

A-52  
7-184  
20-25

PN-ARH-177

Annex B  
URBAN AND SHELTER NEEDS

*A Report to the Congress on*

**DEVELOPMENT NEEDS  
and OPPORTUNITIES for  
COOPERATION in  
SOUTHERN AFRICA**



Planning and Research  
for Urban Development

**Rivkin Associates Inc.**

2901 M Street Northwest  
Washington, DC 20007  
Telephone: 202/357-3100

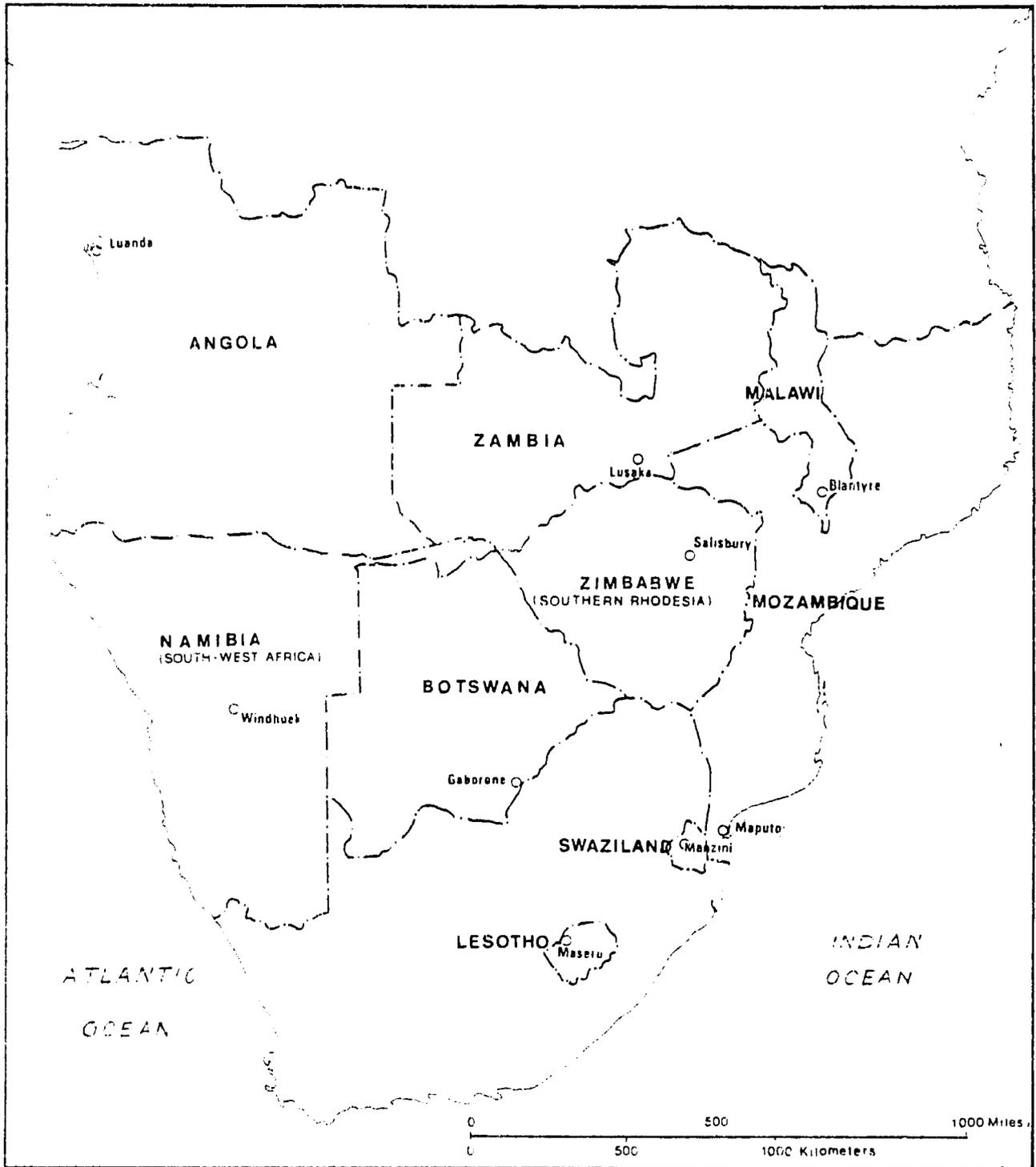
Settlement Patterns, Urbanization, and  
Shelter In Southern Africa

Prepared for  
The Office of Housing and  
The Southern Africa Development  
Analysis Project (SADAP)  
U.S. Agency for International Development

February, 1979

## Preface

Numerous sources were utilized in preparing this paper. During the summer of 1978, The Foundation for Cooperative Housing and Rivkin Associates reviewed Shelter Sector Assessments and other secondary material and made field visits to several countries in the Southern Africa region. They then prepared country "housing and urban development" papers which are part of the background material for SADAP. Various sector studies developed for SADAP were also reviewed, along with draft country strategy papers written by USAID staff during the fall of 1978. A draft of this overview paper was presented by Rivkin Associates to an international colloquium on SADAP, held by USAID in Washington, D.C. in January, 1979. Relevant comments from the colloquium are reflected in this revised version of the paper.



