

I

PLANNING FOR LOW INCOME HOUSING IN ARUSHA  
TOWNSHIP - TANZANIA

A THESIS SUBMITTED IN "PART" FULFILMENT OF  
MASTER OF ARTS PLANNING IN THE UNIVERSITY  
OF NAIROBI

by

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JUNE 1976

AT NAIROBI

XXXXXXXXXXXX

The subject matter of these proceedings is...

**"DEDICATED TO MY BELOVED WIFE NEDENTA, MY  
SON KALEKWA, AND MY DAUGHTER DTAGE"**

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### III

#### A C K N O W L E D G E M E N T S

The author wishes to thank individuals who contributed valuable help to the successful completion of this thesis:

To the Government of Tanzania and especially the staff of Urban Planning Division of the Ministry of lands Housing and Urban Development; the author extends his indebtedness for their valuable help during the preparation of the thesis.

For the facilities, materials, and processing of data, the author acknowledges his indebtedness to Messrs Marshal Macklin Monaghan Ltd.

Special acknowledgement goes to Professor A. Subbakrishniah for the great help, guidance and patience he offered in supervising the organisation and final production of the thesis; and of course not forgetting the other members of staff in the Department of Urban and Regional Planning Mr. Z. Maleche, Mr. Bo Vangby, and Mr. E. Saha for their kind help whenever the author consulted them.

The author also wishes to express with gratitude his appreciation to Mrs. W. A. Lutege for all her valuable assistance in typing the thesis.

The acknowledgement listed above would be incomplete without the author's expression of appreciation to his beloved wife Mrs. R. Mayalla for all her patience and great help during the laborious and painstaking process of editing.

## A B S T R A C T

The theme of the study is to plan for low income housing in Arusha town. Like most towns in Tanzania and other developing countries, Arusha has experienced a fast population growth, especially during the past 19 years. Apart from the usual growth factors of towns; other factors have contributed seriously to this remarkable growth of the town namely:

- i) The population pressure of the surrounding area, especially the nearby Kilimanjaro region,
- ii) The designation of Arusha town as the headquarters of the East African Community and
- iii) The extension of the town boundaries in 1967 and 1975.

A combination of these factors has thus resulted into a population increase of almost ten times the population of 1957.

Such growth has brought with it serious planning implications especially in the areas of housing and urban infrastructure. The town thus experiences similar problems as those found in other towns of developing countries, these are:

- i) Shortage of housing to meet the demands of the growing population.
- ii) The existence of uncontrolled settlements (as a result of (i) most of which are poorly constructed and usually provided with poor, or without infrastructural services (water supply drainage and sewage facilities, electricity and adequate transportation network) and community facilities.

The study therefore begins by discussing the economic and social justifications of adequate urban housing and then goes on to define the scope, objectives of study as well as the reasons for carrying out a study in Arusha. The research hypotheses put forward reflect to a great extent the inherent housing problems of the study area. An attempt is also made to study efforts made by, other countries (Kenya and Zambia) to solve their low income housing problems.

The study then proceeds to discuss the historical development and growth of Arusha town. Close reference is kept in the discussion on the question of housing and infrastructure distribution among the town's various residential areas.

Later, an analysis is made of the National Policies on Housing and Urbanisation as well as the institutions concerned, with the aim of finding out to what extent they are really committed to solving the housing problems of the low income people. On basis of the field survey findings conducted by the author, the study discusses the existing housing situation in Arusha in general; but more emphasis is put on analysing the low income submarket. Reference is made to the availability, distribution and quality of the existing low income housing stock, infrastructural services and community facilities.

The survey findings verify the observations made earlier, that the low income population of Arusha faces a severe housing shortage. The reasons behind this shortage can be summarised to be:

- i) Shortage of surveyed building plots and building materials.
- ii) Restrictive public policies
- iii) Financial constraints
- iv) Lack of coordination among the agencies concerned.

Taking these problems into consideration the study finally comes up with planning proposals on a short and long term basis. The short term proposals aim at providing solutions to the current pressing problems while the long term ones aim at relieving Arusha of those problems which will arise as a result of her future growth and which it will not be able to sustain.

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## CHAPTER I - INTRODUCTION

### 1.1 SCOPE AND OBJECTIVES OF STUDY

The low priority given in financing urban housing is really a thorny problem which arises out of lack of appreciation of the role of housing in national economic development. Many policy makers consider housing to be an unproductive drain of funds.

In economic and social development housing is important as an end and means.<sup>1</sup> While there are no accurate yard sticks to measure its impact, housing should be acknowledged as a necessity of life. The building of homes is economic in that they are often the production centres for cottage industries. Housing also plays a major role in stimulating employment, direct and indirect; it activates other industries and adds to local purchasing power. Moreover, for every worker employed on a site, at least one other job is provided collaterally. One of the main needs of under-developed countries has been to absorb unemployment, particularly in cities where there has been an influx of migrants. When rural migrants come to the city, they are apt to look to the construction industry as one of their primary sources of livelihood. Because of the prevalence of extensive unemployment during the early stages of urbanization and industrialization, a housing program properly organized could be the best means of

employing people productively.

Housing is also economic in that industrial production will be hampered or stopped unless workers are sheltered. It fosters the development of other industries, such as production of building materials, not only for dwelling but for all types of construction. The construction and building industries produce not just dwellings but the related services and utilities, shops and community facilities. They also build factories, transport, and power plants and play an important part in the capital formation process. Since big proportion of the labour engaged in all manufacturing industries are employed in building industries they influence many levels of economic activity.

The location of housing influences the location of industry and vice versa. Picking sites where houses will do the economy and the society the most good with the least expense is therefore a vital task in planning. Where housing is built, whether by Public Authorities, private concerns, or self help, it fixes the public investment in the vast network of public utilities and facilities. Environment can not be easily altered, and, in the long, or short run, enormous public investments are required to reorder and rationalize an existing pattern. A good housing program will therefore contribute to the economical

development of a nation's land and its people. It will stimulate savings and the organization of a mortgage system, and important sources of revenue will be created.

Housing can also be a factor in modernation. In a country under rapid social and economic change it is important to select and give priority to that form of housing which exerts the maximum effect in the direction of modernization and which aids in transition from traditional to modern economy and from traditional to urban living.

Of importance also are the social implications of inadequate housing. Lack of food or clothing may give rise to conditions of ill-health and poverty, but the effects are largely confined to the particular individuals or families. Bad housing affects others as well. If living space is cramped, if buildings are poorly constructed or allowed to fall into disrepair, if the occupants are overcrowded, if conditions of filth and squalor develop, there emerge problems of public safety, sanitation and morality which affect the whole neighbourhood. Overcrowded slums have been found to yield high crime rates, high rates of illiteracy, high proportions of unemployment, poverty, divorce, drug addiction and alcoholism, mental disorders and high residential mobility.<sup>2</sup>

Thus in view of the important role housing plays



in national development, higher priority should be given to it when allocating resources; and the location of new housing schemes should be determined in the framework of overall physical planning in relation to planned infrastructure, industrial locations and other employment areas.

In the light of the above; the objectives of the study can be summarised to be:

- (i) To study low income housing in Arusha town; and assess the extent to which it has met the needs of the low income people.
- (ii) To analyse and critically asses the extent to which the Government, and other agencies (both public and private), encourage and stimulate people's efforts in solving their housing problems through the former's innovative and imaginative policies.
- (iii) Find out what factors have hindered the realisation of goals focussed at the needs of low income people.
- (iv) Suggest corrective measures aimed at achieving the stated goals and objectives.

1.2 REASONS FOR SELECTING ARUSHA

Three reasons account for the choice of Arusha as

a study area.

TABLE II  
POPULATION GROWTH AND  
ANNUAL RATE OF INCREASE FROM 1940  
TO 1975

The uniqueness of Arusha as seen in its developmental aspects and the role it plays today as seen from the point of view:

(a) its population growth. The town's population growth has been considerably high compared to other towns in Tanzania (see table I below).

Between 1940-1957, the town's population grew from 5,320 to 10,000 at an annual rate of 7.3. Between 1957 and 1967, population grew to 32,430 at an average annual rate of 12.4. In 1975 the estimated population and annual rate were 88,820 and 15.0 respectively.

(b) The growth of the industrial sector in accordance with the national policy of decentralisation of industries as established in the second Five Year Plan has had quite a significant impact.

(c) The designation of Arusha as the headquarters of the East African Community has also become a major factor in the recent growth of the town and will continue to influence the town's growth.

A combination of these aspects has posed a remarkably acute problem of housing; shortage especially in the low income groups characterized by the mushrooming temporary structures around the town with poor infrastructural services; as well as a rise in house rents.

**TABLE I: URBAN POPULATION GROWTH AND  
TRENDS IN SELECTED TOWNS IN  
TANZANIA 1948-1967**

TOWN	YEAR	POPULATION	AVERAGE ANNUAL % INCREASE		
			1948-52	1952-57	1957-67
DAR-ES-SALAAM	1948	62,227	9.3%	5.4%	7.8%
	1952	99,140			
	1957	128,742			
	1967	272,515			
TANGA	1948	22,317	6.4%	5.9%	4.8%
	1952	28,621			
	1957	38,053			
	1967	60,936			
MWANZA	1948	11,296	4.9%	7.7%	5.8%
	1952	13,601			
	1957	19,877			
	1967	34,855			
TABORA	1948	12,768	2.3%	1.9%	3.2%
	1952	14,011			
	1957	14,361			
	1967	20,994			
ARUSHA	1948	5,320	7.3%	7.3%	12.4%
	1952	7,698			
	1957	10,038			
	1967	32,432			
TANZANIA	1948	7,477,677	H.A.	1.8%	3.4%
	1952	H.A.			
	1957	8,785,613			
	1967	12,231,342			

OFFICIAL SOURCES

Because the low income people living in these areas are the least articulate and have the least resources they have great difficulties in establishing the minimum acceptable living standards and even greater difficulty in improving them. Their number is greater than any other so much that the conditions in which they live have a dominant effect on the physical environment.

(ii) The non use of existing local building materials which would substitute the currently scarce conventional materials in the country has also slowed down the output of housing particularly for low income groups.

### 1.3 RESEARCH HYPOTHESES

The following research hypotheses reflect to a

---

As a Physical Planning student, carrying a study on housing in Arusha will make a valuable contribution to the Ministry of Lands, Housing and Urban Development, on an aspect which has not been studied comprehensively. Besides this, as a government officer, I was charged with the duty of assisting a Canadian firm assigned to make a review of the Arusha Masterplan prepared by PANCO in 1970.

great extent the inherent housing problems of the study area and the National Policy at large, hence their problem oriented nature.

1. There is a serious housing shortage for the low income people in Arusha, and that most of the existing stock is not in adequately reasonable and habitable quality, coupled with poor urban infrastructure which has lagged further and further behind the needs of the growing population.

2. Although housing policies and procedures have in principle been innovative and focused on the needs of the low income groups, they have fundamentally been inadequate in tackling the basic housing problems of the town. These policies have been beset by severe bureaucratic problems of implementation and co-ordination, as a result, performance in Arusha has so far fallen short of policy goals especially affecting housing programmes for the low income groups. A more realistic, more indigenous and more relevant planning strategy is therefore required.

3. Given the resource position and the facts of population increase, the housing problem of Arusha cannot be solved through the conventional approach alone but as well, through the efforts of the population. The role of the government should be to encourage and stimulate this initiative through more imaginative policies, through concentration of improvements in environmental and social services, social and economic development programmes.

improvements in environmental and social services, social and economic development programmes.

#### 1.4 RESEARCH METHODOLOGY<sup>4</sup>

The research methodology consisted of the following:

i) The author designed and used a questionnaire<sup>5</sup> aimed at obtaining information on such aspects as housing ownership, type, construction materials used; household sizes, population, employment and income, utilities and services, and transportation.

The town is divided into 25 administrative wards, and it was agreed that these wards be used as planning districts, mainly because of their convenience in terms of size. A total sample survey of 2091 in the study area was undertaken, but the sub samples for each of the planning districts varied from one to another, this was so because population sizes of the planning districts also varies; however, the samples taken for each ward were more or less representative.

A random selection method was used in interviewing the households.

ii) In order to quantify and assess the existing housing stock and quality respectively; physical counting of all the houses as well as classifying the houses as well as classifying the houses in each planning district was done by the author in

collaboration with the other members of the Team.

iii) Meetings with the Arusha Urban District Officials were held in connection with various planning aspects. Contacts with the TANU ward chairmen and secretaries, as well as the ten cell leaders helped the author in obtaining an up to date estimated population statistics for each of the planning districts and Arusha town on the whole. Interviews with the management of industries such as General Tyres and institutions such as the East African Community in connection with low income housing programmes.

iv) Personal observations from frequent field trips made by the author when scanning the area of study.

v) Documentary Research at the Arusha Urban District Headquarters, Ministry's Library, National Housing Corporation Headquarters; Tanzania Housing Bank and Registrar of Buildings Headquarters, all based in Dar-es-Salaam, and lastly The Tanzania National Archives in Dar-es-Salaam.

## CHAPTER II: LOW INCOME HOUSING: THE EXPERIENCE

### 2.1 INTERNATIONAL EXPERIENCE RELEVANT TO TANZANIA

Rapid urbanisation rate in developing countries has been accompanied by severe urban problems which are common to most countries of the Developing World, be it in Asia, Latin America or Africa. The consequence of the absence of a properly balanced rural urban development programme in these countries is the acceleration of the rural urban migration trend. There is however a limit to the amount of migrants which towns can sustain and still maintain their prescribed level of living.

In all countries throughout recent history, this migration has resulted in the building of large settlements of very poorly constructed urban shelters. Many of the countries in Europe, through their organisational capacity, have been able to control, and to a high degree, remedy the malady of the massive movement of migrants from rural areas to cities. This has not been the case with the developing world; where the rate of growth of uncontrolled settlements, manned by low income people is such that they, although poor and least articulate, have and will greatly influence the environments of urban societies today and in future.

The conventional housing approach to solving the housing problems whereby Governments play a direct role by investing large sums of money in housing has in most



cases proved a failure, due to the scarcity of resources, as well as the increasing influx of new comers.<sup>1</sup>

This chapter therefore addresses itself to the experiences of a few selected countries, whose approach in solving the housing problem may be of relevance to Tanzania.

This approach is nothing else but the famous Sites and Services. This approach has been selected because the author feels that it has, since its inception, received increased recognition as a realistic approach to meeting the residential needs of a significant proportion of urban populations in developing countries.

Existing information indicates that large percentages (over 50%) of the urban dwellers cannot afford minimal permanent construction, even when provided with financial arrangements or limited subsidies.<sup>2</sup> Furthermore, as suggested earlier, conventional housing approach to low income groups of the urban population has resulted in dwellings at standards far above what the target population can afford; the results have been: overcrowding in existing units, or creation of uncontrolled settlements.<sup>3</sup>

Faced with high urban growth, and lack of capital to provide large scale housing subsidies, more countries in the developing world have turned to sites and services as a means to provide inexpensive residential locations and services to low income groups.

### 2.1.1 DEFINITION AND COMPONENTS OF SITES AND SERVICES

Sites and services is generally taken to mean "the preparation of land to facilitate construction of houses, by occupants using self help means, with provision of public utilities and communal facilities by public agencies."<sup>4</sup> Governments' experiences in Sites and Services have been directed towards serving that sector of the urban population which cannot afford to purchase either a residential building plot or a minimum standard house.

It could also mean the upgrading of existing residential areas. In this case, Governments, also provide public utilities such as water and sewage and communal facilities such as hospitals, schools etc.

The following are three physical components comprise sites and services:

- (i) **Building Plots:** Residential building plots described by their size, the density of the project in which they are located; and their location in relation to employment and other urban services.
- (ii) **Public Utilities:** Both basic utilities such as water and sanitation and utilities such as electricity, public lighting, paved roads etc.
- (iii) **Basic Community Facilities** such as schools, markets, shops, cultural centres etc.

### 2.1.2 ADVANTAGES OF SITES AND SERVICES

(1) Since the objective of residential investment is to provide households with a location, physical amenities and institutional arrangements which will best assist their social and economic development; sites and services is considered an extremely flexible approach in meeting the needs of low income households.

For example an ownership plot with utilities located on the urban periphery, may be of high priority to a stably employed, low income household unable to afford a house supplied by the private market or Government. Conversely such a plot and utilities are of low priority to a household without a stable income; hence inner city rental plots, easily accessible to sources of employment can be of greater assistance. Thus the flexible application of the sites and services concept can assist both types of households to advance socially and economically.

This flexibility is a main advantage of sites and services and arises from the need to match between user's priorities for residential location, tenure, and physical amenities, and the plot, utilities and facilities offered in sites and services programs.

(ii) Because of the low capital costs per unit of

(1) Projects should be planned to minimize

development, sites and services can bring about a more equitable expenditure of government funds.

(iii) The security of tenure available in the new subdivisions provides the incentive for personal investment in the family dwelling.

(iv) Sites and services eliminates many of the major administrative problems connected with housing production. Since most developing countries suffer from manpower shortage, the transfer of decisions concerning investment in private housing units to the occupant households, the number of decisions is reduced greatly and projects are executed within reasonable time.

### 2.1.3 ROLES, OBJECTIVES, AND CONSIDERATION OF SITES AND SERVICE SCHEMES

2.1.3.1 The three major roles which sites and services can play in a residential settlement policy are:

(i) improving the economic and social welfare of low income people by increasing their access to urban services.

(ii) directing and controlling urban growth by land use and land speculation.

(iii) orienting government agencies towards becoming more self sustaining.

2.1.3.2 The five objectives to be considered for project implementation are:

(i) Projects should be planned to minimise

subsidies.

(ii) Projects should facilitate investment in individual household units.

(iii) Project administration should enlist an organised occupant population.

(iv) Projects should

(v) Project administration should ensure skill and institutional development.

2.1.3.3 Considerations to take into account in planning for sites and services programmes include:

(i) Target population should be selected according to capacity to pay and not as a result of slum eradication.

(ii) Families should not be expected to pay more for sites than they presently pay for rent.

(iii) An effective collection system is as important as designing to the capacity to pay.

(iv) Housing investment should be stimulated through the use of housing improvement loans.

(v) Improvements in public utilities, community facilities and housing should be geared to the effective demand of the occupant population.

(vi) Projects should be located within easy access to employment and urban services.

(vii) Security of tenure for individuals or groups

is essential to project development.

With the above yardstick, to what extent have the site and service schemes in the case studies below tried to accomplish their desired goals?

This will be analysed below.

## 2.4 THE EXPERIENCE

### 2.4.1 SITES AND SERVICES IN ZAMBIA<sup>5</sup>

Zambia, has  $\frac{1}{3}$  of her total population 4.06 m. living in urban centres of over 25,000 people. Over 6% of the total population live in Lusaka while the three largest cities contain 57% of the total urban population. Four cities have populations between 10,000 and 25,000 and five towns have between 2,500 and 10,000 people (see table I below).

Between 1963 and 1969, Zambia's urban population grew 16.2%. However, the two most urbanised provinces increased their populations three times as fast. The Central Province, in which Lusaka is located, grew 41% and the Copperbelt Province, containing most of the other urban centres, grew 50%. Further, the six year growth of the three largest cities, Lusaka 81.5%, Kitwe 62.6% and Ndola 70% was over twice as fast as the projected national growth rate of 2.8% per year.

aided self help techniques.

The types of sites and services schemes have been evaluated; the basic and support types. While the

TABLE II: ZAMBIA'S URBAN POPULATION

CITIES WITH OVER 100,000		CITIES WITH 50,000-100,000		TOWNS WITH 25,000-50,000	
LUSAKA	262,182	LUANSHYA	96,282	LIVINGSTON	43,292
KITWE	199,798	KABWE	67,886	CHILLIA- BOMBELO	44,862
NDOLA	159,876				
MUFULIRA	107,802				
CHINGOLA	103,792				
SUB TOTALS 833,050		164,168		88,154	

TOTAL URBAN POPULATION (1969) = 1,085,372

#### 2.4.1.1 POLICY DEVELOPMENT

The Zambian government initiated a sites and service programme in 1965 as a reaction to urban immigration and the creation of squatter settlements especially in Lusaka and the industrial towns of the Copperbelt Province.

