. Floor screed thin layer of cement spread on wet floor	cement	10½ bags			
9. Sundries	wood-preservative yale locks pit latrine	10 liters 7 no. 2 no.			
			Total		

Summary of Costs:
Material cost
labour cost
transport (6 tons)
contingencies.

APPENDIX I

List of materials needed for making the required number of doors and windows per housetype.

MATERIAL REQUIREMENTS FOR DOORS AND WINDOWS

SS - 1 (3)	Material	Quantity	Unit price	Material cost	Cost of Labour
Doors:	timber 2" x 4"	45 rm			
	battens 1" x 4"	132 rm			
	iron bars 16 mm	5.4 rm			
	butt hinges with screws	6 pairs			
	yale locks with screws	4 no.			
	rim locks with screws	2 no.			
	wire nails 2½"	3 kg			
Windows:	timber 2" x 3"	45 rm			
	battens 1" x 4"	90 rm			
	iron bars 16 mm	39.3 rm			
	butt hinges with screws	10 pairs			
	barrel bolts with screws	20 no.			
	wire nails 2½"	2½kg			
			Total		

SS - 2 (4)	Material	Quantity	Unit price	Material cost	Cost of Labour
Doors:	Timber 2" x 4"	53 rm			
	battens 1" x 4"	157 rm			
	iron bars 16 mm	5.4 rm			
	butt hinges with screws	7 pairs			
	yale locks with screws	4 no.			
	rim locks with screws	3 no.			
	wire nails 2½"	3½ kg			
Windows:	timber 2" x 3"	73 rm			
	battens 1" x 4"	135 rm			
	iron bars 16 mm	59 rm			
	butt hinges with screws	15pairs			
	barrel bolts with screws	30 no.			
	wire nails 2½"	3¾ kg			
			Total		

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MATERIAL REQUIREMENTS FOR DOORS AND WINDOWS

SS - 3 (3)	Material	Quantity	Unit price	Material Cost	Cost of Labour
Doors:	timber 2" x 4"	53 rm			
	battens 1" x 4"	154 rm			
	iron bars 16 mm	4.2 rm			
	butt hinges with screws	7 pairs			
	yale locks with screws	3 no.			
	rim locks with screws	4 no.			
	wire nails 2½"	3½ kg			
Windows:	timber 2" x 3"	53 rm			
	battens 1" x 4"	100 rm			
	iron bars 16 mm	43.2 rm			
	butt hinges with screws	11 pairs			
	barrel bolts with screws	22 no.			
	wire nails 2½"	2½ kg			
			Total		

SS - 4 (3)	Material	Quantity	Unit price	Material Cost	Cost of Labour
Doors:	timber 2" x 4"	31 rm			
	battens 1" x 4"	100 rm			
	iron bars 16 mm	3 rm			
	butt hinges with screws	4 pairs			
	yale locks with screws	2 no.			
	rim locks with screws	2 no.			
	wire nails 2½"	2 kg			
Windows:	timber 2" x 3"	26 rm			
	battens 1" x 4"	54 rm			
	iron bars 16 mm	24.3 rm			
	butt hinges with screws	6 pairs			
	barrel bolts with screws	12 no.			
	wire nails 2½"	1½ kg			
			Total		

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MATERIAL REQUIREMENTS FOR DOORS AND WINDOWS

SS-5(3)	Material	Quantity	Unit price	Material cost	Cost of labour
Doors:	timber 2" x 4"	30 rm			
	battens 1" x 4"	91 rm			
	iron bars 16 mm	2.7 rm			
	butt hinges with screws	4 pairs			
	yale locks with screws	2 no.			
	rim locks with screws	2 no.			
	wire nails 2½"	2 kg.			
Windows:	timber 2" x 3"	35 rm			
	battens 1" x 4"	72 rm			
	iron bars 16 mm	32.4 rm			
	butt hinges with screws	8 pairs			
	barrel bolts with screws	16 no.			
	wire nails 2½"	2 kg.			
			Total		

SS-6(3)	Material	Quantity	Unit price	Material cost	Cost of labour
Doors:	timber 2" x 4"	38 rm			
	battens 1" x 4"	116 rm			
	iron bars 16 mm	3.7 rm			
	butt hinges with screws	5 pairs			
	yale locks with screws	2 no.			
	rim locks with screws	3 no.			
	wire nails 2½"	2½ kg.			
Windows:	timber 2" x 3"	46 rm			
	battens 1" x 4"	90 rm			
	iron bars 16 mm	40.5 rm			
	butt hinges with screws	10 pairs			
	barrel bolts with hinges	20 no.			
	wire nails 2½"	2½ kg.			
			Total		

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MATERIAL REQUIREMENTS FOR DOORS AND WINDOWS

SS-7(6)	Material	Quantity	Unit price	Material cost	Cost of labour
Doors:	timber 2" x 4"	105 rm			
	battens 1" x 4"	300 rm			
	iron bars 16 mm	9 rm			
	butt hinges with screws	14 pairs			
	yale locks with screws	7 no.			
	rim locks with screws	7 no.			
	wire nails 2½"	7 kg.			
Windows:	timber 2" x 3"	80 rm			
	battens 1" x 4"	153 rm			
	iron bars 16 mm	68.1 rm			
	butt hinges with screws	17 pairs			
	barrel boalts with screws	34 no.			
	wire nails 2½"	4½ kg.			
			Total		

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APPENDIX II

Four examples of cost estimates for
Dar es Salaam (March 1978).

The cost of labour works out to be half of the total material cost, 10% of which is for foundations and rough floor, 23% for walls, 4% for roofing, 4% for doors and windows and 9% for completion of works.

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Housetype: SS - 1

No. of rooms: 3 + outbuilding Wall material: Sand - cement Blocks

Area: 53.3 sqm

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm concrete 1:3:6 (trench 45cm deep)	sand aggregate cement	1.8 tons 3.4 tons 11½ bags	 150/= 36/=	 500/= 414/=	
2. Blockmaking sand-cement blocks 46 x 23 x 15cm mix 8:1	blocks sand cement	250 no. 4.8 tons 16 bags	 36/=	 576/=	
3. Foundation walls 2 layers mortar 6:1	sand cement	0.6 tons 1½ bags	 36/=	 54/=	
4. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	2.0 tons 3.8 tons 12 bags	 150/= 36/=	 600/= 432/=	1500/=
5. Blockmaking sand-cement blocks 46 x 23 x 15cm and 46 x 23 x 10cm, mix 8:1	l. blocks s. blocks sand cement	700 no. 600 no. 22.4 tons 73 bags	 36/=	 2628/=	
6. Walls mortar 6:1	sand cement	2.4 tons 6½ bags	 36/=	234/=	3450/=
7. Roof c.i. sheets gauge 26	sheets 10' sheets 6' ridge timber 2"x3" timber 2"x4" roof nails wire nails	33 no. 16 no. 10 no. 115 rm. 50 rm. 350 no. 2 kg.	59/70 35/80 12/70 5/50 7/50 =/20 8/=	1970/10 588/80 127/= 632/50 375/= 70/= 16/=	600/=
8. Doors batten doors timber frame 2" x 4"	dimension 210 x 90cm 210 x 80cm 210 x 70cm	 2 no. 2 no. 2 no.	 450/= 400/= 350/=	 900/= 800/= 700/=	
9. Windows wooden shutters timber frame 2" x 2"	dimension 120 x 120cm 120 x 60cm 100 x 60cm	 4 no. 1 no. 1 no.	 300/= 200/= 150/=	 1200/= 200/= 150/=	600/=
10. Plaster 1cm on internal walls sand - cement 6:1	sand cement	3 tons 8½ bags	 36/=	 306/=	
11. Floor Screed thin layer of cement spread on wet floor	cement	5½ bags	36/=	198/=	
12. Sundries	wood-preservative yale locks pit latrine	4 liters 4 no. 1 no.	25/= 56/= 1000/=	100/= 224/= 1000/=	1350/=
			Total	14995/40	7500/=

Summary of Costs:

material cost	15,000/=
labour cost	7,500/=
transport (51 tons)	3,500/=
contingencies (10%)	2,500/=
Total estimated costs	28,500/=

BEST AVAILABLE COPY

Housetype: SS - 1

No. of rooms: 3 + outbuilding Wall material: Soil-cement Blocks

Area: 53.3 sqm

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm soil-cement 11:1 (trench 45cm deep)	soil cement	(4.8 tons) 8½ bags	36/=	306/=	
2. Blockmaking soil-cement blocks 46 x 23 x 15cm mix 11:1	blocks soil cement	550 no. (7 tons) 10 bags	36/=	360/=	
3. Foundation walls 3 layers mortar 8:1	soil cement	(0.8 tons) 2 bags	36/=	72/=	
4. Rough Floor 5cm soil-cement mix 11:1	soil cement	(4.5 tons) 13 bags	36/=	468/=	1260/=
5. Blockmaking soil cement blocks 46 x 23 x 15cm	blocks soil cement	3000 no. (36.4 tons) 42 bags	36/=	1512/=	
6. Walls mortar 8:1	soil cement	(4.0 tons) 9 bags	36/=	324/=	2898/=
7. Roof c.i. sheets gauge 26	sheets 10' sheets 6' ridge timber 2"x3" timber 2"x4" roof nails wire nails	33 no. 16 no. 10 no. 115 rm. 50 rm. 350 no. 2 kg.	59/70 35/80 12/70 5/50 7/50 =/20 8/=	1970/10 588/80 127/= 632/50 375/= 70/= 16/=	504/=
8. Doors batten doors timber frame 2" x 4"	dimension 210 x 90cm 210 x 80cm 210 x 70cm	 2 no. 2 no. 2 no.	 450/= 400/= 350/=	 900/= 800/= 700/=	
9. Windows wooden shutters timber frame 2" x 3"	dimension 120 x 120cm 120 x 60cm 100 x 60cm	 4 no. 1 no. 1 no.	 300/= 200/= 150/=	 1200/= 200/= 150/=	504/=
10. Plaster 1cm on internal walls soil-cement-lime 12:1:1	soil lime cement	(3.0 tons) 225 kg. 4½ bags	=/60 36/=	135/= 162/=	
11. Floor Screed thin layer of cement spread on wet floor	cement	5½ bags	36/=	198/=	
12. Sundries	wood-preservative yale locks pit latrine	4 liters 4 no. 1 no.	25/= 66/= 1000/=	100/= 224/= 1000/=	1134/=
			Total	12590/40	6300/=

