

# Management and control of development of housing in shanty townships

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THE UNIVERSITY OF NEW SOUTH WALES

FACULTY OF ARCHITECTURE

SCHOOL OF BUILDING

MASTER OF SCIENCE (Building)

MANAGEMENT AND CONTROL OF DEVELOPMENT  
OF HOUSING IN SHANTY TOWNSHIPS WITH  
PARTICULAR REFERENCE TO ZAMBIA

By

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A thesis submitted in partial fulfilment for the requirements  
of the Degree of Master of Science (Building) By Course.

SEPTEMBER, 1975

## CONTENTS

	<u>page</u>
LIST OF TABLES	iii
LIST OF FIGURES/ILLUSTRATIONS	v
SUMMARY	vi
INTRODUCTION	1
PART ONE:	
Factors Leading to and Influencing the Development of Shanty Townships.	3
PART TWO:	
Shantys - A Bye-Product of Urbanisation and Affluence of Urban Society.	15
A. Urbanisation and its Problems	15
B. A Case Study of Lusaka of Acute Residential Accommodation Shortage.	38
C. The Squatter Situation of Dar-es-Salaam Tanzania.	43
PART THREE:	
Low-cost Housing Schemes and other Methods of Alleviating the Problem.	48

A.	Projects carried out in some Third World (Developing) Countries.	52
B.	Low-cost Housing Construction.	56
C.	Site and Service Schemes.	67
D.	Modern Agrarian-Industrial (village grouping) Communities.	81
PART FOUR:		
	Suggested Methods of Raising Housing Development Capital.	83
A.	Investment by Para-Statal Corporations and Private Companies	86
B.	National Housing Development Bonds, Hire Purchase and Credit Tax.	91
	CONCLUSION.	96
	ACKNOWLEDGEMENTS	106
	BIBLIOGRAPHY	107



## LIST OF TABLES

	<u>page</u>
1. Distribution and Density of Africa's Estimated Population by Major Regions, selected years 1930 - 1967.	10
2. Villages and Small Towns in Selected African Countries.	16-17
3. Percent of Urban Population of Selected Eastern and Southern African Countries (by size range in thousands).	24
4. Mid-year 1974 Population Estimates for Zambia and her Major Urban Centres.	27
5. Average Annual Population Growth Rates 1969 - 1974 for Zambia (Provisional estimates).	27
6. Sample Census of Population 1974 - Provi- sional estimated populations in Shanty Townships of Zambian Urban Areas.	29-30
7. Number of Local Authority owned Houses - 1966 to 1971 (Zambia).	31-32
8. Housing Stock and Demand (Municipal and City Councils) (Zambia).	34-35
9. Housing stock and Demand by House Type (as at 31st December, 1971) - (Zambia).	36
10. Population of Shanty compounds (townships) of Lusaka (Zambia) as at March, 1975.	39
11. Population of site and service scheme Compounds (townships) of Lusaka (Zambia) as at March, 1975	40

12.	Urban Population Growth trends in Selected Areas: Dar-es-Salaam - Tanzania.	43
13.	Urban Housing Demand in Tanzania by Income Group.	44
14.	Number of Houses in Urban Local Authority Low-cost Housing Areas - as at 31st December, 1971 (Zambia).	61
15.	Amenities provided in Low-cost Housing Areas - as at 31st December, 1971 (Zambia).	62
16.	Low-cost Housing Stock and Demand as at 31st December, 1971 (Zambia)	63
17.	Summary of Monthly Positions of Housing Demand - as at 30th November, 1974 (Zambia)	65
18.	Progress on Site and Service Schemes Plan- ned to 31st December, 1971 (City and Municipal Council only) (Zambia).	70
19.	Summary of Monthly Positions of Site and service schemes - as at 31st December, 1974 (Zambia).	73

## LIST OF FIGURES/ILLUSTRATIONS

	<u>page</u>
Map 2. Total 1967 Population and estimated rate of annual increase of African countries, 1963-1967; major regions of Africa as delineated by the United Nations.	12
Map 17. Population map of Zambia, 1963 rural, 1966 urban. (After George Kay, A Social Geography of Zambia, London, University of London Press, 1967 used by Permission)	28
Map 23. The towns and cities of Africa by selected size ranges.	19
Figure 1. Growth of selected African cities, graph.	21
Figure 2. Growth of selected African cities, semilog.	22
Figure 3. Council owned Houses 1967-1971: Bar diagram (Zambia) - comparison of progress made by City and Municipal Councils only, by Council and year.	33
Figure 4. Progress achieved on site and service schemes; City and Municipal Councils only.	71
Figure 5. Proposed Basic Unit	76
Figure 6. Proposed Basic Unit with dotted lines showing one of the possible future extensions.	77
Figure 7. Example of one of the possible future extensions to the Basic Unit.	78

## S U M M A R Y

The city accommodation and shanty township problems are socio-economic and political and thus, it is difficult to write or talk about the housing problem without making references to political issues. However, an effort has been made to keep reference to political issues to a minimum. The housing problem is the result of the effects and bye-products of urbanisation and urbanisation is a social change on a vast scale. It means deep and irrevocable changes that alter all sectors of society. Unfortunately this change can occur at a wrong stage of the city's economic development and the process is extremely difficult to reverse if not irreversible once begun. The impetus of urbanisation upon society is such that society gives way to urban institutions, urban values and urban demand and thus it is difficult for shanty residents to give up the little that they have and urban values that they have acquired.

The pouring of most of the available investment capital into urban industrial enterprises in the cities in support of the needs of economic expansion without paying due regard to rural areas which supply the urban people with most of the food they need, has caused a worsening disproportion between the living standards of people in the small towns and rural areas and those enjoyed by the urban people. Little attempt is made to invest and

encourage investment in rural areas to provide for adequate advancement and employment opportunities of resident families. This has led to an ever increasing social and cultural difference between rural and urban dwellers and hence rural-urban migration is the end result. The excessive rural-urban migration has resulted in the rapid development of large shanty townships of very poorly constructed shelters and has worsened the problems of already existing shanty townships and accommodation shortage.

However, the shanty problems in the cities of the African countries should not be analysed only in terms of rural-urban migration and large numbers, but also in terms of the internal working of the urban economic structure as well as the national socio-economic system, Condemnation of shantys, moral appeals and political pronouncement requesting the urban masses, mostly shanty residents, to return to rural areas to engage in agricultural activities, in order to avoid congestion in the cities and big towns without attempting any fundamental and meaningful structural changes in the urban and rural areas, are destined (bound) to fall on deaf ears and produce no results. These are also likely to harden and reinforce the shanty residents' belief and contention that in order for them to survive the rigors of an urban system they should work in solidarity to defy any attempts to move them even if it is meant for their benefit.

Cities are simply a reflection of a wider socio-economic system, and within the context of the African countries, each country has been shaped and moulded by the penetration of other socio-economic systems. Therefore, to solve or minimize the accommodation problems, the effects and misery of shanty townships it would need brave and sometimes cruel and unpopular decisions, and efficient, qualified and trained management and lastly, maximum co-operation from those who make decisions and are in positions of control.

There needs to be some changes in the present structure of urban society and style of living of the urban population. Urban living makes socio-economic inequality more visible.

## INTRODUCTION

There is an acute residential accommodation shortage in Zambian cities and big towns and this also applies to some other African countries. This has resulted in the development of shanty townships. The aim of the dissertation (thesis) is to survey the factors leading to and influencing the development of shantys, problems associated with shantys, causes of serious accommodation shortage in cities and methods of alleviating this shortage, and suggest ways of raising housing development capital.

Shantys should not be confused with slums (which are common in developed countries), since where there are slums there exists adequate provision under the city and municipal ordinances, and health and sanitation ordinances of most of the cities and big towns whereby these slums can be demolished or rehabilitated and proper urban standards of living substituted at the discretion of the local authority. Shantys are "illegal" townships or suburbs developing on either government or private land. Residents use their own initiative using any type of building materials that they can lay their hands on to build themselves shelter (huts). In most shanty townships residents enjoy security of tenure initially and in time exert a moral claim to the site (land).

In the shantys, there are little essential public services, hardly any piped water supply or any sewer connections and no adequate provision for sanitation, and no land storm-water drainage systems and no organised system of refuse collection and disposal. Thus, the shelters (huts) are built to no urban standards, and health and sanitation regulations. The absence of the above listed essential services foster sickness among the residents and represent a continual threat of outbreak of disease throughout the rest of the city.

The existence of serious accommodation shortage problems in a city is evident when its natural population growth rate and the rate of rural-urban migration of people from the smaller towns and/or rural areas is greater than the rate at which the city can absorb or integrate the increased population into the existing structure of urban community (society).

Most cities of African countries have a population increase of about six per cent per annum and the shantys have an increase of about twelve per cent per annum. This presents serious and challenging urban problems to the planners, economists, social scientists, housing authorities and city administrators.



## PART ONE

### FACTORS LEADING TO AND INFLUENCING THE DEVELOPMENT OF SHANTY TOWNSHIPS

---

In order to understand and plan programmes to solve or minimize the magnitude, effects and misery of shanty townships, it is important to know first and foremost the factors leading to and influencing the development of shanty townships.

In Africa, it is fair and true to say that accelerated rural-urban movement being experienced today should partly be viewed as the result of the elimination at Independence of certain colonial policies which restricted the movement of people and thus, exposing fully the magnetic pull of the inherited urban economic structures and the neglect and underdevelopment of the rural areas. Colonial governments discouraged and restricted "nominal" movement of people to the cities through the pass system (Chitupa). Such colonial policies included the rounding up and imprisonment and/or use of the unemployed indigenous people found in cities as cheap labour (forced labour), and at the end of their sentence and/or forced labour terms dispatched to their respective villages in the rural areas. Yet these very people were supposed and indeed paid a head or poll-

tax which was as high as K3.00 (\$A3.30) at times. Such policies were of course inhuman, unjust and an infringement of human rights and were based on racial prejudice.

The national leaders vowed to abolish such policies at the very moment independence was obtained. However, the National Governments did not make adequate provisions in their development plans to deal with the huge rural-urban migration that was imminent.

During the colonial rule the European administrators who were often in contact with the rural population made administrative (clerical) work look superior and more important than say, construction, engineering and agriculture work just to mention a few. This led and is still prevalent, to most indigenous parents wishing (sometimes insisting on) their children to become administrative (clerical) officers at the end of their educational career. This also led to the prevailing lack of interest and love for the land, engineering and agriculture work by educated Africans, attributed to many educated townsmen and peasants in Europe. Many of the Africans who receive even a primary education feel that farm work or sometimes any job requiring even minimum physical labour is not appropriate occupation. Youth see the life of the farmer as the most miserable that exists, one which subjects the individual to physical forces beyond his control, while town life appears to offer rapid social advance and liberation.

In colonial days the civil servant was the main

customer of the village man where he could sell his chickens and/or eggs to raise a little money to buy salt, soap, etc., but the Zambian or African civil servant who has replaced the European civil servant exploits traditional culture to obtain free things and in most cases misuse his public office position to obtain free things from the rural population. Such practice was used by district messengers during the colonial days and is being passed on to their new African bosses.

Immediately after Independence the Zambian Government started an impressive and expanding education programme and the fruits of this programme started pouring onto the labour market at the beginning of the present decade (1970). This accelerated schooling in rural areas has produced a disequilibrium between expectation and reality which has become one of the major reasons for the flow to towns.

The problem of school leavers who migrate to towns only to find that there is no employment considered acceptable to them has become a serious one in many African countries but this does not necessarily call for a cutback on education in order to alleviate this problem. It is better and preferable to have a large number of unemployed and underemployed educated population in the country (or urban centres) than an illiterate one.

There are many other factors in addition to the above listed ones which have a bearing to the rural-urban movement. At present rural-urban migration in some African countries has progressed to a point where the residents of almost every village in the rural areas have relatives or fellow villagers living in at least one of the major cities and/or towns. This is particularly true in the industrial towns of central and southern Africa and some cities and towns of western and Eastern African. In modern Africa rural dwellers want to be something other than a farming society. The extension of education, roads, and radio into rural areas is creating a villager who is willing to migrate to urban centres to improve his way of life by increased earning (high wages) capacity. This propensity to migrate to urban areas is much higher among literate and educated people (especially school leavers) than among the illiterate, and that as the level of education rises the tendency to travel greater distance (away from own region or province) to seek improvement increases. This is so because there is not much in the rural areas Industrial and Commercial opportunities to meet and satisfy the ambitions and talents of the rural educated people, which indicates lack of industries and employment generating tertiary sector. The city, even though it does not always offer improved economic status, seems to exert some magical pull on the rural migrant as he does not know the problems of the city at the time of departure. The rural migrant

leaves his home either because he is dissatisfied with the traditional environment, summoned to the city by relatives who are already there and promise education and employment or he is sick and wants to move to a place where hospital or other medical facilities are more readily available.

There is the widespread and readily accepted view that rural-to-urban migrants are saturating the shantys (squatter settlements) of large cities and towns and disproportionately contributing to poverty in urban areas. It has been shown in other countries in the western world that urban poverty and the plight of cities with large shanty (squatter) population are the consequences of broader structural features of the society and not necessarily the product of rural-to-urban migration. There appears to be a firm public and political opinion that rural-to-urban migration is bad. This is based on the presumption that rural-to-urban migrants are streaming into large city shantys and disproportionately contributing to poverty in urban areas. Relative to indigenous shanty urbanites, immigrants of rural background are held to be at a competitive disadvantage because they are less educated and skilled in comparison to native urbanites. The plight of central cities (such as Lusaka in Zambia) is thus heightened by the influx of rural-to-urban migrants who do not benefit from the movement. However, there is no clear evidence of migration's role in urban problems.

A number of studies carried out in America (Blau and Duncan, 1967; Folkman and Cowling, 1963 - just to mention a few) indicate that urbanites of rural background are less upwardly mobile and are lower ranked socioeconomically in comparison with indigenous urbanites, but these studies do not demonstrate that rural migrants are more often in poverty than indigenous urbanites. Usually, rural migrants improve their conditions, particularly with respect to occupational achievement relative to non migrants in rural areas, as they do not have a pre-selected occupation and thus prepared to learn any occupation that is offered to them and is within their capability. The presumed link between rural-urban migration and the plight of the cities is more likely tenuous than is assumed. It could also be said that previous urban experience does not seem to lessen poverty but it is likely to be lower among rural-urban-urban migrants than rural-rural-urban migrants. Rural-urban migration undeniably contribute to urban population growth but not to the extent presumed.

The integration of contemporary rural migrants in new settings is a relatively rapid process. However, this is inhibited when the destination community is large, the migrants have low initial socioeconomic status and kin (kinsmen) are present in the receiving area and traditional customs are followed. Adaptation to a new environment following migration has generally been seen as a difficult experience for persons from rural areas.

Evidence from a wide range of studies carried out in Europe, America and in recent years in Asia (Beers and Heflin, 1945; Youmans, 1963; Featherman, 1971; T.G. McGee - just to mention a few) indicates that rural immigrants tend to gravitate to the lower echelons of the occupations hierarchy of the city - to the unskilled and labouring jobs vacated by better trained, educated and qualified urban natives moving up. The individual may come as part of a stream of migrants from a community of origin and often is part of a chain-migration "system" within his own extended family. Thus the choice of destination is frequently due to the presence there of one or more members of the kin group, or friends (Brown, Schwarzweller, and Mangalam, 1963; Simwanza, 1969). Such persons serve to mediate the impact of the experience, providing support and reinforcement to the migrant in the new setting. This is the case with Lusaka (capital city of Zambia) and large copperbelt cities and towns (regarded most important "island" of export production in tropical Africa).

Research studies on rural immigrants should not focus only on the practical matters of adjustment - securing employment, establishing stable residence, and learning one's way about the new community, including development of skills in solving the day-to day problems of living but also should include integrational variables which involve social contacts with natives and the development of a social anchorage in, and identity as part of, the community. These two sets of variables are intimately linked in the overall process of adaptation, but in some circumstances

they may be independent of each other.