The Government used it as a solution to low income residential settlements after originally using it as a resettlement method to remove squatters to the outskirts of the planned city area.

Funds to local authorities were granted by the Central Government in order to lay out and service urban building plots on which low income households could build with the assistance of materials loans and aided self help techniques.

Two types of sites and services schemes have been established; the basic and normal types. While the

communally serviced plots comprising the basic scheme have been used mainly for squatter resettlement, the individually serviced plots of the normal scheme have recently become the principal sites and services program. The latter has been the first stage of an aided self help housing scheme which includes grants and technical assistance for house construction of permanent materials.

Since 1965, 18,484 sites have been approved for construction in Zambia, over 50% of which have been in basic schemes, (see Table II below).

TABLE III: SITES AND SERVICE SCHEMES

APPROVED IN ZAMBIA 1965-1971

YEAR	LUSAKA	NDOLA	KITWE	OTHERS	TOTAL
1965-66	744	-	240	625	1609
1966-67	-	40	650	620	1310
1967-68	3,116	817	38	412	4483
1968-69	-	858	52	112	1022
1969-70	103	3204	362	1167	4836
1970-71	-	2615	1899	1710	5224
TOTAL	3,963	7534	3241	3646	18484
% OF TOTAL	21.4%	40.8%	17.5%	20.3%	100%

SOURCE: NATIONAL HOUSING AUTHORITY, 1972

The second National Development Plan (1972-76) emphasizes on an exclusive concentration on the provision of 70,000 services sites by local authorities with Central Government funds (see table IV below).



The former assists the ministry in making housing policy,

**TABLE IV: ALLOCATION OF SERVICED SITES ACCORDING  
ESTIMATED HOUSING COSTS FOR THE SECOND  
NATIONAL DEVELOPMENT PLAN, 1972-76**

	HOUSING COST RANGE (K)	AVERAGE HOUSE COST (K)	NO. OF SITES	TOTAL COST (K-MILL)
SELF HELP HOUSES	200-100	400	44,000	17.6
LOW COST HOUSES	1500-2500	2200	20,000	44.0
MEDIUM COST HOUSES	5000-8000	6500	5,000	32.5
HIGH COST HOUSES	10-15,000	12000	1,000	12.0
LESS: LOANS TO SELF HELP BUILDERS			70,000	106.1
<b>FINANCED:</b>				<u>4.0</u>
			<u>70,000</u>	<u>102.1</u>

Table III above implies that the major share of the budget will go to finance low to high cost houses. The Government, however, through grants and loans has financed the development costs of the 64,000 sites for self help and low cost houses and assists in financing the construction of self help houses. Sites and houses in the medium to high cost categories are financed privately by the site purchasers.

#### 2.4.1.2 IMPLEMENTATION:

##### ADMINISTRATION OF THE PROGRAMME:

The Sites and Services development is the responsibility of the National Housing Authority, an agency of the Ministry of Local Government and Housing.

The former assists the ministry in making housing policy, projects annual construction targets, approves schemes and sanctions grants for site development.

Local Authorities are responsible for planning specific projects, reserving land for future development, ensuring that infrastructural services are available to the proposed sites. While site design and construction are the responsibility of the office of the engineer of the local authority's housing departments are responsible for erecting temporary buildings, control of sub-letting and operation of materials distribution warehouses.

#### FINANCING:

According to the Second National Development Plan, all plot development costs are assumed to be K500. This cost is financed from a K200 Government Grant and a K300 Government loan at 6% for 30 years per plot.

The following are the monthly charges for the recovery of the loan per applicant:

- (i) K.2.75 as loan recovery per month for 15 years.
- (ii) K.2.00 as ground rent
- (iii) K.1.45 as municipal rates per month
- (iv) K.1.50 as water charges per month.

The economic characteristics of occupant population vary because the average house hold incomes vary throughout the country. In the great majority of the schemes, however, any family who wanted a site and who

could afford the payments would qualify.

#### 2.4.1.3 EXPERIENCE

1. Designing a project which the target population can afford to pay does not guarantee adequate debt recuperation.

The Zambian experience shows that there are high rates of arrears in the country's sites and service projects even when occupants have more than adequate capacity to pay. This however, has been so in the middle income category where heavy subsidies have been given. Furthermore, the type of scheme, (normal type) does not have a target population per-se. Anyone who has the above minimum income (K 30) and is able to afford a down-payment of K 20 qualified for a site.

As for the "basic type", the programme has directed the National Housing Agency toward serving lower income people; not only have the targeted number of sites vastly increased but subsidies on council housing are also being phased out. However, if these low income programs are to be effective, maximum income qualifications must be imposed.

As a method of directing and controlling urban growth by regulating land use and speculation, the Sites and Service program has not achieved much because the physical expansion and provision of sites and allocation has neither kept abreast of lower income household formation nor making any significant

impact on the backlog of housing demand.

However, the Agency is aware of this problem but is constrained by funds.

3. The adequate training and articulation of responsibilities of project administrative officers is an important element of success in the program.

The National Housing Agency and the Ministry of Local Government and Housing have complemented the Sites and Service program with training for all levels of administrators, community development officers and artisans. Other ministries have followed their initiative and issued directives on how their officers are to assist in the execution and operation of the sites and services program.

#### 2.4.2 SITES AND SERVICES IN KENYA

From 1948 to 1962, census figures showed an average urban rate of growth of 6.3% per annum. Taking the African population of the two largest towns, Nairobi and Mombasa, growth rates were 6.5% and 7.1% respectively,<sup>6</sup> compared with an African growth rate of 2.8% for the whole country.<sup>7</sup> Between 1962 and 1969 censuses, the African population in Nairobi and Mombasa grew at a compound annual rate of 15.2% and 7.6; the increase in growth for Nairobi was especially high. These growth rates, in combination with the decline in private building,<sup>8</sup> put tremendous pressure on the Government to deal with housing in a more serious manner.

The country's housing problem was described in 1965 by a U.N. mission as a serious one characterised by poor quality and extreme overcrowding,<sup>9</sup> especially among the African population.

#### 2.4.2.1 POLICY DEVELOPMENT

Suggested solutions to encounter the problem ranged from regulatory to developmental. On the regulatory side, Rent Tribunals were set up in the main towns, with powers to control rents in low and middle income housing. The developmental approach included the formation of the National Housing Corporation with powers to undertake housing projects throughout the country.

The second Five Year Plan recognised the need to accelerate the creation of inexpensive urban housing for the low income groups; thus it stipulated that all Government funds given to the N.H.C. would be for houses costing £1200 or less;<sup>10</sup> and 33% of the N.H.C. funds allocated be spent on sites and services schemes rather than on conventional housing. Such schemes, it was realised, would provide planned alternatives to the "large and expanding illegal squatter areas near urban centres."<sup>11</sup> Under the Sites and Services Scheme, plots and services are provided by the Authorities, and people are expected to build their own houses to minimal standards.

### 2.4.2.2 FINANCING

Like other developing countries, Kenya's housing schemes are financed mainly through public or public sponsored agencies<sup>12</sup> and overseas aid. Until very recently, Kenya obtained virtually no financial assistance for housing from international or bilateral agencies. Main reasons for this were<sup>13</sup>:

(i) investment in housing has often been labelled "unproductive" in comparison to investment in other fields such as agriculture and industry.

(ii) the interest charged by donors on borrowed funds was high and not at subsidized rates, and this implied that such foreign loan for housing was completely unsuitable for low cost housing schemes.

(iii) lack of commitment on the part of administration to implement a really low cost housing policy.

In 1975 the World Bank provided a loan of £5.7 million, with the Government contribution of £4.8 million to prepare 6000 site and service plots over a five year period, to settle some 30,000 people with a monthly household income of Shs.280-650 in Nairobi as a result of the Urbanisation Sector Working Paper of 1972.<sup>14</sup> The main objective in this type of project is to provide low income families with the land and

The N.H.C. claimed that "such schemes would call in public utilities as well as technical and financial assistance in the form of loans to enable them to use self help to build and improve their dwellings; the entire cost could be recovered through monthly payment over a period of between 20 and 30 years. In the same year, U.S.A.I.D. also concluded negotiations to provide a loan of \$10 million to Nairobi and \$5 million to other municipalities through the City Council and Ministry of Housing/N.H.C. respectively. These funds would provide 2,800 and 1400 housing units for low income earners in Nairobi and other municipalities respectively.<sup>15</sup>

#### 2.4.2.3 EXPERIENCE

Since 1969, the conventional approach to solving low income housing problems in Kenya has realised limited success. The tendency for the N.H.C. has been to extend services and benefits to the middle and upper income groups.

The private housing market has also been biased against the low income people due to rising land values and, consequently, high rents.<sup>16</sup>

As for the Sites and Service Scheme, the second Five Year Plan's target was that 33% of the total funds allocated to all forms of public housing was to be channeled to these schemes. However, performance has shown that only 5% as compared to the Plan target of 33% was spent on Site and Services between 1969-1972.

The N.H.C. claimed that "such schemes cannot work in large towns because most participants have full time jobs and cannot spare enough time to work on the houses themselves."<sup>17</sup>

Besides that, problems have been experienced even with the plot owners. A pattern that appears to be common among them all over the country is for many low income plot allottees to sell their interest in the site to wealthier people who then develop the plots by hiring labour, recouping their capital very quickly in high rents.<sup>18</sup>

Although the Government has made available more housing funds, the practice has been not to use up all the approved funds.<sup>19</sup> The main reason for this under expenditure is that the N.H.C. has been under-spending for some time. Partly there has been a shift in the Government housing policy. In the past the N.H.C. has concentrated funds mainly in the upper bracket of the low cost housing.<sup>20</sup> This implied that housing became completely out of reach of the lowest income groups.

Now the main emphasis has been in Sites and Services schemes. Under the New Plan, N.H.C. is required to provide 56% of total planned units at a cost of not more than £750 per unit. However N.H.C. has not been able to prepare more sites and services and other low cost housing projects, hence the experienced excess finance (see table V). This has



TABLE 7

STATE AND FEDERAL BOND AND DEBT INSTRUMENTS OBTAINED THROUGH THE OFFICE OF INDUSTRIAL REVENUE

Year	State and Federal			Federal Government			Mortgage			Total MD		
	No. of Notes	Total Cost (\$M)	%	No. of Notes	Total Cost (\$M)	%	No. of Notes	Total Cost (\$M)	%	No. of Notes & Units	Total Cost (\$M)	%
1970	169	28,640	1.5	2,146	2,348,300	94.7	25	93,750	3.8	2,340	2,430,690	100.0
1971	1,483	312,783	14.1	1,757	1,901,403	83.9	-	-	-	3,202	2,241,153	100.0
1972	2,100	200,610	6.4	2,116	2,994,990	65.9	382	1,214,633	27.7	4,598	4,590,233	100.0
1973	96	15,532	0.7	944	1,755,543	81.5	190	309,502	18.0	1,190	2,160,602	100.0
1974	-	-	-	1,283	1,664,521	67.9	173	783,300	32.1	1,441	2,452,321	100.0
1975	449	106,170	6.0	1,240	1,365,034	44.3	392	1,530,451	49.7	2,081	3,080,495	100.0
1970-1975 Total	4,279	633,697	5.0	9,951	11,908,621	71.1	1,122	4,016,691	23.9	14,852	16,779,029	100.0

has primarily been due to shortage of the required administrative and technical capacities.

Another reason for underspending has been lack of commitment on M.H.C. to provide such schemes.

Thus it can be concluded that the problem with low income housing schemes, especially the Sites and Services, is not the lack of finance, but the need to channel more of these funds to these schemes. In addition to this, is also the need to adopt a positive approach on the part of the administration, to housing for the numerically dominant low income group.

... of the area and these increase the pressure on land. Coffee is grown for cash and because it mainly grown for wholesale. In the lower slopes of Mt. Kenya, coffee has increasingly become more important while in the higher parts, pyrethrum is grown.

The southern plains form the bulk of the southern part of the region. This area consists of dry plains with low population densities. Large estates formerly privately owned and the Rift state farms cover a considerable part of the area. Its inhabitants are the semi-nomadic Somali herders and the farmers who have not very long ago moved in. They grow maize, beans, and cabbage and probably cotton and sisal in the better soil which may be irrigated by dam and paddy. The southern plains are those north of Mt. Kenya and comprise the majority parts of West Kenya and East Kenya Divisions.

CHAPTER III - DEVELOPMENT  
OF ARUSHA TOWN

3.1 REGIONAL CONTEXT:<sup>1</sup>

Arusha region is made up of the slopes on Mt. Meru and Monduli; the Northern plains and the southern plains. The slopes on the two mountains are densely populated, and shortage of land has increasingly become a major problem. Many people on Meru own traditional land and keep livestock in the plains. In the upper parts, there are steeper slopes and soil erosion has set in making communication a problem. Coffee estates occupy much of the area and these increase the pressure on land. Coffee is grown for cash and bananas are mainly grown for subsistence. In the lower slopes of Mt. Meru, maize has increasingly become more important while in the higher parts, pyrethrum is grown.

The southern plains form the whole of the southern part of the region. This area consists of dry plains with low population densities. Large estates formerly privately owned and the Oljoro state Farm occupy a considerable part of the area. Its inhabitants are the semi-nomadic Masai herders and the farmers who have not very long ago moved in. They grow maize, beans, and cassava and presently cotton has become an important cash crop followed by wheat and paddy. The Northern plains are those north of Mt. Meru and comprise the Northern parts of West Arusha and East Meru Division.

THE HISTORY OF THE  
ROYAL SOCIETY

1660-1700

The history of the Royal Society is a story of the growth of scientific thought in England. It begins with the foundation of the Society in 1660, and continues through the reigns of Charles II and William III. The Society's early years were marked by a period of intense activity, during which many of the great discoveries of the 17th century were made. The Society's members, including such names as Boyle, Newton, and Halley, were instrumental in the development of the scientific method and the establishment of the Society as a permanent institution. The Society's influence on the development of science in England and elsewhere is incalculable.

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LEGEND:

- +++++ NATIONAL BOUNDARY
- REGIONAL BOUNDARY
- NAME OF THE REGION
- MAIN ROAD
- RAILWAY
- REGIONAL CAPITAL

SOURCE: URBAN PLANNING DIVISION  
DARES SALAAM  
MASOTA G. MAYALLA; DEPT. OF URBAN  
REGIONAL PLANNING; UNIVERSITY  
NAIROBI 1975/76

The whole of this area is occupied by large farms and ranches formerly owned by white settlers. During the past ten years or so, much of the land has since then been bought by groups of farmers on a co-operative basis, State Farms also exist.

The new settlers are mainly people from the slopes on the mountains and these maintain two homes. Animal husbandry and mixed farming are the main economic activities of the area.

Land rights are held on a co-operative basis and individually in the whole region. On the slopes, land is usually sold at high prices, inherited or loaned. In the plains, especially the northern part, land is communally owned while in the southern plains, land is plentiful and there is no land shortage. This land is being moved into by people from the overpopulated upper areas. The amount suitable for cultivation however is limited by the availability of water.

There is a pattern of very dense agricultural settlement in the immediate vicinity of Arusha town with a rapidly declining density pattern in the surrounding plain lands; to the south and west of the town. This pattern results from the topographical characteristics of the area. The prime agricultural lands of northern Tanzania are found in the foothills of Mt. Kilimanjaro and Meru. This is the most productive agricultural land in Tanzania. The climate is

particularly favourable, and rainfall plentiful. March-April; November and December are the rainy seasons. Besides the favourable rainfall and climate on the foothills of the mountains, there is the rich and fertile volcanic soil which makes for high productivity.

In addition to agriculture, tourism is the other major regional resource of national importance. The game parks at Serengeti, Ngorongoro and Lake Manyara are within two to five hours drive of Arusha. Arusha National Park and Mt. Meru National Park are less than one hour away.

### 3.1.1 POPULATION

Table IX below indicates the population growth of Arusha region and district between 1948 - 1967. From the table, it can be established that, the region's population has almost doubled between the inter-censal periods; the annual growth rate of the region has almost doubled from 2.5% between 1948 and 1957 to 4.2% between 1957 and 1967. This rate, compared with the national rate of 1.8% and 2.5 respectively also represents almost a double increase.

However, the population is not evenly distributed throughout the region. Immediate areas around the town have densities of 180 persons per square mile or more (e.g. the surrounding Arumeru District). On the other hand, Masai and Monduli districts have population

**TABLE VI ANHIA: PROJECTED POPULATION IN CURRENT YEARS AND INTERCENSAL GROWTH RATES**

This pattern of population can be said to be a direct function of the present levels of agricultural productivity (i.e., soil fertility, seed, climate, etc.) in the various parts of the country.

	POPULATION IN '000			ANNUAL GROWTH RATE	
	1948	1957	1967	1948 - 57	1957 - 67
<b>ANHIA</b>	324.6	407.5	610.5	2.5%	4.2%
<b>ANHIA</b>	111.2	143.7	214.2	3.3%	3.7%
<b>ANHIA</b>	5.3	10.0	32.4		

From the mountains and on to the plains, in search of more land for cultivation. They have been reluctant to move to the town in search of alternative employment in central area, but recently some have been taking employment of a temporary nature, in the town between harvesting and planting seasons.

The Hara are principally agriculturalists. They live on the eastern slopes of Mt. Hara and specialize in the cultivation of coffee; together with maize and pyrethrum and maintain some cattle. As a tribe they are also reluctant to come to the town for employment. Recently they have been expanding to the west, down on to the Sanyo Plains in search of more land and have taken to cultivate beans.

The Chaga have adapted to urban living more



densities of 4.3 persons per square mile.

This pattern of population can be said to be a direct function of the present levels of agricultural productivity (i.e. soil fertility; good climate) in the various parts of Arusha region.

Four major tribes live in Arusha Region: Wa-Arusha, Meru, Chagga and the Masai.

The WaArusha are principally agriculturalists. Traditionally, they have lived on the western slopes of Mt. Meru where they grow maize, beans, potatoes, pyrethrum, bananas and some wheat and coffee. Recently the WaArusha have begun to expand to the west, down from the mountain and on to the plains, in search of more land for cultivation. They have been reluctant to move to the town in search of alternative employment to agriculture, but recently some have been taking employment of a temporary nature, in the town between harvesting and planting seasons.

The Meru are principally agriculturalists. They live on the eastern slopes of Mt. Meru and specialise in the cultivation of coffee; together with maize and pyrethrum and maintain some cattle. As a tribe they are also reluctant to come to the town for employment. Recently they have been expanding to the east, down on to the Sanya Plains in search of more land and have taken to cultivate beans.

The Chagga have adapted to urban living more

rapidly than any of the four major tribes in the region. Traditionally, they have lived on the slopes of Mt. Kilimanjaro and cultivated coffee. This area is so intensively cultivated and settled that a good number of the local population is forced to relocate.