Summary of costs:

Material cost	12,600/=
labour cost	6,300/=
transport (5 tons)	1,100/=
contingencies (10%)	2,000/=
Total estimated costs	22,000/=

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Housetype: SS - 4

No. of rooms: 3 **Wall material:** Sand - cement Blocks

Area: 45.1 sqm

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30x15cm concrete 1:3:6 (trench 45cm deep)	sand aggregate cement	1.0 tons 2.0 tons 6½ bags	 150/= 36/=	 300/= 234/=	
2. Blockmaking sand-cement blocks 46 x 23 x 15cm mix 8:1	blocks sand cement	150 no. 2.8 tons 9½ bags	 36/=	 342/=	
3. Foundation walls 2 layers mortar 6:1	sand cement	0.3 tons 1 bag	 36/=	 36/=	
4. Rough Floor 5cm concrete mix 1:3:6	sand aggregate cement	1.7 tons 3.2 tons 10 bags	 150/= 36/=	 480/= 360/=	1040
5. Blockmaking sand-cement blocks 46 x 23 x 15cm and 46 x 23 x 10cm, mix 8:1	1. blocks s. blocks sand cement	630 no. 120 no. 14.0 tons 47½ bags	 36/=	 1710/=	
6. Walls mortar 6:1	sand cement	1.5 tons 4½ bags	 36/=	 162/=	2392/=
7. Roof c.i. sheets gauge 26	sheets 10' ridge timber 2"x3" bushpoles roof nails wire nails	36 no. 5 no. 80 rm. 6 no. 300 no. 2 kg.	59/70 12/70 5/50 7/50 =/20 8/=	2149/20 63/50 440/= 45/= 60/= 16/=	416/=
8. Doors batten doors timber frame 2" x 4"	dimension 210 x 90cm	4 no.	450/=	1800/=	
9. Windows wooden shutters timber frame 2" x 3"	dimension 90 x 120cm	3 no.	300/=	900/=	416/=
10. Plaster 1cm on internal walls sand - cement 6:1	sand cement	1.5 tons 4½ bags	 36/=	 162/=	
11. Floor Screed thin layer of cement spread on wet floor	cement	4½ bags	36/=	162/=	
12. Sundries	wood-preservative yale locks pit latrine	3 liters 2 no. 1 no.	25/= 56/= 1000/=	75/= 112/= 1000/=	936/=
			Total	10608/70	5200/=

Summary of Costs:

material cost	10,600/=
labour cost	5,300/=
transport (33 tons)	2,300/=
contingencies (10%)	1,800/=
Total estimated costs	20,000/=

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Housetype: SS - 4

No. of rooms: 3 **Wall material:** Soil-cement Blocks

Area: 45.1 sqm

	Material	Quantity	Unit price	Material cost	Cost of labour
1. Footing 30 x 15 cm soil-cement 11:1 (trench 45cm deep)	soil cement	(2.8 tons) 5 bags	36/=	180/=	
2. Blockmaking soil-cement blocks 46 x 23 x 15cm mix 11:1	blocks soil cement	330 no. (4.2 tons) 6 bags	36/=	216/=	
3. Foundation walls 3 layers mortar 8:1	soil cement	(0.6 tons) 1 bag	36/=	36/=	
4. Rough Floor 5cm soil-cement mix 11:1	soil cement	(1.8 tons) 11 bags	36/=	396/=	885/=
5. Blockmaking soil cement blocks 46 x 23 x 15cm mix 16:1	blocks soil cement	1700 no. (21.0 tons) 24 bags	36/=	864/=	
6. Walls mortar 8:1	soil cement	(2.4 tons) 5½ bags	36/=	198/=	2036/=
7. Roof c.i. sheets gauge 26	sheets 10' ridge timber 2"x3" bushpoles roof nails wire nails	36 no. 5 no. 80 rm. 6 no. 300 no. 2 kg.	59/70 12/70 5/50 7/50 =/20 8/=	2149/20 63/50 440/= 45/= 60/= 16/=	354/=
8. Doors batten doors timber frame 2" x 4"	dimension 210 x 90cm	4 no.	450/=	1800/=	
9. Windows wooden shutters timber frame 2" x 3"	dimension 90 x 120cm	3 no.	300/=	900/=	354/=
10. Plaster 1cm on internal walls soil-cement-lime 12:1:1	soil lime cement	(1.5 tons) 125 kg. 2½ bags	=/60 36/=	75/= 90/=	
11. Floor Screed thin layer of cement spread on wet floor	cement	4½ bags	36/=	162/=	
12. Sundries	wood-preservative yale locks pit latrine	3 liters 2 no. 1 no.	25/= 56/= 1000/=	75/= 112/= 1000/=	796/=
			Total	8832/70	4425/=

Summary of costs:

Material cost	8,850/=
labour cost	4,425/=
transport (3 tons)	725/=
contingencies (10%)	1,400/=
Total estimated costs	15,400/=

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Office of Housing
Agency for International Development

SHELTER
TRAINING
WORKSHOP
November 5-30, 1979

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THAILAND

Background

The Kingdom of Thailand has an area of approximately 200,000 square miles. It has common boundaries with Burma on the West and North, Lao People's Democratic Republic on the North and East, Kampuchea on the East, and Malaysia on the North. South of the main portion of the country and east of peninsula Thailand lies the Gulf of Siam.

Thailand's topography is diversified. There are four main geographic regions....central, northeast, north, and south.

Thailand is a tropical land high in temperature and humidity. The climate of much of the country is dominated by monsoons. In most regions there are three seasons: from June to October the rainy season, from November to February the cool season; and from March to May the hot season. Rainfall varies but is generally heaviest in the south and lightest in the northeast.

Thailand's population of 44 million is composed primarily of Thai. The principal minority groups are ethnic Chinese located in the larger urban areas, Malay - speaking Moslems in the southern most provinces, Vietnamese in the northeast, and the various hill tribes in the north. This society is predominantly rural in nature and is most heavily concentrated in the valleys and plains of the north, northeast, and central regions.

Out of a total population in 1978 of 44 million which is increasing at a rate of 2.6 percent per annum, more than 20 percent reside in urban areas throughout the country. Of those urbanizes, more than one half are settled in the Bangkok area which now contains a population of approximately 4.8 million and growing at a rate of 4.6 percent per annum. The trend of Bangkok's primary, despite considerable growth of other urban centres, is increasing.

This primacy is a result of many historical, geographical, economic and political factors which tend to accentuate the trend despite national development planning goals and government actions to reverse this trend. Bangkok remains the biggest

port of the country, the seat of the government, the monarchy, most of the higher learning institution including the most prestigious ones, it offers by far the most comprehensive range of health care and medical facilities and other services and most important of all it offers wide ranging employment opportunities.

NATIONAL HOUSING AUTHORITY'S HISTORICAL DATA

Thailand did not experience housing problems until during World War II, when Bangkok became so populous and resulting deterioration so considerable that the government began to seek ways to solve the problems. In 1940, the Public Welfare Department was set up. The rationale was to provide housing to families in the self-help land settlements upcountry, since housing problems in big towns at that time were not so serious. The emphasis then was placed on rural areas.

After World War II, the need for dwellings increased. Houses had been destroyed during the war. People from the provinces streamed into Bangkok looking for jobs and homes. People who had become traders required shophouses and so wooden houses were demolished. The number of houses for rent and the number of shophouses were reduced while new houses, built at high east, were too expensive for low-income families. As a result, low-income families could not afford to buy suitable houses. Some put up temporary dwellings and lived in unsanitary and crowded conditions in what are now called slums.

The government at that time had to seek effective ways to solve housing problems in the municipality. So in 1950, the first housing project for hire-purchase was carried out by the Public Welfare Department's Public Housing Division, on a plot of land at Soi Rangnam, Rajavithee Road, followed by those in the Din Daeng area, at Sawankaloke (Yomaraj) Road, and in the Huay Kwang area. All of the houses were of wood construction.

The first housing project was not able to meet the increasing demand for housing in the municipality. The government, having realized that the Public Housing Division alone could not solve such problems, set up another office in 1951 in the same department called the Office of Welfare Housing, which was responsible for the construction of houses to be rented to low-income families.

Nevertheless, the housing problems could not be completely solved, for the demand for housing kept on rising, and the government's budget for welfare housing construction was found to be insufficient. Worse still, prices of land and construction materials also kept rising. Consequently, more people could not afford to build their own houses. To ease these difficulties the government decided to set up the Housing Welfare Bank, attached to the Ministry of Finance in 1953 to encourage the housing production for the general public so that people could own their own houses instead of renting from the government.

A crucial problem that arose while the government was working on solving housing problems involved the dangers that the slums were causing to society, both in public health and in security. To eliminate these problems, the Office of Community Improvement was then set up under the jurisdiction of the Bangkok Metropolitan Administration (BMA) on April 30, 1960. Its sole responsibility was to protect, maintain and renovate houses and also to demolish dwellings fallen into decay.

In addition to the slum problems the government was also faced with the problems of the deterioration and uninhabitability of some of the welfare houses five years after construction. To solve the problem, the government decided to construct flats to replace the delapidated welfare dwellings. The reason with which the government introduced the construction of apartment buildings in Thailand was that they did not consume much land, and since the price of land was rising, it would be wise to extend housing vertically rather than horizontally. Moreover, it would be difficult to turn strongly built apartment buildings into slums through room extensions.

The government first built flats in the Din Dang area in 1963 to replace the wooden houses and then in the Huay Kwang area. Thus it can be said that the Din Dang and Huay Kwang flats were the first welfare flats ever to be built in Thailand.

The four government agencies in charge of constructing welfare housing, encouraging private estate developers to build houses, and improving slum areas could not meet the demand of house seekers. The major reason for this failure was that all four agencies belonged to different departments and ministries. Thus each agency carried out different aspects of housing activity and it was obvious that such fragmentation was not conducive to effective housing development. There was not real housing policy, no long term development planning, no national housing plan, hence, funds and energy to carry out housing projects could not be employed to the fullest extent. Each agency performed duties according to the limited amount of budget alloted. Consequently, between the time the welfare housing activities had been started in 1973, only 11,268 housing units were built for rent or hire-purchase and only 5,431 lots of land were used, while the housing need was far more than 100,000 units, or, in other words about 500,000 people were suffering from the housing shortage and expecting government assistance.