TABLE NO. 1: Distribution and Density of  
Africa's Estimated Population by Major  
Region, Selected Years, 1930 - 1967

Region	Population in Millions					Percent of Pop.	Crude Density per sq. ml.	Area	
	1930	1940	1950	1960	Mid. 1967	Mid. 1967	Mid. 1967	Million sq. ml.	Percent
N. Africa	39	44	53	66	79	24.1	23.7	3.29	28.1
W. Africa	48	58	67	88	104	31.7	43.8	2.37	20.3
M. Africa	21	23	25	29	34	10.4	13.8	2.55	21.8
E. Africa	46	54	63	77	90	27.4	40.8	2.44	20.9
S. Africa	10	12	14	18	21	6.4	20.1	1.04	8.9
TOTAL	164	191	222	278	328	100.00	28.4	11.69	100.00

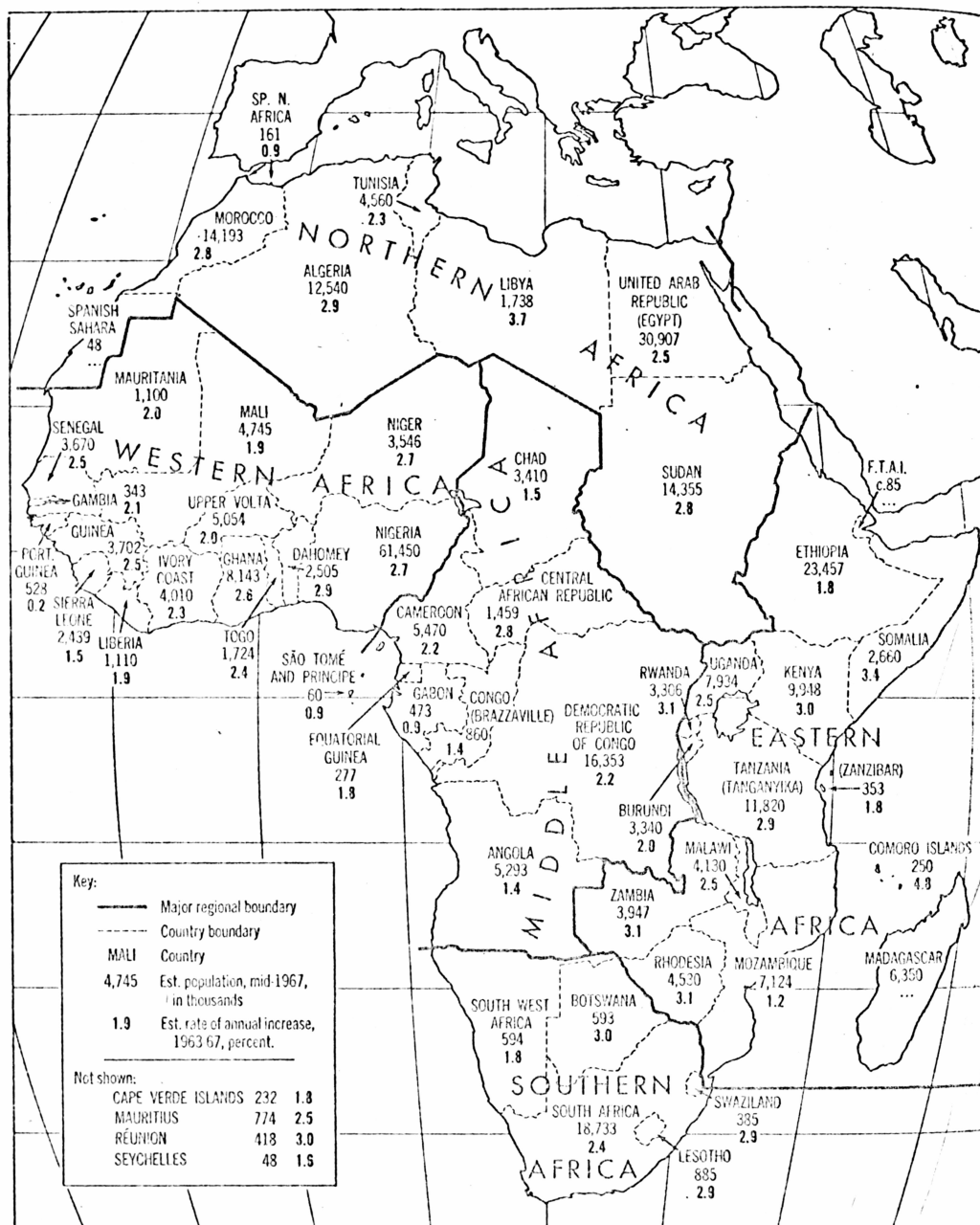
SOURCE 3: U.N. Demographic Yearbook 1967 (New York, 1968),  
P. 97, Table 6 and other calculations.



In the last decade some cities and big towns of some African countries have been growing massively at rates of from five to eight per cent annually and thus, probably doubling their populations every ten to fifteen years. Cities grow in three ways;<sup>3</sup>

- (1) because of population growth, settlements previously classified as rural are re-classified as urban.
- (2) through an excess of birth over death (natural increase); and
- (3) because people have moved from the non-urban to the urban areas.

However, the shift of population from rural to urban areas is the principal component of population growth in the cities. This city growth has not been associated with a rate of economic growth which is fast enough to provide employment opportunities for the rapidly increasing populations of these cities. This city growth has also not been accompanied by a boom of the building industry to provide houses and other forms of accommodation (flats), even for those who are in steady and well-paid employment to afford the rent. This leads to physical problems of overcrowding, due to inadequate housing and either a long wait of from six to ten years on the local authority housing list, or moving into shanty townships. This move into the shantys is inevitable since, while one is waiting for a council (local authority) house or flat or government civil servant's quarter, one has to live somewhere. The shanty residents are continually reminded of their



MAP 2. Total 1967 population and estimated rate of annual increase of African countries, 1963-1967; major regions of Africa as delineated by the United Nations.

subhuman living conditions by the affluence of the only too observable city elites, who use these masses sometimes ruthlessly to maintain and improve their status quo. Some of the city elites are so indifferent and unsympathetic to the problems of the shants that they will do anything to turn these problems to their advantage. For any programmes aimed at solving or reducing the problems of shantys to succeed, would depend on the full co-operation of the urban society. Most African countries or cities need carefully designed national plans which should aim at increased industrialisation in the cities as well as rural development by encouraging rural industries and should also include a ratio between urban and rural population, and the pattern within which populations should be distributed among the towns, cities and rural areas. It is appreciated that this is a difficult and challenging task but it is not impossible, and the benefits which might accrue may be worth the trouble and very rewarding.

It could also be said that contemporary rural migrants are remarkably easy-going in coping with a new environment - they exhibit a higher degree of adaptability than is usually attributed to them. Therefore, to attribute all the urban poverty and problems of the cities with large shanty (squatter) population to rural-urban migration, is failing and refusing to recognise, understand and appreciate the magnitude of the problem and hence, obviously unable to devise realistic programmes to minimize the problem. This

has been the case with many councils of the cities with large shanty (squatter) population in African countries - Lusaka (Zambia) not excepted. The present trend and rate at which shanty townships are developing cannot be ignored and left uncontrolled.

However, the housing problem itself is but a part of the much wider question of social and economic organisation and in its local aspect forms only one of many problems connected with a country and/or its cities.

## PART TWO

### SHANTYS - A BYE-PRODUCT OF URBANISATION AND AFFLUENCE OF URBAN SOCIETY

---

#### A. URBANISATION AND ITS PROBLEMS

Urban centres or urban areas are relatively large, dense and permanent settlements of socially and economically heterogeneous individuals.

Urbanisation is a continuing process, related to the increasing functional specialisation in human society resulting in the creation of communities at different stages of the process.<sup>3</sup> The stage reached by any community has important and sometimes serious repercussions on a whole set of social, economic and political relations in that community. Therefore, shantys of some African cities are a manifestation of the stages reached by these cities.

Urbanisation in Africa is progressing with amazing rapidity in most countries, resulting in housing problems and dilemmas of which some seem almost insoluble in the short run. The population of a city increases in three ways: <sup>3</sup>

- (1) from population growth, settlements previously classified as rural are re-classified as urban;

- (2) through an excess of birth over death (natural increase); and
- (3) because people have moved from the non-urban to the urban areas.

The modern prevailing theory is that birth rates are high in urban areas and deaths lower, and thus urban population growth from natural increase is considerably higher than the rural population increase. Cities grow from natural increase just as much as from rural-urban migration in Africa as opposed to the rather different circumstances in Western Europe and North America. Since the Second World War the pace of urbanisation in most African countries has accelerated significantly and continues to do so; particularly in tropical Africa this has been a period of mushrooming growth.

TABLE NO. 2: Villages and Small Towns In  
Selected African Countries

Country	Year	Size Range	Number	Population (Thousands)
<u>Northern Africa</u>				
Morocco	1960	1-5,000	33	87
U.A.R. (Egypt)	1960	"Villages"	4,021	
<u>West Africa</u>				
Mauritania	1966	2-5,000	4	10.5
Senegal	1966	"Villages"	13,000	
Upper Volta	1960-1961	"Villages"	7,000	4,200
		Av.- 600		
Niger	1968	3-5,000	48	
	1962-1963	"Villages"	8,533	2,372
		Av.- 278		

TABLE NO. 2: (Cont'd)

Country	Year	Size Range	Number	Population (Thousands)
Gambia	1966	1-2,000	28	40
		2-5,000	6	20
Sierra Leone	1963	1-5,000	129	
Togo	1959	"Villages" 370-1180	1,979	1,158
	1968	2-5,000	6	24.3
Dahomey	1961	"Villages" Av.- 685	2,806	1,922
Nigeria	1952	Nucleated Villages		Dominant, except in Iboland, Tivland
<u>Middle Africa</u>				
Chad (a)	1962-1963	"Villages" Av.- 260	9,048	2,352
C.A.R. (b)	1961-1963	"Villages" Av.- 186	2,910	542
Congo (B)	1966	"Villages"	C.4,200	
Gabon	1966	"Villages" Av.- 122	4,503	549
Angola	1960	2-5,000	11	42
<u>Eastern Africa</u>				
Kenya	1962	2-5,000		11
Tanganyika	1967	2-5,000	13	42.9
Malawi	1966	2-4,000	3	8.7
Zambia	1963	100-2-5,000	46	49
		2.5-5,000	4	17
Madagascar	1960	2-5,000	56	156
<u>Southern Africa</u>				
South Africa	1960	2-500	76	27
		500-2,000	246	274
		2-5,000	202	611
Namibia (S.W.A.)	1960	500-2,000	11	9
		2-5,000	11	37
Swaziland	1966	1-5,000	9	17.7

SOURCE <sup>3</sup>: National Census and Surveys -

(a) In area surveyed, estimated to include 72.1  
per cent of total population.

(b) 76 communes in 4 Prefectures.

The term "Villages" should be understood as used by  
Francophone countries.

Population growth has direct impacts on the economic development of a city or country. It may increase the size of the market for certain items and the number of operatives available for productive output. This is the case of the housing market in most African cities and big towns. The demand for houses (accommodation) is so huge and increasing at a fast and high rate, that the building industry is not able to satisfy the market, as it is expanding at a lower and slower rate than the housing market. But rapid population growth also tends to increase the difficulty of development in that a substantial part of investment must go to provide the population increment with essentially the same services enjoyed by the existent population.

In some African countries this has led to pouring much of the investment capital into urban industrial enterprises and supporting services more often at the expense of rural development, which in turn generates rural-urban migration.

This rural to urban movement process is due to the





economic facets of the urbanisation process. The motivation for the rural-to-urban migration can be described as twofold,<sup>3</sup> for personal advancement and for the sense of security, sometimes only the psychological sense of security, which the city accords (threats of attack from hostile neighbouring countries). Also as agricultural technology is improved, capital costs in farming rise and manpower becomes not only less needed but also economically more burdensome (introduction of mechanisation in rural areas at wrong stage of economic development, especially in Africa at present). The large portion of the agricultural population is, therefore, sufficiently disadvantaged, in relative terms, to be attracted by higher wages in other sectors in towns and cities. The rural-urban migrants bring with them their values, habits and attitudes and whose political, economic and social organisation are those of the rural areas, which contrast sharply with the urban society. In many cities and big towns in most African countries, people no longer live and work together on the basis of kinship and affinity, as they do in the rural areas and many of the customs and features of the rural system discontinue. Thus people from rural areas find life extremely difficult in cities and big towns and hence are forced to seek shelter in the shantys.

It could also be argued by some people that the very processes which promote rural modernization and integration, namely education, mass media, and transportation, also spur

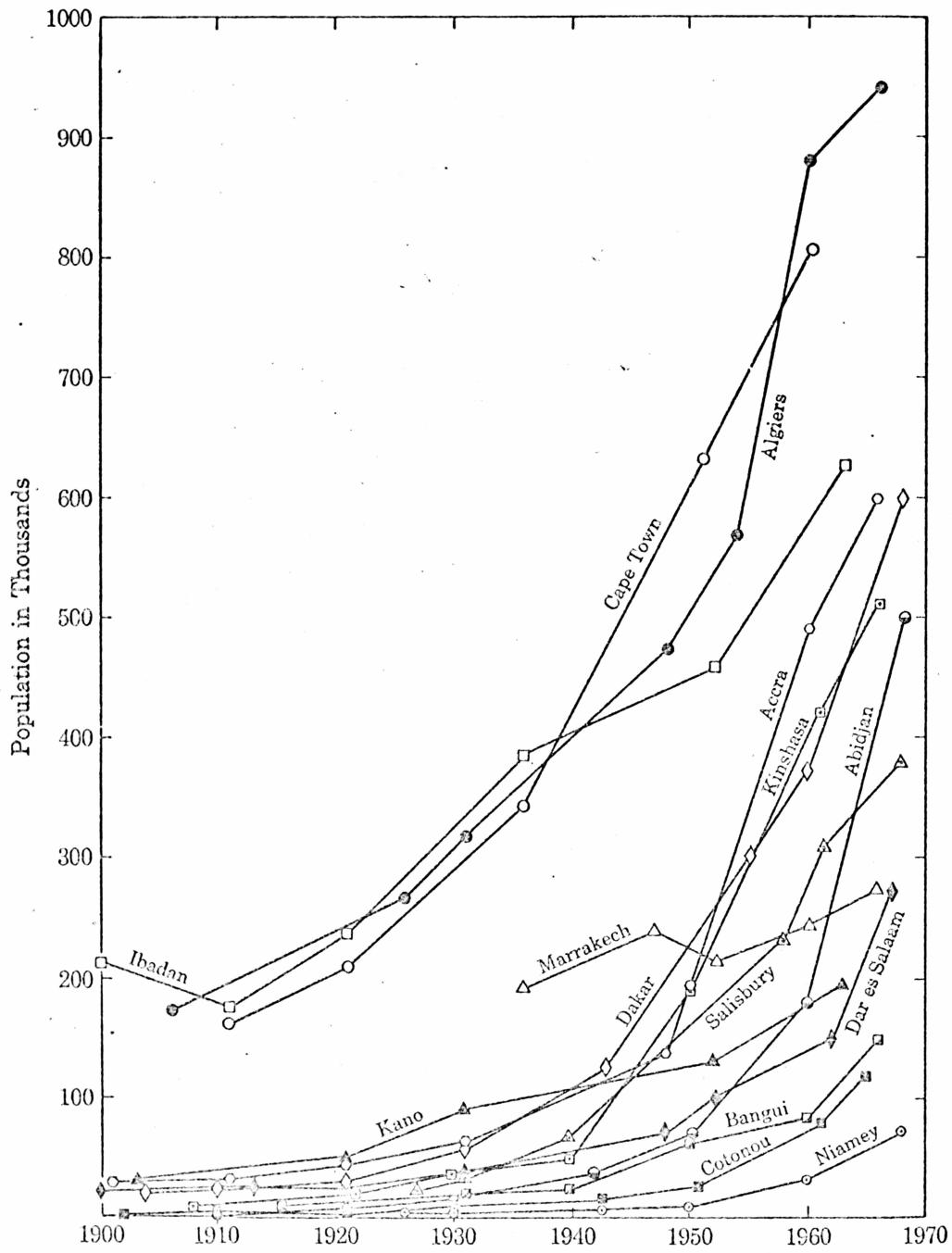


FIG. 1. Growth of Selected African Cities, graph

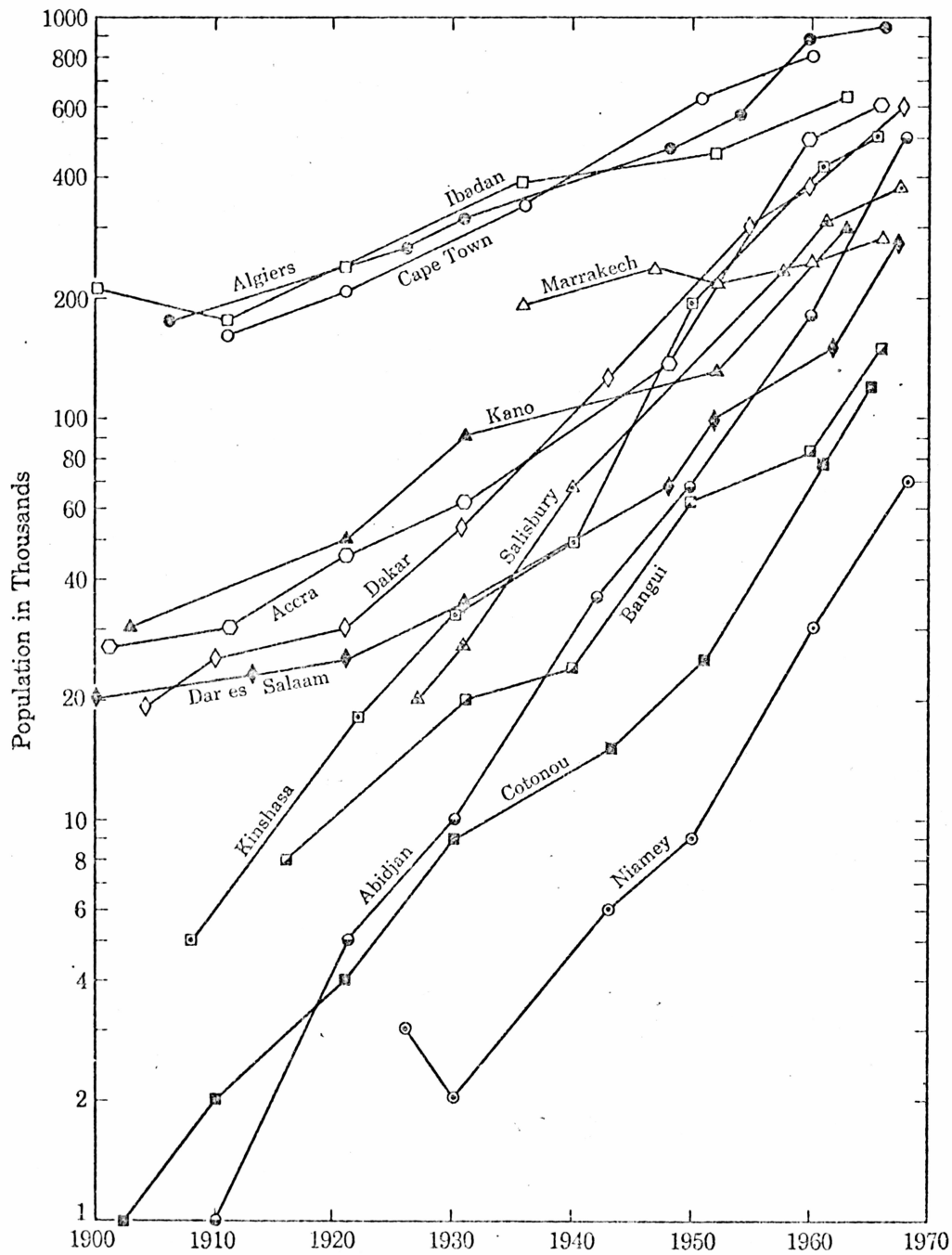


FIG. 2. Growth of Selected African Cities, semilog

the exodus in search of a better life.