# Southern Africa

(EXCLUDING THE REPUBLIC OF SOUTH AFRICA)

○ — Most Populous City for Each Country

Table of Contents

	<u>Page</u>
Introduction. . . . .	1
A. Shifting Patterns of Settlement Within The Region. . . . .	1
B. Impacts of Sectoral Policy on the Settlement Pattern. . . . .	2
C. The Shelter Imperative. . . . .	5
I. Background to Settlement and Shelter Issues-- Relevant Country and Regional Data. . . . .	7
A. Linguistic and Political Background . . . . .	7
B. Demography. . . . .	8
C. Patterns of Settlement. . . . .	11
II. Shelter....Characteristics and Needs. . . . .	33
A. Rural Shelter . . . . .	33
B. Urban Shelter . . . . .	35
C. Dimensions of Urban Housing Need. . . . .	44
III. The Institutional Framework for Addressing Settlement Patterns and Shelter in the Commonwealth Countries. . . . .	46
A. Spatial Development Policy. . . . .	46
B. Shelter Policy. . . . .	51
C. Formal Sector Instruments of Housing Production. . . . .	52
D. Finance Institutions. . . . .	56
E. Programs for the Urban Poor . . . . .	59
F. Summary Comments. . . . .	61
IV. Special Issues and Opportunities Relating to Urban Shelter . . . . .	62
A. Construction. . . . .	62
B. Manpower. . . . .	66
C. Land Tenure . . . . .	67
D. What Can Be Learned From Each Other: The Reservoir of Regional Experience. . . . .	69

Table of Contents (cont'd)

	Page
V. Current External Donor Activity in Shelter. . . . .	72
VI. Urbanization and the Draft SADAP Country Development Strategies. . . . .	75
A. Impacts of Capital Works and Area Development on Migration and Settlement Patterns. . . . .	76
B. Role of Settlements in the Development Strategy. . . . .	81
C. Roles for the Large, Established Urban Complexes . . . . .	84
VII. Strategies for Assistance in Settlement and Shelter . . . . .	88
A. Formulation of National Policy. . . . .	88
B. Identification of Specific Communities for Linked Investments. . . . .	90
C. Expansion of Urban Shelter Supply . . . . .	92
D. Broadened Financial Mechanisms. . . . .	95
E. Rural Housing and Services. . . . .	95
F. Technical Assistance and Training . . . . .	97
G. Specific Study Assistance . . . . .	100
H. Regional Opportunities. . . . .	101
I. AID Resources for Shelter and Human Settlements . . . . .	104
J. Prospects for the Future--Zimbabwe and Namibia . . . . .	106
K. Prospects for the Future--Angola and Mozambique. . . . .	109
L. Concluding Note: Priority Attention to Urbanization and Spatial Development. . . . .	110

List of illustrations

	<u>Page</u>
Southern Africa. . . . .	Frontispiece
Country Maps with Population of Main Urban Areas . . . . .	16-24
Urban Self-Built Housing Under Construction: Botswana, Swaziland, Malawi . . . . .	37
Similarities of Types and Materials, Self-Built Urban Housing in Botswana, Swaziland, and Malawi. . . . .	38
Economic Activity in Self-Built Communities. .	41
Various Services in Self-Built Urban Communities . . . . .	42
Institutional Framework for Spatial Development and Shelter--Five Countries . . . . .	47

## INTRODUCTION

### A. Shifting Patterns of Settlement Within the Region

Movement and Change. These words characterize the patterns of human settlement in countries of Southern Africa. Distribution of population and economic activity among rural and urban areas is far from stable. To the contrary, existing settlement patterns are being altered and new patterns formed. This very process of geographic transformation has profound influence on national economies: on incomes, production of goods and services, health and sanitation conditions, governmental budgets; and most particularly, on limited supplies of capital and skilled labor.