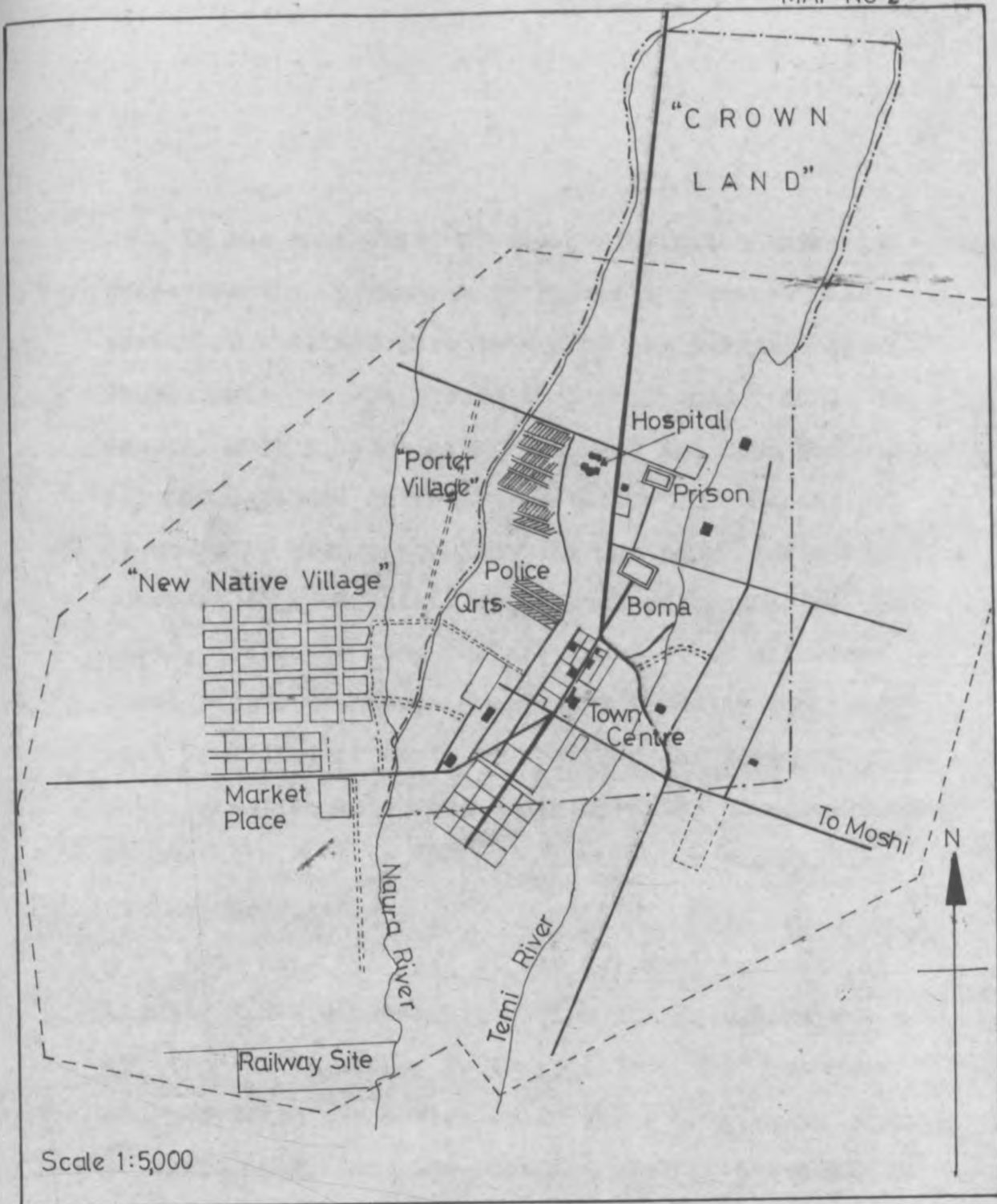
Largely, as a result of the early missionary impact (schools long since established), the Chagga have responded faster to make the transition to urban work and life. It is estimated that about 75% of the Arusha industrial labour force are Chagga.

The Masai are principally cattle herders and live on the vast plains west of Arusha. They have shown no interest in moving to the town and generally only come to Arusha for marketing.

### 3.2 LOCAL SETTING<sup>3</sup>:

Arusha town lies just south of the Moshi-Nairobi Highway (formerly Arusha-Tavette Road) on the lower slopes of Mt. Meru (15,000 ft.) and gains access to this region serving highway principally through two north south roads lying about two miles apart. One is Moshi Road at the eastern edge of the town and the other is a branch of the Great North Road. These in turn join with the principal east west road through the centre of the town (Uhuru Road) to create a rectangular road structure about two miles long and a mile wide. This basic structure has existed for many years and until recently provided adequate access to the town.





Scale 1:5,000

LEGEND

- MAIN ROAD
- MINOR ROAD
- - - - 1905 TOWN BOUNDARIES
- 1922 TOWN BOUNDARIES

SOURCE : TANZANIA NATIONAL ARCHIVES  
DARES SALAAM

MASOTA·G·MAYALLA; DEPT·OF URBAN &  
REGIONAL PLANNING; UNIVERSITY OF NAI  
1975/76

ARUSHA TOWN: URBAN GROWTH (1905-1922)

in constructing buildings in the town; and the indi-

In the same year, however, Provincial Authority persuaded the Government to reduce the town's boundaries to a little more than  $\frac{1}{2}$  of its original size, temporarily, on the ground that they were "unable to control such a large area, and that the town had after all not expanded on the entire statutory boundaries, it would be more convenient for municipal administrative purposes if a temporary adjustment of boundaries was made<sup>5</sup>. This was done "with the object of allowing local people to occupy demarcated township land until such time that it would be required for township purposes, when the municipal administrative boundary would be extended." This, being a reasonable proposition, it was agreed to.

Thus what was left of the original area was a lightly drawn boundary including the then King's African Rifles lines, Railways sites, the Boma area, and provision for a Mission in the centre, with nothing to spare other than the occupied plots. Certainly no provision for expansion. This situation greatly worried the Township Authority, but the then Provincial Commissioner thought that "the Township Authority were unnecessarily alarmed; should the town require more land, it could be acquired in the area that was being made use of temporarily by the natives."<sup>6</sup>

However, this decision led to considerable delay in constructing buildings in the town; and the indi-

genious people had claimed as permanent right  $\frac{1}{3}$  of the township on which they had been allowed temporary squatting rights. This resulted into amendment of the township boundaries and the drawing of a Provisional zoning map in 1946, which indicated the direction of future growth of Arusha (see map III).

### 3.2.1.1 LAND TENURE:

Before European occupation, the traditional ownership of land was based on individual basis; this was so in the densely populated parts of Mt. Meru including the site of Arusha town, which are fertile and where intensive agricultural activities take place. These individual plots contained the homesteads, the banana plantations and coffee and usually a small piece of grazing land especially planted with Kikuyu grass and had demarcated boundaries either by shallow ditches or hedges or some other plants.

These plots were however held subject to certain limitations which in pre-European days were as follows:

- (i) they could not be disposed of by sale or other wise outside the tribe.
- (ii) they could not be disposed of to the detriment of the heirs, in other words, for all practical purposes they were entailed.
- (iii) if by any coincidence a man possessed two or more plots, the Chief and elders could compel him to surrender any in excess of one

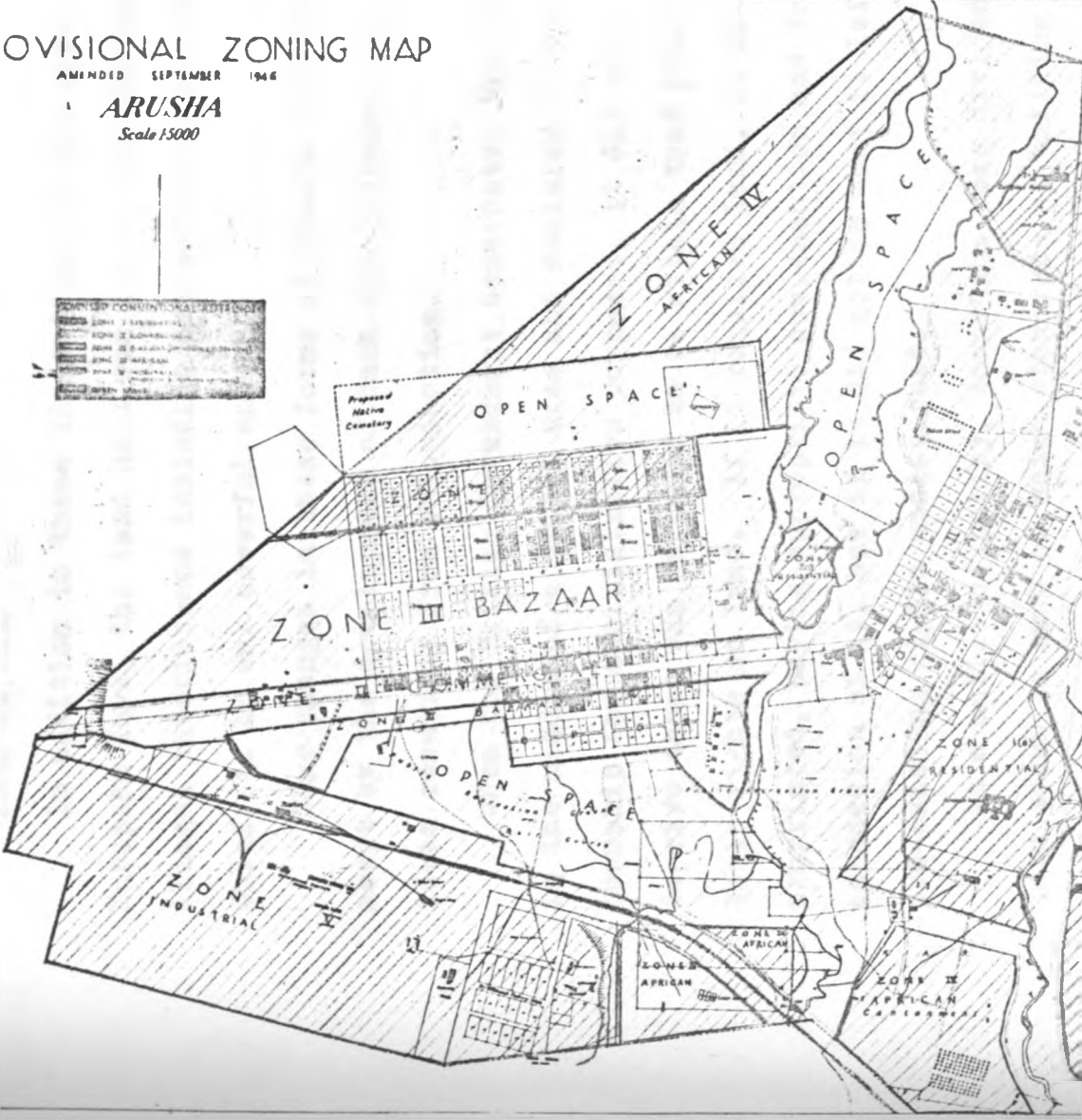
# PROVISIONAL ZONING MAP

AMENDED SEPTEMBER 1946

## ARUSHA

Scale 1:5000

PERMITTED CONVENTIONAL BUILDINGS	
[Symbol]	ZONE I RESIDENTIAL
[Symbol]	ZONE II RESIDENTIAL
[Symbol]	ZONE III BAZAAR (permitted buildings)
[Symbol]	ZONE IV AFRICAN
[Symbol]	ZONE V INDUSTRIAL
[Symbol]	ZONE VI OPEN SPACE



if there were other tribesmen who had no land at all.

In addition to these limitations in the pre-European days, the land held was liable to arbitrary illegal interference including expropriation by the Chief; if he was powerful enough.

Some changes in these forms of tenure were brought about by the development of cash crop farming and new ideas resulting from colonisation.

When the British Government demarcated the land in the middle of a tribal area and declared it to a township for administrative purposes, it did not deprive those who happened to be within that area of their rights on land. If it required land, it expropriated, paying appropriate compensation and took possession of it, but if it did not do that it left pre-existing rights undisturbed.

As a matter of policy, townships were divided into zones in each of which standards of building and sanitation were specified, and efforts were directed towards the complete application of those standards in each zone. In the case of Arusha, this in fact meant the gradual elimination of indigenous owners in zones A and B in map no. III - unless in any particular case an indigenous person was willing and able to build himself a house of the requisite standard. This elimination took the form either of sale by the indigenous owner to a non indigenous person, or expropriation



in return for compensation.

Compensation took the form of money or with the consent of indigenous owner, of the grant of land elsewhere. In the case of Arusha, about 300 acres of a forest reserve were set aside for the relocation process.

In case of areas densely populated by indigenous people, it became necessary to demarcate all round the boundary on the inside an open space 50 yards wide which was maintained as a neutral sanitary zone on which no building was allowed.

#### 3.2.1.2 LAND USE PATTERN AND INFRASTRUCTURE:

Major land uses at that time were residential, commercial and institutional - (see map II). Industrial land use came into effective use when the railway line reached Arusha in 1920s.

(1) **RESIDENTIAL LAND USE:** The residential land use pattern reflected racial segregation. (see maps II and II). Distinct segregated residential zones for Europeans, Asians, and Africans were established. Zone 1(a) (Map III) was for European residential development; here African owners of land were relocated; "unless in any particular case (which was impossible) they were willing and capable of building themselves houses of the requisite standard".<sup>7</sup>

Zones II and III (map III) were for Commercial use; since most of the commercial traders were Asians these areas were residential areas for Asians. Zone IV - north of Zone III - BAZAAR; north of the open space, and south west of Zone V were the African residential areas.

Plot sizes and plot ratios differed in the three residential zones. Low density areas (European zone) had large plots, most of them not below one acre. Medium density (Asian zone) varied between half an acre and slightly over one acre. In the African zone, uniform plots of about 4,000 sq.ft. were provided.

This type of zoning resulted into a rather low utilization and inefficient form of land use supported by a high level of infrastructure in the European residential areas. The criterion of having access to the infrastructure was the ability to pay, thus the provision of expensive facilities such as tarmac roads and sewers were financed through road pontage premia, water and electricity followed the same pattern. Thus, only a small percentage of the total population of Arusha enjoyed such facilities.<sup>8</sup>

In the high density (African) residential areas, poor forms of infrastructure e.g. earth roads could be provided. Despite the high densities per acre, as compared to the other zones, only poor and less costly forms of sanitation were provided.

**TABLE VIII: ARUSHA TOWN: NUMBER OF PERSONS SUPPLIED  
WITH WATER AND ELECTRICITY**

YEAR	POPULATION	NO. OF PERSONS AND % OF TOTAL POP. SERVED WITH	
		WATER	ELECTRICITY
1948	5320	222 (4.2%)	N.A.
1952	7698	385 (5.0%)	784 (10%)
1957	10,038	847 (8.4%)	1388 (14%)
1967	32,432	1995 (6.2%)	2335 (7%)
1975 <u>ESTIMATE</u>	88,820	N.A.	N.A.

**SOURCE:** Author's computation of data supplied  
by Statistical Abstracts 1938-1970.  
Bureau of Statistics DSM.

POPULATION:

Table I shows the town's population from 1948 to 1967. One of the most critical demographic questions to be answered relates to the future rate of growth that can be expected to occur in Arusha town. Population in the area has risen dramatically since the Second World War.

The annual growth rate from 1948-1957 reached a level of 7.5% and records show rise in population from 5,300 in 1948 to 10,000 by 1957. Growth in the following

Other community facilities such as hospitals, schools, and recreational facilities which were meant for the African population were situated far away from them.<sup>9</sup>

After independence, Arusha has played a much greater role in the country's overall development policy.

During the second Five Year Plan period, the town was designated a major centre for urban growth, and benefited from the national policy on industrial decentralisation in terms of planned investments.<sup>10</sup>

The designation of Arusha as the headquarters of the East African Community has also been a major factor in recent growth.

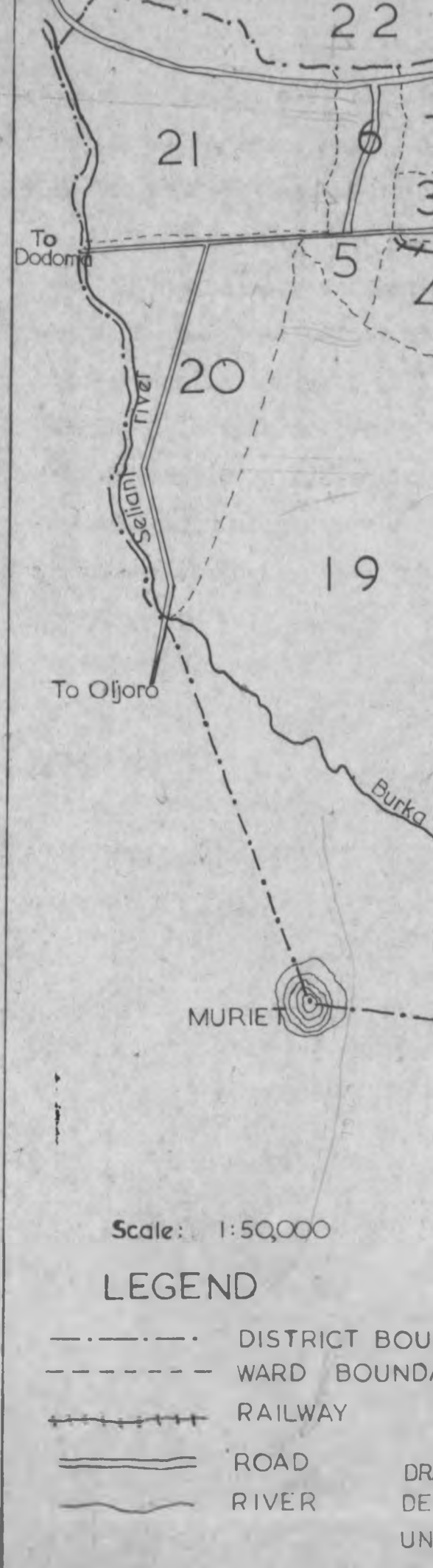
With the opening of the Kilimanjaro International Airport (21 miles from Arusha) in 1972 Arusha's role as an international tourist centre has been greatly enhanced.

#### POPULATION:

Table I shows the town's population from 1948 to 1967. One of the most critical demographic questions to be answered relates to the future rate of growth that can be expected to occur in Arusha town. Population in the area has risen dramatically since the Second World War.

The annual growth rate from 1948-1957 reached a level of 7.8% and records show rise in population from 5,300 in 1948 to 10,000 by 1957. Growth in the following

The district boundaries are shown by a dash-dot line. The ward boundaries are shown by a dashed line. The railway is shown by a line with cross-ticks. The road is shown by a double line. The river is shown by a wavy line. The map shows the Seliani river, the Burka river, and the town of Muriet. The map also shows the roads to Dodoma and Oljoro. The map is numbered 19, 20, 21, and 22. The map is drawn at a scale of 1:50,000.



ten year period 1957-1967 increased at an annual rate of 12.4%. A total population of 32,500 was recorded by the National census in 1967.

The results of the 1975 demographic survey conducted by the team indicate this figure has more than doubled to a total of about 89,000. This is equivalent to a growth rate of 13.1% in the period 1967-1975. This rate of growth is not likely to decline significantly in future; as it has been indicated in a population origin survey conducted. Residents in 5 of the wards characterised by high squatter concentrations were interviewed on a sample basis. The results show that the bulk of the in-migration originated either in nearby Kilimanjaro Region (35.7%) or the Central Region (29.4); and not in Arumeru District as had been suspected. Others came from areas such as Tanga and Kenya. Overcrowding in Kilimanjaro region is likely to continue and encourage out migration.

Thus the most probable growth-rate of 13% would result in a 1980 population of 160,000; 225,000 by 1985 and 545,000 by 1990.