Those who migrate to urban centres are usually young adults just entering or recently have entered the labour market and school leavers and thus, resulting in abundance of labour supply, while the numbers of well-paid and secure manual jobs expands extremely slowly. There is some truth in this argument but this does not necessarily warrant a cutback on education in order to alleviate this problem. More often much of the new investment financed by entrepreneurs of developed countries is relatively capital-intensive enterprises using labour-saving modern technology. Also social and legal factors usually raise the cost of labour and reduce the cost of capital to entrepreneurs, and in state-owned or controlled enterprises, the managements' concern to prove their efficiency by high annual profits works in the same direction. These factors also apply to the building industry and they make the production of a real low-cost house difficult.

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Table No. 3

SOURCE : National Census and other estimates

TABLE NO. 3: Percent of Urban Population of Selected  
Eastern and Southern African Countries  
(By Size Range in Thousands)

	Year	Urban Total	Urban Pop. as Percent of Total Urban Population					Urban Pop. as Percent of Total Country Population				
			5-9	10-19	20-49	50-99	100+	5-9	10-19	20-49	50-99	100+
<u>Eastern Africa</u>												
Kenya	1962	7.8	10.3	3.6	12.4		73.9	0.8	0.3	1.0		5.8
Uganda	1959	3.3	12.5	16.7	13.9		56.9	0.4	0.5	0.5		1.9
Tanganyika	1967	5.5	7.1	6.2	35.1	9.4	42.2	0.4	0.3	1.9	0.5	2.3
Malawi	1966	3.8	5.2	25.2			69.7	0.2	1.0			2.6
Rhodesia	1961- 1962	19.1	7.0	8.1	13.8		71.1	1.3	1.5	2.6		13.6
Zambia	1966	20.5	4.3	2.5	9.3	36.6	47.4	0.9	0.5	1.9	7.5	9.7
Madagascar	1964	13.0	12.0	15.7	30.3		42.0	1.6	2.0	3.9		5.5
<u>Southern Africa</u>												
South Africa	1960	41.0	6.8	7.0	11.7	9.8	64.6	2.8	2.9	4.8	4.0	26.5
Namibia (S.W.A.)	1960	13.4	31.4	17.1	51.4			4.2	2.3	6.9		
Botswana	1964	25.4	15.9	13.0	71.0			4.0	3.3	18.0		

The people who live in the shanty townships are not only the unemployed immigrants from rural areas and the under-employed urbanites but also legitimately employed citizens; people in medium income groups who can afford a fair and reasonable rent for better and comfortable accommodation, live in these shantys. The shantys have no electricity and yet some power supply lines pass across them; no system of water supply and water-borne sewerage. Residents rely on water points usually located in very unhealthy areas, and do not have any kind of indoor plumbing or adequate waste disposal systems. It is disheartening to see legitimately employed people sleeping in subhuman and health hazard huts and shelters. In some of these huts and/or shelters densities per room is very high and they are clustered together without sufficient space for outdoor activities and fresh air, in hot dry climates such as found in most African countries. Almost all politicians and other leaders, and those in high income groups citizens have moved into former European areas (low density) and medium density residences and have completely lost contact with the masses of the city population and hardly notice, or pay very little attention to the sufferings of the unfortunate masses.

Some urban planners and city administrators in Africa have been so brainwashed, moulded and influenced by the western model of the Industrial Revolution and economies, that they are incapable of re-thinking the problems of development within the unique conditions of their cities.

Some hire or engage consultants from the western world to solve or plan their city housing/accommodation problems and/or programmes and yet these consultants have failed to solve slum problems in their own countries and have hardly any idea about the African way of life. This is usually done at the expense of the local expertise.

Cities play an important role in the economic development of the country and thus need to be managed by qualified, enlightened and dedicated personnel in order to function efficiently and profitably. Fear by politicians and city administrators that the low income groups (the poor masses) will be politically destabilizing occasionally spur ill-conceived, hasty and partial housing and social programmes which divert funds and effort from the long range and realistic planning necessary to cope with their problems. In some capital cities of African countries the only modern houses that have been constructed in the past seven years or so have been for government officials on super, professional and executive salary scales and foreign diplomats.

The rural migrant major attracting areas in Zambia are copperbelt and along the railway lines, particularly Lusaka, the capital city.

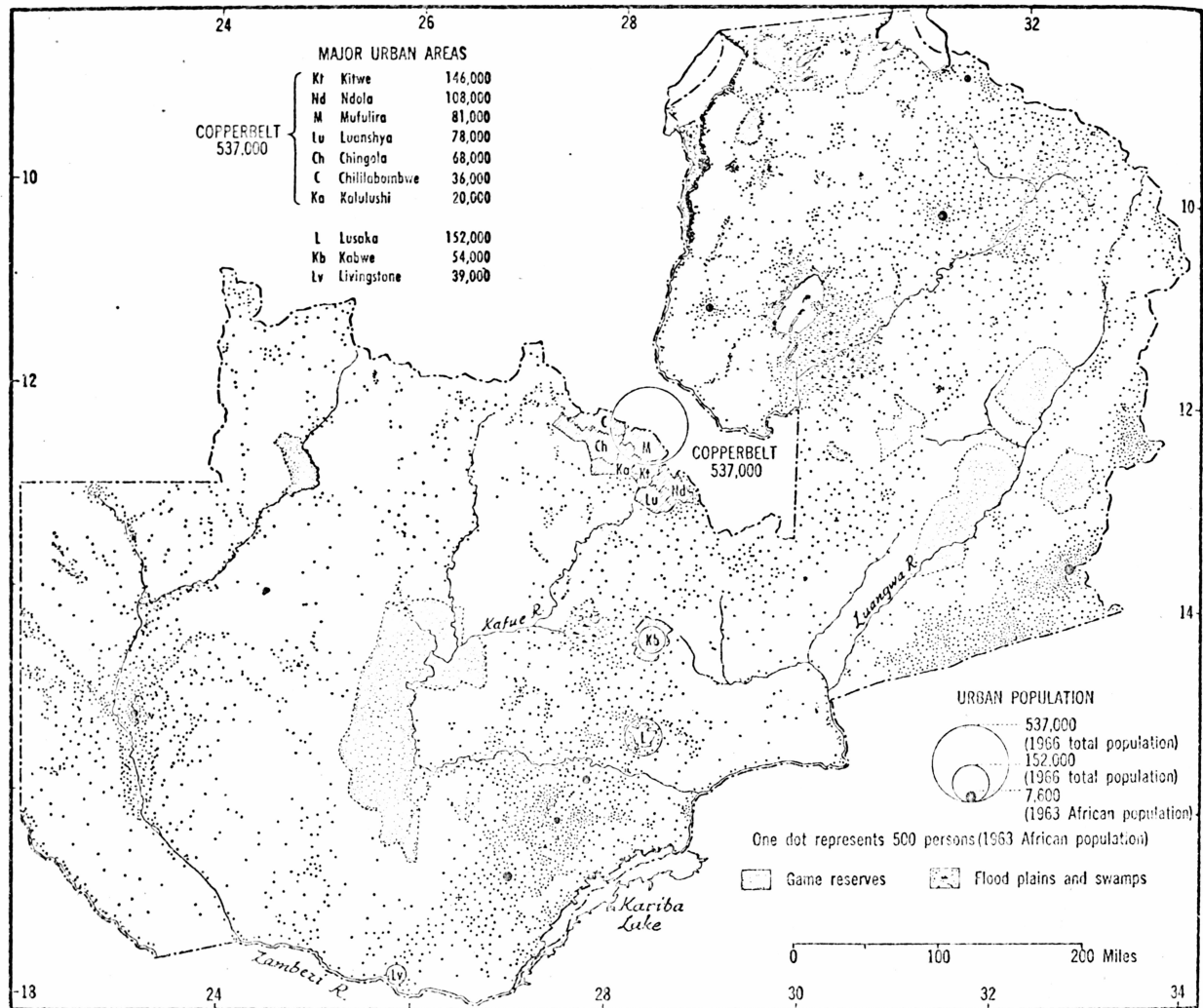


TABLE NO. 4: Mid-Year Population Estimates  
for Zambia and Her Major Urban Centres (1974)

Population:	Africans	4,577,000
	Non-Africans	58,000
	Total	<hr/> 4,635,000 <hr/>
Main Towns:	Lusaka	381,000
	Kitwe	270,000
	Ndola	216,000
	Chingola	140,000
	Mufulira	130,000
	Luanshya	116,000
	Kabwe	89,000
	Chililabombwe	54,000
	Livingstone	54,000
	Kalulushi	41,000
	Total	<hr/> 1,491,000 <hr/>

TABLE NO. 5: Average Annual Population  
Growth Rates 1969-1974 for Zambia  
(Provisional Estimates)

<u>Urban Area</u>	<u>Growth Rate (Percentage)</u>
Lusaka	8.9
Kitwe	4.7
Ndola	7.5
Chingola	5.3
Mufulira	4.8
Luanshya	4.7
Kabwe	8.2
Chililabombwe	4.5
Livingstone	5.1
Kalulushi	4.9



MAP 17. Population map of Zambia, 1963 rural, 1966 urban. (After George Kay, *A Social Geography of Zambia*, London, University of London Press, 1967, used by permission.)

According to the census of 1963 copperbelt alone contained 12.9% of the total indigenous population of Zambia, with the seven major copperbelt urban centres accounting for 92.9% of the total. The total population of the seven copperbelt urban centres (towns) in 1966 was estimated at 537,000 or 14.0% and in mid-year 1973, it was estimated at 967,000 or about 20.8% of total population of the country. This influx of people to and concentration in urban centres has created a big demand for houses that city, municipal and township councils, already faced with serious residential accommodation shortage, cannot construct or provide houses at a rate to keep pace with the increase in demand for new housing resulting from such rapid urbanisation.

TABLE NO. 6: Sample Census of Population  
1974-Provisional Estimated Populations in  
Shanty Townships of Zambian Urban Areas.

<u>Urban Areas</u>		<u>Totals</u>
<u>Chingola</u> (including		
Chililabombwe)		
Ipafu )		
Mutenda )	10,000	
Muchinshi )		
Kalilo	2,000	
Chingola East	3,000	
Mine Plant Area		
(Chililabombwe)	1,000	
Luano	11,000	27,000
	<hr/>	
<u>Kabwe</u>		
Makululu	17,000	
Katondo	8,000	
Kaputula	1,000	
Nakoli	4,000	
Shamabanse	1,000	
Natuseko	1,000	
Kohima	2,000	34,000
	<hr/>	

TABLE NO. 6; (Cont'd)

<u>Urban Areas</u>		<u>Totals</u>
<u>Kitwe</u> (including		
Kalulushi)		
Ichimpe    )		
Kalumbwa   )	8,000	
Kalulu	2,000	
Mutupa	2,000	
Impala	6,000	
Kamatipa	6,000	
Magazine	1,000	
Zambia Compound	3,000	
Ndeke	5,000	33,000
	<hr/>	
<u>Livingstone</u>		
Malota     )		
Burton     )		7,000
Maramba    )		
<u>Luanshya</u>		
Butungwa	3,000	
Chilabula	1,000	
Kawama	4,000	
Shangwena	2,000	10,000
	<hr/>	
<u>Mufulira</u>		
Njiri       )		
Mokambo    )	7,000	
Luansobe	3,000	
Nufulira West	2,000	12,000
	<hr/>	
<u>Ndola</u>		
Katolomba	6,000	
Mukungulwe	3,000	
Mackenzie	2,000	
Chipulukusu	3,000	
Chibolele	2,000	
Sakania	1,000	
Misundu	5,000	22,000
	<hr/>	
<u>Lusaka</u>		
See Table No. 10		241,099
		<hr/>
		386,099
		<hr/>

TABLE No. 7 Number of Local Authority Owned Houses 1966 - 1969 (Zambia)

Local Authority	1966 End of Year Total	1967 End of Year Total	1968 End of Year Total	1969			
				Com- pletions	Demo- litions	End of Year Total	Per- centage Change
Chingola	3,786	3,923	6,435	234	204	4,465	0.5
Chipata	1,462	1,591	1,591	11	3	1,599	0.5
Choma	866	910	1,019	16	--	1,035	1.6
Kabwe	2,734	2,748	2,847	--	--	2,847	0.0
Kafue	329	343	394	46	--	440	11.7
Kalomo	259	270	270	--	--	270	0.0
Kasama	759	697	906	58	10	954	5.3
Kitwe	10,084	10,737	11,304	928	--	12,232	8.2
Livingstone	3,973	4,398	4,537	108	--	4,645	2.4
Luanshya	3,418	3,589	3,760	190	--	3,950	5.1
Lusaka	10,928	11,562	12,696	449	52	13,093	3.1
Mansa	286	306	334	3	--	337	0.9
Mazabuka	959	969	969	15	--	984	1.5
Mbala	432	432	432	40	--	472	9.3
Mongu	--	--	--	75	--	75	100.0
Monze	387	393	436	--	--	436	0.0
Mufulira	3,817	3,892	4,378	45	--	4,423	1.0
Ndola	13,124	13,618	14,349	384	47	14,686	2.3
Pemba	80	85	85	7	--	92	8.2
TOTALS	57,683	60,463	66,742	2,609	316	69,035	3.4

Notes: -- = Nil

TABLE 7 a Number of Local Authority Owned Houses 1970 - 1971 (Zambia)

Local Authority	1970				1971			
	Com-pletions	Demo-litions	End of Year Total	Per-centage Change	Com-pletions	Demo-litions	End of Year Total	Per-centage Change
Chingola	152	86	6,531	1.0	265	73	6,150*	15.8
Chipata	125	53	1,671	4.5	--	--	1,671	0.0
Choma	--	1	1,034	(0.1)	50	1	1,083	4.7
Kabwe	35	--	2,882	1.2	14	--	3,302*	18.0
Kafue	--	--	440	0.0	--	--	440	0.0
Kalomo	--	--	270	0.0	41	--	391*	44.8
Kasama	--	2	952	(0.2)	16	--	968	1.7
Kitwe	1,494	--	13,726	12.2	216	--	13,942	1.6
Livingstone	--	--	4,645	0.0	271	--	4,772*	2.7
Luanshya	55	--	4,005	1.4	2	--	3,985*	(0.5)
Lusaka	569	130	13,532	3.4	907	80	14,359	6.1
Mansa	--	--	337	0.0	163	--	500	48.4
Mazabuka	73	--	1,057	7.4	--	--	1,043*	(1.3)
Mbala	--	--	472	0.0	--	--	472	0.0
Mongu	--	--	75	0.0	--	--	75	0.0
Monze	--	--	436	0.0	--	--	436	0.0
Mufulira	30	--	4,453	0.7	--	--	4,451*	0.0
Ndola	478	51	15,113	2.9	1,133	212	16,034	6.1
Pemba	--	--	92	0.0	--	--	92	0.0
TOTALS	3,011	323	71,723	3.9	3,078	366	74,166	3.8

Notes: \* These figures are a result of a reconciliation of the Councils' housing stocks as at 31st December, which were grossly over or understated, hence no reliance should be placed on the apparent percentage changes which are arbitrary.