Each of the seven majority rule countries is being urbanized at a pace which far exceeds already high rates of population growth. Although all are predominantly rural, exodus from rural areas--on a permanent or temporary basis--has accelerated despite domestic and internationally aided programs of rural development. For five of these countries the safety valve against even more intensive urbanization continues to be an increasingly tenuous option of labor export to South Africa. If the region's history provides any lessons, once political stability and majority rule come to Namibia and Zimbabwe, these countries also will evidence increasing shifts from rural to urban settlement. Even now, large numbers of their refugees fleeing domestic conflict have congregated in cantonments within other countries of the region, adding yet another complexity to the evolving patterns of settlement.<sup>1</sup>

This process of shifts and changes in spatial distribution of population is likely to continue. It is a process which has occurred in other regions experiencing economic development--in Asia, Latin America, the Middle East, Northern Africa. Predominantly rural populations throughout the developing world have become more urbanized as contemporary economic activity has evolved in cities, and as rural poverty has stimulated migration.

---

1. Some recent evidence suggests that flight from the countryside to cities in Zimbabwe is now occurring also despite controls on native urban settlement.

In Southern Africa the process is at an early stage. This SADAP policy review finds the region in a period of spatial development<sup>2</sup> before the precise urban/rural pattern in each of the countries has become solidified. The region still has few massive concentrations of population in primate cities, and many options are open as to what networks of processing centers, market towns, and intermediate-size centers with diversified economic activity may evolve. The SADAP policy review comes at a time when sensitively designed assistance efforts have an opportunity to moderate the flow and timing of migration and to influence spatial development in support of economic and social objectives. The process cannot be stopped. It can be channeled through conscious policies of governmental intervention.

B. Impacts of Sectoral Policy on the Settlement Pattern

Many of the national development initiatives identified in draft SADAP country papers may further stimulate urbanization and movements of population even though such effects are not explicit or intended.

For example:

1. Rural Productivity Improvement. All of the countries are placing heavy emphasis on rural development programs--to increase productivity and to stem migration flows. Inadvertently, however, successful productivity efforts can reduce still further the need for rural labor and result in even heavier flows of job seekers to towns and cities.

2. Rural Produce Marketing Improvement. Successful marketing of rural produce requires distribution points for aggregation and shipment to domestic consumers and regional markets. These distribution points may be existing towns and cities whose growth is accelerated by the marketing function.

3. Farm-to-Market Roads, Highways, and Rail Line Extensions. Transportation improvements in developing countries can fulfill their explicit functions of expediting the flow of goods and services.

---

2. Spatial development is the geographic distribution of population, economic activity and communities within a country.

But, in so doing, they invariably expedite the flow of rural migrants and contribute to increased size of the towns and cities which they connect.

4. Mining and Industry. Several of the countries have identified mineral resources as a major opportunity for economic development. Exploitation of these resources, especially new finds, results in growth of settlements and substantial capital investments to service these settlements over and above commitments to mining operations and transportation. Similar conditions will occur as new major processing operations identified in the policy reviews are established.

Other sectoral activities identified in the papers imply direct concern with geographic location or settlements. These include:

1. Rural resettlement activities associated with land re-distribution, new crop and husbandry patterns, and agro-based industry.
2. Refugee support, education and training.
3. Manufacturing of import substitution items, creation of small-scale enterprises, and the training of entrepreneurs and workers.
4. Allocation of social infrastructure; e.g. drinking water, clinics, schools, decentralized administrative offices, et al.

Interestingly enough, the implications for accelerated migration and urbanization of these and other national development priorities have been essentially unrecognized in overall country papers and individual sectoral reviews. The linkages have not been perceived or addressed. Yet, awareness of such linkages and their impact issues are critical in any international effort to support productivity and efficiency within the region.

Even more critical than the problems posed are the opportunities the linkages afford to meet national objectives of economic and social

development. For urban areas can--as they have elsewhere in the developing world--become centers of entrepreneurship and employment, concentrated markets for domestic agricultural produce, settings for fabrication of goods to substitute for imports, education, administrative and service centers for rural hinterlands, all crucial functions in a drive for economic independence and national stability.

Urban areas--whether rural market towns or major cities--can offer external economies to the Southern African countries whose endemic poverty and scarce capital and manpower resources require careful husbanding of what real development opportunities exist.

The foregoing comments are not a plea for major shifts in national priorities from rural to urban concerns. Rather they are made in full awareness that these are predominantly rural societies, with rural social and political traditions, and are not appropriate settings for policies which encourage growth of large urban agglomerations. Continued urbanization in some form is inexorable, however. Options are still open as to whether the process will be accelerated or retarded, whether concentration will occur in a few primate megalopolises or whether balanced patterns of large, intermediate-size, and small communities can be achieved.<sup>3</sup> It is still possible to create networks of settlements which support national economic and social objectives or--by default and lack of explicit attention--to permit build-up of patterns which so drain capital and manpower that the intractable dualism of many other developing countries will be solidified in Southern Africa as well.