PAGE 3.
National Housing Authority's
Historical Data

In 1971 during the period of political change the National Executive Council (NEC) in an effort to solve housing problems issued Decree Number 316, on December 13, 1971 to establish the National Housing Authority as a state enterprise attached to the Ministry of Interior transferring activities, assets, debts and liabilities and personnel from the Public Housing Bureau, the Public Housing Division of the Public Welfare Department the Government Housing Bank and the Office of Community Improvement of the Bangkok Metropolitan Administration, under the responsibility of the National Housing Authority.

NEC Decree Number 316 states that the National Housing Authority shall come into effect at the lapse of sixty days from the date on which it is published in the Royal Gazette. NHA was thus officially set up on February 12, 1973 to implement the following objectives:

1. Provide the public with housing for rent, hire purchase or purchase.

2. Subsidize citizens who wish to own housing or individuals who wish to provide the public with housing for rent, hire purchase, or purchase. ("Subsidize" here does not mean that NHA will extend loans but that loans will be obtained from different local and foreign agencies in order that houses can be built for rent, hire purchase or purchase at low down payment rates and long term installment plans. "Assistance" given to individuals who wish to provide the public with housing for rent, hire purchase or purchase, means that NHA would become a shareholder in the private estate development companies).

3. Run building or housing estate business.

NATIONAL HOUSING AUTHORITY ACTIVITIES

NHA is empowered to realize its objectives through the following activies:

1. Constructing, purchasing, selling, renting, leasing, hire-purchasing, borrowing, lending, exchanging, transferring, and managing any business related to property;

2. Acquiring sources of loans or loan guarantees for the people who wish to own housing or individuals who wish to provide housing for rent, hire-purchase or purchase;

3. Acquiring land and building materials for housing construction;

4. Clearing settlements which have deteriorated for the purpose of rebuilding them as housing complexes;

5. Raising loans from internal and external sources or from international organizations;

6. Issuing bonds or other loan agreements for investment purposes;

7. Cooperating with other private businesses for the benefit of NHA, including entering into a limited liability partnership with limited partnerships firms, or holding shares in a company or with any legal individual whose objectives are related to the sale or purchase of land or the provision of housing or the acquisition of sources of loans or loan guarantees.

8. Transacting any other business pertinent to the objectives of NHA.

The Interior Minister has the power to supervise in general the activities of NHA.

The Board of the NHA consists of board members who are appointed by the Cabinet and comprise a chairman and not fewer than five but not more than ten persons, excluding the governor, who is ex-officio. The board has the power to formulate policies and control NHA activities. The Board appoints the governor who executes NHA activities in compliance with the law, regulations, and policies determined by the board, and to exercise power over personnel in all positions. The Governor is also responsible for the management and operations of NHA.

Financially, NHA must obtain cabinet approval prior to taking action on the increase or decrease of capital, and on raising a loan amounting to more than ten million Baht. NHA also estimates the annual budget, dividing it into investment and operational funds. The budget for investment must be submitted to the Cabinet for consideration and approval, but the budget for operations is submitted to the Cabinet only for acknowledgement.

The income that NHA receives through operations belongs to NHA for operational expenses and for other obligations, such as maintenance and depreciation costs, and benefit funds or other forms of benefits for the works and their families. After expenses and obligations are deducted, the annual income becomes capital for NHA. Should the income not cover expenses and obligations, and should NHA be unable to acquire funds from other sources, the government then covers the deficit.

The NHA Board is required to submit to the Minister of Interior annual reports which present NHA activities in the past year, clarification of the policies of the Board, and future projects and plans. During each year the internal auditor is empowered to audit all account books and any other financial documents for NHA to submit these financial statements to the Board and to the Cabinet. In addition, NHA publishes the annual reports with the balance sheet and profit and loss statements.

NATIONAL HOUSING AUTHORITY PROGRAMS

Policy formulation and program planning for the NHA had taken place since 1974 by a subcommittee appointed by the NHA Board of Directors. However, before the work of the subcommittee was submitted a change of government occurred. In 1975 the elected government of ML Kukrit Pramoj affected some high-level NHA management changes, and handed down a firm directive for the NHA to construct a minimum of 20,000 net housing units each year. The first NHA 5 year Implementation Plan (1976-1980) was then prepared setting a construction target of 120,000 housing units in the Bangkok Metropolis and regional cities over the five year period.

After two years of implementation according to the aforementioned 5 Year Plan, it is clear that alterations to the plan from basic strategy issues, targets and various planning parameters are needed in order to keep NHA policy, strategies and implementation program abreast with the ever changing economic, social, political and other planning determinants.

It is, hence, decided that a 5 year planning period will be adhered to in order to allow planning continuity but a complete review and plan adjustment will be carried out every 2 years commencing in 1978.

The NHA has been assigned by the Government to implement its policies on solving housing problems suffered by the people of low and middle income groups and to cope with slum problems in order to maintain the favorable living standard. The NHA works both in Bangkok and upcountry but most of its effort is concentrated in Bangkok where population increase and emigration rates are extremely high and, consequently, housing needs in Bangkok are rising more rapidly and more critically than in the provinces.

K.A.

Comprehensive NHA Housing Development Programs

1979 - 1982

Type of Programs / Projects	Projected area (Rais)	No of units	Household Income level A (less than 2,000฿)	B (฿2,001-3,000)	C (3,001-4,000)	D (4,001-6,000)	E (more than 6,000)	Notes
I. Rental Type Dwellings								
1. Din Daeng Project	41.5	1,536	1,536	-	-	-	-	
2. Tung Song Hong (Additional)	30	1,188	792	396	-	-	-	
3. Rental Dwelling in Regional Cities	50	800	800	-	-	-	-	
4. Nava - Nakorn	20	560	420	140	-	-	-	
5. Klong Toey III(Phase1)	36	1,512	1,512	-	-	-	-	
Total	177.5	5,596	5,060	536				
II. Sites & Services								
6. Lad - Krabang	1,107	4,725	1,470	1,760	475	700	320	-
7. Bang Plee - Bang - Bo	1,665.8	4,857	1,152	1,500	1,060	766	377	-
8. Rangsit(Phase 2)	176	1,760	460	880	200	200	-	
9. In secondary Cites	600	8,400	3,950	2,430	1,100	920	-	
10. Pra - Pra - Daeng	700	5,600	1,460	2,800	670	670	-	
11. Taling - Chan/Petch Kasem	700	5,600	1,460	2,800	670	670	-	
12. Ram - Indra	200	1,693	550	1,143	-	-	-	
Total	5,048.8	32,635	10,522	13,313	4,175	3,928	697	

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T. of Programs Projects	Projectarea (Rais)	No of units	Household Income level A (less than-2.000฿)	B (฿2,001-3,000)	C (3,001-4,000฿)	D (4,001-6,000฿)	E (more than-฿6,000)	No
III Slum Upgrading								
13. In Bangkok Metropolitan	-	26,800	13,400	13,400	-	-	-	
Total		26,800	13,400	13,400	-	-	-	
IV Special Profit Making Projects(High Income Flats-and garden Apartment)								
14. Raj Vithee - Rang Nam	19.5	976	-	490	244	244	-	
15. Prachanives 2 Phase 2	287	1,385	-	-	-	1,385		
16. Klong Chan Deluxe Flat	27	840	-	-	-	840	-	
17. Piboon Wathana 2	7.9	320	-	-	-	-	320	
Total	341.4	3,523	-	490	244	2,469	320	
Total unit being Developed within 1979 - 1982	5,567.7	68,554	28,932	27,739	4,419	6,397	1,017	

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NHA Housing Development Programs

1979 - 1982

1. Rental Type Dwellings (5,596 units)

Name of Projects	Project area(Rais)	No. of Units	Project Development Duration 1979	1980	1981	1982	Construct Period(mo.
1. Din Daeng	41.5	1,536		DEC MAR	1536 UNITS		27
2. Tung Song Hong(Add.)	30	1,188		NOV FEB	1188 UNITS		25
3. Rental Dwelling in Regional Cities	50	800	OCT	DEC	400 UNITS MAY JUN	400 UNITS	13
4. Nava - Nakorn	20	560		JAN APR	560 UNITS		20
. Klong Toey 3	36	1,512		FEB MAY	1512 UNITS		27

Notes
1. Land Acquisition and Project Preparation
2. Land Development
3. Construction

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2. Sites & Services (Hire - Purchase) 32,635 units.

Names of Projects	Project area(Rais)	No. of units	Project Development Duration						Constructi Period(mo
			1979	1980	1981	1982	1983	1984	
1. Lad - Kra bang	1,107	4,725							18
2. Bang Plee - Bang Bo	1,665.8	4,857							40
3. Rangsit (Phase 2)	176	1,760							24
4. In secondary cities	500	8,400							24
5. Pra Pra Daeng	700	5,600							40
6. Taling Chun/Petch Kasem	700	5,600							40
7. Ram Indra	200	1,693							24

3. Slum Upgrading

Names of Projects	Project areas(Rais)	No. of units	Project Development Duration				Construction-Period(months
			1979	1980	1981	1982	
In Bangkok Metropolitan area	-	26,800					

4. Special Profit Making Projects 3,523 units.

Names of Projects	Project area(Rais)	No of units	Project Development Duration						Constructi Period(mo
			1979	1980	1981	1982	1983	1984	
1. Raj Vithee - Rang Nam	19.5	978							24
2. Prachanives 2 Phase 2	287	1,385							30
3. Klong Chan Deluxe Flat	27	840							24
4. Piboon - Wathana 2	7.9	320							13

Sources of Fund for Housing Development Programme

(Unit : 1,000,000 Baht)