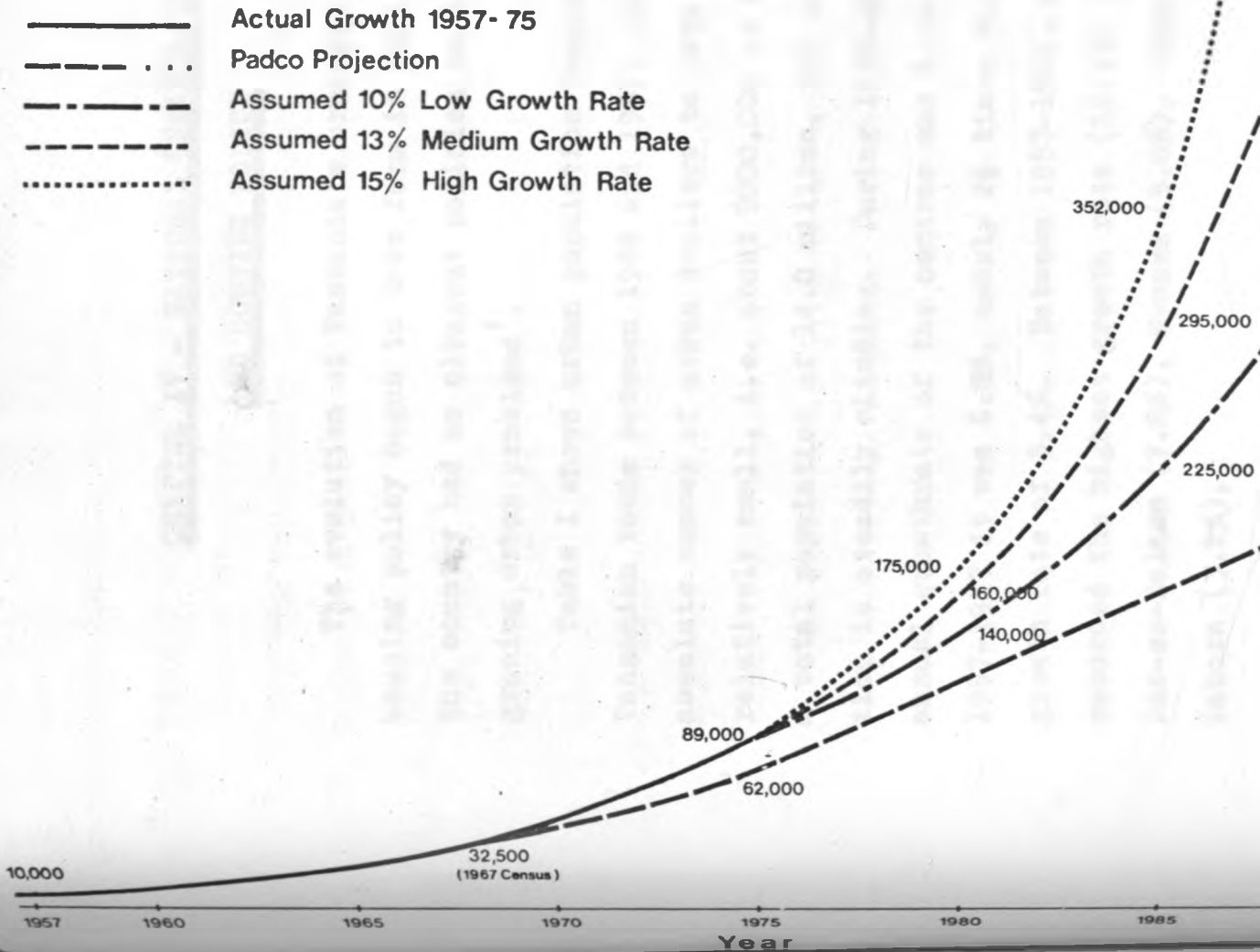
The accompanying graph indicated the size to which Arusha could grow in the next 20 years under a range of assumed population growth rates.

**ARUSHA TOWN: POPULATION STATISTICS BY WARD**  
**(SOURCES - SURVEY FINDINGS)**

WARD	ESTIMATED POPULATION
<b>Arusha District</b>	
1. Pangani	2,789
2. Bondeni	4,310
3. Majengo	4,452
4. Unga	3,848
5. Tindiga	7,930
6. Ngarenaro	10,430
7. Levelosi	1,908
8. Kibla	2,734
9. KKaloleni	2,161
10. Sekel	4,858
11. Kijengo	1,797
12. Daraja Mbili	7,248
13. Themi	6,109
14. Kimandolu	3,630
15. Oloirien	2,582
16. Baraa	2,391
17. Meshono	4,810
18. Simeni Lemara	1,737
19. Simeni	4,623
20. Sombetini	3,784
21. Elerai	<u>4,689</u>
	<b>88,820</b>

# Projected Population Growth to 1995

Arusha Town (SOURCE: SURVEY FINDINGS 1975)





## CHAPTER IV - NATIONAL URBANISATION

### AND HOUSING POLICY

The evolution of Tanzania's urbanisation and housing policy began to take form in 1967. Until then, the country had no clearcut policies to deal with her growing urban problems<sup>1</sup>.

Table I shows urban population trends in selected Tanzanian towns between 1948 and 1967. Although the absolute number of urban dwellers to date remains relatively small, i.e. about 9000,000 or about 6.5% of a total population of 14.0 million, the rate of urbanization is steadily climbing. During 1948-1952 the average annual growthrate of the centres was 6.4% while between 1957-1967 it was 6.8%, nearly 2½ times the national growth rate of 3.4%. Between 1957-1967, Arusha town recorded the highest growth rate (12.4%) followed by Dar-es-Salaam (7.8%), Mwanza (5.8%), Tanga (4.8%) and Tabora (3.2%).

A by-product of these high rates of urbanisation is a severe shortage of housing and community facilities, particularly among the nearly 80% of the urban households in these towns, earning less than T.Shs.600 per month; (table shows incomes of households in Arusha town by wards); accompanied by poor provision or lack of the essential infrastructural services.

#### 4.1 URBANISATION POLICY:

Since 1967, Tanzania's urban growth can be seen

as a component of regional development in which urban centres stimulate and complement rural development.

The second Five Year Development Plan (1969-1974) selected 9 towns to act as growth poles during the plan period.<sup>2</sup> The aims of the urban growth policy, thus were: (i) to integrate the urban centres in the regional development policy; (ii) to provide rural hinterland with services and facilities; (iii) to restrain the fast growth of, as well as reduce the migration to Dar-es-Salaam and improve the overall urban living conditions.

To achieve these objectives, the second Five Year Plan proposed the promotion and development of the 9 growth centres, minimal urban infrastructure, health and education facilities, employment opportunities through industrial development and regional communications. The Plan however, warned that, promotion of urban growth should not become a drain on the country's financial and physical resources.<sup>3</sup>

The budget allocated by the second Five Year Plan for urban infrastructure was thus limited to less than 10% of the total central budget. In order to implement the Plan in the field of urban development, the Ministry of Lands, Housing and Urban Development carried out a general infrastructural survey in the 9 growth centres. The survey revealed that the major problems facing the development of the growth towns

are the lack of inadequate water supply, sewage and road infrastructure, not only for existing needs but also for future expansion.<sup>4</sup>

However, three years after the initiation of the second Five Year Plan, limited success was experienced in the policy implementation. The selected urban growth programme was not effective and migration to Dar-es-Salaam could not be reduced.

The main problems faced during the implementation of the policy were:

- (i) The second Five Year Plan outlined the strategy and targets of development, but did not provide the tools for their realisation.
- (ii) Lack of central authority responsible for the overall implementation of the policy and co-ordination among the various ministries and parastatals.
- (iii) Insufficient research, data and information which would enable to determine the resources and potential of each region as well as their inter-relations.
- (iv) Lack of planning both at national and regional levels.
- (v) Unbalanced development investment with regard to urban, rural and geographic location of investments.
- (vi) Financial strain.

Particularly striking was the industrial location policy. Of the 30 major industries established during the first two years of the Plan, only 10 went to growth towns, and of these 7 went to Arusha/Moshi.<sup>5</sup>

In several cases, decision on industrial location was made before the second Five Year Plan while in others, decision was made according to management demand.

In 1972, the growth centre policy based on selected urban centres was abandoned and the Decentralisation policy was introduced, in which the responsibility of development planning and programme implementation was transferred from the centre to the regional and district authorities, while the central Government retained the general overall planning, guidance, supervision and coordination tasks.

To encourage industrial development, the Government decided on the following measures:

- (i) To create an Industrial and Licencing Council to choose locations for the founding of new industries in urban areas.
- (ii) Preparation of Master Plans for the regional centres and consequently, improvement of infrastructure and services for industrial development.

In addition to the preparation of master plans, the Ministry of Lands started training programmes for local town planners and with the revision of existing

Master plans (Dar-es-Salaam and Arusha) to adapt them to the new policy.

The Government policy, despite the above measures, has tended to restrict investments in urban centres and increase investments in rural areas, during the Second Five Year Plan.

#### 4.2 HOUSING POLICY

Since independence, the housing policy of Tanzania has undergone considerable alterations, from limited housing provision to civil servants by the public sector, to direct responsibility on the part of the Government for assisting the majority of low income population to construct their own houses by means of self help.

Until 1967, Tanzania pursued two main strategies to alleviate the problem of housing and urban infrastructure<sup>6</sup>: a building strategy and land control strategy.

The building strategy started with the formation of a centralised agency - the National Housing Corporation in 1962 to deal with all aspects of housing. The policy involved:- leaving the sub commercial non urban sector to generate its own demands and changes; building mostly minimum and some medium standard low cost housing on a large scale in the urban centres and either renting these directly or providing for their purchase over periods of up to twenty years.

The market for purely commercial housing finance was left to other agencies.<sup>7</sup>

The second major approach was the land control and allocation strategy, which operated through the Lands Division. Under a series of Acts beginning in 1963, all freehold land was converted to Government leasehold, previous owners obliged to pay rent to the Government, and development conditions laid down for the use of all urban land. In practice, the development conditions are agreed between the Town Planning Division and the Lands Division.

The zoning policy of the colonial government which divided residential urban land into low, medium and high density areas was continued but the emphasis in plot allocation and the provision of services was shifted from the low density (i.e. former European) areas to the high density (low income African) areas. The bulk of the high density plots are given out with year to year rights of occupancy. This allows the occupant, upon payment of a premium and an annual land rent, to build a temporary structure using traditional materials for building. For more permanent tenure in high density areas, the occupier must pay a higher premium and land rent and satisfy higher development conditions, involving in turn higher building expenses. Before any new urban area is laid out for such development, full compensation of property of the people

- (i) Lack of adequate housing and housing financing policy, concept and programs.
- (ii) Rapid growth of urban centres and especially Dar-es-Salaam due to rural-urban migration and thus also the rapid expansion of squatter settlements.
- (iii) Lack of sufficient resources to deal efficiently with the squatter problems.
- (iv) Rising costs of labour and building materials as well as the use of relatively expensive materials and construction methods. Consequently the slum clearance houses were beyond reach of at least 70% of urban population.
- (v) Lack of qualified manpower and experience.
- (vi) The slum clearance houses were not maintained and therefore deteriorated rapidly.
- (vii) In many cases, owner occupier of slum clearance houses refused to pay for the houses.

Thus the experience gained during the first Five Year Development Plan indicated that the slum clearance Programme and institutional housing as a whole were not in a position to cope up with the growing housing demand or solve the problem of existing squatters.

#### 4.2.2 THE SECOND FIVE YEAR DEVELOPMENT PLAN:

Following the 1967 Arusha Declaration, the second Five Year Development Plan's housing targets were based

on the assumptions that the majority of urban population in Tanzania can afford only self help housing that public resources available for housing are extremely limited, and that the growing housing needs resulted from the population growth and rural-urban migration. So the plan foresaw increasing efforts to solve the housing needs of lower income groups.

Thus the housing policy outlines for the second Five Year Development Plan foresaw the following measures.<sup>10</sup>

- (i) Provision of serviced plots through the National Housing Corporation, within a large scale site and services programme on which the recipients will be able to construct their own houses, organised in co-operatives or through employers who will also provide them with loans for construction.
- (ii) Increase low cost housing construction by N.H.C. from approximately 1,000 units to 2,000 units per annum and reduce costs from Shs. 7,7000-34,000 to Shs.6,000-11,000.
- (iii) Limitation of expenditure on housing construction by the public sector to Shs.75,000 per unit.
- (iv) Financing of some 400 units medium costing housing for middle and upper income groups through the Permanent Housing Finance Company.



- (v) Reduction of local building materials costs and elimination of import factor.
- (vi) Modification of existing outdated building regulations.
- (vii) Comprehensive research and improvement of local building materials, housing designs, building techniques based on traditional forms and customs.

The overall responsibility for the Plan implementation in the field of housing was entrusted to the Ministry of Lands, Housing and Urban Development. The Ministry was therefore charged with the following tasks:

- (i) Physical planning of urban and residential areas.
- (ii) Formulation and implementation of housing policy.
- (iii) Co-ordination of the housing efforts of all Governmental Ministries, parastatals, Community Development Organisation and others.
- (iv) Planning and assisting with the implementation of the Site and Services programme.
- (v) Provision of surveyed plots.
- (vi) Co-ordination with the authorities responsible for land development and urban infrastructure.
- (vii) Research on building materials and construction methods.

(viii) Training of town planners, surveyors and others.

The responsibility of actual housing construction lies mainly with the H.H.C. but also with other ministries of Works, Home Affairs, Education, etc. Involved in the provision of infrastructure, design and housing also were the parastatals TANESCO, NEDCO and MECCO respectively, while financing of medium cost housing was mainly the task of the PHFC (now Tanzania Housing Bank).

The housing construction target for the second Five Year Plan was set at some 100,000 housing units. The annual housing construction target was set at 20,000 units, of which 8,000 units by public sector and 12,000 units by the private sector. Of the plan target for the public sector (40,000 units) more than 65% were allocated to site and services for lower income groups, some 20% to H.H.C. low cost housing and the rest to medium cost housing.

Considering the annual housing need of 21,000 units in all urban centres of Tanzania, the target of public sector housing construction was to provide for 38% of the annual housing needs or some 8,000 units.

#### 4.2.2.1 PERFORMANCE

During the first four years of the second Five Year Plan (1969/70-1972/73) the H.H.C. constructed 873, 2738, 1796 and 138 units respectively. In the first year of the Plan, the H.H.C. was given Shs.14.0m.

for the construction of 2,000 low cost housing at Shs.7,000 per unit but the corporation was able to construct only 1,060 units at average costs of not less than Shs. 13,000!' In addition, 300 medium cost units were constructed by the Corporation during the year. However many of the houses completed could not be occupied for months, due to lack of water, sewage, electricity and other connections. Inadequate co-ordination among the responsible authorities find an expression not only with regard to infrastructure but also other services. Usually there is also no planning of community facilities for new housing projects.

In terms of the plots produced, the surveyed plot allocation programme was to a certain extent successful (in 1971, 7,305 new short term rights of occupancy in urban areas were issued by the Lands, Division, while in 1972 the figure was 6,331. But this was still far too small compared to the high demand; for Dar-es-Salaam alone, the waiting list for high density plots stood at 15,000 at the end of 1972. The procedure was cumbersome and expensive. A lot of money was needed for compensating squatters and other purposes before land was cleared for surveying, and once surveyed plots were made available it also took a long time to bring the required services such as roads, water and other facilities, with the result that little controlled building took place and squatters often moved back to the land.

Similar to the plot allocation programme, but with

higher standards of services provided was the sites and services programme. While the second Five Year Plan called for 5,000 serviced plots per year; three years after its initiation only 725 foundations together with 60 core houses (about 6%) were made available. Thus the site and services programme, through which the majority of low income urban population are expected to build their houses by means of self help proved to be the most complicated task of the housing policy.

The average costs of foundation slabs and core house is estimated at Shs. 2,350/- and the cost of infrastructure at Shs. 7,000 per unit. Thus even if the houses were constructed on these plots with traditional building materials and manual self help, the minimal costs per house and services would have amounted to between Shs.13,000 and Shs. 14,000 which is nearly the same as M.H.C. low cost housing units.

The Private sector construction with the exception of squatter housing has (since 1971) practically stopped as the result of the Acquisition Act of 1971 and it will take sometime before this fall in construction capacity is restored.

Thus the target of housing policy as stated in the second Five Year Plan has not been reached. Lower income groups, comprising more than 60% of urban population have been devoid of public assistance.

#### 4.3 THE REVISION OF HOUSING POLICY:

Consequently, a series of changes have been introduced in the National Housing Policy; and institutions to implement the programmes.

The policy aims at providing housing for the majority of urban populations, this is to be achieved only by means of self help, since the Government is not in a position to invest huge sums of money in housing alone.

Essentially the policy comprises the following measures<sup>12</sup>;

- (i) Provision of new serviced sites and improvement of existing squatters.
- (ii) Financing of housing and especially for lower income groups through the Tanzania Housing Bank (THB).
- (iii) Elaboration of comprehensive building research programme.
- (iv) Modification of building regulation.
- (v) Adjustment of rent paid by public employees in government and parastatal housing to their income and reduction of loan ceiling on public financed houses to Shs.40,000.

Thus the main aim of the new policy is to utilize housing resources for low income workers and reach more justified rent burden distribution. Corresponding to the policy outlines, the Ministry of Lands,

Housing and Urban Development proposed a new housing programme for the period 1973-1977 according to which<sup>13</sup>;

(i) Funds for material loans for the self help construction of 10,000 housing units per annum, at an average cost of Shs.3,500 per unit, will be made available.

(ii) N.H.C. will construct 4,000 low cost housing units per annum at costs of Shs.12,000 to Shs.18,000 per unit.

(iii) 4,000 medium and high cost units will be constructed annually at no more than Shs.40,000 per unit.

(iv) Total annual expenditure will amount to Shs.215m.

#### 4.3.1 THE PROGRAMME COMPONENTS

The implementation of the national policy involves not only direct steps to be taken by the Ministry of Lands, but also complementary measures, which have a decisive impact on housing and building economy and thus also on the urbanisation process in the country. These include facilities and institutions, availability of acceptable building material loans to plot recipients, self help organisations, mainly in the form of housing co-operatives, the reduction of building costs, by improvement and utilisation of local materials, and the development

and introduction of new designs and training in building methods.

#### 4.3.1.1 LAND SURVEY:

The policy realises the need for availability, and provision of surveyed plots in sufficient numbers to answer the requirements of growing urban population.

The traditional method of laying out and surveying building plots, procedural delays and lack of compensation funds have essentially been the causes of the already discussed problems of uncontrolled settlements.

#### 4.3.1.2 MASTER PLANS PREPARATION:

The provision of surveyed and serviced plots as well as other programmes of housing policy and the problems of urbanisation in general can be solved in conjunction with Urban Masterplans. By the end of 1974, the planning of seven major urban centres: Dar-es-Salaam, Arusha, Morogoro, Tanga, Moshi, Mbeya and Tabora had been completed. Other plans for the remaining major urban centres are in progress; while that of Dodoma, the new capital, is the responsibility of the Capital Development Authority. The main problem facing the Ministry of Lands in preparing the Master Plans is the lack of qualified local town planners. Training programmes are in progress both at home and abroad. In the meantime there are Indian experts as well as a few Finnish expatriates who are assisting the ministry.

#### 4.3.1.3 HOUSING RENT POLICY:

In February 1973, the Government introduced a new rent policy which applies to all public employees (Governmental and parastatal) in publicly owned housing. The objective of the new rent policy, which relates rent paid by public employees to their income, is to modify the previous system, whereby housing subsidy or allowance was usually paid to high ranking civil servants as part of salary agreement. Thus, top officials had to pay only 10% of their income for housing and the difference was subsidised by the employer, while low paid employees received no assistance and were forced to pay 20% to 25% of their income for housing.

According to the new policy, low income employees (Shs.240 - Shs.750 per month) pay 7.5% of their income for rent; middle income (Shs.751 - 1,500 per month) pay 10% and higher income employees (above Shs.1,501) pay 12.5% of their income for rent.

#### 4.4 INSTITUTIONAL FRAMEWORK OF THE HOUSING POLICY

##### 4.4.1 REORGANISATION OF THE MINISTRY OF LANDS:

In accordance with the Decentralisation policy of 1972; comprehensive studies for the reorganisation of ministries were carried out. As a result of the policy, most of the responsibilities of the Ministry of Lands, Housing and Urban Development with regard to the development and control of land have been transferred to the Regional and District Land Development Officers, who



have taken over:

(i) The Planning and control of the development of urban and rural areas including economic infrastructure.

(ii) Allocating land, surveying plots and performing the legal processing involved.

Besides the Regional and District Land Offices, six Zonal Town Planning Offices have also been established in Dar-es-Salaam, Mbeya, Morogoro, Moshi, Mtwara and Mwanza; each zonal office caters for two or more regions, monitoring urban development in the regional and district urban centres. Shortage of local town-planning staff at the moment accounts for the opening up of Zonal Town Planning offices instead of Regional Town Planning offices.