Opportunities still exist. For this compelling reason, we believe that attention to control and direction of urban growth warrants a high priority in U.S. and other international assistance programs; and that this new emphasis should be a major outgrowth of the SADAF review.

---

3. The status and needs of rural communities were not included within the scope of this assignment. They should, however, be recognized at the extreme of this spectrum of settlements or as units in the settlement network. As the most numerous, widely dispersed and characteristic communities of the region, they deserve particular attention to reinforce their stability.

C. The Shelter Imperative

The principal purpose of this particular component of the SADAF investigation is to identify priority needs for international assistance within the shelter sector. These needs are extensive and must be addressed even in the absence of more comprehensive spatial development or settlement policies. They involve housing itself, supporting community infrastructure, regularized land tenure in urban and rural areas, building materials supply, and associated employment and training. Shelter has been a concern of several international agencies, including AID, and legislation exists providing AID with specific responsibilities in the field.

Given the extraordinary opportunity to channel the settlement formation process within these countries--and the prospect of enhancing its positive contributions to national development--the approach merits a broader perspective than shelter alone. Shelter sector programs need a context of explicit settlement policy to achieve their greatest effectiveness. Settlement policy, and the attention of international assistance agencies to its formulation, can enhance the performance of other sectors as well. It can, for example, complement more traditional agricultural productivity efforts through a focus on improving the economic and social conditions of rural communities. It can be a tool in reducing income disparities between large cities and the rural hinterland by focusing on opportunities to create networks of market towns and rural service centers. Shelter and settlement initiatives should be integral components of any strategy to meet basic human needs. Thus, the recommendations of this paper will deal with shelter assistance opportunities in the broader spatial development context.

The policy recommendations of this paper are pragmatic. Needs in the shelter and settlement areas are essentially unlimited and it is relatively easy to come up with a long shopping list of international technical and capital assistance. Such an exercise would be insensitive, however,

both to the considerable distinctions between countries in the region and the fundamental question of absorption capacity to be addressed in all sectors of international aid. Capital investments should be carefully evaluated, for example, for their long-term impacts on heavily constrained, recurrent budgets. Measures that call for new local institutions or large supplies of trained manpower should be approached gingerly, because institutional and human capacities are in short supply. If one basic objective may be posed to guide international initiatives it would be to increase the countries' capacity to deal effectively with shelter and settlement issues. Achievement of the goal mandates a modest approach, carefully targeting each element of international help toward increasing local capacity.

I. Background to Settlement and Shelter Issues--Relevant Country and Regional Data

This paper presents an overview of settlement and shelter issues and the prospects they afford for international assistance in nine southern African countries: Angola, Botswana, Lesotho, Malawi, Namibia, Swaziland, Zambia, and Zimbabwe. All told, the nine countries comprise today about 39 million people and about 16 percent the territory of the African continent. Although differences between the countries are striking, they share the common characteristic of rapid shifts from rural to urban settlement. In considering possible strategies for international assistance to channel the shifting settlement patterns and to meet significant needs for shelter and related services and facilities, it is necessary to array salient facts about the countries which highlight their differences and similarities. Below is a brief discussion of some key items to serve as a context for the analysis that follows.<sup>4</sup>

A. Linguistic and Political Background

Five of the countries, comprising 13.6 million people (35 percent) are independent Black African states, members of the British Commonwealth, for whom English is the working language. These are the countries in which field interviews were held for preparation of the shelter and settlement papers (Lesotho, Malawi, Botswana, Swaziland, Zambia).

Two additional countries have English as an official language. Zimbabwe and Namibia comprise 8 million people (20 percent). Each is undergoing painful national changes that will probably displace

---

4. This paper is intended as an overview of conditions and assistance possibilities. Detailed settlement and shelter reviews have been made for each of the countries and accompany this overview. These papers, along with overall country analyses prepared by USAID and other sectoral studies for SADAP provide a wealth of demographic and economic information, only portions of which have been excerpted for this document.

the white minority government. Because of long time white minority rule and concomitant efforts to exclude native populations from principal cities, many aspects of settlement conditions differ from the other countries. Field investigations were not possible. Secondary source information on conditions in Zimbabwe were extensive, but slim on Namibia.

The remaining two countries (Angola and Mozambique) contain 17.2 million people, or 45 percent of the region's population. Portuguese is the working language, and the two are ex-Portuguese colonies with socialist governments. Extremely little information is available on current conditions and institutions for Angola and Mozambique, and field investigations were not possible.

Because of the above distinctions, most discussion and strategy proposals in this paper will deal with the five independent Commonwealth states. Material from the other countries will be incorporated as relevant, and prospective international and U.S. assistance opportunities for them will be briefly treated in separate sections.