Type of Project	Source of Fund				Total	Gov.Subs. as %
	USAID	IBRD	ADB	Domestic & Foreign Bank		
Rental Type Dwellings						
1. Din Daeng	-	-	-	168.96	168.96	100
2. Thung Song Hong (Add.)	-	-	-	130.68	130.68	100
3. Rental Dwelling in Regional Cities	-	-	-	92.40	92.40	100
4. Nava - Nakorn	-	-	-	61.60	61.60	100
5. Klong Toey 3	-	-	-	166.32	166.32	100
Total				619.96	619.96	100
Site & Services for Hire - Purchase purchase						
1. Lad Kra Bang	135.45	225.75	-	90.29	451.49	25
2. Bang Plee - Bang Bor	163.69	-	272.81	109.12	545.62	28
3. Rangsit (Phase 2)	49.32	-	-	115.07	164.39	30
4. Housing in Regional Cities	217.15	210.30	-	296.39	723.84	33
5. Phra Pra Daeng	158.03	-	-	368.73	526.76	30
6. Taling Chan/Petch Kasem	153.76	-	-	373.00	526.76	30
7. Ram Indra	-	-	-	155.52	155.52	30
Total	877.40	436.05	272.81	1,508.12	3,094.33	30
Slum Upgrading						
1. In Bangkok Metropolitan	122.60	70.00	-	52.60	245.20	63
Total	122.60	70.00	-	52.60	245.20	63
Special Profit Making						
1. RajVithee-Rang Nam	-	-	-	185.43	185.43	-
2. Prachanivee 2 Phase 2	-	-	-	301.65	301.65	-
3. Klong Chan Deluxe Flat	-	-	-	166.32	166.32	-
4. Phibul Wathana	-	-	-	85.18	85.18	-
Total				738.58	738.58	-
Grand Total	1,000.00	506.05	272.81	2,919.26	4,698.12	36

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4. Sites & Service for Hire - Purchase (32,635 units)

(Unit : 1,000,000 Baht)

Name of Project	Total Investment	Estimated Distribution of Investment					
		1979	1980	1981	1982	1983	1984
1. Lad Kra Bang	451.49	-	139.96	288.96	22.57	-	-
2. Bang Plee - Bang Bor	545.62	-	109.12	163.69	163.69	109.12	-
3. Rangsit (Phase 2)	164.39	-	4.93	73.98	77.26	8.22	-
4. Housing in Reginal Cities	723.84	-	36.19	424.81	241.61	21.23	-
5. Phra Pra Daeng	526.76	-	-	94.82	158.02	158.02	115.9
6. Ta ling Chan/Petch Kasem	526.76	-	-	94.82	158.02	158.02	115.9
7. Ram Indra	155.52	-	-	15.56	77.76	62.20	-
Total	3,094.38	-	290.20	1,156.64	898.93	516.81	231.9
		Investment Fund to be Born by the Government					
1. Lad Kra Bang	111.71	-	34.63	71.50	5.58	-	-
2. Bang Plee - Bang Bor	155.41	-	31.08	46.63	46.63	31.07	-
3. Rangsit (Phase 2)	49.83	-	1.49	22.43	23.42	2.49	-
4. Housing in Regional Cities	235.44	-	11.77	134.21	81.52	7.94	-
5. Phra Pra Daeng	157.48	-	-	28.35	47.24	47.24	34.6
6. Taling Chan/Petch Kasem	157.48	-	-	28.35	47.24	47.24	34.6
7. Ram Indra	58.34	-	-	5.84	29.18	23.32	-
Total	925.69	-	78.97	337.31	280.81	159.30	69.
		Investment Fund to be Born by Tenants					
1. Lad Kra Bang	339.78	-	105.33	217.46	16.99	-	-
2. Bang Plee - Bang Bor	390.21	-	78.04	117.06	117.06	78.05	-
3. Rangsit (Phase 2)	114.56	-	3.44	51.55	53.84	5.73	-
4. Housing in Regional Cities	488.40	-	24.42	290.60	160.09	13.29	-
5. Phra Pra Daeng	369.28	-	-	66.47	110.78	110.78	81.
6. Taling Chan/Petch Kasem	369.28	-	-	66.47	110.78	110.78	81.
7. Ram Indra	97.18	-	-	9.72	48.58	38.88	-
Total	2,168.69	-	211.23	819.33	618.12	357.51	162.

Notes : Distibution of Investment Fund Estimated by Progressive of Project

BEST AVAILABLE DOCUMENT

Financial Plan for Housing Development Programme

1979 - 1982

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1. Rental Type Dwelling (5,596 Units)

(Unit : 1,000,000 Baht)

Name of Projects	Total Investment	Distribution of Investment Fund to be Born by Governm					
		1979	1980	1981	1982	1983	198
1. Din Daeng	168.96	-	25.34	84.48	59.14	-	-
2. Thung Song Hong (Add.)	130.68	-	19.60	65.34	45.74	-	-
3. Rental Dwelling in Regional Cities	92.40	-	33.00	23.10	36.30	-	-
4. Nava Nakorn	61.60	-	15.40	36.96	9.24	-	-
5. Klong Toey 3	166.32	-	33.26	83.16	49.90	-	-
Total	619.96	-	126.60	293.04	200.32	-	-

2. Special Profit Making Projects (3,523 Units)

(Unit : 1,000,000 Baht)

Name of Projects	Total Investment	Distribution of Investment Fund to be Born by Tenants					
		1979	1980	1981	1982	1983	1984
1. RajVitee - Rnag Nam (Flat)	185.43	-	-	-	74.17	92.72	18.54
2. Prachanivat 2 Phase 2 (garden Apartment)	301.65	-	-	90.50	120.66	90.49	-
3. Klong Chan Deluxe Flat	166.32	-	-	24.95	74.84	66.53	-
4. Phibul Watana 2 (Flat)	85.18	-	12.78	42.59	29.81	-	-
Total	738.58	-	12.78	158.04	299.48	249.74	18.54

3. Slum Upgading (26,800 units)

(Unit : 1,000,000 Baht)

Items	Total Investment	Distribution of Investment Fund					
		1979	1980	1981	1982	1983	1984
Investment Fund to be Born by government	153.25	47.01	27.97	36.65	41.62	-	-
Investment Fund to be Born by Tenants	91.95	28.21	16.78	21.99	24.97	-	-
Total	245.20	75.22	44.75	58.64	66.59	-	-

Notes : Distribution of Investment Fund Estimated by Progressive of Project.

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Source of Fund for 4 Year Development Programme (1979 - 1982)

Sources	Total Investment	Fiscal Year					
		1979	1980	1981	1982	1983	198
International Financial Institutions :-							
- USAID(1)	1,000.-	37.61	109.43	370.89	278.36	135.09	68.
- IBRD(2)	506.05	21.47	93.28	308.42	82.88	-	-
- ADB(3)	272.81	-	54.56	81.84	81.84	54.57	-
Other Sources :-							
- Domestic & Foreign Bank	2,919.26	16.14	217.06	905.21	1,22.24	576.89	181.
Total	4,698.12	75.22	474.33	1,666.36	1,465.32	766.55	250

Notes : 1. Proposed USAID financing 30% for Site and Service Project also Slum Upgrading Project 50%

2. Proposed IBRD financing 50% for Lad Kra Bang Project, Housing in Regional Cities and Slum Upgrading Project

3. Proposed ADB financing 50% for Bang Plee - Bang Bor

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ORGANIZATION DESIGN

NHA is a state enterprise with a mixture or bureaucratic and business systems of management. As a bureaucratic system, it aims at providing fair services to the general public, whereas as a business system, it operates on a non-profit making basis, but not at a loss. Because of its emphasis on efficiency and effectiveness, NHA in the design of its organization stresses speed and flexibility in operation. Lines of responsibility are thus carefully drawn.

Under the Board is the governor and his two deputies (one for administrative affairs and the other for financial affairs) who belong to the Administrative Line. They supervise NHA personnel and coordinate NHA with other government agencies, for example, the Ministry of Interior, the Ministry of Finance, the Budget Bureau, the National Economic and Social Development Board, the Bangkok Metropolitan Administration, and other agencies in charge of public facilities and utilities. The coordination aims at accelerating NHA activities.

The Governor has an administrative staff which is considered the sub-Administrative Line. Under the Administrative Line is Operational Line. (See Organization Chart attached.)

Chart แผนผังองค์กร

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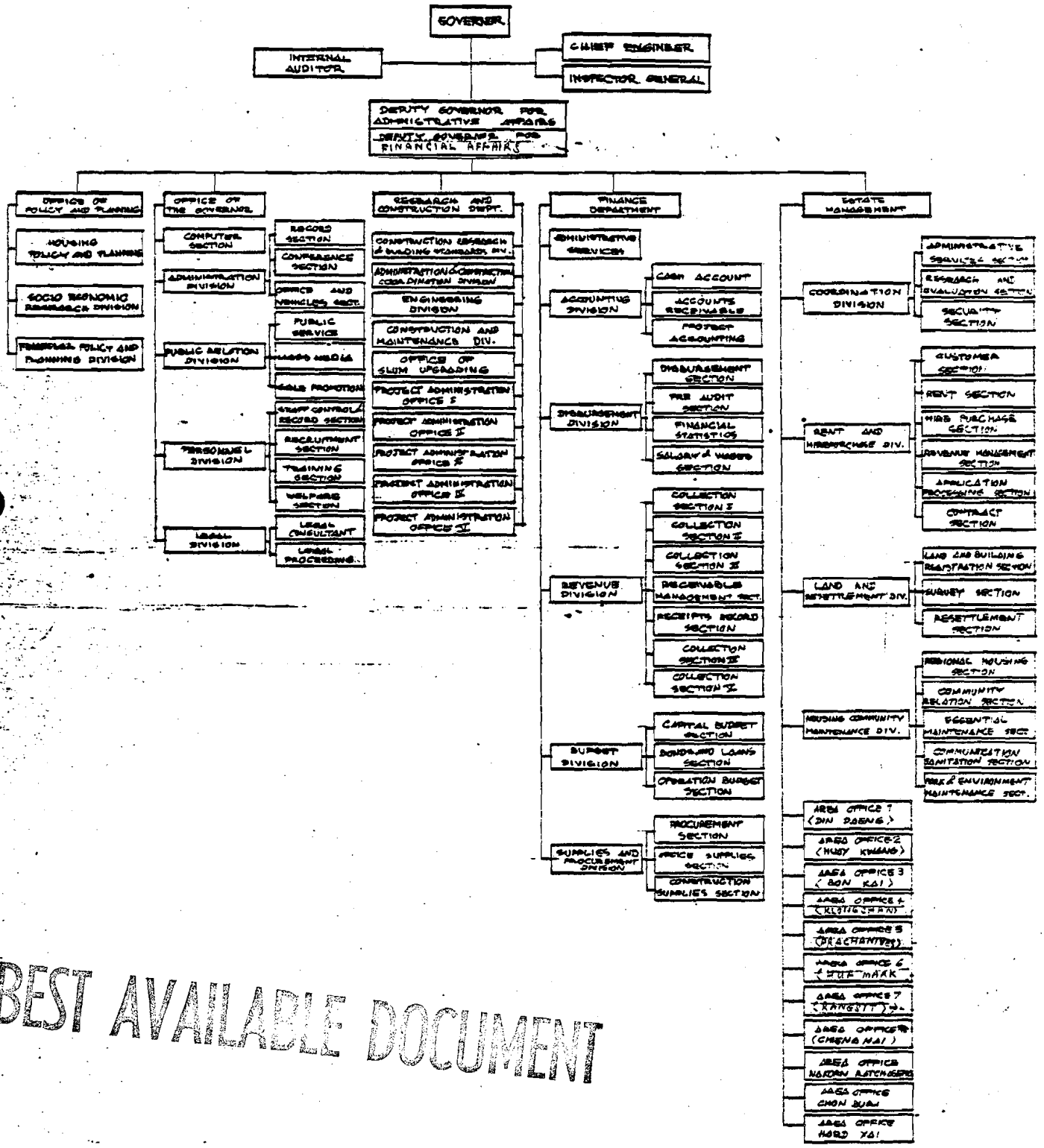
NATIONAL HOUSING AUTHORITY