The Ministry of Lands on the other hand has retained the responsibility for:

- (i) Overall planning and co-ordination.
- (ii) Planning policy and strategy for the development of urban areas.
- (iii) Development and implementation of housing policy, both directly and through parastatals.
- (iv) Assisting Regional and District organisation with the preparation and implementation of regional, urban and rural housing policy.

In addition, the ministry also retains tasks which are not related to direct local development and can be carried out more efficiently at national level or tasks

which are beyond local capacity (these include land registry, mapping, acquisition, e.tc.) Responsibility for housing policy and implementation is in hands of the Ministry of Lands, and its parastatals.

Unver the Ministry's reorganisation plan, (see Appendix II) the former Housing Division has been re-named Housing Development Division. This division supports the Urban Development Commissions by:

- (i) Contributing to the formulation of housing strategy.
- (ii) Developing national housing program.
- (iii) Implementing national site and services projects.
- (iv) Co-ordinating the supply of funds for housing programmes.
- (v) Monitoring activities in the housing sector.

The Director of Housing Development is responsible for planning and implementation of national housing and non residential property programme and for supervising the operations of M.H.C. and the Registrar of Buildings. He is supported by two sections:

- (i) Site and service section which is responsible for the planning, preparation, organisation, implementation, and supervision of projects as well as for the reviewing the activities of M.H.C., the Registrar of Buildings, and regional land development offices.

(11) Housing Finance services section which is responsible for securing funds for the financing of housing activities by

- (a) Projecting fund requirements for the financing of housing programme
- (b) Co-ordinating the provision of funds with the Tanzania Housing Bank, Treasury and external resources.
- (c) Organisation and support of housing co-operatives.
- (d) Paying contractors to work on site and services projects.

#### 4.4.2 THE NATIONAL HOUSING CORPORATION

After 14 years experience with institutional housing construction through the N.H.C. and other parastatals, it has been recognised that for various reasons, the N.H.C. is not in a position to fulfil the primary objective for which it was established, namely to build low cost housing for low income groups. If N.H.C. houses were to be within reach of low income groups, considerable subsidies would be required.

The revised housing policy, has rejected this approach in favour of self help housing and re-considered N.H.C.'s activities under the following principles:

- (1) Although the focus of the revised housing policy is on self help housing, N.H.C. will continue to construct low and medium cost

housing for which there is a considerable demand.

(ii) For the financing of its building the N.H.C. receives interest carrying loans from the T.H.B. instead of governmental grants. Its housing construction is therefore based more on economic foundations.

(iii) The N.H.C. receives limited governmental grants for the purpose of providing infrastructure facilities such as roads and drainage to existing neighbourhoods.

(iv) The graduated rent policy, it is hoped will assist N.H.C. to solve one of its major problems, namely in rent in default in its tenancy houses as rent is now paid by employers.

#### 4.4.3 THE REGISTRAR OF BUILDING:

The Registrar of Buildings was established by an Act of Parliament (The Acquisition Act) of 1971 under which privately owned residential and commercial buildings belonging to certain categories were nationalised. Altogether 3,066 buildings have been acquired under the Act; though 160 were returned to their owners. For the administration, maintenance and allocation of the acquired units, the office of the Registrar of Buildings was established and similar to the N.H.C. it is operating under the overall

sponsorship of the Ministry of Lands, Housing and Urban Development as an independent body. The rent income collected by the Registrar is transferred to the Treasury after deducting running and development costs.

As a result of the Acquisition Act, private construction activity in Tanzania other than squatter housing has practically stopped. Consequently there is a serious shortage of office space, shops and various commercial premises.

However, plans have been finalised, which will enable the Registrar to take up the responsibility of building in townships, shopping, office blocks as well as medium and high cost housing.

#### 4.4.4. TANZANIA HOUSING BANK

The Bank has been established by an act of Parliament and began its activities in January 1973 when it took over the assets and liabilities of Permanent Housing Finance Company of Tanzania Ltd.

Its activities range from accepting deposits from the public to giving loans for every type of building activity in urban and rural areas. Loans offered by the Bank are mainly for the purchase of building materials, improving the standard of existing houses; construction of houses; commercial buildings (office blocks, industrial estates etc.); finances projects for commercial production by local building materials (burnt bricks, clay tiles etc.)

The types of loans offered are of three types:

- (i) Soft loans at lower rates of interest for the purchase of building material; improving existing sub-standard houses and construction of low cost housing.
- (ii) Loans for other housing.
- (iii) Loans for construction of commercial building and production of building materials on commercial basis.

As a national institution, with the obligation to fulfil the national housing policy the bank is supposed to promote housing development through housing co-operatives and Ujamaa Villages.

The Bank has to a great extent emphasized on low cost housing "without sacrificing the standard and durability of housing units". With this in view, the Bank prepares, produces and sells type designs which are suitable for low income urban housing, though it is not a condition for loan seekers.

#### 4.4.4.1 RATES OF INTEREST

For soft housing loans (Shs.1000-34,000), which are used for construction of low cost houses and/or purchase of building materials, the rate of interest is 5% up to Shs.25,000/- and 6% from 25,000

For other housing loans the rate is higher:

8½% from Shs.35,001 to 60,000/- and

10% from Shs.60,001 to 80,000/-.

The ability to repay the loans is carefully assessed with a view to, not only protecting the interests of the Bank as lender but also preventing the borrowers from unnecessarily big financial commitments which they cannot meet. Age and income are thus the main criteria for assessing the borrowers' ability to pay.<sup>14</sup>

This was the original intention, and the Bank has always been the mainstay of the economy. It is always in the forefront of the policy and the industry development.

The Bank was established as a vehicle for financial services. It was the primary source of funds for the country. The Bank has always been the mainstay of the economy. It is always in the forefront of the policy and the industry development.

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## CHAPTER V - EXISTING LAND USE

There are six existing major land uses in Arusha today; these include: Industrial, Commercial, Institutional, Residential, Recreation and Open Space; and Transportation. (see Map IV)

### 5.1 INDUSTRIAL LAND USE:

There are two principal industrial zones in Arusha. The first one is the oldest zone, popularly known as Unga. It is situated in the western side of the town, near the railway terminal.

This area contains a mixture of industrial activities, from an abattoir to ware housing; as well as car repair on open plots. This area has extended to the south to meet immediate industrial expansion, but since the opening up of the new estate in the Temi Corridor, this expansion has more or less diminished.

The second zone is the Temi Industrial Estate, situated on the western and southern side of Temi Hill. This estate is occupied mainly by major industries such as the Textile factory, Tyre, Beer, and Pyrethrum factories; there is enough land reserved for future industrial expansion.

### 5.2 COMMERCIAL LAND USE:

There are three major areas of commercial activities: The Clock Tower Area; the Main Market, and the Uhuru Road Bazaar area. Other commercial activities in town are located in high density residential areas



and consist of miscellaneous shops (dukas) and temporary markets. They serve the population with the daily provisions.

The Clock Tower area is the traditional centre of business and commerce. There, major activities include:

(i) Hotels, restaurants, curio shops, tour offices oriented to tourist industry.

(ii) Government buildings and professional offices.

(iii) Automobile sales and service facilities and printing shops.

(iv) Office supplies and miscellaneous small commercial operations.

(v) Residential dwelling units in the form of flats over shops.

The Main Market area consists of a mixed residential, commercial, and small industries. The market and the commerce surrounding serves the residents of this area and the rest of the town, as well as the agricultural hinterland of Arusha which brings to town livestock and agricultural produce. Foodstuffs, clothing (new and used), household goods, and other items are sold here.

Most commercial establishments have housing on the backyards and/or upper floors, which are occupied by the shop owners. However, due to the tremendous housing shortage, rooms are frequently let.

(iv) There are also points in the town,

situated along the Uhuru Road and behind the western access road to Usuki-Whirah highway.

### 5.3 INSTITUTIONAL LAND USE:

This includes, educational institutions (nursery, primary and secondary schools); Government offices, the E.A.C. headquarters, Religious institutions, Community centres, etc.

The E.A.C. is the largest institution land user in Arusha; its giant headquarters complex occupying about four acres is situated north of the Clock Tower Area.

### 5.4 RECREATIONAL LAND USE:

The existing Recreational facilities are either inadequate or poorly located with respect to residential areas. Excluding the main stadium there are no adequate facilities for the majority of the people in the town. (in Majengo and Kaloleni residential areas) two of the most densely populated areas in the town.

The principal public recreational facilities are found in the following areas:

- (i) Semei: the Golf Course and tennis courts and the cricket pitch (see map IV); and the camping ground behind the Town Hall.
- (ii) Playing fields associated with the Arusha Secondary School and religious institutions.
- (iii) The Main Stadium and community centre located in Kaloleni. Most primary schools have some form of outdoor recreation facilities which can be used by the general public.
- (iv) There are also parks in the town. situated along the Uhuru Road and behind the western access road to Moshi-Nairobi highway.

### 5.5. TRANSPORTATION LAND USE:

Arusha town lies south of the Moshi-Nairobi highway. Access to this town is through two north-south roads lying about four kilometres apart. One is Moshi Road at the eastern edge of the town, and the other one is a branch of the Great North Road. These two roads form the main axis of the town's transportation network; they join with the principal east-west road through the centre of town (Uhuru Road) to create a rectangular structure about four kilometres long and two kilometres wide. This basic structure has existed for quite a long time, and has provided adequate access to the town until recently.

The interior pattern of the streets is not very well developed, especially in the high density residential areas characterised by a grid-pattern road development. Roads in these areas are narrow, and due to heavy pedestrian movement, they pose a serious danger to the residents' safety. Other low income residential areas apart from the old ones are very poorly served with roads (squatter areas).

Low density residential areas are fairly well served with road network.

A major problem affecting transportation network in the town, however, is the topography; which slopes rapidly down from the Moshi-Nairobi highway; and is bisected by several valleys which make the development

of east-west connections difficult. The main valleys are those formed by the Temi, Maura, and Goliondo Rivers, which lie on each side of the main institutional and commercial districts of Arusha (see map IV).

#### 5.6 RESIDENTIAL LAND USE:

The existing residential land use largely reflects the planning in the colonial era (see chapter III) - characterised by low, medium, and high density areas which corresponded to the racial segregation among Europeans, Asians and Africans respectively. Today, this pattern is based on economic distinction rather than racial.

Thus in Arusha there are basically four types of residential development, (the fourth one is rural in character). These are:

(a) Very low density development as in Sekel and Temi Wards, formerly occupied by Europeans, but today it is occupied by the upper class.

These areas are characterised by single family units on plots averaging one to two acres, with high building covenants.

(b) Medium density development as in the town's central area, and on several residential areas scattered around the town (Pangani, and Bondeni Wards). This form of residential pattern was built by and for members of the Asian community

and is in form of flats. Other new medium residential areas include the N.H.C. housing estates in Kaloleni and Ngaramaro wards. Plot densities vary between 300 sq.ft. and one acre.

(c) High density residential development as in such areas as Majengo, Kaloleni and Ngaramaro with plot densities vary from 2500 sq.ft. to 4000 sq.ft. (For further discussion, see chapter VI which deals in great length with this type).

(d) Housing of similar form and construction as in (c).

(e) There is high density residential development as found in Ngaramaro, Kaloleni, and Majengo wards (see map IV). This type is characterized by a simple grid type of layout and densities vary from 2500 to 4,000 sq.ft. composed of multi-family housing (though the design may be officially only for one family) occupancy is on a short lease, usually on a year to year basis and standards of construction are minimal.

A variety of commercial activities frequently occupies one or two rooms in the front part of the house e.g. small provision shops, very small scale industries such as shoe making, watch repair etc.

## CHAPTER VI--HOUSING FOR LOW INCOME PEOPLE

### 6.1 LOCATION OF LOW INCOME RESIDENTIAL AREAS:

As discussed in the previous chapter, until 1961 residential pattern was to a great extent based on racial segregation which in turn reflected income differentiation. After independence, the pattern has tended to be based more on economic distinction, i.e. low density areas occupied by high income groups, medium density occupied by middle class and high density areas by low income people.

Low income residential areas in Arusha have thus been divided into two distinct but similar categories:

(a) There is high density residential development as found in Ngaremare, Kaloleni, and Levelosi wards (see map IV). This type is characterized by a simple grid type of layouts; plot densities vary from 2500 to 4,000 sq.ft; composed of multifamily housing (though the design may be officially only for one family); occupancy is on a short term, usually on a year to year basis and standards of construction are minimal.

A variety of commercial activities frequently occupies one or two rooms in the front part of the house e.g. small provisional shops, very small scale industries such as shoe making, watch repair etc.



to exploit the existing housing shortage and in anticipation of receiving the high compensation rates paid by government to obtain land for conventional urban development. Some of these areas have been developed either as industrial sites (TEMI AREA) or E.A.C. Residential sites (LEVOLOSI, KIBLA, TEMI), or National Housing Corporation Residential sites (Ngarenaro and Sekel). As a result of this, population densities have gone up in the remaining settlements (Elerai, Sombetini, Unga, Tindiga) where intensive building activities are taking place.

## 6.2 EXISTING HOUSING STOCK

### 6.2.1 INVENTORY OF EXISTING STOCK:

An inventory of the existing housing stock was compiled from the building counts conducted during the course of the demographic survey in December 1975. It indicates that, as of that time, there were about 9027 housing units in Arusha. Of this total, 5238 (or 58%) are described as regular housing units and 3789 (or 42%) as irregular, (see table IX).

The most prevalent type of structure is the Swahili house, common in the squatter and other high density areas. This is typically a structure with an internal courtyard occupied by two or more households sharing all utilities and services. Building materials vary but in most cases include either mud and pole or stucco with tin or corrugated roofing.



TABLE IX : SUMMARY OF EXISTING HOUSINGSTOCK AND TYPE BY WARD

WARD	TRADITIONAL HOUSE	SWAHILI HOUSE	DETACHED HOUSE	SEMI DETACHED	PLAT
KILIMANDOLU	75	350	68	-	-
SINONI	245	380	40	-	-
KLERAI	74	324	50	-	-
SOMBETINI	296	81	12	19	-
OLOIRIEN	43	216	45	-	-
NGARENARO	31	419	159	74	160
UNGA LTD.	-	218	14	24	-
LEVOLOSI	17	83	6	14	-
TINDIGA	22	723	3	-	-
SINONI LEMARA	72	108	35	15	-
KIBLA	-	160	3	4	69
KALOENI	-	140	10	62	-
PANGANI	-	79	22	45	189
SEKEI	20	125	128	47	164
KIJENGE	6	19	165	10	19
MAJENGO	-	156	17	86	208
BONDENI	-	110	22	36	229
DARAJA MBILI	177	309	13	20	-
TEMI	-	15	270	189	184
MOSHONO	317	333	-	-	-
BARAA	100	239	-	-	-
<b>TOTAL</b>	<b>1495</b>	<b>4586</b>	<b>1082</b>	<b>645</b>	<b>1219</b>

Overall TOTAL 9027.

Single family units are generally beyond the means of the majority of the population. Those who can afford them usually rely on Tanzania Housing Bank (T.H.B.) loans or other financial assistance. Medium and higher density units are usually built by government agencies

Also common but concentrated in the outlying areas is the traditional house normally a round mud and pole structure with thatched roof and no foundation, occupied by a single family.

More permanent semi-detached and detached units and flats are less prevalent and generally confined to the built up area. Large detached homes remain in the old European quarters. Flats tend to be concentrated in the central core and along the major streets.

Arusha has very limited planned residential development in the last few years with the exception of the B.A.C. staff housing now under construction. Growth has been concentrated in the squatter areas where overcrowding and generally inferior living conditions pose a range of planning and engineering problems. The only new residential plots provided since 1969 and are in the Temi corridor areas and are few in number.<sup>3</sup> The time consuming and costly process of obtaining a certified plot contributes to further growth of the squatter areas. At the same time the implementation of approved neighbourhood plans is discouraged by the inability to meet required compensation payments.

Single family units are generally beyond the means of the majority of the population. Those who can afford them usually rely on Tanzania Housing Bank (T.H.B.) loans or other financial assistance. Medium and higher density units are usually built by government agencies

such as National Housing Corporation.

The National Housing Corporation programme commenced in 1967. Since that time 530 units have been constructed for rental purposes only, and all are occupied by medium and high income groups<sup>4</sup> (see appendix V). The present status of the program is uncertain, however, because of rising costs and a shortage of funds. The N.H.C. target of providing 100 units per year in Arusha is not being met. No long term program has been prepared given the uncertain economic situation though N.H.C. land is available. Rental accommodation, mostly flats, is also available through the office of the Registrar of Buildings. These housing units were acquired under the Acquisition of Buildings Act of 1971, which applied to all buildings valued at Shs.100,000 or renting for Shs.833/- per month or more, (appendix IV). This housing is maintained by the Registrar of Buildings but is in very short supply. So far, no immediate plans exist to take over or build additional units for this purpose.

### 6.3 HOUSEHOLD SIZES

In a survey conducted by the Ministry of Lands, Housing and Urban Development in Tanzania, on Housing needs in 1972, it was found that the average household size was about 3 persons. There were at that time 9600 household. Of these, 64% lived in single rooms, 19% lived in 2 rooms, 9% in 3 rooms and 8% lived in

4 rooms (see Appendix V)

The 1975 survey (done by the author) came up with an estimated population of Arusha town of 88,820.

Table X shows the estimated average number of households per house type by ward. Table XI shows the average household size per housing type by ward.

From table X it can be established that the average number of households per house type in the five housing types is highest in the Swahili type of house, this is especially so in the wards which have squatter settlements (e.g. Unga has 5.2, while Pangani has 4.4). Such are areas where most low income people live.

Table XI on the other hand indicates that average household sizes per housing type are greater in the traditional housing types, however, reasons behind this can be the rural nature of these areas and the African extended family system. The average household size is however greater to that of the 1972 survey - 5.1.