## B. Demography<sup>5</sup>

### 1. Population Size

The countries exhibit a considerable range of population scale. At the low end are Botswana and Swaziland, each with under 1 million people. Mozambique, the largest, has a population more than ten times that of Botswana or Swaziland.

---

5. Data for this paper come from many sources, but are primarily derived from the individual country shelter sector reviews in the SADAF series, the overall AID draft SADAF country papers, and individual SADAF sector studies. They are not separately referenced here.

Population figures are mainly those of the country statistical offices, supplemented by World Bank and U.N. materials. Unless otherwise specified, they are fairly current (1975-78).

The array is as follows:

under 1 million. . . . .	Botswana, Swaziland
1-2 million. . . . .	Lesotho, Namibia
5-7 million. . . . .	Angola, Malawi, Zambia, Zimbabwe
over 10 million. . . . .	Mozambique

2. Land Area and Density

The countries range from small to extremely large in land area. They display extraordinarily different overall density characteristics--from Namibia and Botswana which are among the least populated countries of Africa, to Malawi, whose settlement density is one of the highest.

	<u>Land Area/sq. mi.</u> (rounded)	<u>Population Density</u> <u>per sq. mile</u>
Angola .	480,800	15
Botswana	242,300	3
Lesotho	11,600	103
Malawi	36,300	151
Mozambique	310,000	30
Namibia	318,000	3
Swaziland	6,700	78
Zambia	290,300	19
Zimbabwe	151,000	43

These overall statistics do not sufficiently depict the severe man-to-land relationships which exist in portions of the region.

Large areas in some countries are mountainous, arid or otherwise uncultivable. Thus, concentrations of both rural and urban population may be found in certain confined portions. For example, population density in the arable lowlands of Lesotho has been estimated at 280 per square mile and in the Southern region of Malawi which has held both the principal rural and urban areas it is 228 per sq. mi. In Botswana

and Zambia, major concentrations have occurred along the lines of rail which are relatively small portions of the countries' overall land area. Over population of confined arable areas has contributed to urban migration.

### 3. Age

All of the countries have relatively young populations. More than half of the residents are under 20. In 1975, four of the countries (Malawi, Mozambique, Zambia and Zimbabwe) had over 45 percent of the population aged 15 and under. In itself, this is a serious portent of urbanization. For as large numbers of young people increasingly join the labor force, limited opportunities in rural pursuits will push them increasingly to the towns and cities.

### 4. Impact of Labor Migration

A principal relief from past urbanization pressures within five of the countries has been temporary migration of laborers to South Africa or Zimbabwe for work in mines and industries. For two of the countries (Lesotho and Botswana) the impact of jobs in South Africa is extraordinary. Lesotho, with few sources of internal employment, has 50 percent of its male labor force working in South Africa. For Botswana, the level is 35 percent of men age 20-34. Malawi, Mozambique, and Swaziland have also exported workers but at relatively small proportions of their labor forces. Below are the most recent estimates of exported labor for each of the five:

Botswana -	60,000
Lesotho -	200,000
Malawi -	not known
Mozambique -	70,000 (RSA) 80,000 (Zimbabwe)
Swaziland-	21,000

Other impacts of the labor export have been significant. Transfer payments from the workers are important sources of revenue for the individual countries and for their families, primarily in rural areas and serve to bolster low cash income levels.

Without resident male heads of household, women become the principal rural labor force in Botswana and Lesotho where the ratio of women to men is particularly imbalanced.

Along with unskilled workers, the opportunity for higher wage employment in South Africa has drawn skilled artisans and construction workers from the BLS countries (Botswana, Lesotho, Swaziland) further straining the limited capacities of these countries to expand domestic economic development.

Given strained political conditions in South Africa, the present absorption of migrant labor by the RSA must be considered tenuous. Were it to be sharply reduced or terminated, serious economic as well as urbanization consequences could follow within the exporting countries.

### C. Patterns of Settlement

Accompanying this paper are maps of each of the countries displaying the most recent information on the size and distribution of principal urban areas.

#### 1. The Rural Context

By and large the nine countries of the region remain basically rural. Although precise patterns differ from country to country, the retention of people on the land has enabled the Southern Africa region thus far to avoid the great crush of migrants to the cities, characteristic of many developing countries in

Asia, Latin America, and elsewhere in Africa. Only Zambia can be considered today as an "urbanized" country, with almost 40 percent of its present population in cities and towns over 5,000 in size.