ORGANIZATION CHART



BEST AVAILABLE DOCUMENT

PROCEDURES FOR RENTAL AND HIRE-PURCHASE

NHA does not have the policy of immediately available housing (except for a small number of units for hire-purchase by those with high incomes). Instead, an applicant submits his application prior to construction and receives a registration number. His name is then placed on a waiting list. The applicants are divided into four groups according to income:

Type A: Households with monthly incomes below 1,500 Baht. ($75)

Type B: Households with monthly incomes between 1,500 and 3,000 Baht. ($75-$150)

Type C: Households with monthly incomes between 3,000 and 5,000 Baht. ($150-$250)

Type D: Households with monthly incomes above 5,000 Baht. (over $250)

In 1977, NHA cancelled Type D so that people of this type could hire-purchase NHA housing type D without registering in the waiting list.

Originally, there were no limitations of incomes for those who wanted to rent NHA housing. However, in 1976 NHA issued a regulation that an applicant for rental of NHA housing must earn less than 1,500 Baht, and that a renter was prohibited from tranferring rent except if the renter died. Those renters whose monthly incomes were above 1,500 Baht would be provided with housing for hire-purchase in accordance with their income. However, applicants who suffer severe housing problems, or who are evicted by the Court from the land will be given special consideration.

Applicants for hire-purchase for NHA's housing can be anyone of any income group, even those with monthly incomes below 1,500 Baht.

When any NHA construction projects is nearly completed, applicants whose names are on the waiting list are personally interviewed at the NHA office in order to make sure they still need housing. Those at the beginning of the list are given first choice. Those who are not provided with housing are still on the waiting list for the next project. NHA allows those on the list to choose housing for another two projects but no more.

At present, NHA has 14,100 housing units for rental and hire-purchase; 10,706 of them were occupied before 1977, and 3,394 units of the 1976 Public Housing Project were completed and occupied in 1977.

Procedures for Rental and Hire Purchase

The housing construction projects in progress, consisting of more than 14,000 units, are expected to be completed and occupied in 1978.

NHA's rental and hire-purchase rates of housing are as follows:

1. Households with monthly incomes below 1,500 Baht can rent at 300 Baht per month and hire-purchase at 400 Baht per month (including service charges) for 20 years. Hire-purchasers with monthly income below 1,500 Baht, the lowest income group, are required to make an advance payment.

2. Households with monthly incomes between 1,500 - 3,000 Baht can hire-purchase housing or housing with land at 500-800 Baht per month for 20 years, with a down payment of 5% of the total price.

3. Households with monthly incomes between 3,000 - 5,000 Baht can hire-purchase housing or housing with land at 1,000-1,500 Baht per month for 20 years, with a down payment of 15% of the total price.

4. Households with monthly incomes of 5,000 Baht can hire-purchase housing or housing with land at 1,500 - 3,000 Baht per month for 20 years, with a down payment of 20% of the total price.

Rates of rental and hire-purchase may be liable to change without advance notification to renters and hire-purchasers. Rates of rental and hire-purchase may be different for the same income groups at different projects because of the cost of construction and land for each project.

NHA has buildings of several types. Those in the urban areas are mostly flats of 5 storeys, 8 storeys, or 12 storeys. Housing units in flats vary in number and size, ranging from a multi-purpose room unit, a one-bedroom unit, a two-bedroom unit, a three-bedroom unit, to a standard unit of high income groups.

In the suburbs, both flats and housing of different types are built: a one-storey rowhouse, two-storey rowhouse, three-storey rowhouse (garden apartment), one-storey deplex, two-storey duplex, one-storey single-house and two-storey singlehouse. In outlying towns and the provinces, mostly houses are constructed, with few flats.

Interested people can see NHA housing models at the NHA Head Office at Klong Chan.

THE ALLOCATION OF HOUSING TO APPLICANTS ON THE WAITING LIST

The NHA provides housing in various housing estates both to tenants and hire-purchasers, according to the waiting list. In the fiscal year 1978, the applicants were housed in 13,629 units. Slums were eradicated and the families were moved to the flats so that the original compound could be used for construction of the new living quarters. In the fiscal year 1978, various places were pulled down according to the following plan:

Din Dang Estate Phase 1	505	families
Din Dang Estate Phase 2	689	families
Klong Toey Estate	450	families
Bon Kai Estate	296	families
Thung Mahamek Estate	16	families

Number of Applicants on Waiting List

1. In the fiscal year 1978

Renting	377	applicants
Hire-Purchasing	4,457	applicants
Total	4,834	applicants

2. Applicants' Income Group for Hire Purchasing in 1978

Less than 1,500 Baht (Group A)	785	applicants
Monthly income 1,500-3,000 Baht (Group B)	2,065	applicants
Monthly income 3,000-5,000 Baht (Group C)	1,213	applicants
Monthly income above 5,000 Baht (Group D)	394	applicants
Total	4,457	applicants

3. From the First Start to the End of the Fiscal Year 1978

Applicant registered to rent	11,305	applicants
Applicants registered to hire-purchase	80,815	applicants
Total	92,120	applicants

COMMUNITY DEVELOPMENT AND REDEVELOPMENT

In addition to the construction of the new housing estates NHA has redeveloped existing estates which were constructed a long time ago. In some estates, the buildings and the roads had deteriorated and needed improvement for the convenience of the residents of the community.

Several projects underway are the construction of water supply systems in the Mahamek Estate, Piboon Wattana Community, Ngam Wongwan Community, Klong Chan Community, The SEA Games Sportmen Village, Prachanives 2 Community. In terms of building repair, the Garden Apartment at Klong Chan, the Din Dang project, the Klong Toey project and the Huay Kwang project are being reconstructed.

Moreover, the NHA is repairing roads within its estates such as the roads around the artificial lake at Klong Chan, roads at Thonburi project, the road to Huay Kwang Community, the Rajaviti project and the SEA Games Sportsmen's Village.

SERVICES PROVIDED TO HOUSING COMMUNITIES

The National Housing Authority (NHA) offers services to residents of its communities through the Area Offices which are the branches of the main office in connection with public utilities such as electricity, tap water, sanitation and sewage plants. In addition to providing services and being responsible for solving the difficulties for enforcing regulations as well as maintaining good relationships with residents of the estates to make the estates more livable. At present, there are 8 area offices:

1. The Area Office 1 responsible for Din Dang Community.
2. The Area Office 2 responsible for Huay Kwang Community.
3. The Area Office 3 responsible for Bon Kai, Thung Mahamek, Klong Toey Community.
4. The Area Office 4 responsible for Klong Chan and Ram Indra Community.
5. The Area Office 5 responsible for Prachanives 1, 2, Tasai Communities.
6. The Area Office 6 responsible for Hua Mark Community.
7. The Area Office 7 responsible for Rangsit Community.
8. The Area Office 8 responsible for Chiengmai Community.

SLUM IMPROVEMENT

Slums bring about a serious problem in large communities. In Thailand, Bangkok Metropolis is seriously affected by this problem. Unless extreme and vigorous attempts are made to solve this critical problem, slums will certainly be an obstacle to the solution of social problems and will eventually create many other problems.

Slum areas refer to densely populated areas where houses are constructed very densely without any planning. Residents of slum areas, therefore, lack hygienic surroundings and sanitation which are indispensable for everyday life.

According to the project, of 300 slum areas, 250 need to be improved. The Ministry of Interior has designated the NHA together with the Bangkok Metropolis, the Metropolitan Waterwork Authority, the Metropolitan Electricity Authority, the Department of Industrial Promotion and other related offices to coordinate improving the slum areas in Bangkok by following the plan with the available budget.

From a study and survey of 108 slum areas by the NHA in June 1975, it was discovered that residents confront several problems such as the land ownership. Only a very small number own land. Most of the land is owned by the government or the private sector and is rented under a short termed contract. In terms of public utilities, the most serious problem is the drainage system and tap water system. The residents have to rely on the water supply from their neighbors. Moreover, the pathways to the houses are quite delapidated consisting of narrow wooden planks. Around the house is polluted water. Nevertheless, most of the houses are made of impermanent material such as wood. In terms of income, the residents have a low income averaging about 1,500 Baht per month (US $75). In addition, the majority of the residents are reluctant to move due to convenience of location in terms of transportation, sources of employment and communication with relatives and business.

Therefore, the NHA has established a unit which is responsible for slum improvement. It is called "Slum Improvement Office". At the initial stage they have surveyed slum areas in Bangkok Metropolis. This activity is stated in the 5 year plan for further improvement.

Slum Improvement Projects in Fiscal Year 1978

The Cabinet approved the initial slum improvement projects proposed by the Ministry of Interior. Subsequently the Ministry charged NHA with the implementation of slum improvements based on the following guidelines:

1. Physical Improvement. The improvement includes pavements, drainage systems, public utilities, garbage collection, and fire prevention measures.

2. Economic and Social Improvement. NHA will work with government agencies concerned to implement such services as health centers, community centers, child-care centers, career-promotion centers, and job employment centers.

3. Land Ownership Improvement. NHA will seek cooperation and permission from land owners in order to guarantee that the squatters can stay where they are as long as possible after improvements in the whole area have been completed.