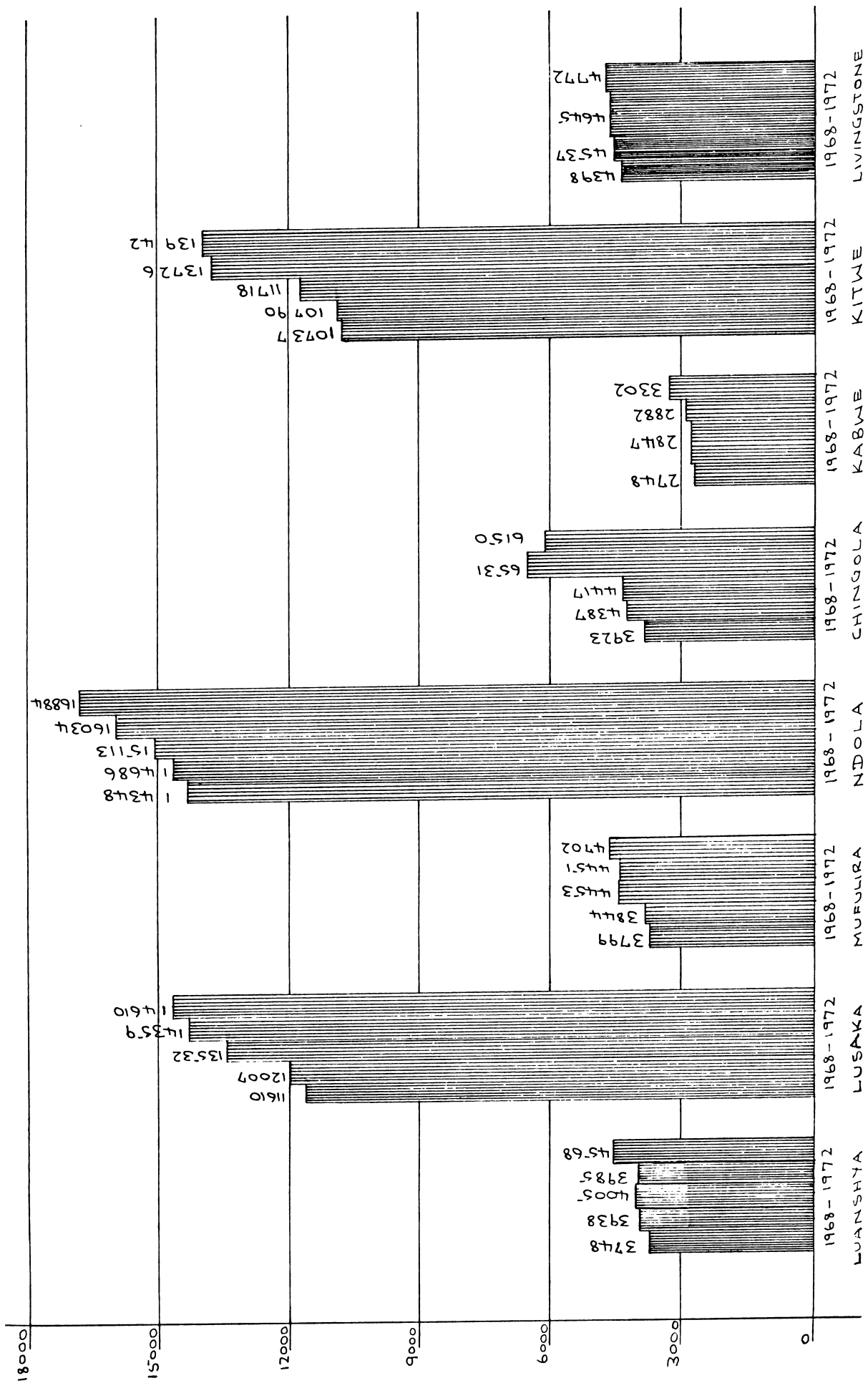


FIG. 3 COUNCIL-OWNED HOUSES 1967-1971: BAR DIAGRAM  
COMPARISON OF PROGRESS MADE BY CITY AND MUNICIPAL COUNCILS ONLY, BY  
COUNCIL AND YEAR

TABLE NO. 8: Housing Stock and Demand  
(Municipal and City Councils)

(ZAMBIA)

Area	1966		1967		1968		1969	
	Housing Stock	Size of Waiting List	Housing Stock	Size of Waiting List	Housing Stock	Size of Waiting List	Housing Stock	Size of Waiting List
Chingola	5,347	5,084	5,524	6,665	6,086	3,751	6,116	5,430
Kabwe	2,699	1,138	2,748	964	2,847	1,322	2,847	1,506
Kitwe	10,434	8,442	11,168	12,865	11,286	17,588	11,718	19,277
Livingstone	3,973	4,457	4,321	5,387	4,537	5,238	4,585	5,382
Luanshya	3,417	1,839	3,589	1,658	3,748	2,502	3,938	3,164
Lusaka	11,033	14,105	12,648	13,732	12,763	13,818	12,686	16,392
Mufulira	3,817	2,900	3,892	3,760	3,899	5,337	*	*
Ndola	13,124	6,433	13,618	8,567	14,349	11,404	14,686	13,100

\* Not Available

NOTE: Data refer to December 31 for each year



TABLE NO. 8A: Housing Stock and Demand  
(Municipal and City Councils)

(ZAMBIA)

Area	1970		1971		1972		1973	
	Housing Stock	Size of Waiting List	Housing Stock	Size of Waiting List	Housing Stock	Size of Waiting List	Housing Stock	Size of Waiting List
Chingola	6,531	5,141	6,308	7,178	6,369	9,753	6,484	10,858
Kabwe	2,882	1,821	3,770	2,398	3,951	2,221	4,251	2,434
Kitwe	13,726	21,479	13,960	24,359	14,641	26,414	14,821	27,762
Livingstone	4,645	6,059	4,772	6,059	4,831	4,087	5,581	4,985
Luanshya	4,005	3,970	4,092	4,699	4,569	5,481	4,684	5,942
Lusaka	13,532	21,454	14,388	26,411	14,610	27,945	14,440	27,020
Mufulira	4,453	6,741	4,451	7,390	4,703	5,313	4,704	5,623
Ndola	15,113	15,078	16,034	16,560	16,884	16,913	17,084	17,003

NOTE: Data refer to December 31 for each year

TABLE NO. 9 – HOUSING STOCK AND DEMAND BY HOUSE TYPE (AS AT 31ST DECEMBER, 1971) – (ZAMBIA)  
(CITY AND MUNICIPAL COUNCILS ONLY)

Council	SQ		1R		2R		3R		4R		4R+		Demand with House Type not Specified	Total Housing Stock	Total Demand
	Housing Stock	Demand	Housing Stock	Demand	Housing Stock	Demand	Housing Stock	Demand	Housing Stock	Demand	Housing Stock	Demand			
Chingola	961	796	121	–	3,036	–	1,428	–	421	–	183	–	6,382	6,150	7,178
Kabwe	84	–	–	–	2,362	1,635	629	654	221	109	6	–	–	3,302	2,398
Kitwe	–	–	409	–	7,526	–	4,888	–	1,043	–	76	–	24,359	13,942	24,359
Livingstone	–	488	102	–	2,998	–	1,480	–	192	–	–	–	5,571	4,772	6,059
Luanshya	166	203	2	–	1,399	1,294	2,084	1,824	328	1,378	6	–	–	3,985	4,699
Lusaka	976	4,689	1,101	–	6,034	–	4,166	–	1,908	–	174	–	21,722	14,359	26,411
Mufulira	–	4,458	2,029	–	2,183	1,226	150	784	89	606	–	316	–	4,451	7,390
Ndola	–	1,351	686	–	10,076	–	4,182	–	929	–	161	–	15,209	16,034	16,560
TOTALS	2,187	11,985	4,450	–	35,614	4,155	19,007	3,262	5,131	2,093	606	316	73,243	66,995	95,054
PERCENTAGE	3.26	12.61	6.64	–	53.16	4.37	28.37	3.43	7.66	2.20	0.91	0.33	77.06	100.00	100.00

NOTES:

(1) – = Nil.

(2) The housing demand figures for Kitwe and Lusaka are likely to be lower after revisions next year or after.

It is stated that in the First National Development Plan (1966-1970), 27,000 housing units were projected, and approval was given to local authority schemes involving 27,137 units and an additional scheme involving 2,000 units. The target for the Second National Development Plan (1972-1976) was set at 73,000 units, plus 67,000 units anticipated from the private sector. In the mid-term review of this Plan it is estimated that of the 73,000 units target, 15,318 units had been completed by the end of 1974. It is said that this low figure is attributed largely to a long preparatory period needed for designing and tendering, and a final figure for the period of the Plan is expected to be in the region of 40,000 to 50,000 units.

However, even the planned figures of housing units in the Second National Development Plan fall short of that of people living in shanty townships, let alone those who are badly accommodated in local authority housing areas, and an increase resulting from annual growth of the cities/towns.

Any form of control of rural-urban migration is objectionable not only from the standpoint of infringement of human rights, but seems to be entirely impractical socially, economically and politically, especially when one sees the luxuries and affluence of the urban population at the expense of the rural population.

B. A CASE STUDY OF LUSAKA OF ACUTE RESIDENTIAL  
ACCOMMODATION SHORTAGE

It could be said that there is hardly a country in the world that can substantiate a claim that squatting does not exist in its borders. This is so because squatting is not the product of any one particular political or economic and social system, but of man's need for shelter in a rapidly urbanizing world. Squatter settlements are a threat to the modern cities not necessarily because of their expansion but their rapid rate of growth. It is being accepted, though reluctantly, that housing is a socio-economic problem and that the origins of this problem lie outside the, general definition of, housing sector.

Lusaka, the capital city of Zambia, has been growing more rapidly than any other urban community in the country in the last one and half decades (15 years), and has attracted many migrants. In one decade Lusaka grew from about 58,000 in 1956 to 152,000 in 1966, almost trebling its population and in mid-year 1973 its population was estimated at 381,000 which is more than double the 1966 figure. The refugees from Rhodesia, Angola, Mozambique, and some on a smaller scale from Malawi, South Africa and Namibia (South West Africa) have added to the already large in-migrants from rural areas. This has resulted in the mushrooming of new shanty townships around and near the old existing ones and extended to new

areas. Lusaka now has the most serious accommodation problem in the country and has the largest number of shanty townships, 28 in all. While the city has been expanding rapidly economically and thus populationwise, the number of houses constructed or sleeping spaces erected each year has not been increasing significantly to accommodate its citizens, even those who are legitimately employed and well-paid and can afford the rent.

TABLE NO. 10: Population of Shanty Compounds  
(Townships) of Lusaka as at March 1975

Shanty Compound	Population	No. of houses
Mwaziona	27,630	7,094
Ngulube	10,197	1,465
Chaisa	27,144	3,900
Chipata	15,427	2,337
Mutambe	4,872	700
Kanyama	18,751	2,841
Quaries	7,197	1,024
Chawama	21,576	3,100
Jack	2,959	425
Kalikiliki	5,000	340
Kalingalinga	10,692	1,620
Roma	1,715	261
Chainda	3,960	660
Chelston	1,692	280
Bauleni	4,108	518
Chilanga	3,367	510
New Garden	20,000	2,890
Freedom	8,000	29,965
John Howard	4,000	Figures not available
Ng'ombe	2,000	
Misisi	5,000	
Chibolya	11,000	
Mandevu	6,812	
Kamanga	5,000	
Desai	5,000	
Marrapodi	4,000	
Kwacha	2,000	
Paradise	2,000	
TOTAL	241,099	

In 1969 about 90,000 people lived in shanty townships in Lusaka alone and it is estimated that about 241,099 people or 63.28% of the city's population lived in shantys in Lusaka in 1974. The unscrupulous self-proclaimed landlords in the shantys are making between 80% to 150% profit annually on the rental of one room unburnt clay brick or concrete block and crate huts. A Home Ownership Scheme envisaged at present and home purchase loans from the National Building Society will not help low and medium income group earners. They are and will continue to be unable to secure loans because they cannot provide the security required by the National Building Society and other commercial banks as they are regarded as financial risks. The housing problem is but a part of the much wider question of social and economic system.

TABLE NO. 11: Population of Site and Service Scheme Compounds (Townships) of Lusaka as at March 1975

Site and Service Compound	Population	Planned No. of Houses
Chunga	3,554	1,870
Kaunda Square	6,246	1,977
Marapodi-Mandevu	9,188)	Figures not available
Mutendere	16,466)	
	<hr/> 35,454 <hr/>	<hr/> 3,847 + <hr/>

The role of the Zambia National Building Society in financing a National Housing Programme which should be spearheaded by the National Housing Authority, should be carefully examined and given serious consideration. At present the low and medium income group earners cannot secure a home with the standard of accommodation necessary for decent living.

It could be said that the relationship between the city and the shanty (squatter) settlements is like the relationship between the developed and underdeveloped countries. The shanty (squatter) settlements export (sell) cheap semi-skilled and unskilled labour, the price of which they do not control and, at the same time, they import (buy) manufactured goods and pay for services, the price of which they also do not control. Economic pressures have forced these people from the ignored and depressed rural regions to opt in to urban society; or rather, have caused them to drop out of their rural villages to build a new life in the cities.

Whether they receive government aid or not, people will seek shelter and will build for themselves when help is not forthcoming. Affluent city-dwellers broadcast fears of crime and violence. The battle and the will for survival give these people a sense of identity and unity and despite all the alarm inspired, self-help housing continues and shantys grow bigger and increase in numbers.

Though technically illegal, the shanty residents fight against victimisation, repressive legislation and the physical destruction of their homes until their sheer determination leads the city and/or state to admit its own weakness and lamely accepts their presence.

Shantys are a common, serious and pressing and depressing problem in most African countries and housing is a national problem, and it should be treated and tackled as such.



## C. THE SQUATTER SITUATION OF DAR-ES-SALAAM TANZANIA

Tanzania cannot be rated as an urban nation. Estimates of the urban population range from 5 to 7 per cent (about 750,000)<sup>9</sup> but Dar-es-Salaam is one of the fastest growing cities in Africa with a growth rate for the period 1965-1967 of 11 per cent according to the Ministry of Lands, Housing and Urban Development. Tanzania has those problems prevalent in most African countries, inherent in rapid urbanization, the most obvious of which is a shortage of housing. The urban dwelling density, in Tanzania averages 10 units/

TABLE No. 12: URBAN POPULATION GROWTH  
TRENDS IN SELECTED AREAS: DAR-ES-SALAAM -  
TANZANIA

	Year	Population	Percent Increase		
			1948-52	1952-57	1948-67
Dar-es-Salaam	1948	69,227			
	1952	99,140			
	1957	128,742	42.80	30.00	293.60
	1967	272,515			
Tanzania	1948	7,477,677			
	1952	NA	NA	NA	65.50
	1957	8,785,613			
	1967	12,231,342			

From: Bienefeld, M.A. and Binhammer, H.H. "Tanzania Housing Policy"  
E.R.B. Paper 69.19 Economic Research Bureau University of  
Dar-es-Salaam, 1969

acre; at this density approximately 9,800 acres would be required to meet the housing demand per year for the next few years. To this should be added community facilities

requiring approximately 3,300 acres per year. Hence about 25 square miles (64,75m<sup>2</sup>) or another Dar-es-Salaam should be built every year to meet the needs of Tanzania<sup>9</sup>. This may seem a dramatic illustration but the volume of building

TABLE No. 13 URBAN HOUSING DEMAN IN TANZANIA  
BY INCOME GROUP

Income Group,Shs/month	% of total population demand for housing
0 - 180	12%
181 - 350	37%
351 - 500	18%
	<hr/> 67%

Source: Ministry of Lands, Housing, and Urban Development (known as Ardhi)

required to house the needy is unlikely to occur as a result of government action only.

Although land is most African countries is not a problems at present, finance is. The governments of these countries cannot generate enough money to finance such volume of building without. full participation of individual citizens, firms and corporations, which is lacking at present in most African countries. The UN estimates that a country must invest 5 percent of its gross Domestic Product (G.D.P.) each year if it wants to meet housing demand caused by natural population growth and upgrade all housing, and even at this rate

it would take 30 years to accomplish the stated goals. The majority of African countries invest as little as 1 per cent of their G.D.P. Tanzania at present invests 1.5 per cent of its GDP, and intends to increase this until it reaches 5 per cent.

At present the squatter population of Dar-es-Salaam is estimated to be about one third of the city's population which was put at 272,515 in 1967. The figure for 1971 was put at 16,000 housing units required to house squatters. Most squatters in Dar-es-Salaam as is the case in other African countries, do not own their houses but rent from the "squatter landlords" who constitute about 20 per cent of the squatter population. The great bulk of squatters, both owners and tenants, make under Shs 500 per month (approximately 75 U.S. dollars) which is considered the low income bracket. About 90 per cent of the population of the country as a whole is in this category.

The squatter houses of Dar-es-Salaam are not usually owner built. The owner usually assists in the construction process, but the bulk of the building is done by low-skilled craftsmen, who work on informal basis at wages that may be as little as half the established government minimum wage. The construction time of a squatter building depends on the resources available to the owner. It has been estimated that the average time required to build a house in Dar-es-Salaam is from three to six months

but it may take longer where the owner lacks capital. Squatter housing is located on the outskirts of Dar-es-Salaam or on the fringes of nearby villages. The growth of the city and the village results in the eventual union of the two and this locational pattern is the same that is identified with squatter settlements in Africa and other developing countries.

There is a serious shortage of low-cost dwellings in Tanzania as is the case in other countries in Africa. The squatter problem is intended to be tackled by providing squatters with serviced plots (site-and-service scheme in Zambia) in lieu of compensation. These new plots are to be located in the urban Ujamaa settlements which are co-operative units where there are communal activities such as poultry-keeping and small scale industries, and co-operative building of community facilities and services. These villages (ujamaa) are found in the rural and urban areas.

The Town Planning Division of Ardhi, is responsible for the planning of the urban Ujamaa settlements which it intends to place on the fringes of towns and cities. The Housing Division proposes a scheme to provide serviced plots (supposedly not in Ujamaa villages) for leasing to individuals or groups of prospective developers to build their own houses through self-help efforts. Building co-operatives of this type will receive technical help from the ministry. Each plot will have a water borne toilet and shower room. The Division also plans to build low

cost minimum and medium standard units for rent or sale.

The Ujamaa settlements seem an impressive idea; however, it is argued by others that, the policy of giving serviced plots in lieu of cash compensation when a squatter is moved will not discourage squatters, only discourage them from investing in a good structure. Also, the amount of housing planned to be built will be a small dent in the housing market.

The important factors affecting the housing situation in Tanzania and other African countries are:-

1. The extreme shortage of such trained professionals in the fields relating to housing as architects, engineers, planners, builders and so on.
2. The relatively underdeveloped state of the construction industry.
3. Lack of realisation by local business community that housing is one of the few relatively risk free areas of investment.

### PART THREE

#### LOW-COST HOUSING SCHEMES AND OTHER METHODS OF ALLEVIATING THE PROBLEM

The "rapid" increase in population and excessive large numbers of people from rural areas going into towns in pursuit of an exciting life, high earning capacity (high wages) and high standard of living make the provision of reasonably cheap houses at a reasonable cost which would enable construction of large numbers of units by central housing agencies or governments very challenging and difficult.