Percentage of Population Urban<sup>6</sup>

Under 10 percent-----Lesotho, Malawi, Mozambique  
10-20 percent-----Angola, Botswana, Swaziland  
20-25 percent-----Namibia, Zimbabwe  
39 percent-----Zambia

Of particular interest is that four of the five independent commonwealth states have populations that are still more than 80 percent rural. The full force of potential movement has not yet been felt through much of the region.

How population is grouped and organized in rural areas varies extraordinarily throughout the region. Although each country appears to have characteristic forms of rural settlement, the forms differ considerably among countries as a function of tribal and religious tradition, agricultural and other economic patterns. For example, the dense rural areas of Malawi evidence numerous small, clustered villages. Village life is not part of Swazi tradition, however, and rural settlement is generally in the form of individual homesteads for extended families. The cattle raising population in Botswana congregates in settlements of several thousand people each during certain seasons of the year, and disperses at other times into range areas. Mozambique has thoroughly re-organized its rural structure

---

6. There are some discrepancies between the definitions of urban used in each country. Generally the floor is settlements of 5,000. But, in Botswana large villages of up to 40,000 are classified as rural. Because of Swaziland's general lack of villages, on the other hand, settlements of 1,000 or more people are classified as urban.

under FRELIMO and is in the process of resettling dispersed rural population among over 1,500 communal villages. Assistance efforts to strengthen rural economic development within the region must take into consideration this wide variety of organizational forms. There is a great deal of commonality, however, from country to country in the type of building construction employed for these rural settlements and in their specific problems of sanitation and services. These commonalities, and the prospects for international support to rural shelter efforts will be examined below.

## 2. Rate of Population and Urban Growth

Despite the modest overall level of urbanization, cities are growing at far faster rates than the population as a whole-- throughout the region. The most recent indicators appear below:

	<u>Annual Pct. Growth</u> <u>Total Population</u>	<u>Annual Pct. Growth</u> <u>Urban Population</u>
Angola	2.0	7.6
Botswana	3.3	12.0
Lesotho	2.2	6.7
Malawi	2.9	8.0
Mozambique	2.3	11.6
Namibia	2.9	(5.0)*
Swaziland	2.8	6.7
Zambia	3.5	6.4
Zimbabwe	3.5	5.0

\*Estimate for Windhoek only

---

Displayed above are some of the highest urban growth rates in the world. According to the World Bank's 1978 "World Development Report" the average urban growth rate for 34 "low income" countries 1970-75 was 5.5 percent with an average overall population growth rate of 2.4 percent. For 57 "middle

income" countries, the average urban population growth rate was 4.5 percent, with an overall population growth rate of 2.7 percent. Thus, while increase in population throughout the region is high, but not unusual, the acceleration of urban settlement generally exceeds the pace of developing countries. This is an "issue" which merits world attention.

The only two countries in the region whose urban growth rate is less than six percent are those where present white minority governments have instituted control measures to keep the black majority from settling in urban areas. With anticipated independence, this picture is bound to change.

Three of the countries whose urbanization rate is among the highest in the region (Lesotho, Malawi, Mozambique) are classed among the most poverty stricken in the world, with per capita GNP's of under \$200, countries where rural agricultural conditions can be expected to provide even stronger pushes towards urban settlement.

The push towards urbanization may be seen especially in growth of the principal cities. Whether these centers are large or of moderate size, they have been expanding at levels that equal or exceed the overall rate of urbanization in the country itself. Below growth estimates are presented for the largest center in each country between two recent periods for which such estimates are available:

<u>Country</u>		<u>City</u>	<u>Period I</u>	<u>Period II</u>	<u>Annual Pct.</u>
Angola	1970-1977	Luanda	475,000	856,000	8.5
Botswana	1971-1977	Gaborone	17,800	43,000	15.0
Lesotho	1972-1978	Maseru	21,800	43,000	12.0
Malawi	1966-1977	Blantyre	109,500	226,200	6.7
Mozambique	1970-1978	Maputo	383,000	800,000	9.6
Namibia	1970-1975	Windhoek	61,200	75,000	5.0
Swaziland	1976-1978	Manzini	28,800	32,550	6.0
		<u>Mbabane</u>	<u>26,600</u>	<u>29,800</u>	<u>7.0</u>
		Urban Corridor	54,400	61,300	6.0
Zambia	1974-1978	Lusaka	401,000	579,000	9.6
Zimbabwe	1969-1977	Salisbury	386,000	561,000	4.9

It is only in the minority rule countries--with restrictions against African settlement in the cities--that the growth rates are below 6 percent.