The slum improvement projects will be divided into two categories:

1. The projects subsidized by World Bank loans. NHA will rent land for slum improvement from both private and government land-owners as the initial step for the government to receive loans from the World Bank. Half of the money for these projects will come from the government through World Bank loans; NHA or the Finance Ministry will be responsible for the other half. NHA expects to repay the government in due course.

2. General projects. NHA will seek permission from private or public land owners in order to improve the slums on their lands and to grant agreements whereby squatters can stay there at least 10 years after improvement. In the agreements, NHA will not have to pay rent and will not ask for reimbursement from land owners.

Slum Improvement

The 4 year plan (1979-1982) is gearing towards the improvement of two thirds of the slum areas in Bangkok, or approximately 200 areas so that about 40,000 families will be provided with a better environment and social and economic status. It is anticipated that about 200 million Baht (US $10 million) will be invested for this matter.

Slum improvement is a project which needs to be done in coordination with the construction of residences for low-income citizens. Slum improvement is a means of help extending to people who live in unhygienic surroundings so that they can have better homes with public utilities which will make life more convenient for them.

There are two ways to improve slums. The first method is clearance of slum areas and replacement with flats such as at Din Dang and Klong Toey. Another method is improvement of public utilities such as electricity, tap water, sidewalks, drainage systems instead of clearance.

There are 10 places under improvement by the NHA: Soi Kingpetch, Praditaram Temple, Soi Sriphoom, Jerusalem Village, Wat Soythong, the area behind Wat Yai Srisupan, Soi Ruamrudee, the area behind the new market of Wat Prayakrai, Soi Sawatdiraksa and Klong Tan. After improvement, it is expected that about 5,000 families will benefit from this project. Owing to the 4 year priority plan (1979-1982) of the NHA, it is anticipated that about 26,000 families will benefit from community improvement.

CURRENT NHA PUBLIC HOUSING ESTATES
(as at September 30, 1978)

Current NHA public housing estates include those taken over from Public Welfare Department, Welfare Housing Office, Government Housing Bank, and Slum Improvement Office of the Bangkok Metropolitan Administration, and those built by the NHA itself on the land taken over from some mentioned government departments and offices. Details of those public housing estates are as shown on the attached charts.

ATTACHMENT

CURRENT NHA PUBLIC HOUSING ESTATES

NUMBER	NAME OF PROJECT	TYPE OF BUILDING	NUMBER/ UNIT	BASIS OF PAYMENT
1.	Rajvithee-Rangmam	2-Storey rowhouse	237	Rental
2.	Swankaloke Road	2-Storey rowhouse	92	Rental
3.	Din Daeng	5-Storey flat	4,970	Rental
		12-Storey flat	308	Hire-Purchase
4.	Huay Kwang	5-Storey flat	1,600	Rental
5.	Bon Kai	5-Storey flat	336	Rental
6.	Pracha-Nives 1	4-Storey flat	240	Rental
		2-Storey rowhouse	120	Hire-Purchase
7.	Pracha-Nives 2	2-Storey single house	599	" "
8.	Pibul Watana	2-Storey rowhouse	3	Rental
		2-Storey single house	250	Hire-Purchase
9.	Thung Mahamek	2-Storey single house	545	" "
		3-Storey rowhouse	16	" "
10.	Ribul Wes	2-Storey single house	243	" "
11.	Jang Watanawes	2-Storey single house	101	" "
12.	Hua Mark	2-Storey duplex	576	" "
13.	Rangsit	1-Storey rowhouse	1,428	" "
14.	Provincial Public Welfare Housing	Combination of various types	1,101	Rental
15.	Special Flats Din Dang	5-Storey flats	830	Rental
16.	New Din Dang Flats Phase 1	12-Storey flats	308	Hire-Purchase
17.	Huay Kwang Flat Phase 3	5-Storey flats	1,600	Rental
18.	Bon Kai Flats Phast 1	5-Storey flats	816	Rental & Hire-Purchase
19.	Klong Toey Housing Community Phase 1	5-Storey flats	2,098	Rental
20.	Ram Indra Housing Community	5-Storey flats	448	Hire-Purchase
		2-Storey rowhouse	322	" "
		Shophouse	42	" "
21.	Klong Chan Housing Community Phase 1,2,6,7	2-Storey rowhouse	140	Rental
		2-Storey single & duplex House	1,145	Hire-Purchase
		3-Storey rowhouse	624	Hire-Purchase
		5-Storey flat	3,486	Rental & Hire-Purchase
		TOTAL	24,675	

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ATTACHMENT

CURRENT NHA PUBLIC HOUSING ESTATES

1977 Public Housing Projects Completed in the Fiscal Year 1978

NUMBER	PROJECT	TYPE OF BUILDING	NUMBER OF UNITS	INCOME GROUP	TOTAL
1.	Hua Mark Phase 1	2-Storey duplex	576	D	588
		Shophouse	12	D	
2.	Rangsit Phase 1 (	1-Storey rowhouse (Sites & Services)	1,428	A	1,428
3.	Din Dang	5-Storey flat	664	A (Rental)	826
	Special flats	Shophouses	162	A (Rental)	
4.	New Din Dang Flats, Phase 1	12-Storey flat	308	B	308
5.	Pracha-Nives 1 (Addition)	4-Storey flat	120	A (Rental)	240
		3-Storey rowhouse	120	C	
6.	Garden Apartment Tung Mahamek	3-Storey rowhouse	16	D	16
7.	Huay Kwang Phase 3	5-Storey flat	1,600	D (Rental)	1,600
8.	Bon Kai Phase 1	5-Storey flat	120	A	
		12-Storey flat	120	A	816
		12-Storey flat	264	B	
9.	Ta Sai	5-Storey flat, type ก.-5	100	A	
		partially built rowhouse type 1-1	103	A	
		rowhouse of type ก.-1	152	A	
		rowhouse of type ก.-2	130	B	
		rowhouse of type ก.-4	231	B	1,419
		rowhouse of type ก.-4	156	C	
		duplex of type ก.-3	166	C	
		single house of type ก.-7	381	D	
10.	Klong Toey Phase 1	5-Storey flat	2,098	A (Rental)	2,098
11.	Ram Indra	5-Storey flat	448	A	
		Shophouse	42	D	812
		2-Storey rowhouse	322	C	

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ATTACHMENT
CURRENT NHA PUBLIC HOUSING ESTATES - PAGE 2.

1977 Public Housing Projects Completed in the Fiscal Year 1978

NUMBER	PROJECT	TYPE OF BUILDING	NUMBER OF UNITS	INCOME GROUP	TOTAL
12.	Klong Chan	1st Part, 5-Storey flat	936	B	
		2nd Part, 5-Storey flat	936	B	
		6th Part, 5-Storey flat	990	B	3,486
		7th Part, (Garden Apt.)	624	D	
			TOTAL		13,637

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ESTIMATED CASH-FLOW FOR THE PERIOD OF 1978 - 1981

ITEMS	1978 Baht	1979 Mill.Baht	1980 Mill.Baht	1981 Mill.Baht	Total Mill.Baht
Estimated Cash Inflows					
Cash Balance 1977 Forward					
Cash on hand	20,579	(11.072)	78.757	57.894	0.021
Cash at bank	101,489,283				101.489
Total	101,509,862	(11.072)	78.757	57.894	101.510
Cash Received					
Rent	16,311,749	23.782	31.045	32.992	104.131
Hire-Purchase	71,631,579	136.760	164.238	197.099	569.729
Advance Receivable	48,481,548	20.978	22.722	24.615	116.796
Other Revenues	34,144,138	34.472	19.100	20.000	107.716
Government Grant	60,048,456	50.741	225.473	336.459	672.721
Loan - Siam Commercial Bank	66,762,000	-	-	-	66.762
- Ministry of Finance	400,000,000	-	400.000	-	800.000
- IBRD	-	14.819	47.419	54.881	117.119
- LTCB (Japan)	-	1,112.888	-	-	1,112.888
- Others	-	-	800.000	1,000.000	1,800.000
Overdraw - Krung Thai Bank	38,356,995	50.000	-	-	238.357
- Gov't Housing Bank	-	150.000	-	-	
Lottery Bureau Grant	27,048,810	0.294	-	-	27.343
Promisory Notes	574,779,903	334.424	-	-	909.204
Ministry of Justice Project Fee	-	-	1.394	-	1.394
Police Project Fee	36,524,576	11.428	50038	-	52.990
Total	1,374,089,754	1,940.586	1,716.429	1.666.046	6,697.150
Total Cash Received	1,475,599,616	1,929.514	1,795.186	1,723.940	6,798.660

ITEMS	1978 (Mill.Baht)	1979 (Mill.Baht)	1980 (Mill.Baht)	1981 (Mill.Baht)	Total (Mill.Baht)
Estimated Cash Outflows					
Project Cost - 1976	681,139,736	390.398	368.714	95.544	1,535.796
- 1977	119,360,808	373.091	595.565	412.788	1,500.805
- 1978	3,771,326	73.797	125.420	112.837	315.825
- 1979	–	0.133	107.931	227.421	335.485
- 1980	–	–	17.547	78.539	96.086
- Ministry of Justice	85,805	10.045	19.142	–	29.272
Non Project Cost	10,979,882	8.265	43.713	20.992	83.950
Operating Expenses	105,437,681	149.604	188.577	207.434	651.053
Interest Expenses	56,136,338	102.925	193.432	333.582	686.075
Principal Expenses	28,043,600	209.556	69.794	122.690	430.084
Miscellaneous Expenses	15,127,248	8.655	7.457	7.180	38.419
Promisory Notes	466,589,092	524.288	–	–	990.877
Total Cash Outflows	1,486,671,516	1,850.757	1,737.292	1,619.007	6,693.727
Total Estimated Cash Balance	(11,171,900)	78.757	57.894	104.933	104.933