House ownership in most African countries is on a small scale because the majority of the people cannot afford the high cost of modern houses and it is only those people in the high income groups that own houses and these are few. The central housing agencies and governments build houses for rent to cater for the middle and low income groups but because of the acute housing/accommodation problem they cannot afford state-aided housing on a sufficiently large scale to meet the demand. Even in countries with booming economies such as Ivory Coast, Kenya, Negeria, Zaire and Zambia, central housing agencies and governments cannot construct enough low-cost houses and

flats because of the limited resources and other problems which require urgent attention as the housing problem, such as the communication infra-structure. There is hardly any private investment in the housing area of the building industry other than in office accommodation buildings. Encouraging people to build their own houses, especially those in the low-income group, means creating slums and shanty townships explained somewhere in this dissertation. On the other hand some countries pass by-laws that require impossible standards from the point of view of financial capability of the individual that the masses look to central housing agencies and governments to provide houses. The tenant purchase schemes and housing loans contemplated by some housing authorities such as the Zambian Ministry of Local Government and Housing will not solve the acute accommodation shortage because the majority of the people are still financially and characteristically beyond the means of both with the exception of the high income group. The cost of construction and materials are rising at a very fast rate yearly. Also the cost of living does rise proportionally to the wages the people earn and makes it very difficult for the low-income earners to save and hence improve their standard of living significantly.

The principle of Town Planning on a neighbourhood-unit basis is now favoured throughout the world. This type of planning meets some of the traditional living patterns of indigenous people of Africa based on neighbourhood or

community living. However, care must be taken in Africa to ensure as far as possible that neighbourhood planning on the Industrialized Western countries' pattern, which is very much influenced by the motor vehicle (private), is avoided. The neighbourhoods to be created should be designed (planned) with good means of communication by public transport. Walking distances to schools, shops and public transport stations (stops) from residential allotments should be kept to a minimum.

The specific task of the planners and designers should be to provide housing in the neighbourhood (or estates) within the financial capital of the people although this presents design problems. The important and essential factors to consider are security, fire resistant materials which are not very expensive and protection, good general services and in particular, disposal of waste. The criteria for design and construction should be: health, safety, comfort and economy. "Comfort" is difficult to define, however, in technical terms means :-

1. To suit a way of life in the neighbourhood relative to (under) urban conditions
2. Adequate space for the purpose intended.
3. Security, thermal control, minimum privacy, light and ventilation and insect protection.

The neighbourhoods should not be considered and planned in isolation of the future expansion of the cities/towns but must be integrated in the overall planning and development programmes.



Private enterprise, in partnership with Local Authorities, para-statal organisations, with public control (by Government through the National Housing Authority-Zambia) in the matter of zoning, planning and building regulations can create an economic atmosphere where low-cost housing would be possible, which would be within the means of most of the medium and some low-income groups. This would give Local Authorities the chance to use their limited resources on houses for the low-income group and provide better services to the public.

A.        PROJECTS CARRIED OUT IN SOME THIRD WORLD  
            (DEVELOPING) COUNTRIES.

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The problems of shanty townships in Africa contain many elements comparable to those of the squatter problems prevailing in other Third World (Developing) countries.

It is observed that if the established authority has a moral and social philosophy of providing three basic needs for the rural-urban migrants, namely work, shelter and a welcome into the community, the migrants can become a blessing to the community as a whole and not a liability. This requires a positive investment programme by the authorities to reduce the time-lag between the time of arrival of the newcomers and the time they will begin to pay taxes to the community treasury. This provides for early assimilation of the newcomers into the community. This should be part of the National Development Plan of the country.

The above method has been tried by the Government of Israel.<sup>8</sup> It is claimed to have worked successfully and to the advantage of the Government of Israel and the in-migrants. But it should be noted that the majority if not all of the immigrants of Israel are not necessarily the rural type and not very poor as compared to the rural-urban migrants of Africa. Actually, almost all immigrants of Israel are middle class from urban centres of their former countries. So this method is not suitable to Africa and thus

cannot work successfully and furthermore Israel is rich compared to some African countries.

It is said that the Authorities of Delhi have minimized the problems of squatters in Old Delhi by an urbanisation programme compiled by the Delhi Development Authority and the municipal corporations<sup>8</sup>. The authorities of Delhi have also recognized that a slum-squatter clearance in itself without a continuing follow up support programme for training and assisting the displaced families towards an improved way of life is negative in its approach, since it only shifts the problem to another location and another time. Such an urbanisation programme involves the relocation of some squatter families as part of the urban renewal programme which is an integral part of the general redevelopment plan of the city. However, old Delhi is a very old city and its dilapidated position necessitated the redevelopment plan and to obtain the maximum out of this plan, it was right and economically justifiable to include the slum-squatter areas. But most cities in Africa are very young and most of their buildings are less than fifty years old. It is doubtful if this approach to the shanty (squatter) problem would suit African cities and their shanty problems. This programme calls for the co-ordination of governmental and non-governmental resources which is not possible at present in most African countries where private enterprises are mostly in foreign hands.

The Government of Turkey has embarked on long range national housing programme to minimize the problem of urban squatters.<sup>8</sup> This programme proposes to improve those squatter compounds which can be improved, some with grants and some on a public loan basis, and ultimately to provide the occupants with the title to the land; for those areas which are beyond rehabilitation, the government intends to reaccommodate the squatter families in social housing schemes. The results and success of this programme are awaited.

The Government of Hong Kong has dealt with the squatter problem with much success through an effective low-cost high density housing programme.<sup>8</sup> A Department of Resettlement was created in 1953 to plan and organise the programme. The Department of Public Works was entrusted with the design and construction of apartments. With the simple repetitive design, the Public Works Department was able to complete each 420 room resettlement building in eight weeks. This led to the inauguration of the Hong Kong Housing Authority in 1954. The Government of Hong Kong granted an initial loan which has since been converted into a revolving fund. The land for the housing projects was provided by the government and subsidized to half its commercial value and the loans were made available forty (40) years' capitalization (amortization) at 3½ per cent interest and this meant the rental for an apartment was reduced to the minimum economic level. By 1965 the Authority had accommodated a total of 600,000 former urban

squatters in housing units, mostly apartments. Each project was provided with high schools, primary schools, communal rooms and halls, shopping and commercial centres, post offices, and play areas. Each apartment was self-contained. Management took responsibility for maintenance of property, refuse collection, cleanliness of grounds, car parks, rent collection, and renting out and organizing the use of communal spaces. The Authorities discovered that many of the squatter families were industrious and could afford to pay rent for a larger and better apartment, if such were available, and also that there was little or no delinquency in the payments of rent and that the occupants assisted in the maintenance of the building.

This method seems feasible and has social philosophy and consideration in it. Whether this method would work and be accepted in most African countries would depend on the economic development of each country and the attitudes of its political leaders, social scientists, economists, planners and the general public.

B.           LOW-COST HOUSING CONSTRUCTION.

The housing problem itself is but a part of the much wider question of social and economic organisation and its local aspect forms only one of many problems connected with a country or its cities.

It is true and fair to say that technology imported from developed countries and directly applied to the problems of African countries as well as other developing countries, does not necessarily fit and solve the problems. African countries (and other developing countries) are forced to some extent to grow with an alien technology in some respects directly contrary to their own needs and conditions. The application of costly modern technology in most cases where it is not needed and justifiable is partially to blame for the failure of most African countries to provide suitable low-cost dwellings to the lot of their people, even when their economies are growing satisfactorily. The new imported technology automatically replaces the local one which might in fact be very cheap and more suited to the country.

Attempts by expatriate (foreign) architects to design houses and housing environments for alien cultures of another class or country lead to a paradoxical rejection of sensitive schemes by the recipients. Many a European architect

takes a look at the scene, analyses spatial requirements, studies servicing costs etc., and proposes housing which looks something like an urban environment of European cities. It is usually a variant of the courtyard or terrace house theme. These designs are alien as they are just carbon copies of the designs used in Europe with the minimum modifications. But the clients - usually a local council, do not like it. They detest it, and in most cases insist that they want proper houses, ones that someone can walk around. Eventually this leads to loss of confidence by the European architects and they wonder whether their rational analysis of housing needs was really right, and whether the councillors are being a little wiser than they appeared.

This is due to the fact that European concepts of privacy (including community and privacy's percepts) are irrelevant in Africa - especially in black Africa. The African way of life is still traditional - that based on neighbourhood or communal living. Although many people are living in cities and towns, not many are trully urbanised. The three basic ingredients of village (communal) life still prevail and these are:-

1. External society - in which there is a sense of total community, in which everyone likes to be seen, and in which the physical dimensions are limited by the distance a voice will carry without strain (about 40 to 50 metres).

2. Internal intimacy - inside the hut (house) one is immediately in an intimate situation because of its dimensions. Huts (or houses in towns) are normally used at night.
3. Privacy - privacy (external) is not provided for in the village or city township because traditional culture and belief is that unnecessary privacy breeds selfishness, grudge, criminal and bad practices and these are contrary to the philosophy of communal living.

The space around the house is the village (compound). Other houses in sight, and in shouting distance, constitute the remainder of the village (township or suburb). The back door is the centre of activity, the place where women sit while preparing meals or washing clothes or just passing time, and thus the back door is the nodal point. Far from requiring privacy, the women in these positions depend on external society for mental health - which could be affected by continued solitary resulting from unnecessary privacy. For men it is different. As in the village, they spend most of their time away - doing their work. In the evenings and at the weekends they play a role different from their wives, and may even have completely different friends. They may be seen sitting at the front doors, not in ones or twos, but in larger groups, discussing the matters of the day. The house is also maintained like a hut: the space around it is swept daily, and the ground made hard



so that one may sit down on it without getting dirty.

Thus, the grid-iron layout bears certain points of reference to traditional life and the thought process. Indeed, that which is anathema to those who are looking for a locally derived solution may well perform better in this respect than the "progressive" solutions.

The expatriate or European architects fail to realize and evaluate the importance of these factors. As a result of familiarity with the scene derived from biased and irrelevant textbooks from schools of tropical architecture, school geography, the biased and sensational information and news from the media and so on, the newcomer to Africa is less interested in finding out more about the scene for himself. Therefore, it does not take him long unconsciously to equate the fact that because the operation of many physical and social aspects of life of his fellow minority western-educated African workers are closely related to their European counterparts, so are the aspects about which he knows nothing. And this is his undoing. Thus it is that the keen, highly motivated (especially young) men develop models that are meaningless, Africanised versions of living patterns that are entirely European in their culture values. The public, ill-equipped to be patrons or critics of architecture, then suffer from one of the more unexpected forms of neo-colonialism. The councillors who sometimes reject the houses are among the few with the cou-

rage of their convictions. But for a European architect to tell the difference between sense and nonsense in convictions is difficult, and it is in their capacity for a meaningful dialogue that the young men are weakest. Such a dialogue requires, in the view of these young men, a type of humility and sensitivity which these European young men would not and cannot stand.

Thus, this confirms the simple fact that what is most needed and overdue is the development of construction and improvement of local construction technology and design of houses by indigenous young men in the profession suitable for local needs and conditions. Modern Western technology is generally labour-saving orientated but this does not necessarily mean that it is cheaper, it might be cheaper in developed countries where wages are very high but not in most African countries. Most of the present house designs are far removed from the fundamental need to provide shelter to low-income and medium-income groups at rents and/or prices within earning capacity and most of them are designed to provide lavish expensive and more often unused spaces for those in the high-income groups without paying due regard to the low-income groups. It is no good and of very little practical value importing or producing a new house design without relation to the customs and ambitions of the people who will use them. A simple or native design would not and/or does not mean backwardness or retardation in advancement, since it may possess a genius for invention, innovation and building technology that leaves the house designs and building

TABLE No. 14 – NUMBER OF HOUSES IN URBAN LOCAL AUTHORITY LOW-COST HOUSING AREAS – AS AT 31ST DECEMBER, 1971 (ZAMBIA)

Local Authority	Local Authority Owned Houses			Government Owned Houses			Owner Occupied Houses			Private Employer Owned Houses			Total by Category			Grand Total
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	
Chingola	6,012	—	138	1	—	—	21	—	127	10,146	1,611	—	16,186	1,611	265	18,056
Chipata	1,668	33	—	—	—	—	—	—	—	—	—	—	1,668	3	—	1,671
Choma	635	444	4	40	—	—	—	—	—	2	—	—	677	444	4	1,125
Kabwe	3,302	—	—	82	—	—	—	—	—	2,616	—	—	6,000	—	—	6,000
Kafue	440	—	—	40	—	—	—	—	—	—	—	—	480	—	—	480
Kalomo	391	—	—	—	—	—	—	—	—	—	—	—	391	—	—	391
Kasania	928	—	40	520	—	—	217	—	—	179	—	—	1,844	—	40	1,884
Litwe	13,723	219	—	568	76	—	17	316	203	4,864	5,522	108	19,272	6,133	311	25,716
Livingstone	4,668	104	—	79	—	—	—	—	—	551	—	—	5,298	104	—	5,402
Luanshya	3,983	1	—	219	—	—	67	29	3	42	—	—	4,311	31	3	4,345
Lusaka	13,260	1,099	—	220	494	—	—	—	—	172	298	—	13,652	1,891	—	15,543
Mansa	268	232	—	—	—	—	—	—	—	—	—	—	268	232	—	500
Mazabuka	1,043	—	—	—	—	—	—	—	—	525	—	—	1,568	—	—	1,568
Mbala	472	—	—	—	—	—	453	453	—	—	—	—	925	—	—	925
Mongu	75	—	—	610	131	—	9	—	—	98	—	—	792	131	—	923
Mufulira	3,782	649	20	..	..	..	..	..	..	..	..	..	3,782	649	20	4,451
Monze	280	156	—	—	—	—	—	—	—	96	—	—	376	156	—	532
Ndola	15,787	247	—	134	—	—	—	—	—	591	—	—	16,512	247	—	16,759
Pemba	92	—	—	—	—	—	—	—	—	—	—	—	92	—	—	92
TOTALS	70,809	3,155	202	2,513	701	—	884	345	333	19,882	7,431	108	94,088	11,632	643	106,363

A = Permanent Dwellings

B = Semi-Permanent Dwellings

C = Temporary Dwellings

— = Nil

.. = Not Known

NOTE: Large number of private employer owned houses on the copperbelt are owned by the copper mining companies.

TABLE NO. 15 – AMENITIES PROVIDED IN LOW-COST HOUSING AREAS – AS AT 31ST DECEMBER, 1971 (ZAMBIA)

Council	Total Housing Stock	Water			Toilet			Electricity			Percentages		
		Inside House	Within (100 yards) 91.4 m	Other (1)	Individual	Communal	Other (2)	Full Electricity (3)	Light Only	None	With Water	With Toilet	With Electrici
Chingola	6,150	1,158	2,009	2,983	5,826	11	313	295	1,623	3,732	51.5	94.9	39.3
Chipata	1,671	264	1,407	—	264	—	1,407	—	240	1,431	100.0	15.8	14.8
Choma	1,083	199	877	7	149	—	934	5	155	923	99.4	13.8	14.8
Kabwe	3,302	730	2,533	39	1,992	14	1,296	642	2,554	106	98.8	60.8	96.8
Kafue	440	56	384	—	56	28	356	56	—	384	100.0	19.1	12.7
Kalomo	391	..	..	..	..	..	..	..	..	..	..	..	..
Kasama	968	171	644	153	171	—	797	..	527	441	84.2	17.7	54.4
Litwe	13,942	3,429	3,513	7,000	1,538	403	12,001	145	6,737	7,060	49.8	13.9	49.4
Livingstone	4,772	2,079	230	2,463	2,163	230	2,379	1,934	417	2,421	51.6	50.2	49.3
Luanshya	3,985	1,987	1,996	2	1,987	—	1,998	276	665	3,044	99.5	49.9	23.6
Lusaka	14,359	9,845	2,722	1,792	6,824	48	7,487	6,851	128	7,380	87.5	47.9	48.6
Mansa	500	123	377	—	500	—	—	41	378	81	100.0	100.0	83.8
Mazabuka	1,043	104	939	—	104	—	939	—	128	915	100.0	10.0	12.3
Mbala	472	56	416	—	40	53	379	—	422	50	100.0	19.7	89.4
Mongu	75	—	75	—	—	75	—	—	75	—	100.0	100.0	100.0
Monze	436	25	411	—	—	411	25	—	193	243	100.0	94.0	44.3
Mufulira	4,451	704	2,757	990	3,241	—	1,210	—	438	4,013	77.8	72.8	9.8
Ndola	16,034	4,573	10,431	1,030	12,740	829	2,465	— (4)	4,315	11,719 (4)	93.6	84.6	26.9
Pemba	92	19	73	—	19	—	73	—	19	73	100.0	20.7	20.7
TOTALS	74,166	25,522	31,794	16,459	37,614	2,102	34,059	10,745	19,014	44,016	N/A	N/A	N/A
As Percentage of Total	100.0	34.6	43.1	22.3	51.0	2.8	46.2	14.2	25.8	59.7	77.7	79.5	40.3

## NOTES:

(1) House with water further than 91.4 metres (100 yards).

(2) e.g. pit latrines, aquaprivy, buckets, etc.

(3) Electric light plus cooker.

(4) Cases of under- or over-statement.

.. = Not available.

— = Nil.