Only two other countries--Swaziland and Malawi--have principal city growth rates below 8 percent. In Swaziland, the level may be explained by the extremely decentralized pattern of urban settlement, more an accident of resource distribution than public policy. This has thus far provided viable migration options to other communities than the chief centers. Malawi is the one country where major governmental effort has been devoted to establishing a new capital city linked with agricultural development, in a underpopulated region. Creation of Lilongwe was undertaken with an explicit purpose of siphoning migration from Blantyre and stemming increased rural density in the southern region. From this standpoint it has been effective. Lilongwe grew from fewer than 20,000 in 1966 to over 102,000 in 1977 (almost 17 percent per annum) and has clearly attracted population who would otherwise have added to the intensive development of Blantyre. Botswana's Gaborone is also a new capital and a new city. At a much smaller scale it has contributed to a decentralized pattern of urbanization, and has, since independence, become the largest community in Botswana. Its size is still comparatively modest.

CONGO

-16-

Z A I R E

Cacinda

Luanda

Malanje

ATLANTIC OCEAN

LODICO  
Benqueza

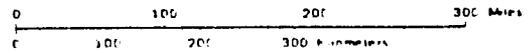
NOVA LISBOA

Sã de Bandeira

Z A M B I A

NAMIBIA  
(SOUTH-WEST AFRICA)