Unga	1.0	1.2	-	-	-
PANGANI	1.3	1.5	1.4	1.1	-
WIPONI	1.0	2.9	1.0	-	-
SHIMONI	1.3	2.8	1.0	4.0	-
SINDAI	1.3	3.3	2.0	-	-
AVERAGE	1.4	2.8	1.6	3.7	1.3
TOTAL AVERAGE IS 2.2					

**TABLE X : ARUSHA URBAN DISTRICT: AVERAGE NUMBER  
OF HOUSEHOLD PER HOUSING TYPE BY WARD**  
SOURCE: (SURVEY FINDINGS - 1975)

WARD	NUMBER OF HOUSEHOLD PER HOUSING TYPE				
	TRADITIONAL	SWAHILI	DETACHED	SEMI DETACHED	FLAT
PANGANI	-	4.4	1.3	2.0	1.0
BONDENI	-	2.0	1.8	1.6	1.3
MAJENGO	-	2.0	1.3	2.3	2.0
UNGA	-	5.2	2.0	4.4	-
TINDIGA	2.0	3.2	1.3	-	-
NGARENARO	1.1	3.3	2.5	3.6	1.0
LEVOLOSI	2.8	3.7	1.2	4.6	-
KIBLA	-	3.5	1.0	2.3	1.0
KALOLENI	-	3.4	1.0	1.7	-
SEKEI	1.3	2.7	1.3	5.5	1.5
KIJENGE	1.3	2.7	1.3	5.5	1.5
DARAJA MBILI	2.4	4.2	3.4	9.8	-
TEMI	-	1.3	1.3	3.3	1.1
KIMANDOLU	1.0	1.9	1.8	-	-
OLOIRIEN	1.1	2.4	1.6	-	-
BARAA	1.0	1.0	-	-	-
MOHONGU	1.0	1.3	-	-	-
SINONI LEMARA	1.1	1.5	1.4	1.1	-
SINONI	1.0	2.9	1.0	-	-
SOMBETINI	1.3	2.6	1.0	4.0	-
ELERAI	1.3	3.3	2.0	-	-
AVERAGE	1.4	2.8	1.6	3.7	1.3
TOTAL AVERAGE IS 2.2					

**TABLE XI : ARUSHA URBAN DISTRICT: AVERAGE**  
**HOUSEHOLD SIZE PER HOUSING TYPE BY WARD**

WARD	HOUSEHOLD SIZE PER HOUSING TYPE				
	TRADITIONAL	SWAHILI	DETACHED	SEMI- DETACHED	FLAT
PANGANI	-	2.9	5.5	4.5	5.9
BONDENI	+	6.3	5.7	5.3	4.9
MAJENGO	-	3.9	6.5	5.9	7.6
UNGA	-	3.3	3.3	3.5	-
TINDIGA	3.4	3.4	4.3	-	-
NGAREMARE	6.0	3.4	3.5	5.1	6.0
LEVOLOSI	2.8	3.9	5.6	4.8	-
KIBIA	-	3.5	7.3	5.6	7.5
KALO LENI	-	3.8	5.4	3.9	-
SEKEI	7.4	4.5	4.8	3.0	4.5
KIJENGE	7.4	4.5	4.8	3.0	4.5
DARAJA MBILI	3.8	3.4	3.5	2.8	-
TEMI	-	6.4	6.1	4.4	6.1
KIMANDOLU	6.6	4.3	4.1	-	-
OLOINIEN	6.9	4.0	4.3	-	-
BARAA	7.5	6.5	-	-	-
MOSHONO	4.3	7.1	-	-	-
SINONI LEMARA	7.0	4.8	5.7	7.1	-
SINONI	5.6	3.6	5.5	-	-
SOMBETINI	5.6	4.3	7.3	2.5	-
ELERAI	6.1	3.8	4.6	-	-
AVERAGE SIZE	5.7	4.4	5.2	4.4	5.9
TOTAL AVERAGE IS 5.1					
KIBIAI	20	50	42	7	2
TOTAL	332	820	451	171	163

TABLE XII : INCOME DISTRIBUTION BY WARD

SOURCE - (SURVEY FINDINGS)

WARD	INCOME GROUPS IN T.SHS.					
	0-200	201-400	401-600	601-800	801-1000	1000+
PANGANI	6	8	3	11	5	19
BONDENI	1	14	17	13	4	25
MAJENGO	10	43	18	9	10	10
UNGA	4	61	16	4	1	1
YINDIGA	23	146	46	10	4	1
NGARKHARO	21	64	41	13	3	13
LEVOLOSI	2	45	50	24	16	12
KIBLA	8	16	24	6	2	6
KALOENI	9	19	26	18	7	10
SEKEI	12	32	15	7	7	22
KIJENGE	12	32	15	7	7	22
DARAJA MBILI	32	87	38	5	1	-
TEMI	-	7	10	8	4	2
KIMANDOLU	27	39	25	3	1	2
OLOIRIEN	30	41	22	11	2	7
BARAA	7	5	1	3	-	2
MOSHONO	5	5	-	5	1	1
SINONI LEMARA	30	36	10	1	1	2
SINONI	35	23	4	-	-	-
SOMBETINI	38	56	28	6	1	3
ELEHAI	20	59	42	7	1	2
TOTAL	332	838	451	171	78	162

#### 6.4 LOW INCOME POPULATION:

According to the survey carried out table XII indicates the break down of income distribution by ward.

**TABLE XIII - LOW INCOME POPULATION**

**SOURCE (SURVEY FINDINGS)**

<b>INCOME PER MONTH IN T.Shs.</b>	<b>NO. OF RESPONDENTS</b>	<b>PERCENTAGE</b>
0 - 200	332	16%
201 - 400	838	42%
401 - 600	451	22%
601 - 800	171	8%
801 - 1000	78	4%
1000+	162	8%
<b>TOTAL</b>	<b>2032</b>	<b>100%</b>

Table XIII summarises the survey finds by income groups.

From this table, it can be established that 80% (1621) of the total sample are in the low income bracket earning between 0-600 Shillings a month; 12% (249) are in the medium income group earning between 601-1000 Shs. per month, while 8% (162) are in the high income bracket earning Shs. 1000 and above.

Taking this sample to be representative of the town, it follows that the low income people constitute about 80% of the town's population.

The same study also helps to establish what people



in the low income bracket can afford in rent and what type of housing will be appropriate for them. Similarly the above table established that the crux of the problem lies in this income bracket.

**TABLE XIV: RENT LEVELS, ARUSHA TOWN**

(SOURCE: SAMPLE SURVEY)

RENT IN T.SHS. PER MONTH	NO. OF RESPONDENTS	% OF TOTAL
- 20	295	15%
21 - 50	762	38%
51 - 80	548	27%
81 - 110	178	9%
111 - 150	81	3%
151+	167	8%
TOTAL	2032	100%

From table XIV it can be established that about 65% of the sample can afford to pay rents up to 80/-, whereas about 15% can only afford to pay 20/- per month; those who afford to pay up to 80/- per month are usually employed in the formal sector (government sector, industrial sector or sometimes self employed business men), while those who can afford up to 20/- per month are those in the informal sector as well as those seeking employment.

Thus, rent levels in Arusha are high in the private housing market. Such a situation occurs because of the

current housing shortage both in the private as well as the public markets. Arusha town has experienced a rapid population growth before its designation as the E.A.C. headquarters (see Chapter III). The main factor contributing to this growth can be summarised to be: (i) the population pressure on surrounding areas - notably Kilimanjaro Region, especially the highlands of the slopes of Mt. Kilimanjaro; (ii) The designation of the town as the headquarters of the E.A.C. as well as the National Policy of Industrial decentralisation have also significantly contributed to this crisis. Thus the public housing market failed to meet the current housing demand, hence the tendency has been to encroach the Public and Private medium and low income sub-markets, hence the current shortage in these sub-markets (see table on Recorded employment below.

The present Rent policy on charging all government and parastatal employees occupying public housing according to their incomes, benefits only a few people, since the existing public housing stock is very small (see table on Existing Public Housing Stock); thus the bulk of the population depends on the private housing market.

The Rent Restriction Control Act of 1962 on housing in the Private Market has also not played its role effectively, and has a result left the low income groups succumb to high rents.<sup>5</sup>

## 6.5 EMPLOYMENT

There has been little statistical information as regards existing and projected employment, however the most recent figures on employment (see Table XV ) indicate that there has been practically no substantial increase in employment since 1967, while the total population of the town grew by something like 50%. Employment increased from 9254 in 1967 to 10,565 in 1972 (an increase of about 1311 persons) while population growth was around 17,000 persons. In fact, between 1969 and 1971 there was a decline in the absolute number of employed persons from 9968 to 9353.

The designation of Arusha as the headquarters of the E.A.C. has apparently given people outside the town a false impression of the employment opportunities available. There is thus a considerable unemployment among the squatter population which mainly depends on either subsistence agriculture or the informal sector for its existence. Many people hold very temporary jobs while seeking more permanent positions.

### 6.5.1 SURVEY FINDINGS:

According to the survey conducted, a total of 1621 persons (out of the 2032 sample) belonging to the low income bracket were interviewed - (see table XVI below. Employment here has been taken to include casual, self, and permanent employment.

The survey indicates that, out of the 1621 respon-

TABLE XV

ANNUA TOTAL ECONOMIC INDUSTRY PROFITS - 1960 - 72  
 SOURCE: BUREAU OF REVENUE AND CUSTOMS - DCA, 1974.

SECTOR	1966	1967	1968	1969	1970	1971	1972
AGRI-CULTURE	1409	1162	950	1054	478	273	403
MINING & QUARRIES	221	17	21	24	8	5	5
MANUFACTURING	998	1934	1780	2605	2831	3159	3782
CONSTRUCTION	1525	1385	1645	1522	1664	1265	1146
COMMERCE	2132	1721	2014	931	929	1237	1260
TRANSPORT AND COMMUNICATION SERVICES	504	708	567	695	882	653	1011
	1888	1875	1932	2533	2451	2294	2515
TOTAL	8851	9254	9420	9968	9242	9332	10565

dents in the low income bracket, 39% are employed in the Government and Parastatal sectors (mainly industries), most of them hold clerical and other junior posts; 26% are in Private Firms, 28% are self employed and 7% unemployed.

**TABLE XVI - EMPLOYMENT**

( SOURCE: SAMPLE SURVEY )

NAME OF ESTABLISHMENT	NO. OF RESPONDENTS	PERCENTAGE OF SUB-SAMPLE
GOVERNMENT AND PARASTATAL	633	39%
NON PUBLIC FIRMS	425	26%
SELF EMPLOYED	451	28%
UNEMPLOYED	112	7%
TOTAL	1621	100%

## 6.6 INFRASTRUCTURAL SERVICES

### 6.6.1 DRAINAGE AND SEWAGE<sup>6</sup>

The existing drainage system for Arusha presents few problems in general. The town is well supplied with adequate natural outlets and slopes are generally quite steep, thus promoting rapid run off.

The storm drainage system can be described as follows:

- (a) Natural streams traversing the town ring (Temi, Naura, Goliondo, Kijenge and Ngarenare).
- (b) Open road drainage consisting of stone or concrete lined channels as found in the densely developed areas such as Bondeni and Majengo.
- (c) Open roadside ditches of earth section found in residential areas.

In squatter areas, there is no provision for storm drainage of any kind. Minor floods in these areas can cause great inconvenience to residents and is a contributing factor to the public health problems in these areas.

The existing sewage collection and disposal system in Arusha serves only the old part of the town, thus at the moment, the system is presently operating at its design capacity with no available excess capacity to service additional development. The soil in most of the area except in areas of high ground water appears suitable for soil absorption type disposal systems. Thus septic tank soak away system constructed for low density development function adequately.

Older portions of the town and squatter areas use pit latrines and cess-pits; they are however not constructed and maintained adequately, hence they are potential public health hazards. The frequency of occurrence of water borne diseases in these areas indicates that sewage disposal system is not adequate.

These disease include a high incidence of hookworm and ring worm as well as typhoid.

The larger part of the town is at the moment not served with sanitary sewers (see map No. VI).

#### 6.6.2 WASTE COLLECTION AND DISPOSAL:

The town has at present three operational collection trucks with four others broken down (beyond repair). The trucks collect refuse daily from the high density and squatter areas and less frequently from the low density areas. The Town Authorities have provided rubbish bins throughout the town at short house intervals, while the ten cell leaders have been asked to ensure cleanliness in their respective areas.

Generally, collection coverage is adequate especially considering the equipment available. However it is common for residents to burn refuse by the roadside and many of the open areas around the town have small refuse piles which are potential health hazards.

#### 6.6.3 WATER SUPPLY:

Map no. VIII shows the existing water distribution system. Both the existing water supply and distribution system have many deficiencies, peak demands are not met throughout the presently serviced area. Industries regularly use their private wells to supplement their demands.

These diseases include a high  
ring worm as well as typhoid.  
The larger part of the town  
is served by sanitary sewers (

WATER COLLECTION AND  
The town has at present  
collection trucks with four other  
trucks). The trucks collect  
density and sparser areas and  
the low density areas. The  
provided rubbish bins through  
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Generally, collection cov  
especially considering the  
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roadside and many of the open  
have small refuse piles which  
barabaras.

WATER SUPPLY  
Map no. VII shows the exist  
system. Both the existing wa  
tion system have many deficien  
not met throughout the present  
Industries regularly use their  
plement their demands.



Scale: 1:50,000

LEGEND

-  AREA PRO  
SANITARY
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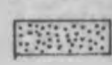
### LEGEND



AREAS SERVED BY KIC



AREAS PRESENTLY SER



AREA TO BE SERVED



From the map it can be seen that the area presently serviced adequately is very small both in size and population compared to the rest of the town. About 80% of the total population living outside the serviced area depend on 12 kiosks, and the present water demand from these kiosks is estimated to be less than one gallon per capita per day (gpcpd). The remainder of water demand from the estimated 2500 connections averages 38 gpcpd including industrial requirements and 26 gpcpd when industrial requirements are deducted.<sup>7</sup>

#### 6.7 TRANSPORTATION:

The central business and older residential areas are areas are generally well served by a grid system of roads, providing a high degree of accessibility and level of services. But the surrounding residential areas are characterised by a lack of well defined road and public road facilities.

The majority of the population in Arusha town have only four modes of transportation at their disposal: taxis (presently economically out of reach of the majority of people); bicycles; private or company bus operations, and walking. The latter three are used to such an extent that buses are overcrowded and unsafe; cyclists and pedestrians are so numerous along the edge of roads that they present a safety hazards. Walking distances from residential areas to employment centres are as long as 8 kilometres.

With the projected continued rapid population growth in towns, operation of a pedestrian oriented system will become less efficient. Hence some form of public transport action is urgently called for.

## 6.8 COMMUNITY FACILITIES:

Community facilities are at the moment concentrated in the built up area of the town (see map IV).

### 6.8.1 HEALTH:

There is one major health facility i.e. Mt. Meru-Arusha Hospital, now operating as a Regional and District Hospital. It has 237 beds and is overcrowded and seriously needs renovation and expansion. There is one outpatient clinic in Kaloleni Ward, and one maternity clinic. The most serious complaint from the respondents during the course of the survey was that the existing facilities are concentrated in a relatively small area. In fact the provision of health facilities has not kept pace with population growth and the need for dispersed medical services serving outlying population concentrations is now apparent.

### 6.8.2 PRIMARY SCHOOLS:

School location policy in Arusha town has to date been haphazard. The Town Authority which has jurisdiction over primary schools has chosen in most cases to allocate sites wherever vacant or compensated plots

happen to be available. Little consideration has been given to the distribution of school age population.

There are currently 15 primary schools within the town plus one small semi private facility. The primary school system is comprised of standards 1-7. In the past the ideal primary school was considered to be one with 3 streams. This resulted in an optimum size of 21 classrooms. In practice there is considerable variation in this respect.

The situation is further complicated by the Government's goal of attaining Universal Primary Education (U.P.E.) by 1977. This goal will be attained in Arusha only if sufficient facilities are provided to accommodate the estimated 3000 children of primary school age not yet enrolled. It is likely that the desire to attain U.P.E. will result in overcrowding of existing facilities.

Several of the existing primary schools are very old, dating back to 1940 and are in poor condition. Most schools require additional facilities.

There are four nursery schools at the moment operated in the town, they however cater for medium and high income brackets.

In general, the town lacks certain essential community facilities such as community centres, playing fields and sports grounds (resulting in children playing in the streets). The existing facilities are not properly dispersed to serve the larger population.

## CHAPTER VII: PLANNING FOR LOW INCOME HOUSING:

### PROBLEMS, OBJECTIVES, AND PROPOSALS

#### 7.1 PROBLEMS:

Problems of inadequacy in the sphere of low income housing in Arusha can be summarised to be:

(i) Serious housing shortage of existing stock in the low income sub market, as reflected in the spread of squatter settlements around the town, as well as rising rents

(see chapter VI). The order of magnitude can

be estimated starting from the assumption

of a 1980 population between 160,000 and

170,000; a national guideline of providing

68% of the population with adequate housing,

and the present number of adequately housed

are 20,000. This gives the number of people

who require new adequate housing between

1975 and 1980 as between 90,000 and 95,000.

According to 1967 averages, this would

correspond to over 30,000 households and

over 45,000 rooms.

(ii) Shortage of surveyed building plots.

The only new residential plots provided

since 1970 are few in number and are in the

Temi Corridor.<sup>1</sup> At the same time, the

population is growing at well over 10,000

persons per year. There is great need to

plan and service new development areas to accommodate this increase. However, high compensation payments, as well as the time consuming and costly process of obtaining a certified plot have contributed to this problem.

- (iii) Related to this is the problem of finance, i.e. obtaining loans for building materials and low cost housing units. The Tanzania Housing Bank's (THB) loan terms have not, in the actual sense been geared to helping low income people.<sup>2</sup>

Other constraints of production of new housing include shortage of building materials, technology, restrictive public policies.<sup>3</sup>

## 7.2 OBJECTIVES:

The existing shortage of building plots in most of the towns in Tanzania has given rise to a crash program in the Ministry of Lands, to provide not only surveyed plots, but also plots with minimal services. This has formed part of the National Housing Policy for Tanzania.<sup>4</sup>

On account of limited public funds to direct to housing, the National Urban Housing Policy suggests two major alternatives for future urban housing policy: a subsidy program based on rents (see Chapter VI); and a non subsidy program.

Under the non subsidy program, the main proposals include:

- (i) Encouraging urban wage earners to build their own houses through self help and co-operative efforts; because the government cannot provide complete houses for all dwellers.
- (ii) The Tanzania Housing Bank (THB) should make funds available to the N.H.C., Housing co-operatives, and individuals at low interest rates for construction of low cost houses.
- (iii) Existing unplanned developed areas (squatter areas) should be improved and provided with basic services such as water, drainage, access roads. Building regulations should be amended to allow use of traditional building materials in urban housing.

Thus, from the above, a set of objectives has been formulated to guide the development of proposals aimed at ameliorating those problems summarised above as well as fulfilling the general requirements as far as possible. These objectives include:

- (i) Providing low income people with housing units of satisfactory housing standards in line with the National Urban Housing Policy.
- (ii) Planning of new residential neighbourhoods near employment centres and public facilities.
- (iii) Improving existing squatter settlements,



by providing them with basic services and other facilities.

(iv) Provision of future planned direction of growth in order to accommodate current and future rapid population growth.

#### **PLANNING PROPOSALS:**

##### **SHORT TERM PLANNING**

Given Arusha's present and anticipated future growth, the study proposes both short term planning approach to immediate problems, as well as long term solutions for guiding future development of the town.

##### **INFILLING PROGRAM**

A short term approach would be to utilise as many as possible vacant or unallocated plots in the central area for high density housing before building on the periphery (see Map IV). Considerable potential exists for providing such needed housing units through an infilling program. Such an approach has several advantages. Most vacant land in the central area is under the Town Authority's jurisdiction and does not require compensation. Hence it is available for immediate development. Servicing such plots is in most cases feasible and would entail a minimum of expenditure. Furthermore, housing developed on this basis would be easily accessible to a wide range of community facilities.

### SQUATTER IMPROVEMENT

Apart from the infilling program, an upgrading/improvement approach to existing squatter settlements fringing the built up area. These areas are characterised by overcrowding, generally sub-standard housing, lack of services, proper roads, water supply and poor sanitary conditions. The need for better housing and infrastructure is more pressing and necessary because of the bad social consequences which arise when they are not provided. It is estimated that over 50% of the total ownership of housing units is in the squatter areas.

Total clearance of the squatter settlements and relocation of the squatter population would not be economically or social acceptable as experienced has shown elsewhere. Squatter areas have developed on the fringes of the built up area, near existing employment centres because of the shortage of housing near these centres. Thus attempting to relocate the squatter communities without prior construction of alternative accommodation would compound problems elsewhere (see Chapter VI).

The most effective means of dealing with the squatter settlement problem is to undertake a limited amount of upgrading and rationalisation to improve servicing standards and living conditions. These improvements include:

THE PROGRAM

- (i) the development of a simple road network allowing improved access for public service and emergency vehicles without demolishing many homes.
- (ii) the provision of additional water kiosks to adequately serve local needs.
- (iii) the provision of improved sanitary facilities reducing the risk of disease.
- (iv) the provision of adequate drainage to handle surface drainage runoff.
- (v) density reduction by the thinning out of selected units in areas of extreme overcrowding to reduce public health problems and the pressures on local services.

Once provided with definite building areas and minimum standards of construction, it is expected that individual home owners will gradually upgrade their environment and homes.

Priority areas to be affected by this program are: Tindiga, Elerai, Unga, and Ngarenaro (see map 6).

The total costs for improving both of the program's residential areas will be:

Land Survey	70,000/-
Utilities	1,200,000/-
Construction	1,100,000/-
<b>Total</b>	<b>2,070,000/-</b>

COST ESTIMATES

ROAD WORKS: The costs for the projects have been taken to be uniform in each of the proposed priority areas. They are based on standards used by the Urban Planning Division for the preparation of Master Plans for Urban centres in Tanzania at 1974 prices<sup>5</sup>.