N/A = Not Applicable

TABLE NO. 16 – LOW-COST HOUSING STOCK AND DEMAND AS AT 31ST DECEMBER, 1971 (ZAMBIA)

Council	Housing Stock			Housing Demand			Total Housing Requirement		
	1970	1971	% Change	1970	1971	% Change	1970	1971	% Change
Chingola	6,531	6,150	(5.83)	5,141	7,178	39.62	11,672	13,328	14.19
Chipata	1,671	1,671	0.00	1,541	1,720	11.62	3,212	3,391	5.57
Choma	1,034	1,083	4.74	471	486	3.18	1,505	1,569	4.25
Kabwe*	2,882	3,302	14.57	1,821	2,398	31.69	4,703	5,700	21.20
Kalomo	270	391	44.81	100*	100*	0.00	370	491	32.70
Kasama	952	968	1.68	316†	754†	138.61	1,268	1,722	35.80
Kitwe	13,726	13,942	1.57	21,479	24,359	13.41	35,205	38,301	8.79
Livingstone	4,645	4,772	2.73	6,059	6,059*	0.00	10,704	10,831	1.19
Luanshya	4,005	3,985	(0.50)	3,970	4,699	18.36	7,975	8,684	8.89
Lusaka	13,532	14,359	6.11	21,454	26,411	23.11	34,986	40,770	16.53
Mansa	337	500	48.37	707	692	(2.13)	1,044	1,192	14.18
Mazabuka	1,057	1,043	1.32	362†	985*	172.10	1,419	2,028	42.92
Mbala	472	472	0.00	433†	895†	106.70	905	1,367	51.05
Mongu	75	75	0.00	72	98	36.11	147	173	17.69
Monze	436	436	0.00	145	276	90.34	581	712	22.55
Mufulira	4,453	4,451	0.04	6,741	7,389	9.61	11,194	11,840	5.77
Ndola	15,113	16,034	6.09	15,078	16,560	9.83	30,191	32,594	7.96
Pemba	92	92	0.00	81*	40	50.62	173	132	(23.70)
Kafue*	440	440	0.00	1,117	768	(31.24)	1,557	1,808	(22.41)
TOTALS	71,723	74,166	3.40	87,088	101,867	16.97	158,811	176,033	10.84

\* Estimated.

† Possible cases of under- or over-statement.

technology imported from 'developed' countries far behind. The African traditional architecture is full of life, intelligence, economy, constructiveness and effectiveness but simple. The essence is to serve a need and everything incorporated in the design has a relationship to the functional need. The recognition of the usefulness of local building design and forms-especially of domestic buildings, which take into consideration man's position in and relationship to the society, customs and culture, resources, the environment and climate of the area and/or country concerned would go a long way towards producing a real low-cost house that would meet the needs of many of the people. National Standard Designs should involve (develop) from the appropriate selection and application of local designs, methods, materials and relevance to the indigenes needs.

The Western-trained African architects and civil engineers design and produce mock-European suburban houses which are as uncomfortable as they are inappropriate. The architecture and building (construction) technologies of a region or country should reflect the local climate, environment, materials and the living habits of the people.

Whether in short or long-term housing policies, certain factors - the structure of the economy of the country, the difficulty of providing credit facilities to low-income groups for housing, the psychology of the people - demand that a thorough investigation be made as to how the human potential revealed in shanty and site-and-service housing

TABLE No.17 - SUMMARY OF MONTHLY POSITIONS OF HOUSING DEMAND  
AS AT - 30th NOVEMBER, 1974

LOCAL AUTHORITY	H O U S I N G   D E M A N D											
	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
CHINGOLA	10,939	11,054	1,140	11,245	11,372	11,453	1,542	11,658	11,755	11,848	11,133	
CHIPATA	2,296	2,334	2,360	2,380	2,392	2,402	2,416	2,430	2,441	2,457	2,454	
CHOMA	697	697	697	710	727	736	730	767	809	841	868	
KABWE	2,478	2,552	2,533	2,563	2,583	2,595	2,649	2,718	2,783	2,783	2,783	
KAFUE	578	583	582	586	586	590	597	598	600	605	612	
KALOMO	80	80	80	80	80	81	81	82	82	83	84	
KASAMA	331	349	380	392	399	409	428	439	449	470	478	
KITWE	27,883	27,875	28,012	28,036	28,090	28,141	28,151	28,171	28,194	28,213	28,213	
LIVERINGSTONE	4,998	5,000	5,005	5,007	5,023	5,024	5,028	5,039	5,033	5,033	5,033	
LUANSHYA	5,997	6,009	6,060	6,109	6,175	6,235	6,271	6,309	6,345	6,379	6,418	
LUSAKA	27,020	27,080	27,231	27,452	27,452	27,452	27,559	27,718	27,863	27,863	27,863	
MANSA	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	
MAZABUKA	712	713	712	722	729	738	746	750	751	751	751	
MBALA	2,118	2,343	2,585	2,943	3,018	3,203	3,342	3,642	3,642	3,642	3,642	
MONGU	597	597	597	597	597	597	597	597	597	597	597	
MONZE	669	669	586	586	592	603	619	636	651	654	654	
MUFULIRA	5,669	5,686	5,728	5,756	5,771	5,806	5,843	5,857	5,872	5,885	5,915	
NDOLA	-	-	-	-	-	-	-	-	-	-	-	
PEMBA	121	121	121	121	121	121	121	121	121	121	121	
TOTAL	94,850	95,379	96,058	96,952	97,374	97,853	98,390	99,199	99,658	99,892	99,286	

construction, the desire and will to improve their standard of living and the capital in private savings can be channelled into schemes that will provide a healthier environment and a more efficient use of the limited financial resources than at present. The individual houses in shanty and site-and-service townships, seen within their own physical boundaries and against their occupants' financial potentialities, are remarkable achievements of courage, good sense and independent response to the housing problem.

Architects, civil engineers, building economists and planners could perhaps accomplish a very useful task in finding the technical solutions by which this blending of shanty and site-and-service resident's action and private initiative in housing can be realized for various levels of urban densities. The progress of organisation in house building should not waste our indigenuous and/or national ability to create our own house designs and environment, but use it.



## C. SITE AND SERVICE SCHEMES

The site and service scheme if properly organized, planned, managed and co-ordinated can go a long way towards minimizing and/or solving the shanty problems and acute accommodation shortage. This would require committees to be formed to co-ordinate the scheme. In the case of Zambia there should be a co-ordinating committee consisting of members from the Public Works Department, National Housing Authority, Ministry of Local Government and Housing, Department of Labour and Social Services, Department of Country and Town Planning and charitable organisations. This committee should be a policy-making and Planning board. It should use to the best interest of the state the services and professional know-how at its disposal of its diverse members. It should be charged with the task of drawing up a comprehensive urban planning process and a system of city administration which would be an acceptable compromise between the rights of existing established citizens and those of the new site-and-service townships. There should also be sub-committees each responsible for design of buildings and roads, planning the new townships to be created, social welfare services which should include education, vocation training and recreation, and construction supervision which should have full-time qualified building technologists (not just carpenters, bricklayers, etc) from and on the payroll of the Public Works Department, National Housing Authority

and city council.

The design of these new site and service townships should be based on and incorporate modern and the latest town design principles and techniques. They should be designed as townships of the future so that they do not become obsolete within say fifteen (15) years of their creation.

Applications for plots in these townships should be scrutinized thoroughly to ensure that those who are allocated the plots will build the houses according to the design and specification and will comply with all relevant regulations and ordinances. It is better, cheaper and beneficial in the long run, to approve a limited (controlled) number of applications which satisfy the conditions than to have many approved whose applicants might not or never finish the construction of the units and thus destroy the objective of the scheme and affect the commercial and environmental values of well constructed units (houses). This would also avoid the creation of "legalized" shanty townships which the site and service scheme would be supposed to replace.

The theme of site and service is self-reliance. However, the philosophy of self-reliance seems to be mis-

applied and probably misunderstood by many people in some African countries. Self-reliance refers to a people as a whole, a nation who mobilises its own resources in groups which can be companies, co-operatives and any other organisation to build houses, dig wells, farm, educate its people and do all sorts of things without waiting for aids. Self-confidence is a prerequisite for self-reliance and self-reliance demands maximum effort from the entire population of the community or country. It is unfair and unrealistic to expect only a small section (proportion) of the nation's population (mostly those unfortunate) to apply self-reliance alone, when the notion of individual self-reliance is non-existent for high and some medium income urbanites. It is also not fair and true to say that those people living in shanty townships deserve the conditions under which they live because they have failed to make the grade in a competitive society. They have tried and are still trying hard to improve themselves but the forces working against them are too great.

In Zambia the Government introduced site and service schemes. They were introduced as a result of a Government housing policy review in 1965. The theme and emphasis of the policy review was self-help housing construction. The aim was to persuade councils to solve their housing problems by means of self-help schemes. The councils were to provide fully serviced and basic (minimum services) site and service

land for plots to be leased to people (mostly medium and low-income groups) for self-help housing construction. A basic plot has a shared water supply and road system, the participants being required to dig their own latrines. These plots are estimated to cost about K180.00 (\$A190.00) per unit. A fully serviced (normal) site and service plot has individual water supply, sewage disposal and ablution facilities. These plots are estimated to cost about K800.00 (\$A890.00) per unit. The basic type plot is not favoured by many councils.

TABLE NO.18 PROGRESS ON SITE AND SERVICE SCHEMES  
PLANNED TO 31st DECEMBER, 1971  
(CITY AND MUNICIPAL COUNCIL ONLY)

Local Authority	Number of Plots Planned	Number Allocated	Allocated as Percentage of Total Planned	Number Completed & Occupied	Completed Percentage of Allocated
Chingola	1,693	731	42.2	489	66.9
Kabwe	571	463	81.1	135	29.2
Kitwe (2)	945	945	100.0	618	65.4
Livingstone	249	189	75.9	116	61.4
Luanshya	744	183	24.6	168	91.8
Lusaka	7,806	4,792	61.4	2,977	62.1
Mufulira (2)	650	250	38.5	183	73.2
Ndola (2)	4,640	3,228	69.6	2,826	87.5
TOTALS	17,298	10,781	62.3	7,612	70.6

Notes: (1) Where 1971 figures are not available 1970 figures are used.

(2) Still not able to reconcile figures from Ndola City Council and in all these cases 1970 figures are higher than those for 1971.

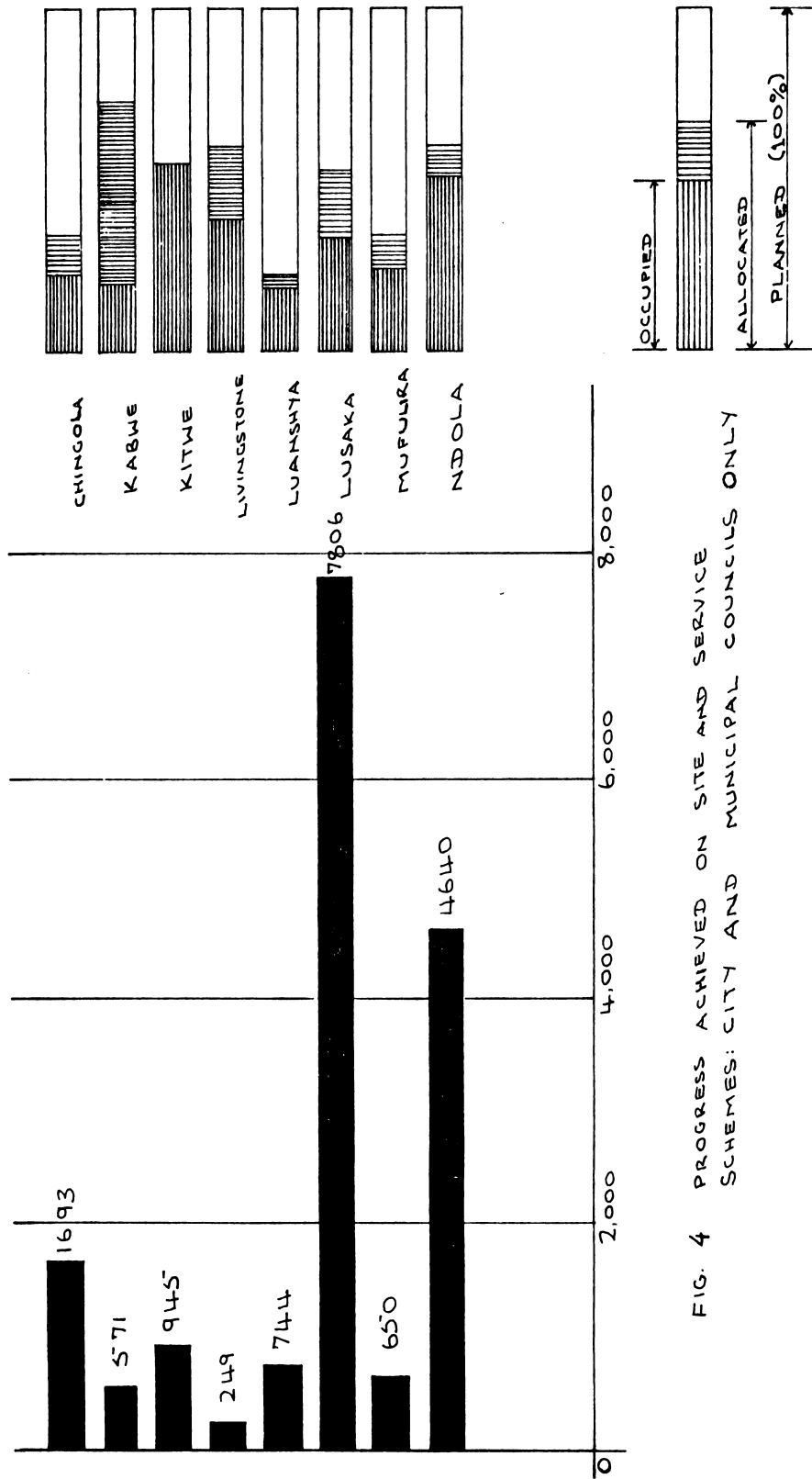


FIG. 4 PROGRESS ACHIEVED ON SITE AND SERVICE SCHEMES: CITY AND MUNICIPAL COUNCILS ONLY

The rate of house building, which unfortunately has resulted in uncontrolled housing development, is very fast and from the participant's point of view means great achievement and success. Lusaka, the capital city of Zambia, with the highest rate of urban growth of about 10% (15,000 people) per annum has four such sites with total population of 36,000 (table No. 11) as at March, 1975. There is one in Kabwe, Luahshya, Ndola, Mufulira, Chingola and two in Kitwe. The objective is to provide houses at a rate which will keep pace with the increase in demand for new housing resulting from rapid urbanisation. It is argued and perhaps believed by those people concerned with the schemes that this is the only means of accommodating the majority of the fast growing population of Zambia's major urban areas.

The Government through city, municipal and township councils provide the necessary materials such as cement, corrugated asbestos cement roof sheets, concrete blocks, standard metal door and window frames, doors etc. at subsidised prices and loan facilities. The councils also provide assistance by providing supervisors to ensure or maintain that the houses are built according to design and that minimum standards are complied with. Lusaka City Council has three house design types from which the prospective house builder has to choose. However, some of these site and service townships are badly designed and planned, especially those in Lusaka - Kaunda Square, Chunga, Mutendere and Marapodi-Mandevu. The houses are clustered too close to each other that there is hardly any space

TABLE No. 19 Summary of Monthly Positions of Site and Service Schemes as at 30th November, 1974

Local Authority	Total Planned	Total Serviced	Total Allocation	Under Construction	Completed & Occupied
Chingola	1,692	1,589	1,586	346	1,172
Chipata	83	83	81	19	62
Choma	538	388	388	185	95
Kabwe (4)	1,990	567	558	172	386
Kafue	1,267	481	331	74	256
Kalomo	50	50	31	--	31
Kasama	204	204	82	27	55
Kitwe (5)	4,153	4,153	3,810	2,873	939
Livingstone (4)	649	295	293	109	180
Luanshya	544	344	337	63	263
Lusaka (4)	8,687	8,617	7,857	2,978	4,019
Mansa (1)	210	210	81	6	28
Mazabuka (4)	446	446	297	43	242
Mbala (3)	100	100	18	N/K	N/K
Mongu (2)	529	529	382	23	358
Monze (5)	179	62	62	6	39
Mufulira	250	250	248	13	235
Ndola	12,935	6,843	6,274	685	5,146
Pemba	12	12	6	--	6
TOTALS	34,518	25,223	22,726	7,622	13,512

Notes: (1) January, 1974 figures  
(2) May, 1974 figures  
(3) August, 1974 figures  
(4) September, 1974 figures  
(5) October, 1974 figures  
N/K Not Known  
-- Nil

between the adjacent houses, with barely 1.2 m (4'0") wide space separating the outer walls of the houses. There is hardly any space (area) for outdoor activities, laundry drying space just to mention a few, and yet in Zambia most home activities are done outside and people spend most of the day outdoors because of the hot dry weather. The traditional patterns of living and doing things of the people are not taken into consideration.

Applications for plots were and are not scrutinized thoroughly as suggested earlier in this dissertation to ensure that certain requirements would be met and regulations and ordinances complied with, and most important of all, that an applicant would be in a position to complete construction of the house according to design and in a certain (specified) period of time. Hence, many of the applicants who were allocated plots have not finished constructing the house after two years or more from the time of taking possession of the plot. Some have just managed to build one room of the house and others half the house, put corrugated roofing sheets over the brick and concrete block walls with a few rafters or just ceiling joists. They have been using these partially constructed houses for two years or so and some of these plot holders do not know when they are going to complete the house and have no hope of completing the house. They will never relinquish their plots unless by forceful means by city municipal or local authority which would require legal backing. This



legal backing would not be easy coming as the scheme was introduced by the Government and it is expected that plot holders have security of tenure and this would involve social and political complications.