SOURCES OF FUNDS - SUMMARY

for 1979,1980

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NO.	Description	1979		1980	
		Amount	Total	Amount	Total
1	DIRECT REVENUE				
	1.1 Rent	35,146,200		31,045,000	
	1.2 Hire - purchase	130,322,100		164,238,100	
	1.3 Down payment	42,880,500		22,722,000	
	1.4 Others	20,900,000	229,248,800	19,100,000	237,105,100
2	GOVERNMENT SUBSIDIES				
	2.1 Subsidy - B/Fwd from last year	16,074,700		5,798,430	
	2.2 Subsidy for 1979				
	2.2.1 Interest payable on bonds	13,750,000		13,750,000	
	2.2.2 Interest over 7 %	15,004,300		27,566,000	
	2.2.3 10% subsidy for low income projects	21,656,400		112,300,000	
	2.2.4 Refunding for Songkla Projects	499,000		-	
	2.2.5 Slum Upgrading	5,000,000		-	
	2.2.6 Subsidy for World Bank Projects	-		23,989,000	
	2.3 Subsidy for priority Plan	-	71,984,400	42,070,000	225,473,430
3	INCOME FROM GOVERNMENT LOTTERY	152,600	152,600	-	-
4	DOMESTIC LOANS				
	4.1 Ministry of Finance (W.B.Loan)	55,664,600		47,418,700	
	4.2 Ministry of Finance	-	55,664,600	400,000,000	447,418,700
5	FOREIGN LOAN				

NO.	Description	1979		1980	
		Amount	Total	Amount	Total
	Long - Term Credit Bank of Japan	1,000,000,000	1,000,000,000	-	-
6	OVER DRAFT from - Krung Thai Bank	-		50,000,000	
	- Government Housing Bank	-	-	150,000,000	200,000,000
7	OTHER INCOME	900,000,000	900,000,000	1,300,000,000	1,300,000,000
8	INCOME FROM POLICE DEPT.				
	7.1 Welfare Housing Projects for Central Police Officers	2,909,000		-	
	7.2 Welfare Housing Projects for Metropolitan Police Officers	8,922,000	11,831,000	5,038,000	5,038,000
9	INCOME FROM MINISTRY OF JUSTICE	-	-	1,394,000	1,394,000
	Total		2,268,881,400		2,416,429,230

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APPLICATION OF FUNDS - SUMMARY

for 1979,1980

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NO.	Description	1979 Amount	1979 Total	1980 Amount	1980 Total
	OPERATING BUDGET				
	1.1 Salaries of Regular Personnel	51,630,300		85,084,750	
	1.2 Salaries of Permanent Employees	10,696,400		20,152,480	
	1.3 Salaries of Temporary Employees	2,957,700		7,672,000	
	1.4 Other employment costs	24,851,700		19,607,530	
	1.5 Operating expenses	30,610,400		42,750,900	
	1.6 Supplies	10,695,800		11,409,400	
	1.7 Welfare Fund	810,000		900,000	
	1.8 Other expenses	4,315,000		-	
	1.9 Compensation paid for 1979	-	136,567,300	11,000,000	198,577,060
2	NON PROJECT BUDGET				
	2.1 B/Fwd from last year	3,645,900		22,174,828	
	2.2 Budget for this year				
	2.2.1 Durable items	2,721,300		8,269,150	
	2.2.2 Improvement to building and surrounding area	3,431,500		4,444,850	
	2.2.3 Extension to community Offices and surrounding	11,105,000		1,102,074	
	2.2.4 Laboratory building	2,554,900		-	
	2.2.5 Reserve price	700,000		7,043,100	
	2.2.6 Contigency fund	3,000,000		3,000,000	
	2.2.7 Survay and research approval projects		27,158,600	3,000,000	49,034,002
3	PROJECT BUDGET				
	3.1 B/Fwd from last year	834,652,300		826,361,400	
	3.2 Budget addition this year	634,775,100	1,473,427,400	783,643,400	1,610,004,80

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Description	1979		1980	
	Amount	Total	Amount	Total
FINANCIAL BUDGET				
4.1 Repayment of principal	281,423,600	-	296,793,600	
4.2 Repayment of loan interest	111,548,000		197,484,800	
4.3 Repayment of Metro Housing and Construction	8,655,300	403,626,900	7,457,000	
4.4 Reserve for Operating Budget	2,600,000	403,626,900	2,000,000	476,735,400
		2,040,780,200		2,334,351,262

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APPENDIX

1. NHA - National Housing Authority
2. NHA Budget Year - October 1 - November 30
3. US$1 - 20 Baht
4. 1 hectare = 6.25 rais
   = 10,000 square meters

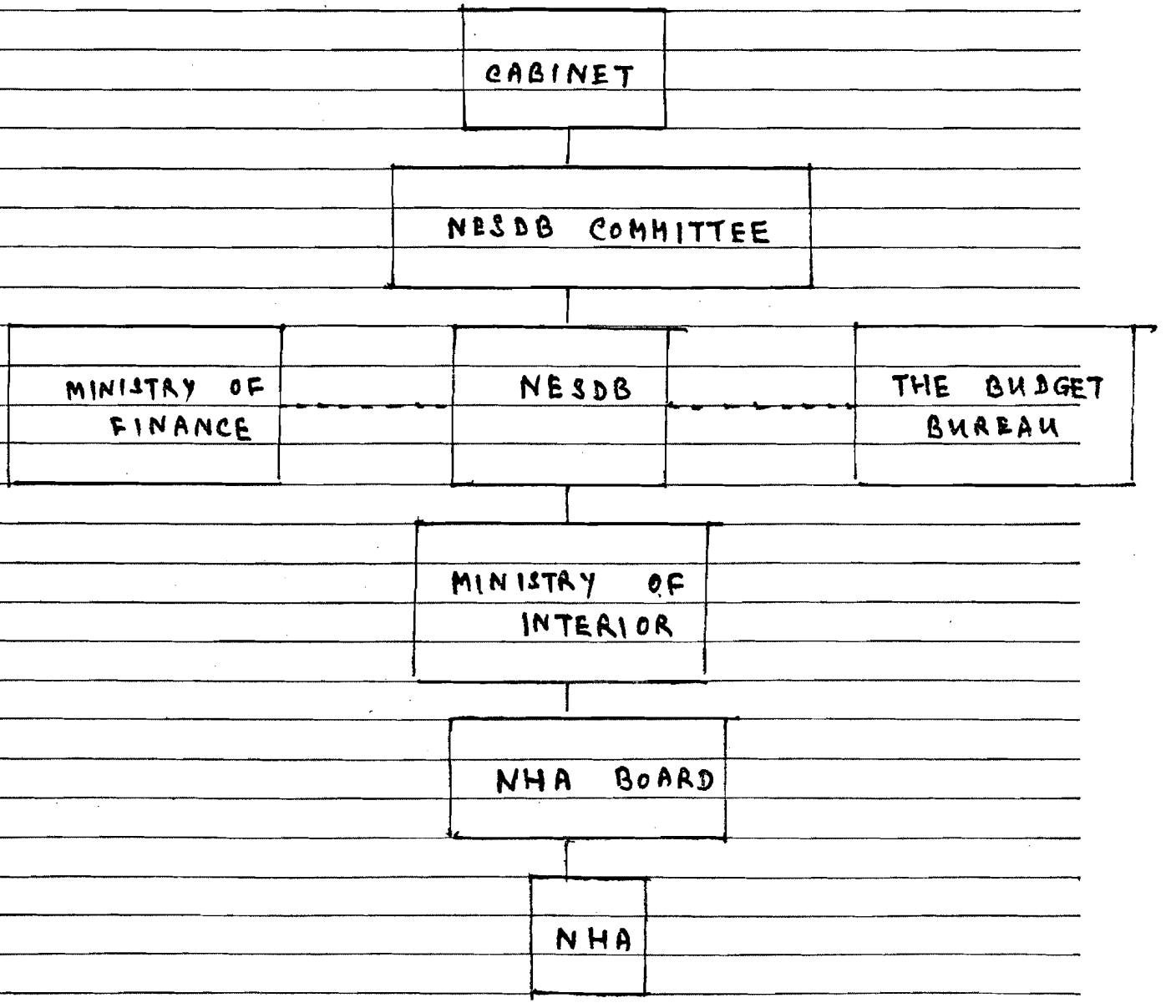
Office of Housing
Agency for International Development

SHELTER TRAINING WORKSHOP

November 5-30, 1979

THAILAND

FOR REGULAR NHA HOUSING PROGRAM PROJECT CYCLE

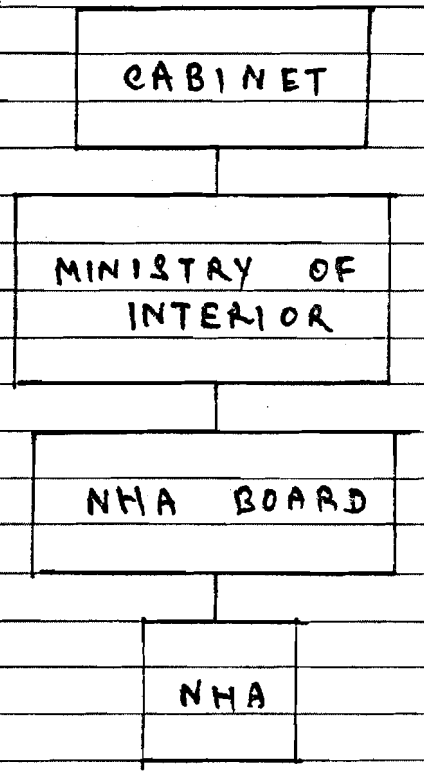


N.B. NESDB - NATIONAL ECONOMIC AND SOCIAL DEVELOPMENT BOARD

NHA - NATIONAL HOUSING AUTHORITY

THAILAND

FOR THE SPECIAL PROJECT CYCLE



ACTUAL HOUSING PROJECT DATA SHEET:

NAME OF PARTICIPANT: MISS KRITTIGA SIRIYUVASAKDI, MR. VISNU BHULSUK

NAME OF COUNTRY THAILAND

This form should provide information on one housing project recently constructed which was designed for low-income people. The information will be used during the Shelter Training Workshop in a participant study exercise.

1. General Information

a. Name of the project: Tung Song Hong (Site & Service) Project

b. Location of the project (city) : About 1.5 kms. off Jang Watana Road, Thungsigun, Bangkhen, Bangkok Metropolistan Area

c. Year of construction: 1978-1981

d. Number of units in project by size (square meters):

No. of Units	Size (in m^2)
608	70 m^2/Unit
1,872	80 m^2/Unit
161	80 m^2/Unit
296	80 m^2/Unit
66	100 m^2/Unit

e. Annual income range of households in project area:

Lowest: 9,900 ฿/Annual Highest: 60,250 ฿/Annual

f. If possible, indicate what percentage of households in the city where the project is located have an annual income higher than the average income of households in the project.

NO %

g. What is the average number of persons per household?

5.5 persons/household

h. What is the average population density in the project?