In order to alleviate the current shortage of building plans, we

CLASS	WIDTH	NO. OF UNITS	UNIT COST	COST
Major Road:	6m -12m	1500m	Sh. 150/-	225,000
Access Streets	4.5m-8m	3000m	Sh. 100/-	<u>300,000</u>
SUB TOTAL COST				<u>525,000</u>

UTILITIES/SERVICES: Estimated unit costs for the on site utilities/ services are based on data from projects carried under the Sites and Services Scheme. Estimates for water, sewerage and storm drainage are given at 1973 prices<sup>6</sup>. Prices include pipes, excavation laying, jointing and backfilling where relevant:

UTILITY	TYPE	NO. OF METRES	UNIT COST	COST
WATER	Mains: Av.			
	Size: 110mm	2500m	Sh. 55	Shs. 137,500/-
	Kiosks	10 kiosks	Sh.175/-	Shs. 1,750/-
SEWERAGE	Mains. Size 21c.m	5000m	Shs.132/-	Shs. 660,000/-
DRAINAGE	Concrete lined			
	Covered Channels: 5,000m		Shs. 50/-	Shs. 250,000/-
ELECTRICITY				<u>Shs. 240,000/-</u>
				<u>Shs.1289,250/-</u>

The total costs for improving each of the proposed squatter settlement areas will be:

Road Works:	525,000/-
Utilities/ Services:	<u>1,282,250/-</u>
TOTAL COST	<u>1,814,250/-</u>

It is further proposed that this project be carried out by phases, hence the need to incorporate it in the Five Year Development Plan.

### 7.3.1.3 DEVELOPMENT OF NEW RESIDENTIAL NEIGHBOURHOODS

In order to alleviate the current shortage of building plots, as well as low income housing stock, it is proposed that new planned residential neighbourhoods be established, preferably close to the major employment centres i.e. Temi Industrial Estate and Unga area. The development of these neighbourhoods be carried on the following approaches:

#### (a) The Conventional Company Housing Approach:

Under this approach, it is proposed that all major public industrial corporation, in collaboration with the National Housing Corporation be charged with the responsibility of constructing housing units for their employees on either a "pool basis" or individually. Hence, this calls for a revision of the existing SCOP's directive, which provides for company housing to the managerial cadre only.<sup>7</sup>

#### (b) The Sites and Services Approach:

Under this approach it is proposed that new residential sites in the suggested areas be surveyed, planned and serviced.

- (i) Design Criteria and Standards: A density of not more than 250 persons per hectare is suggested for these new area, based on Swahili type of housing.

Layouts, for these neighbourhoods should be simple for economic construction and servicing. The basic design unit to be adopted is the ten cell unit. Plots should be arranged within the blocks to avoid un-economic double frontages.

Large plots are necessary to accommodate a Svanili house (in most cases lodging several families), a garden, and a pit latrine or aqua privy on each plot. Two such schemes carried out in Dar-es-Salaam (in Sinza and Kijitonyama) have plot sizes of 288 sq. metres and 370 sq. metres respectively.

Provision should also be made for vehicular circulation throughout the sites, allowing easy access to residential community facilities.

The design standards for the basic infrastructure must be such that the per plot costs can be afforded by the low income households. Provisions however have to be made for future

improvements to roads and drainage and for the installation of individual house connections for water and electricity as incomes permit. As for the provision of water, it is proposed that a water kiosk be provided for every 50 plots within a walking distance of not more than 150 metres.<sup>9</sup>

Initial power distribution system should be provided for security street lighting on the main roads and light for the community facilities.

(ii) Implementation

The executing Agency will be the Ministry of Lands Housing and Urban Development. The Sites and Service Division within the ministry will be responsible for planning, designing and construction of the infrastructure and community facilities, with close co-ordination with the concerned ministries; and the local administration (i.e. plot allocation, collection of repayments etc), will be handled by the Regional Land Development Office. The Tanzania Housing Bank will give loans to individual plot occupants and housing co-operatives for house construction.

The issue of close co-ordination among the concerned ministries and other agencies should be seriously considered. The existing procedure for the implementation of various items of urban infrastructure has been under the responsibility of several different bodies as follows.<sup>10</sup>

SERVICE	RESPONSIBILITY
1. Layout	Town Planning Division
2. Compensation and Site Clearance	Lands Division
3. Cadastral Surveys	Survey & Mapping Division
4. Engineering, Design and Construction of:	
a. Classified/Territorial Roads within town boundaries -	50/50 between Ministry of Works and Town Authorities.
b. Classified/Territorial roads outside town boundaries -	Ministry of Communication

SERVICE	RESPONSIBILITY
c. Roads to and within new Residential areas	Town Planning Division
d. Industrial Area Roads and Low as well as Medium density Residential Areas	Ministry of Communications
e. Central Area roads	Town Authorities
f. Roads in high density Residential Areas	Town PIAuthorities and Ministry of Communications.
5.Sewerage, Treat ment, Plants and Water Supply.	Ministry of Water Development
6.Storm water Drainage	Whoever is responsible for Road construction.
7.Refuse collection and disposal, street lighting, nurseiy and primary schools, clinics, and markets, Open space and parks.	Town Authorities
8.Electricity	TANESCO
9.Telephones	E.A.P.&T.
10.Secondary and High Education	Ministry of Education
11.Hospitals and Dispensaries	Ministry of Health
12.Housing	N.H.C. and Others

This individual responsibility among the concerned agencies has had various repercussions resulting into large wastes of time and effort to get the various bodies to work in unison and waste funds due to lack of project programming and control. Thus the problems arising thereafter have been:

Lack of power (with legal backing) to co-ordinate implementation; thus effective co-ordination of so many activities under so many independent bodies has become practically impossible; as well as long delays in implementation and therefore outcries from the suffering public.



From the above, it is therefore proposed that an Urban Development Co-ordinating Committee be formed at the National level, charged with the responsibility for implementing, and monitoring the urban development policies and with wide powers to control, regulate and guide urban development ( 11 ).

This committee should comprise all Ministries and public agencies which are directly concerned with aspects of urban development.<sup>12</sup>

At the Regional level, the committee will comprise all Regional functional officers of the concerned ministries as well as Regional representatives of the concerned public agencies.

The committee will also be charged with the same responsibilities.

### (iii) Administration:

The Regional Land Development Officer, working with the Sites and Services Section will process applications for rights of occupancy and allocate plots. Here, emphasis should be placed on mobilising people to form housing co-operatives. As co-operative members, low income applicants will have easier access to credit secured through the co-operative- furthermore, they can pool their labour resources easily and enhance housing construction easily, thus making savings on activities which would have otherwise required paying for hired labour. 13

## 7.3.2 LONG TERM PLANNING PROPOSALS

### 7.3.2.1 SATELLITE CENTRE AND CORRIDOR DEVELOPMENT CONCEPTS

Arusha's present and projected rate of population growth suggests that the town may not be able to sustain continued expansion

within the next 10 to 20 years. (see Chapter III). At the present rate of 13.1% per annum, the town's population will be in the neighbourhood of 300,000 by 1985. This represents a four fold increase in just a 10 year period. Within 20 years, the population may considerably exceed 500,000 people.

This anticipated continuation of rapid growth suggests that the current boundaries may not be sufficient to accommodate future needs. Eventual expansion either East or West would involve the compensation of existing cash crops (coffee and bananas) plantations.

Another problem to be confronted is the rapid growth of nearby Arumeru District, directly north of the Moshi - Nairobi highway. Land is becoming heavily populated and includes a number of public buildings. It is in fact an extension of the town and its incorporation in the Urban District would appear inevitable.

These serious development pressures on land in the vicinity of the town suggest that, various alternatives should be considered for growth. Such peripheral growth will gradually eliminate a substantial amount of agricultural land and it would result in the absorption of squatter areas now on the fringes of the town. Such unlimited growth will place a heavy burden on the ability of the town to meet housing, infrastructure and water supply requirements. This indicates that it may be necessary at some

level of population increase to disperse growth to other areas.

Thus the study proposes two alternative approaches to encounter these development pressures: The Satellite Centre Concept may be one way to regulate local growth and reduce the pressure for needed services.

An alternative to the first approach would be the Corridor Development Approach between Arusha and Moshi towns (45 miles apart). The latter, being on the fertile slopes of Mt. Kilimanjaro is also facing a serious population pressure. The area is so intensively cultivated and densely settled that a substantial number of the local population is forced to relocate (see Chapters II and VI).

Since both towns are already experiencing similar problems the proposed Corridor Development Approach will in the long run alleviate such problems. In fact there are already indications of such development; Sattelite communities are becoming noticeable along the highway e.g. at Kilimanjaro International Airport, Usa River; and Sanya Chini. There is thus need to plan early and contain this development before it gets out of control.

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CHAPTER VIII  
SUMMARY AND CONCLUSIONS

8.1. SUMMARY

This study has dealt with the aspects of planning for low income housing in Arusha town. It has discussed the development and growth of the town, highlighting the major growth factors behind this remarkable growth. Besides this, the study has also analysed the experience of two neighbouring countries Zanzibar and Kenya, and it evaluated the relevance of their efforts in solving the problem of housing low income people in Tanzania.

A critical analysis has also been made on the National Urbanisation and Housing Policy and the extent to which the Government and other agencies have encouraged and stimulated people's efforts in solving their housing problems.

The last part of the study has analysed in detail the housing situation in Arusha, highlighting the main problem areas, and proposed planning solutions that will help in solving immediate problems, as well as accommodate the anticipated future development and growth of the town.

8.2 CONCLUSION

From the study, the following conclusions have been made:

- (1) The problem of urban housing (especially low income housing) in rapidly growing towns like Arusha cannot be solved through the conventional approach; whose emphasis depends on government initiative and financing. This approach has proved inadequate to reverse the familiar trends of urban deterioration.

(ii) Although the Government realised the inadequacy of this approach (see Chapter IV) and postulated housing policies aimed at meeting the needs of the low income groups (in principle), experience has indicated that such policies have to a great extent been inadequate in tackling the basic housing problems of the town.

The current approach to resource allocation is an example to this inadequacy. The Arusha Master Plan for example, which was incorporated as a development project in the second Five Year Plan received about 10% or less of the funds allocated to it; on grounds that the Plan's main emphasis was on rural development. Hence data shows that there has been no low income housing and infrastructural projects undertaken by the Ministry of Lands, (Sites and Services) or the National Housing Corporation since 1967. Private construction has also declined since the 1971 Acquisition of Buildings Act was passed and the shortage of surveyed building plots in the town has further complicated the situation. The need for better housing and infrastructure in urban areas is more pressing and necessary because of the bad social consequences which arise when they are not provided, as well as the socio-economic benefits which accrue from urban development. Hence urban and rural development are complementary and as such they should not be antagonised against each other.

These conclusions may be provocative and controversial but they are deeply rooted in a clear appraisal of reality.

### 8.3 Scope for Further Research.

This study has so far tried to propose planning measures which aim at solving the problem of low income housing shortage in the short run, in great detail. It has also suggested briefly long term proposals for the future development and growth of Arusha.

Under the short term proposals, more emphasis has been put on solving immediate pressing problems within the existing town boundaries. These proposals range from infilling programs to squatter improvement and the development of new residential areas.

Population projections have however indicated that if Arusha continues to grow at an estimated annual rate of 13.1%, it will not be able to accommodate the anticipated population in the next 10 to 20 years, given the problem of high population densities already being experienced in areas surrounding the town (especially in nearby Arumeru District). The study has therefore proposed the Satellite Centre and Corridor Development/In the area between Arusha and Moshi towns (45 miles apart) as long term planning proposals aimed at sustaining the anticipated growth.

✓ approaches

Thus it is suggested that these proposals form the basis for future research aimed at controlling Arusha's present and anticipated growth, whose serious short comings have brought about the already mentioned urban problems.

## CHAPTER IX

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7. L. Bloomberg/C. Abrams. Report of the U.N. Mission to Kenya on Housing.
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10. Nairobi Urban Study Group.
11. Kenya; Development Plan 1970 - 1974.
12. World Bank - Sector Policy Paper on Housing.
13. Milton Obote Foundation - Housing Problems in Uganda.
14. R. W. James - Land Tenure in Tanzania.

APPENDIX IARISHA URBAN DISTRICTSOCIO-ECONOMIC SURVEY FORM

- \_\_\_\_\_ Date \_\_\_\_\_  
 \_\_\_\_\_ Ward \_\_\_\_\_  
 \_\_\_\_\_ House No. \_\_\_\_\_
- I. HOUSING**
1. Ownership: Owner \_\_\_\_\_ Tenant \_\_\_\_\_ Other \_\_\_\_\_
2. Type of House: Traditional \_\_\_\_\_ Semi-detached \_\_\_\_\_  
 Detached \_\_\_\_\_  
 Semi-detached \_\_\_\_\_ Flat \_\_\_\_\_
3. Number of Rooms: Total \_\_\_\_\_ Habitable \_\_\_\_\_
4. Use of Buildings: Residential \_\_\_\_\_ Commercial \_\_\_\_\_  
 Residential/Commercial \_\_\_\_\_ Other \_\_\_\_\_
5. Construction Material Used:
- (1) Foundation: \_\_\_\_\_
- (2) Wall: \_\_\_\_\_
- (3) Ceiling: \_\_\_\_\_
- (4) Roof: \_\_\_\_\_
6. Condition of House: Good \_\_\_\_\_ Fair \_\_\_\_\_ Poor \_\_\_\_\_
- II. POPULATION**
1. Number of Households: \_\_\_\_\_
2. Number of People living in the House: \_\_\_\_\_
3. Age Composition: 0 - 7 yrs. \_\_\_\_\_ 8-14 yrs. \_\_\_\_\_ 15-18 yrs \_\_\_\_\_  
 19-22 yrs. \_\_\_\_\_ 23+ \_\_\_\_\_
4. Sex Ratio: Females \_\_\_\_\_ Males \_\_\_\_\_
- III. EMPLOYMENT AND INCOME**
1. How many people in this household are: \_\_\_\_\_



Self-employed ..... Normal Employment ..... Total Number

Employed .....

**2. Income per family (per household)**

Sta. 0 - 200

200

400

401

600

601

800

800

1000

1000+

City and Services Section

Housing Finance Service Section

Housing Development Director

**IV. PLANNING STAFF**

**1. Head of Staff**

Planning Services Section

Master Plans Section

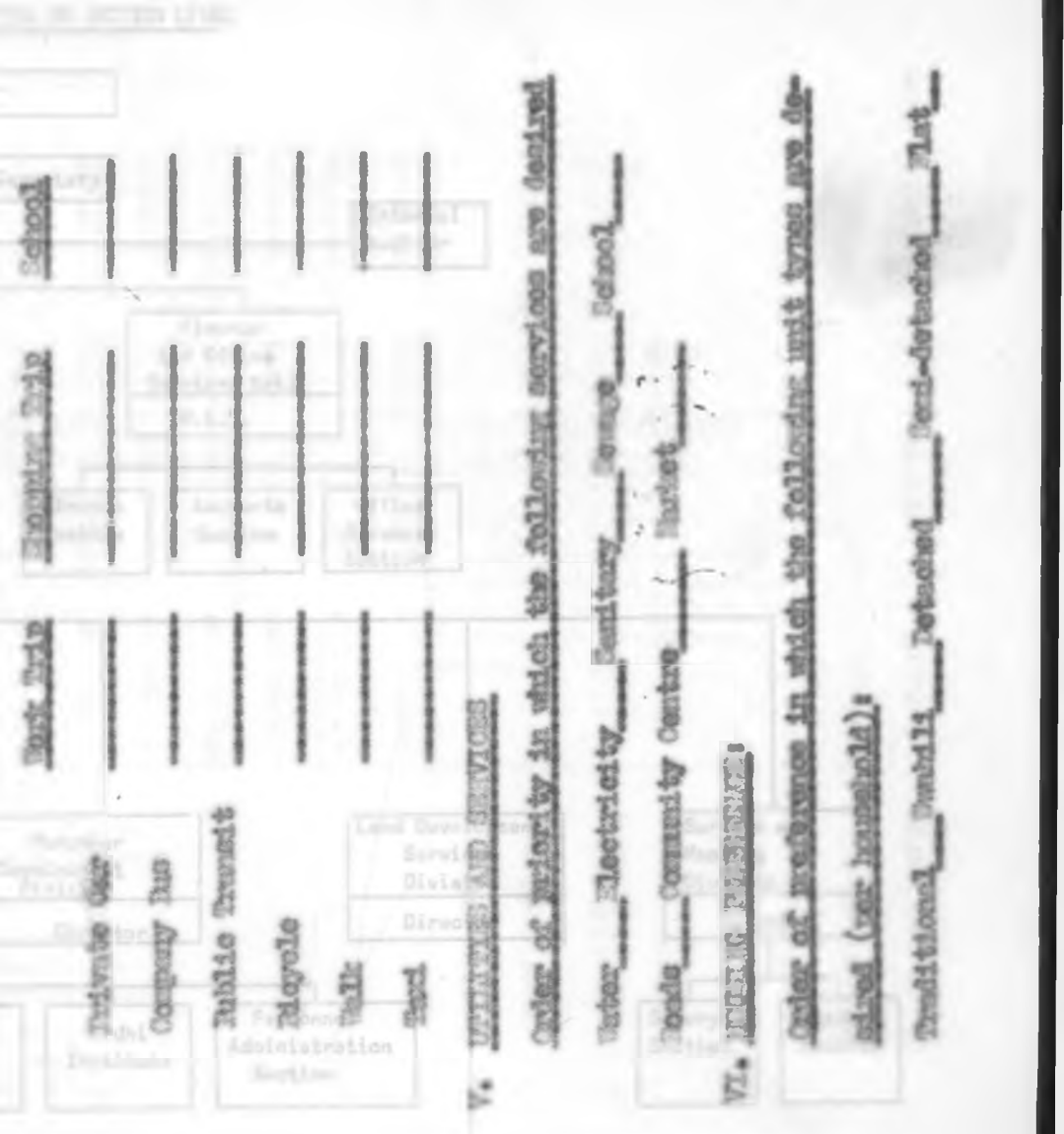
Survey Office

Technical Section

Building Economic Section

Planning Staff

Director



School

Electricity

Water

Private Car

Company Bus

Public Transit

Bicycle

Walk

Roped

Land Development Division

V. UTILITIES AND SERVICES

Order of priority in which the following services are desired

Water \_\_\_\_\_ Electricity \_\_\_\_\_ Sanitary \_\_\_\_\_ Sewage \_\_\_\_\_ School \_\_\_\_\_