It seems and it is fair to say that the three house designs were too big and expensive for most of the type of prospective house owner (builder) intended for. The houses were to be built in one stage once started. They were not designed to be built in stages and the prospective builder was not given the freedom to decide how he was going to phase the construction of the house according to his financial capability. There was no BASIC UNIT which would have been a MUST for every applicant to build and prove that he was financially capable of meeting the cost of the basic unit. This financial capability to meet the cost of the basic unit would have been one of the major criteria for allocating plots.

What is needed is a BASIC UNIT (figure 5). The authorities would calculate the quantities of all materials needed for the construction of the basic unit and price these and arrive at the cost of the basic unit. This cost of basic unit would be revised every six or twelve months depending on the change in the price of materials, and wages of operatives in the building industry. Any applicant would have to satisfy the authorities that he has the

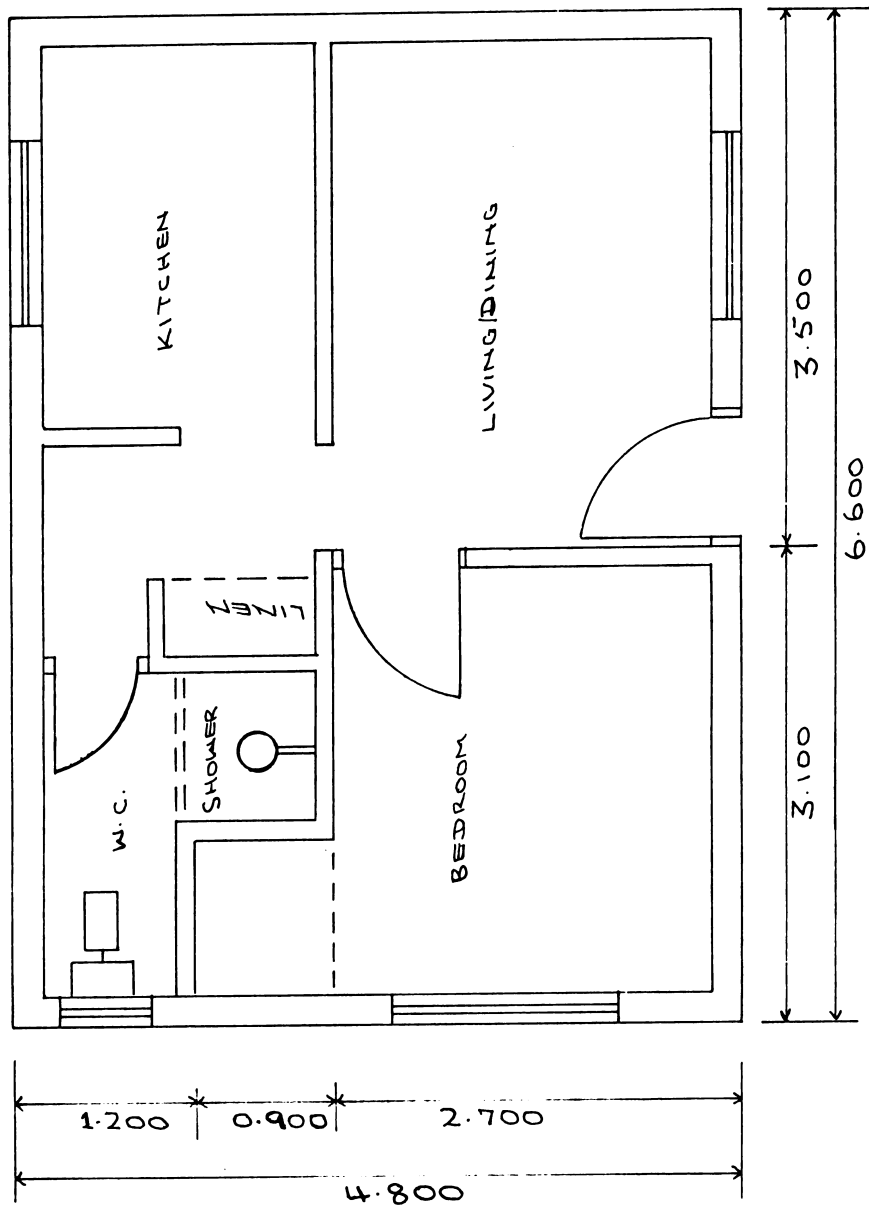


FIG. 5' PROPOSED BASIC UNIT

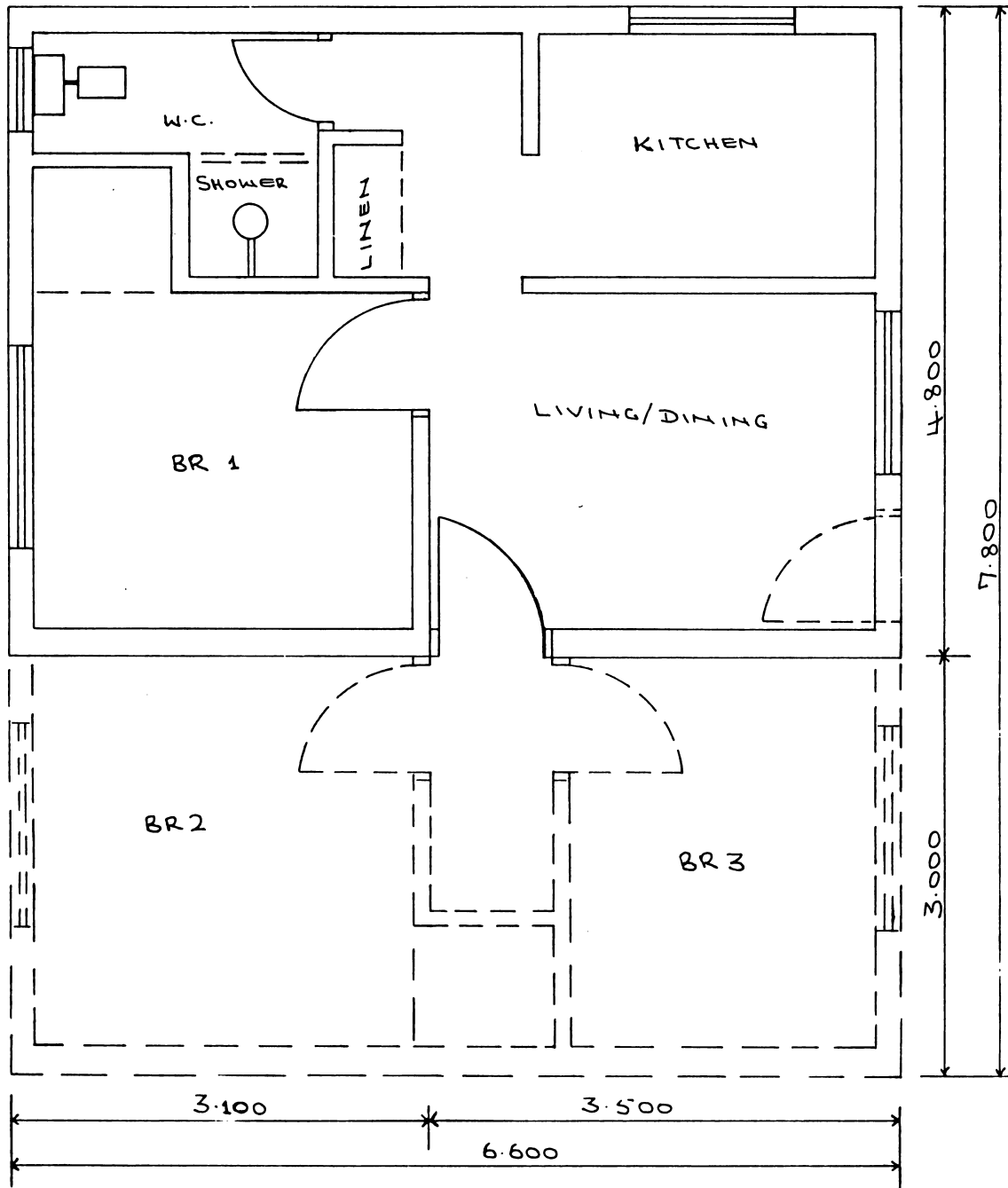


FIG.6 PROPOSED BASIC UNIT WITH DOTTED LINES  
SHOWING FUTURE EXTENSIONS

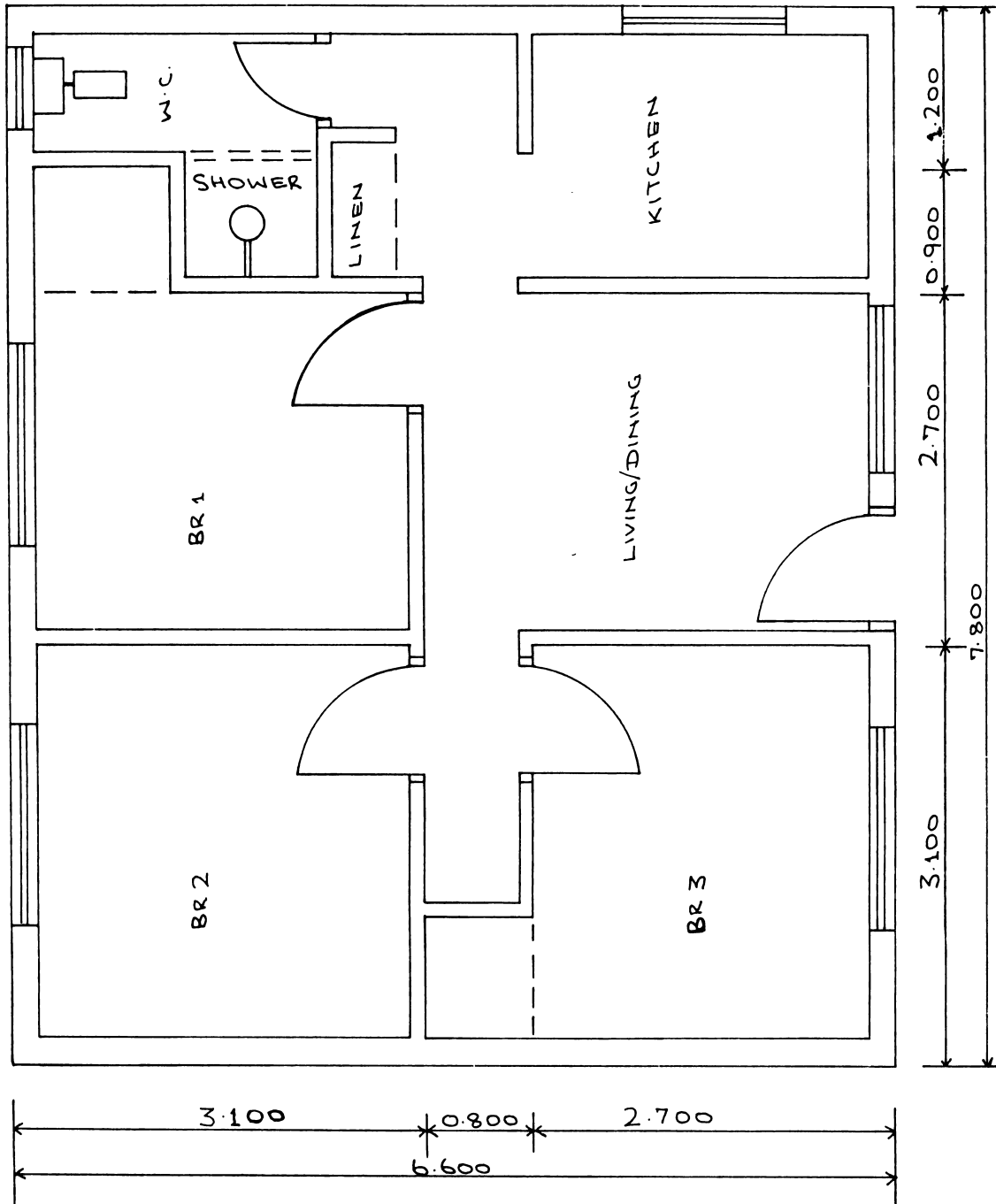


FIG. 7 PROPOSED BASIC UNIT INCORPORATING EXTENSIONS

finance or means of raising and/or securing a loan to meet the cost of the basic unit. The Basic unit has future extensions incorporated in the design. The prospective house builder would have to decide at the time of setting out this basic unit, the direction or section (side) of his intended future extensions. This would ensure that there is provision and safety allowances in the foundation, floor slab and walls of the Basic Unit and the roof to be reversed or re-positioned to suit this future extension. Hollow (cavity) pillars or piers would be incorporated at the corners of the side where future extensions would take place. This would ensure that only the extended brick or block wall of the pillar or pier would be knocked out, leaving the internal (inner) wall intact and thus allowing normal activities to continue in the room while extension work proceeds outside. The Basic unit can be extended only on three sides (elevations) and not on the side containing kitchen, W.C. and shower/bath rooms. This should be so to avoid additional length of service pipes and cost of encasing pipes in concrete under building.

The site and service townships mentioned earlier have resulted into or turned to be "legalized and planned" slums or shantys. It is hoped that the Government and National Housing Authority will review, analyse problems and mistakes, and revise the plans, designs and conditions

before more site and service schemes are embarked on.  
It is not the site and service scheme concept which is wrong but the approach to it. The main reason for this being the lack of right and qualified people to plan, design, manage and co-ordinate the schemes.

D.     MODERN AGRARIAN-INDUSTRIAL (VILLAGE GROUPING)  
          COMMUNITIES

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One of the few possible ways of minimizing the grave problems of shantys lies in the removal of the causes of the rural-urban migration as well as the effect of the internal workings of the urban economic structure and the national socio-economic system.

To reduce and discourage rural-urban migration it is suggested that modern Agrarian-Industrial communities (village centres) with all the essential local urban services should be created. They would be counter-magnets of the cities and big towns and absorb some of the rural-urban migration flow, hence retaining a high factor of population on the land and extending urbanisation into rural areas. These centres or towns would have communal facilities such as health services, schools, shops and markets etc. Such schemes are feasible in Africa because urbanisation is still on a lower scale and there also exists in most African countries, large tracts of land with good fertile soil which if properly farmed and developed would provide the large cities and towns with the food they need which at present is being imported. It would be necessary to provide some training in industrial crafts and farming methods in order to equip the residents for self-reliance projects and to prepare them mentally, technically and socially for their eventual transition to the urban social and economic system.

This would be more attractive and popular with many rural people than the present Rural Development and Agriculture Policies of Governments of many African countries. These centres might be opposed at first by village headmen for their own personal selfish reasons but are likely to agree when they are made to understand the benefits and improvements that would come to their people. Such towns known as "ujamaa villages" have been built (on trial basis) and are being encouraged in Tanzania.

In Zambia, members of the National Youth Service who undergo training in industrial crafts, farming methods and poultry farming could be utilized successfully in these village centres. It is right and proper that these members should be utilized for the benefit and improvement of the people to justify the public money spent on their training, and running and maintaining the organisation. The residents of these centres would engage in brick making, poultry farming and other light industries on co-operative societies basis. The bricks could be used to build their houses under the supervision of the members of the National Youth Service and sell some of their bricks to nearby towns and other prospective builders. Some Zambian soils are among the most valuable in Africa and are, therefore, capable of supporting the rural population and feeding the urban population and even export to other countries. The rural people leave this wealth potential for cities - attracted by the urban affluence.



## PART FOUR

### SUGGESTED METHODS OF RAISING HOUSING DEVELOPMENT CAPITAL

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The urbanisation process of Africa is different from that of Europe and America, in that population growth trend of the cities in Africa are for the most part in excess of their economic growth. Also most African cities have emerged from the colonization policy of foreign nations, a policy which was conceived to provide raw materials for the future expansion of the industrailized ('Machine') economy of Europe, and most African nations (countries) have not yet broken away from this bondage. Their economies are tied to, dependent on the economies of Europe and America and controlled by entrepreneurs in these countries. At the time of attainment of Independence, there were no well-established governmental adminstrative structures, hardly enough educated and trained manpower and no accumulated wealth and capital resources. International and multi-national organisations have worsened the position by their ability to control and determine the economic growth of most African countries. This can best be illustrated by the following facts. The annual revenue of General Motors exceeds the combined Gross National Products of all black African countries (states). The

turnover of Unilever each year is greater than the GNP of Negeria, which has a population of some 60 million and with her oil production has one of the strongest and expanding economies in black Africa. These facts demonstrate the magnitude of the forces which confront any African country which tries to control its own economy and would justify some recommendations made later.

There still exists even after ten years of independence the idea among many indigenous educated people which emerged immediately after independence in many African countries that, what matters in joining a political party or obtaining a civil service post is to plunder public assets, and as long as the loot lasts, one should not make unnecessary noise. This combined with the tendency to grasp at the expense of the masses and the nation puts most African countries at the mercy of notorious and unscrupulous foreign enterprises and makes it very difficult for those dedicated and foresighted citizens to plan meaningful and beneficial projects (housing) which would bring real progress to the people. Most development programmes are not necessarily aimed at raising the level of income of the people or lowering the cost of living to a manageable level to enable the masses to enjoy and use the real cash income on goods that contribute to the raising of their standard of living. Top level policy makers and planners seem not to appreciate or understand what economic development means

or implies and those who do understand seem to fail badly in gearing policies towards the attainment of real economic development. The setting of wrong priorities is due to sheer neglect or misallocation of scarce funds to inappropriate programmes which bring benefits to few people. Development is a multi-dimensional process of judicious utilisation of available resources - human, material and technical, equitably distributed among all the people in the community; the elevation of the people in the nation so that every citizen may enjoy at least a minimum of the good life - which most shanty dwellers miss. Therefore, programmes should aim at the improvement of the quality of life of the masses of people in any community, a quality which should include health and moral uplift of the people. This is best measured or indicated by decent sleeping and living places (houses) which could be privately or publically (state) owned. Most African countries are regarded poor because their multiple resources are not used judiciously for the elevation of their people's betterment.