385.18 persons/ha

2. Housing Finance Terms

a. List the monthly payments required by each house type (listed in Item 1d above).

Core Type	Size of Unit	Monthly Payment	
A1	70 m^2	273 ฿ /Month	Core Unit options attached
A 2.1, 2.2	80 m^2	460 ฿ /Month	
B	80 m^2	1,209 ฿ /Month	
C, C1	80 m^2	557 ฿ /Month	
D	100 m^2	390 ฿ /Month	

b. If the housing units were sold, List:

(1) Sales price of the unit by size: Weighted average 592 ฿ /m^2

(2) Downpayment required as a percent of sales price:

10 %

(3) Loan (mortgage) amount as a percent of sales price:

90 %

(4) Annual interest on the mortgage loan in percent:

12 %

(5) The number of years for mortgage loan payment:

20 years

3. Unit Cost Data on Project

a. What was the total size of the project in square meters?

428,800 m^2

b. What was the average cost per square meter for the raw land (total project site raw land cost divided by number of square meters):

35.52 ₱ /m^2

c. What was the total cost for on-site infrastructure (grading, water, sewer, roads, drainage, etc.) for the project?

34,900,000 ₱

d. What was the total cost of off-site infrastructure (investments required to bring water, sewers, roads, of drainage to the site itself, but not on to the site)?

5,400,000 ₱

e. What was the average construction cost per square meter of the housing units?

249.35 ₱/m^2

f. What plot sizes were used by frontage and depth and total square meters?

Plot Size	Frontage	Depth
70 m^2	4.8	14.6
80 m^2	4.8	16.7
80 m^2	3.6	22.2
80 m^2	6.0	13.3
100 m^2	Variable	Variable

g.

g. What were the amounts of money charged for connections per plot by item (like water connection, electric connection, gas connection and/or sewer connection) ?

Water	2,497.50 ฿ /plot
Electric	3,330.00 ฿/plot
Gas	-
Sewer	3,130.20 ฿ /plot
Other (Circulation & Drainage)	2,664.00 ฿ /plot

h. Were construction costs of public facilities (such as schools, health clinics, or special recreation facilities) charged to the households? NO If yes, what were the total costs of these facilities for the total project?

i. Was there any special construction on each plot besides the house unit (for example, a boundary wall or septic system or latrine)? NO If yes , what was the total cost per plot of these special items?

4. Physical Standards

a. What percentage of the total project site is in parks or open space?

8 %

b. What is the percentage of land area used for schools, health clinics, or other community facilities (plot area is desired, not area covered by buildings)?

8.9 %

c. What percentage of the project area is used for roads and footpaths?

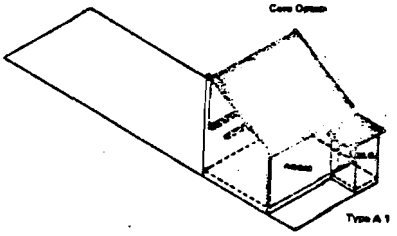
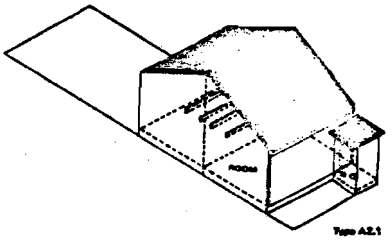
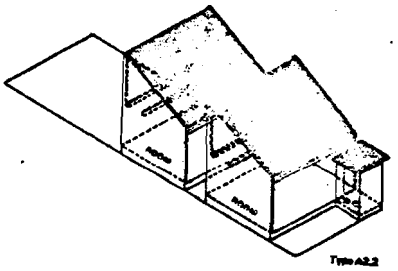
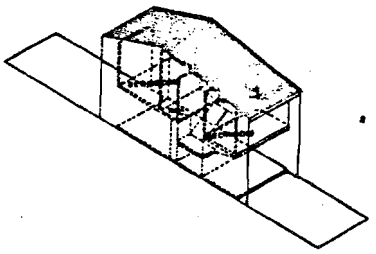
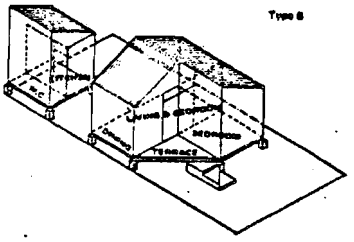
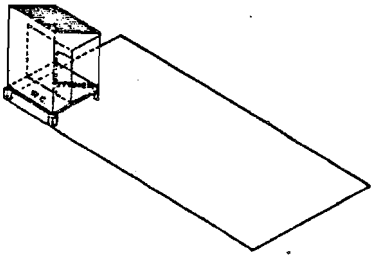
15.3 %

d. What is the width, in meters, of streets or footpaths by the types used in the project?

Main Roads 12 m. right - of -way, 5 m. wide. Secondary Roads 6-8 m. right-of-way 3-3.6 m. wide. Main Pedestrian Path 9 m. right-of-way 1.2 m.wide. Footpaths 3-4 m. right-of-way with 1.2 m. wide

e. What is the average block length? 100 Meters

BANGKOK SITES AND SERVICES AND SLUM IMPROVEMENT PROJECT
CORE UNIT OPTIONS AND COSTS

Core Option	Number of Units and Size		Cost in Baht	
 Type A 1	1565	Plot Area = 70 sq m & 60 sq m Building Area = 20.6 sq m	Plot Core house Total cost Material loan to extend to A2.1	= 14,119 = 18,054 = 32,173 = 4,840
 Type A2.1	612	Plot Area = 80 sq. m Building Area = 37.8 sq m	Plot Core house Total cost Material loan to extend to A2.2	= 16,136 = 27,401 = 43,537 = 5,440
 Type A2.2	303	Plot Area = 80 sq. m Building Area = 37.8 sq m	Plot Core house Total cost Material loan to complete unit	= 16,136 = 28,966 = 45,102 = 4,840
 Type B	161	Plot Area = 80 sq m Building Area = 60 sq m	Plot Core house Total cost Material loan to enclose ground floor	= 16,136 = 82,231 = 98,367 = 3,920
 Type C1	241	Plot Area = 80 sq. m Building Area = 25.9 sq m	Plot Core house Total cost Material loan to add a module	= 16,136 = 45,120 = 61,256 = 6,015
 Type C	56	Plot Area = 80 sq.m Building Area = 25.9 sq m	Plot Sanitary core Material loan to complete to A1 level	= 16,136 = 10,388 = 26,524 = 5,140

Micro Sans – 19083

Not shown here are type D Open plots which are 65 in Number

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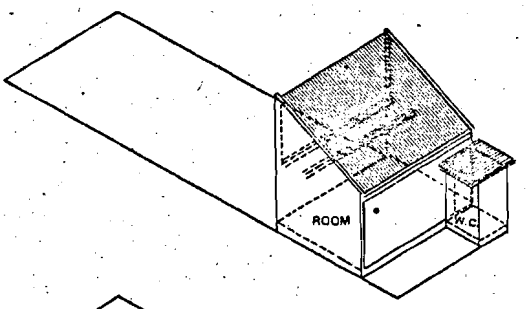
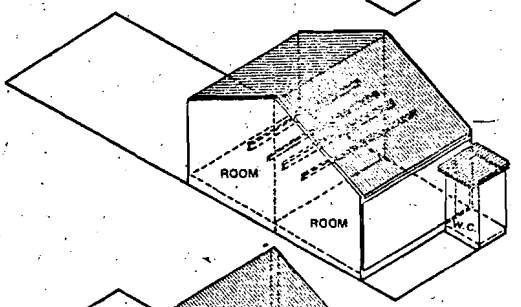
ILLUSTRATIVE INCREMENTAL STAGES FOR CORE TYPE A



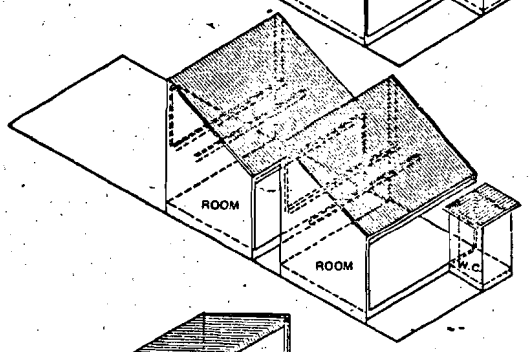
Type A 1

Plot Size: 70,80 Sq M
Building Area: 20.5 Sq M
Base Cost: B 18,054



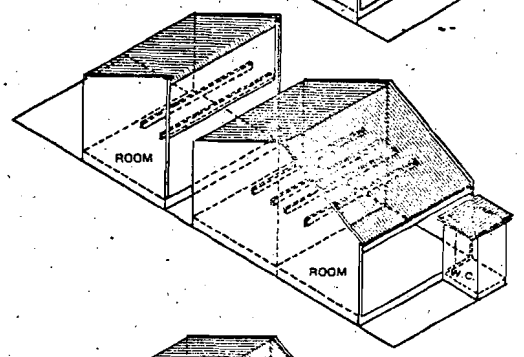
Type A2.1

Plot Size: 80 Sq M
Building Area: 37.8 Sq M
Incremental Cost: B 9,347



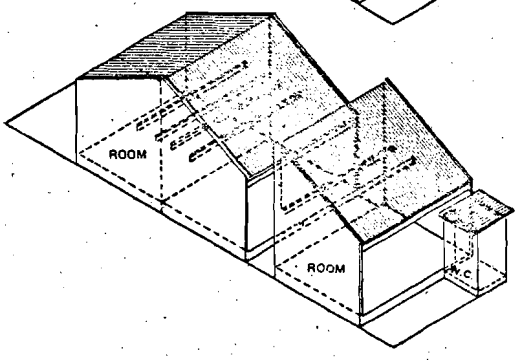
Type A 2.2

Plot Size: 80 Sq M
Building Area: 37.8 Sq M
Incremental Cost: B 10,912



Type A3.1

Plot Size: 80 Sq M
Building Area: 55.1 Sq M
Incremental Cost: B 20,259



Type A3.2

Plot Size: 80 Sq M
Building Area: 55.1 Sq M
Incremental Cost: B 20,259

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Office of Housing
Agency for International Development

SHELTER TRAINING WORKSHOP
November 5-30, 1979

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Office of Housing
Agency for International Development

SHELTER TRAINING WORKSHOP

November 5-30, 1979

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