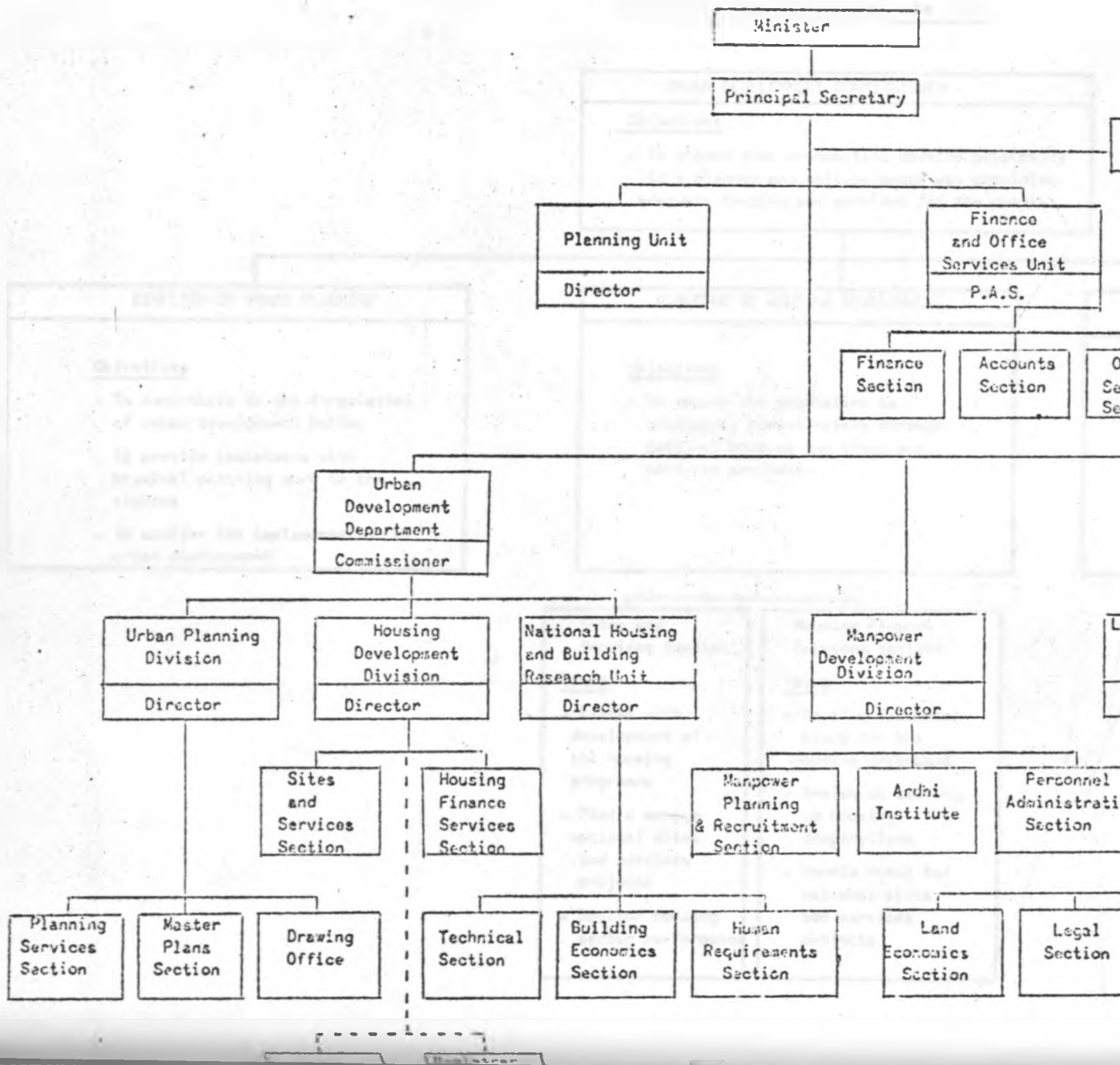
Roads \_\_\_\_\_ Community Centre \_\_\_\_\_ Market \_\_\_\_\_

VI. PREFERENCE

Order of preference in which the following unit types are desired (per household):

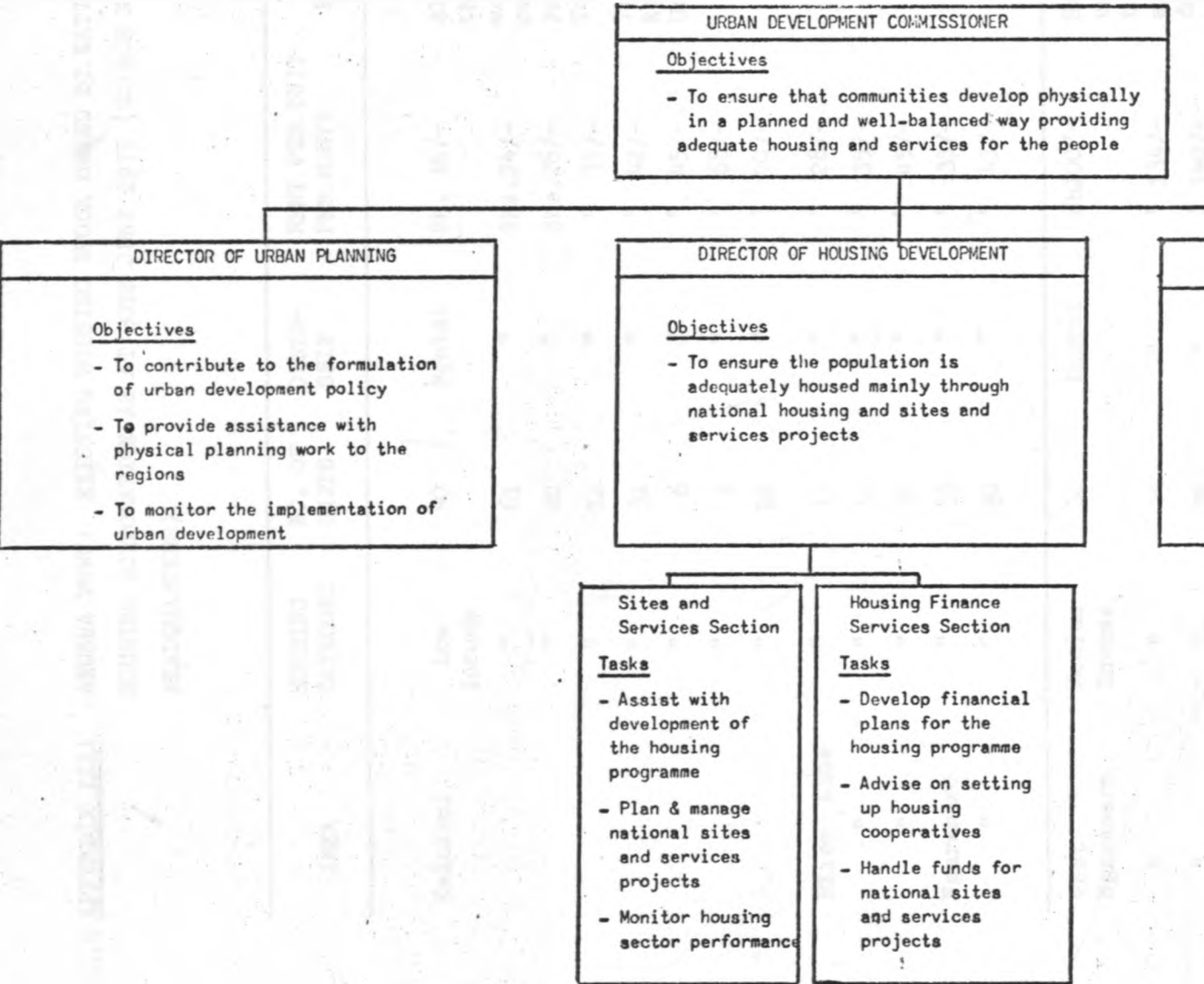
Traditional \_\_\_\_\_ Semi-Detached \_\_\_\_\_ Detached \_\_\_\_\_ Flat \_\_\_\_\_

RECOMMENDED ORGANIZATION TO SECTION LEVEL



APPENDIX IIa: DEPARTMENT OF URBAN DEVELOPMENT

RECOMMENDED ORGANIZATION AND MAJOR TASKS



APPENDIX III: ARUSHA TOWN: EXISTING HOUSING STOCK OWNED BY NATIONAL HOUSING CORPORATION AS AT 30TH JUNE 1975 (SOURCE N.H.C. HEADQUARTERS)

AREA	HOUSING CATEGORY	NO. OF UNITS	OWNER-SHIP	RENT PER UNIT PER MONTH	REMARKS
Kaloleni	Low Income	40	Rental	Sh. 16/-	All houses in this category were formerly owned by the Former Arusha Town Council They are known as Old Urban Quarter
	"	61	"	Shs.24/-	
	"	20	"	Shs.26/-	
	"	12	"	" 35/-	
	"	31	"	" 42/-	
	"	6	"	" 45/-	
	"	1	"	" 68/-	
Rlice Line	"	26	"	" 70/-	
	"	12	"	" 28/-	
	"	50	"	" 35/-	
"	"	35	"	" 45/-	
Ngaranaro	"	35	"	" 35/-	
	"	30	"	" 45/-	
West Ngaranaro	Medium Income	26	Rental	Sh100/-	Some of these units are detached; other are semi-detached. The have been constructed by N.H.C.  * These are multi-storey units
	"	79	"	" 134/-	
	"	96	"	" 140/-	
	"	33	"	" 153/-	
	"	45	"	" 170/-	
	"	9*	"	"200/-	
	"	58*	"	" 225/-	
	"	20*	"	" 315/-	
	"	30*	"	" 342/-	
	"	64*	"	" 400/-	
"	37	"	" 400/-		

AREA	HOUSING CATEGORY	NO. OF UNITS	OWNERSHIP	RENT PER UNIT PER MONTH	REMARKS
Town Area	Medium and High	1	Rental	Sh. 65/-	
"	"	1	"	" 80/-	
" c	"	3	"	" 133/-	
"	"	2	"	" 175/-	
"	"	7	"	" 200/-	
"	"	2	"	" 275/-	
"	"	3	"	" 300/-	
"	"	4	"	" 375/-	
"	"	1	"	" 420/-	
"	"	1	"	" 500/-	
"	"	1	"	" 550/-	
"	"	1	"	" 600/-	
"	"	1	"	" 650/-	
"	"	1	"	" 700/-	
"	"	1	"	" 720/-	
"	"	1	"	" 850/-	
Kimandoh	Medium	1	"	" 180/-	
"	"	1	"	" 260/-	
Town Area	High	1	Rental	" 1100/-	These units were formerly privately owned, now are taken over by N.H.C.
"	"	3	"	" 1200/-	
Town Centre	"	1	"	" 1275/-	

APPENDIX IV : ARUSHA TOWN: NUMBER OF UNITS ACQUIRED UNDER THE  
ACQUISITION OF BUILDING ACT OF 1971

(SOURCE: OFFICE OF THE REGISTRAR OF BUILDINGS - ARUSHA)

---

TYPE/ USE OF UNITS	NO. OF UNITS
Flats (residential)	373
"    Shops	122
"    Offices	106
Godowns	47
Bars	13
Hotels and Restaurants	17
Stores	21
Flats - Guesthouses and Lodgings	10
Dispensaries	8
Workshops	24
Garages	6
Service Stations	5
Cinemas and Theatres	3
<b>TOTAL NUMBER OF BUILDINGS</b>	<b>825</b>

---

APPENDIX A: AREA FOR THE FORESTED OCCUPANCY (SOURCE: REGISTER OF LANDS - 1972)

NO. OF HOUSES	NO. OF HOUSEHOLDS	AREA OF TOTAL
1 HOUSE 2 HOUSES 3 HOUSES 4+ HOUSES	1200 500 140 60	1.4 4 1.5 0.6
1 HOUSE 2 HOUSES 3 HOUSES 4 HOUSES	170 60 60 30	1.9 0.6 0.6 0.3
1 HOUSE 2 HOUSES 3 HOUSES 4 HOUSES	150 185 125 70	5.6 2.0 1.4 0.8
1 HOUSE 2 HOUSES 3 HOUSES 4 HOUSES	60 120 60 75	0.6 1.3 0.8 0.8
1 HOUSE 2 HOUSES 3 HOUSES 4 HOUSES	900 150 110 210	5.5 1.4 1.2 2.5
1 HOUSE 2 HOUSES 3 HOUSES 4 HOUSES	535 530 100 120	4.7 4.4 1.1 1.5
1 HOUSE 2 HOUSES 3 HOUSES 4+ HOUSES	400 120 150 0	4.4 1.3 1.4 0.9
1 HOUSE 2 HOUSES 3 HOUSES 4 HOUSES	2400 400 150 110	27.4 5.4 1.7 1.2
TOTAL	9600	1005



## APPENDIX Va

## HOUSING AND OCCUPANCY

## SUBJECT: OF HOUSEHOLD OCCUPANCY

## CHAPTER I

NO. OF ROOMS	NO. OF HOUSEHOLD	% OF TOTAL
1 room	5724	64%
2 rooms	1691	19%
3 rooms	870	9%
4+ rooms	764	8%
<b>TOTAL</b>	<b>9049</b>	<b>100%</b>

Corporations, Fibre West Africa Ltd, and Arambá  
Manufacturing Industry.

## APPENDIX Vb

## NUMBER OF HOUSEHOLD SIZES

NO OF PEOPLE PER HOUSEHOLD	NO. OF HOUSEHOLD	% OF TOTAL
1 - 2 people	4400	46%
3 - 5 people	3200	33%
5+ people	2000	21%
<b>TOTAL</b>	<b>9600</b>	<b>100%</b>

## CHAPTER II

1. Nairobi Urban Study Group: "Nairobi: A New Urban Housing Policy"; Nairobi, 1970.
2. U.S. Inter-regional Seminar on the Implementation of Slugs and Decentralised Settlements in 1970  
discussed the magnitude of the problem of

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### CHAPTER I

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3. Industries put up in Arusha since 1969 include: Tanzania Breweries; Kilimanjaro Textile Mill; General Tyre East Africa Ltd.; Phillips Ltd; Kilimanjaro Bottlers Ltd.; Tanzania Food Corporation; Fibre Board Africa Ltd; and Arusha Meerscham Industry.
4. The author was one of the Ministry's Officials who participated in the review of Arusha town's Master Plan, in collaboration with a Canadian Firm - Marshal Macklin Monaghan Ltd; Consulting Engineers, Surveyors and Planners. His participation in the project enabled him to utilise all available opportunities and facilities in gathering the required data for his thesis.
5. For the questionnaire used, see Appendix I.

### CHAPTER II

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7. Ibid. p. 82
8. Republic of Kenya; Statistical Abstract 1968.
9. L. Bloomberg and C. Abrams; Report of the United Nations Mission to Kenya on Housing (Nairobi Government Printer) 1965.
10. Republic of Kenya; Development Plan 1970-1974 (Nairobi Government Printer 1969) p.507.
11. Ibid. p.508
12. G.G. Maina, National and Local Housing Financial Institutional Framework in Kenya - Paper submitted to workshop on Urban Implementation.
13. A.A. Shs, "Identification of Sources of Finance for Large Housing Schemes;" A paper submitted to the Workshop on Urban Implementation, Department

CHAPTER III

1. of Urban and Regional Planning, University of Nairobi, March 1976.
14. Ibid.
15. Ibid.
16. Second Year M.A. Planning students; "Housing Needs in Nairobi"; A paper presented to the Workshop on Urban Implementation, March 1976.
17. National Housing Corporation Annual Report 1972; (Government Printer 1973) p.70.
18. See for example, Housing Research and Development Unit; University of Nairobi; Site and Services Schemes Analysis and Report (Nairobi 1971) p.85
19. A. A. Sha opt.cit.
20. For example it supported housing costing on the average £1,200 per unit and less attention was paid to units costing less than £1,200.
21. In the 1960s a total of 300 low income housing units had been constructed by the London Township Authority (these are today owned by the N.H.C.) and are known as Old African quarters) see table 9.
22. Republic of Kenya: Second Five Year Plan (1969-1974); Social and Economic Development.

CHAPTER IV

1. S. Stron, "Urban Development in Kenya and Tanzania; a Comparative Analysis" - Institute of Development Studies Working Paper no.147 March 1974.

### CHAPTER III

1. PADCO, Incorporated; "Arusha Masterplan and Five Year Development Program", 1970 p.15-17.
2. For Arusha Region, District and town, see Table II - "Recorded Population in census years and intercensal growth rates."
3. PADCO opto.cit. p. 18-19.
4. Tanzania National Archives (TNA) 12516 Vol.I p.78-79.
5. Opt.cit p.84 An extract of Governor Cameroon's official proclamation of Arusha Township Boundaries is contained in this page; it describes the boundaries of the Township.
6. Opt.cit. p, 149-150.
7. Tanzania National Archives 1256 Vol.I
8. For a clear analysis of how many people were served with piped water and electricity see table F.
9. Up to 1960 a total of 359 low income housing units had been constructed by the Arusha Township Authority (these are today owned by the N.H.C.) and are known as Old Urban quarters) see table V.
10. Republic of Tanzania: Second Five Year Plan (1969-1974); Social and Economic Development.

### CHAPTER IV

1. R. Stren, "Urban Development in Kenya and Tanzania, a Comparative Analysis" - Institute of Development Studies Working Paper no.147 March 1974.

2. United Republic of Tanzania: "Second Five Year Development Plan 1969-74 Vol.I/General Analysis, Government Printer Dar-es-Salaam 1969.
3. Opt.cit.
4. United Republic of Tanzania: "The Economic Survey and Annual Plan 1970-71" Government Printer Dar-es-Salaam 1970.
5. International Bank of Reconstruction and Development: "The Economic Development and Prospects of Tanzania Vol. II Annex III - Urban Development and Housing.
6. R. Stren: opt.cit. 1975.  
For further analysis of functions of N.H.C. see
7. Laws of Tanzania: N.H.C. Act (Cap.431)
8. Gerhard Grohs; "Slum Clearance in Dar-es-Salaam" in Urban Challenge in East Africa; Nairobi 1972.
9. Ardhi Planning Unit, "Annual Review 1972/73"; Dar es Salaam 1973.
10. United Republic of Tanzania Second Five Year Plan opt.cit.
11. Inability to cater for low income housing has also been experienced in Kenya. For further information on Kenya, see R. Stren op.cit. and Second Year M.A. Planning Students, "Housing Needs in Nairobi" - A paper submitted to Urban Implementation Workshop March 1976, University of Nairobi.
12. United Republic of Tanzania; Second Five Year Development Plan; opt.cit.

13. E. Merril, Tanzania Sites and Services Projects" Ministry of Lands Housing and Urban Development; Dar-es-Salaam, 1973.
14. For further details see Tanzania Housing Bank; Financing of Co-operative Housing Dar-es-Salaam 1975.

#### CHAPTER V

1. Information on Existing Landuse is based on PADCO; "Arusha Masterplan" as well as surveys conducted by the Masterplan team 1975.

#### CHAPTER VI

1. Ministry of Lands; Household Survey (Dar-es-Salaam 1972).
2. Survey Findings.
3. The plots allocated are mainly for Low Density development.
4. See Appendix
5. Rent Tribunal - Annual Reports 1967-1973 (Dar-es-Salaam: Govt. Printer) 1969.
6. Information on drainage and sewage is based mainly on the team's findings and discussions with the District Engineer's Office.
7. Regional Water Engineer's Report 1974-75

## CHAPTER VII

1. These plots have been provided for high income residential development
2. See Chapter VI, the rates of interest have not been within reach of the majority of low income people.
3. Louis Muench; Factors of Housing Supply - unpublished material; also Ministry of Lands Housing and Urban Development; A Draft Urban Development Policy for Tanzania. Dar-es-Salaam 1973 unpublished material.
4. Economic Committee to the Cabinet; National Sites and Services Programme in Tanzania, Paper No. 106; Dar-es-Salaam 1972.
5. A.E. Hankkio and J. Berghall; Moshi Master Plan 1973-1974; Dar-es-Salaam 1973.
6. Coviconsult; Sites and Services Project Layout; 1974
7. Standing Committee on Parastatal Organisation; Staff Housing Circular, Dar-es-Salaam 1973.
8. There is no Sites and Service project of any kind in Arusha.
9. National Sites and Services; Design Standards.
10. Ministry of Lands; a Draft Urban Development Policy for Tanzania; Opt.Cit.



11. The creation of an Urban Development Co-ordinating Committee in the Ministry of Lands and later a sub-committee under the Ministry of Water to co-ordinate water, drainage and power has not had any noticeable impact.

The consultants who prepared the Dar-es-Salaam Masterplan realised the existence of this problem and therefore proposed the setting up of a National Capital Planning and Development Board with powers to co-ordinate development.

The consultants who prepared the Arusha Masterplan also proposed the setting up of an Urban Development Corporation in Tanzania. These two recommendations are a pointer to the need for the setting up of an effective machinery for implementing urban development.

12. The ministries concerned are:

Lands Housing and Urban Development; Works; Water and Power; National Education; Health, Industries; Finance and Planning; and the Prime Minister's Office. Other Public Agencies include, the National Housing Corporation; Tanzania Housing Bank- and Tanzania Electric Supply Company Ltd.

13. Similar experiences have worked elsewhere in Tanzania e.g. Mwenge Housing Co-operative in Dar-es-Salaam