#### A. INVESTMENT BY PARA-STATAL<sup>1</sup> AND PRIVATE ENTERPRISES

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There is acute accommodation shortage in most African cities and big towns because heavier responsibility is placed on governments, local and national housing authorities to provide accommodation for the urban residents and yet private enterprise is unwilling to lend these authorities money with which to build houses. These very private entrepreneurs and para-statal organisations do not provide their employees with accommodation.

Copperbelt (in Zambia) ranks as the single most important "island" of export production in tropical Africa, and yet the mining companies' low-income employees are among the worst housed in tropical Africa. The Mining Companies of Zambia which have sufficient funds at their disposal are still housing most of their employees in the dangerous and subhuman huts built in the colonial days some of which are more than fifty (50) years old. These mining companies might claim and argue that they have built modern houses in recent years for their employees, but these houses are for their senior employees only. The subhuman and substandard huts need to be replaced as soon and quickly as possible.

1-A Para-statal corporation is a company where the state has 51% or more controlling shares.

Private entrepreneurs and companies should invest a proportional percentage of the huge profits they make annually in housing projects, and if they cannot undertake construction themselves, then they should lend this money to local and national housing authorities who should use the money on housing projects. In return for the money lent, the housing authorities would make a certain number of houses/units available to each company/entrepreneur for employees' accommodation. If this cannot be done voluntarily then the government should either tax the profits of those employers who do not and/or are unwilling to provide accommodation to their lower-income employees, or introduce a minimal Employee Accommodation Tax per head per employee of which half should be paid by the employee which the employer should deduct from the employee's wages and the other half to be paid by the employer.

Para-statal corporations (especially in Zambia) are engaged in a game of out-doing each other in expensive and luxurious office accommodation. The bureaucratic empire building malady has swallowed up vast amounts of badly needed resources, as each para-statal organisation seeks to outdo all the others in the height and luxury of its unnecessary office block. Almost half and in some cases the whole office accommodation space in these status symbol buildings are occupied by the corporation and thus the vast amounts of money spent on these buildings does not bring any return or earn interest on the capital. This

money could have been and still could be better and profitably used in the construction of low-cost houses which are badly needed and also earn a reasonable return on the capital invested. Even small organisations with little or limited resources of their own want and build their status symbol multi-storey office blocks. These status symbol multi-storey office blocks are very expensive to maintain as the designs and materials used are those which incur (demand) high maintenance costs. For example, the National Provident Fund of Zambia is the single largest Finance organisation in the country. It is a Retirement Contribution Fund for those working people who do not qualify for the Pension Scheme run by the Government for civil servants and these constitute the largest number of working people in the country. This organisation has built itself expensive and luxurious multi-storey office block in almost all the cities and big towns in the country. Yet most of its employees in the medium and low income groups live in shanty townships. The National Provident Fund is just one example of many para-statal organisation in Zambia with Financial Resources at their disposal which is not being used to help the underprivileged people and spent on projects of which the cost or usefulness is not of immediate relevance and importance or not needed at all.

This bureaucratic empire building malady by para-statal organisations is sheer waste of public funds and in

contempt of public feelings and sufferings. The members of staff of these organisations are so obsessed with luxurious office accommodation that the National interest, which is what they are there for, is disregarded and subordinated to self-interest. All this originates in the fight for status among the corporations and their functional senior staff in each organisation. This reflects the colonial bureaucratic mentality still prevalent among many Zambians. It is high time and important that the construction of these status symbol multi-storey buildings was stopped, and that those already built either be sold to retrieve the money spent or rented to raise additional capital for other important projects such as housing projects. These are public organisations and their duty and/or moral obligation to the society is not to show how affluent the members of staff (management) are, and not necessarily the size of profit made annually which in turn makes the management more affluent, but to be in the forefront of the fight to eradicate or minimize the sufferings of the people.

There is this indifference to the sufferings of the masses (people) because most of the senior and professional staff in the para-statal organisations as is the case in the civil service, have decent sleeping places - the best shelters in the community - provided, often by the

organisations and/or the state or built with money from the public purse and usually subsidized, for which they pay hardly more than 15% of their basic salaries or paid out of the huge housing allowances which go with their salaries.

Fundamentally, contemporary Europe developed without outside help, and she did so with due regard to her geographical, historical, cultural and ideological needs. Human needs are basically simple, the needs of the ordinary African are essentially minimal in comparison to his counterpart in Europe and America, and poverty is rarely a desperate condition in black Africa. The simplicity of life should be a cause of pride, not shame, and efforts should be geared towards recapturing that simplicity, not to destroy it. There is also economic mismanagement and wrong education goals which need to be rectified. All these work against realistic programmes and best use of public funds and retard development of any form.

It takes courage and human concern for anyone in authority to go beyond his privileges and see the needs of others.



B. NATIONAL HOUSING DEVELOPMENT BONDS, HIRE PURCHASE  
AND CREDIT TAX

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There is so much money around in most African countries among the public that some of them do not know how to use it wisely and profitably, and the problem is that there are not many intelligent and foresighted people who can devise legally legitimate means of getting this money from the public and invest it and pay back the owners a good return on their money.

For example, the working public in Zambia spends too much money on beer drinking at the expense of self improvement that many people are worried about the side effects of such type of drinking has on the state as a whole and the drinkers' families. In the past five years drinking has reached a stage where it has become the curse of society and has forced the head of state to talk against it and appeal to the drinkers to reduce their drinking and drink with dignity and conscience. If this money can be diverted to other legally constituted hobbies and activities, it would go a long way in providing the badly needed local development capital.

It is suggested that the National Housing Authority in conjunction with the Bank of Zambia as the guarantor and the National Commercial Bank providing management and account-

tance services, should create National Housing Development Bonds through the ministry of Local Government and Housing which would introduce and pass a bill in Parliament. The bonds would work on the basis of a lottery but different from the ordinary lottery. The bonds should be sold to the public at large at say K1.00 (A\$1.00) per bond number. The holder of the bond cannot redeem his bond (i.e. sell his bond and have his money refunded) until after the lapse of four months. Three months after the purchase of the bond the bond number should be included in the lottery draw consisting of earlier bond numbers. This would not and should not affect the bond holder's right to redeem his bond. The lottery draws can be made fortnightly or monthly depending on whichever is convenient. The money to be paid out as WINNING PRIZES should be the INTEREST MONEY EARNED on the money from the sales of bonds and invested in Estate Development Projects. The prize money and prizes would increase with the increase of the interest earned (or say profit made) which can be based on quarterly figures.

The bond holder would be able to redeem his bond at any time he wishes after the lapse of four months from the date of purchase.

This type of bond/lottery scheme would prove very attractive and popular to the public because the holder of the bond would lose nothing as is the case in ordinary

lottery schemes and would also stand a chance of winning any of the lottery prizes in addition to his right to redeem his bond. This would undoubtedly attract much of the money at present being spent on hobbies and pastime activities which have a high probability of losing and low probability of winning anything. It can be said with certainty that even those excessive and addicted drinkers would consider using part of their drinking money to buy bonds as a worthwhile alternative to how many litres they drink each day of the week, month and year.

A scheme on similar lines (premium bonds) has been and is being used in Britain to raise development capital and seems to be doing very well.

One of the interesting things at present in Zambia is the absence of Hire purchase and credit facilities. This is one of the sources that governments raise their revenue in most countries in the western world. It is therefore suggested that the ministry of Development Planning and Finance (Zambia) should introduce and pass a Bill in Parliament legalising Hire purchase and thus introducing Hire Purchase Tax in addition to the existing Sales Tax. This would give the dealers a recourse to retrieve their goods or take necessary steps (legal) to force the buyer to pay the outstanding amount on the goods Hire Purchased and at the same time protecting the customer (buyer) from unfair treatment

by the dealer (retailer). At present Hire purchase is not legalized in Zambia and any that occur are a result of mutual trust between shop owner (retailer) and buyer (customer). Hire purchase and/or credit systems have been used in many countries in the Western World to raise development capital through tax paid on goods obtained on credit as well as sales tax.

It is also suggested that the Bank of Zambia through its subsidiary the National Development Bank of Zambia, should establish and run a "Bank card credit system" - ZABARCARD or just ZACARD. This could be run on similar lines as the BARCLAYCARD in Britain, AMERICAN EXPRESS CARD in U.S.A. and recently Australian introduced BANKCARD. The Barclaycard Credit system seems to be very successful as well as the American Express card system. The interest charged on the money withdrawn using ZACARD and interest charged on outstanding amounts either resulting from withdrawals, purchases of goods using ZACARD or made up of both, would be used for housing and other pressing social projects. However, for the system to be of practical value and assistance, an effort should be made to keep bureaucracy, which would absorb much of the money earned (tax) to a minimum. The interest rate can be fixed between 1% to 2% per month (12% to 24% per annum) on the outstanding amounts calculated at the beginning of each month on amounts carried forward from previous month. The interest rate would

vary according to the prevailing situation of the money market which is influenced and affected by the yearly national budget. The Banks and shops etc accepting ZACARD would be paid commission for handling and administration.

## CONCLUSION

The data and information available at present and research work associated with shantys (squatter settlements) tend to associate shantys with the unemployed and underemployed. However, the situation is different in Zambia and other similar African countries in that, it is not only the unemployed and underemployed who live in the shantys but also a fairly large number of fully employed and well-paid urbanites live in them. Many shanty residents have steady jobs and some have good education, and some unskilled and semi-skilled workers living in the shantys have steady and well-paid jobs. The majority of them can afford and are willing to pay a reasonable economic rent for a decent and comfortable living in modern houses and units (flats) if these were made available to them.

The advancement of the nation and the standard of living of her people should not be measured by the Gross National Product (GNP) but in real terms by the houses (homes) in which her people live, as it is recognised internationally that housing is undoubtedly a major component of material well-being. A nation full of badly housed and unhappy citizens (workers) could not expect a high rate of productivity and thus a high economic development rate. The economic growth of a nation is dependent

to a large extent upon the stability and strength of its cities. But, the very growth of the huge accommodation problems resulting into the development of shanty townships and problems that are around, in, and throughout the cities and towns of most African countries make one think that an inadequate urban philosophy has been adopted by many of the governments and city authorities concerned. The results and effectiveness of some of the programmes evolved by some governments and city or housing authorities to minimize or solve the problems, are so negligible as to be making very little impression on the total situation.

One of the main criticisms of the site and service schemes described in part three, section C, is that, some of these site and service townships are badly designed and planned. Also applications for plots were and are not scrutinized thoroughly to ensure that certain requirements would be met and regulations and ordinances complied with, and most important of all, that an applicant would be in a position to complete construction of the house according to design and in a certain (specified) period of time. Hence, many of the applicants who were allocated plots have not completed constructing the houses after two years or more from the time of taking possession of the plot. Some have just managed to build one room of the house and others half the house, put corrugated roofing sheets over the brick and/or concrete block walls with a

few rafters or just ceiling joists. The majority of these plot holders do not know when they are going to complete the house and have no hope of completing the house.

It seems and it is fair to say that the three house designs from which an applicant has to choose from were and are too big and expensive for most of the type of prospective house owner (builder) intended for. The houses were to be built in one stage once started. They were not designed to be built in stages and the prospective builder was not given the freedom to decide how he was going to phase the construction of the house according to his financial capability. There was no BASIC UNIT which would have been a MUST for every applicant to build and prove that he was financially capable of meeting the cost of the basic unit. This financial capability to meet the cost of the basic unit would have been one of the major criteria for allocating plots. What is needed is a BASIC UNIT (figure 5). The authorities would calculate the quantities of all materials needed for the construction of the basic unit and price these and arrive at the cost of the Basic unit. This cost of the basic unit would be revised every six or twelve months depending on the change in the price of materials and wages of operatives in the building industry. The basic unit has future extensions incorporated in the design.



The site and service townships have resulted in or turned to be "legalized and planned" slums or shantys. It is hoped that the Government and National Housing Authority will review, analyze the problems and mistakes, and revise the plans, designs and conditions before more site and service schemes are embarked on. It is not the site and service scheme concept which is wrong but the approach to it. The main reason for this being the lack of right and qualified people to plan, design, manage and co-ordinate the schemes.

The lack of realisation of the potential and utilisation of African traditional architecture by the western-trained African architects and engineers as explained in part three, section B, has contributed to some extent to the accommodation problems of the cities and big towns of most African countries. The western-trained African architects and civil engineers design and produce mock-european suburban houses which are as uncomfortable as they are inappropriate. The architecture and building (construction) technologies of a region or country should reflect the local climate, environment, materials and the living habits of the people.

Whether in short or long term housing policies, certain factors - the structure of the economy of the country, the difficulty of providing credit facilities to low-

income groups for housing, the psychology of the people - demand that a thorough investigation be made as to how the human potential revealed in shanty and site and service housing construction, the desire and will be improve their standard of living and the capital in private savings can be channelled into schemes that will provide a healthier environment and a more efficient use of the limited financial resources than at present. The individual houses in shanty and site and service townships, seen within their own physical boundaries and against their occupants' financial potentialities, are remarkable achievements of courage, good sense and independent response to the housing problem.

Architects, civil engineers, building economists and planners could perhaps accomplish a very useful task in finding the technical solutions by which this blending of shanty and site and service residents' action and private initiative in housing can be realised for various levels of urban densities. The progress of organisation in housebuilding should not waste our indigenous and/or national ability to create our own house designs and environment, but use it.

In order to minimize and discourage migration of people from rural areas to urban centres, modern agrarian-industrial (village grouping) communities suggested in

part three, section D. should be given serious and favourable consideration. One of the main aims of the programme should be to create employment opportunities and improve the infra-structural services related to increased rural productivity in order to counteract migration to the urban areas. This would result in providing a ready market for raw materials produced on the farms and the use of raw materials by industries set up in rural parts of the country and thus providing employment opportunities along with other essential services. These communities (centres) would be counter-magnets of the cities and big towns and absorb some of the rural-urban migration flow, hence retaining a high factor of population on the land and extending urbanisation into rural areas. Such schemes are feasible in Africa because urbanisation is still on a lower scale and there is ample land. Some Zambian soils are among the most valuable in Africa and are, therefore, capable of supporting the rural population and feeding the urban population and even export to other countries.

If the people in the shanty townships are not helped technically and financially and there is lack of control of such townships to turn them into viable residential areas, it is inevitable that shanty townships will be perpetuated and negate the progress made by councils and other Housing Authorities. Even if shanty townships cannot be eliminated, real efforts must be made to control their growth and type of houses

built in them. There should be a minimum number of rudimentary Building Regulations that should set housing standards at a realistic level for the majority of home-seekers including those who, for social and economic reasons, choose to build their own houses. These building regulations should be adequate to ensure structural stability requirements and consistent with the minimum requirements of health and safety. It should be noted that higher housing standards are not as important to these people at this time as is the chance to get a secure footing in an urban community.

There should be incentives to encourage intending and established shanty residents to give up their present unhealthy and dangerous huts. It is equally important and necessary to demonstrate that all this is being done for their good and improvement of their standard of living.

The shanty and site and service townships should not be considered and planned in isolation of the future expansion of the cities/towns but must be integrated in the overall planning and development programmes of the cities/towns. The segregation of any particular stratum of society leads to a multiplicity of social grievances. To avoid such a situation, planning strategies need to be adopted which would produce a balance of communities which is a representative of all social groups. This

requires a high degree of intermingling as far as compatibility would allow. There is a need for a planning and development section for self-help townships either in the National Housing Authority (Zambia) or Department of Town and Country Planning in conjunction with the former and councils.

As stated earlier in this dissertation there is enough money in the country among the public that can provide finance for housing projects. There seems to be a problem of lack of intelligent and foresighted people who can devise legally legitimate means of getting this money from the public and invest it and pay back the owners a good return on their money. The National Housing Development Bonds Scheme suggested and described in Part four, section B. is one of such many possible ways. The bonds scheme would work on the basis of a lottery. The bonds should be sold to the public at large at a certain amount per bond number. The holder of the bond not to be allowed to redeem (i.e. sell his bond and have his money refunded) until after the lapse of a certain number of months. After a certain period, say, three months, from the date of purchase of the bond, the bond number should be included in the lottery draw consisting of earlier bond numbers. This would not and should not affect the bond holders' right to redeem his bond. The lottery draws can be made fortnightly or monthly depending

on whichever is convenient. The money to be paid out as winning prizes should be the interest money earned on the money from the sales of bonds and invested in Estate (Housing) Development projects. The bond number would be retained and included in subsequent draws as long as it is not redeemed. The bond holder would be able to redeem his bond at any time he wishes after the lapse of a certain period from the date of purchase of the bond. This type of bond/lottery scheme would certainly prove very attractive and popular to the public.

Private enterprise, in partnership with Local Authorities, Para-statal organisations, with public control (by Government through the National Housing Authority - Zambia) in the matter of Zoning, Planning and Building Regulations can create an economic atmosphere where low-cost housing would be possible which would be within the means of most of the medium and some low-income groups. This would give Local Authorities the chance to use their limited resources on houses for the low-income group and provide better services to the public.

This is the right time that the Government of the Republic of Zambia should establish and fund a Building Research and Development Station, which would be a division of the existing National Council for Scientific Research. This station would concentrate its work in the building

materials industry and building methods and techniques, develop a system of marketing building materials to regulate distribution and control prices. This is very vital to the success of any scheme of low-cost housing. The control of prices of building materials would seem better and cheaper to the Government and the people than subsidizing building materials to a few hundred people in the site and service schemes.

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