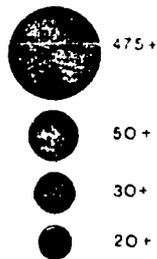
BOTSWANA



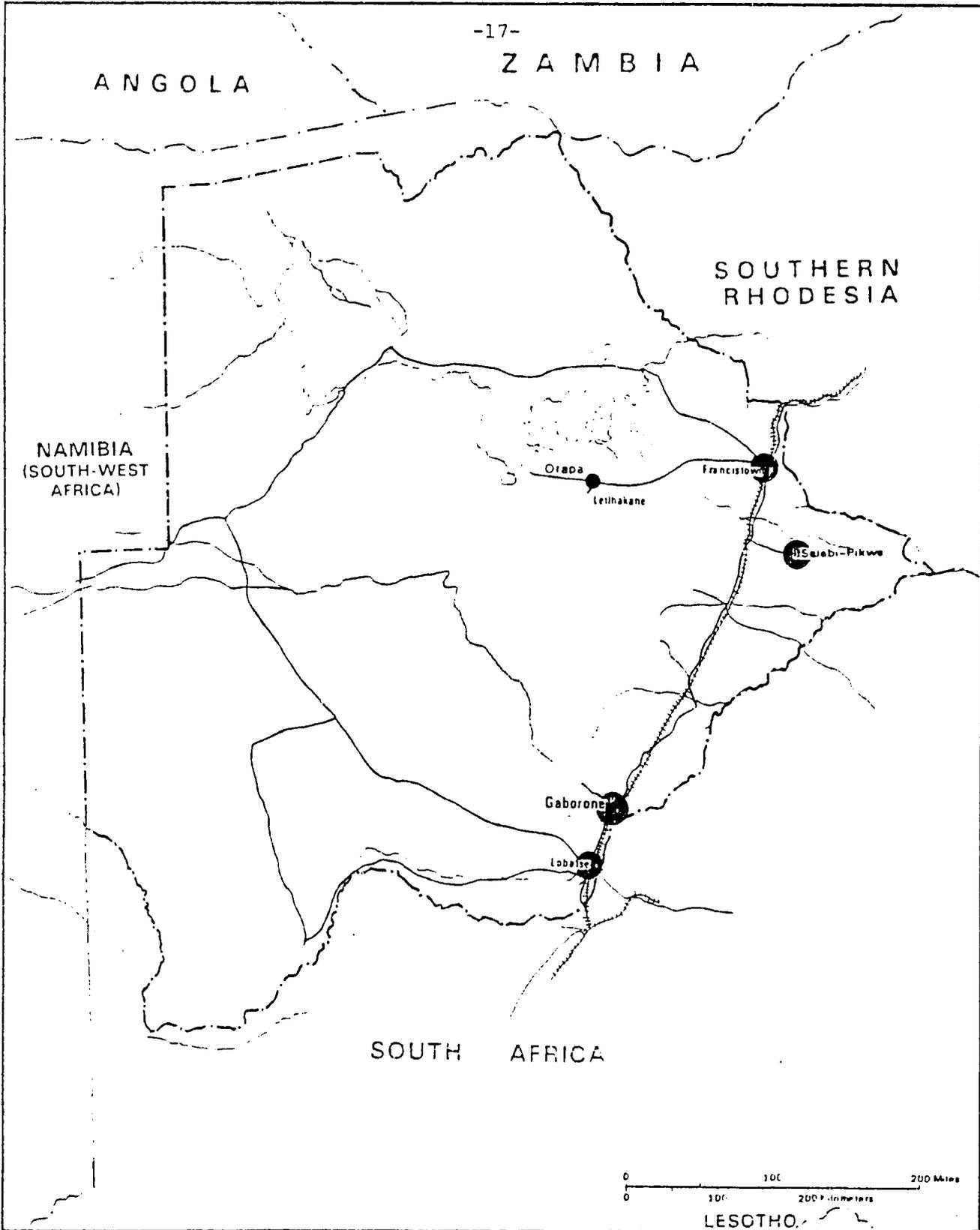
# Angola



POPULATION OF MAIN URBAN AREAS IN THOUSANDS



1974 DATA



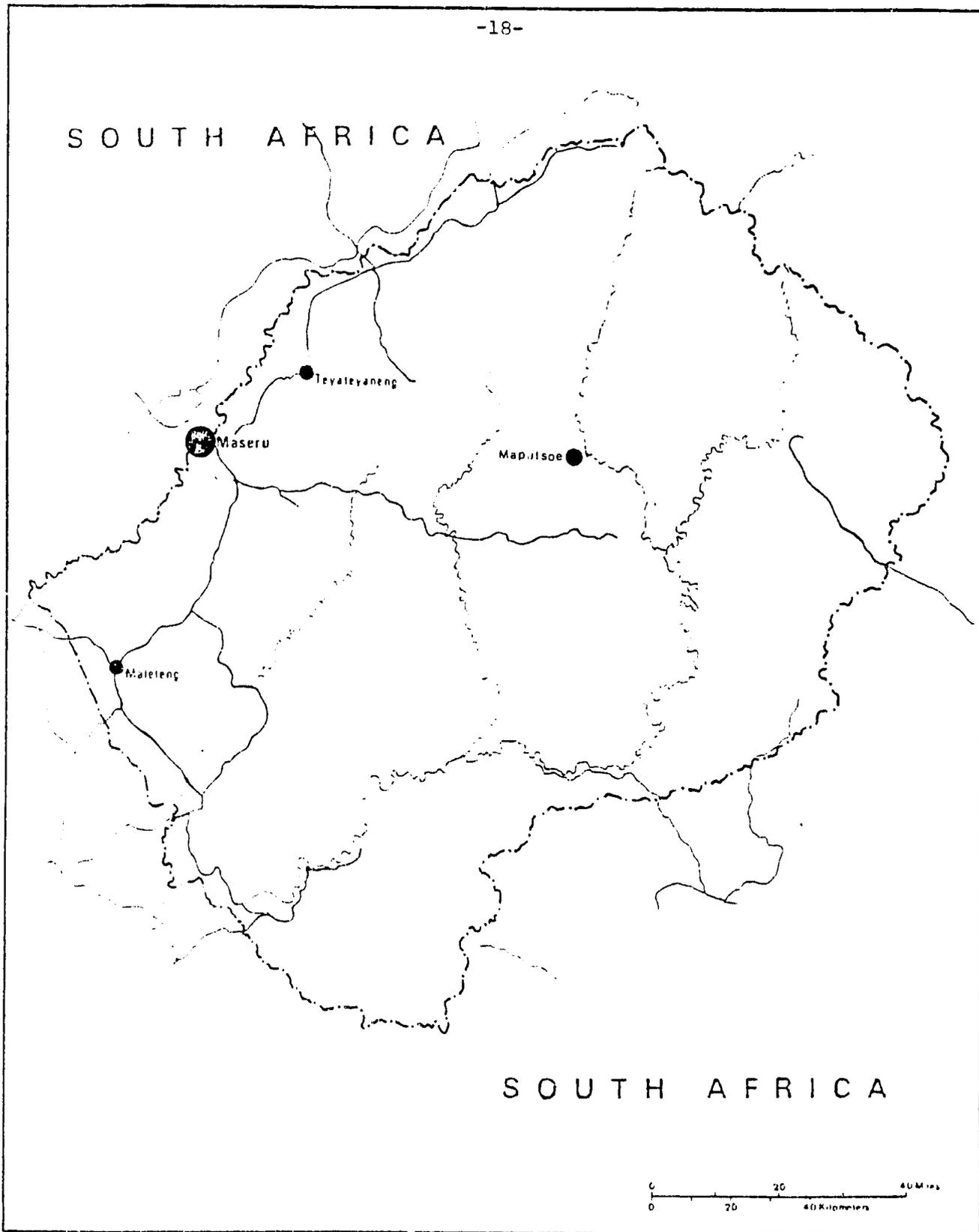
LESOTHO

# Botswana

POPULATION OF MAIN URBAN AREAS IN THOUSANDS

- 30 +
  - 10-20
  - 2
- 1975 DATA



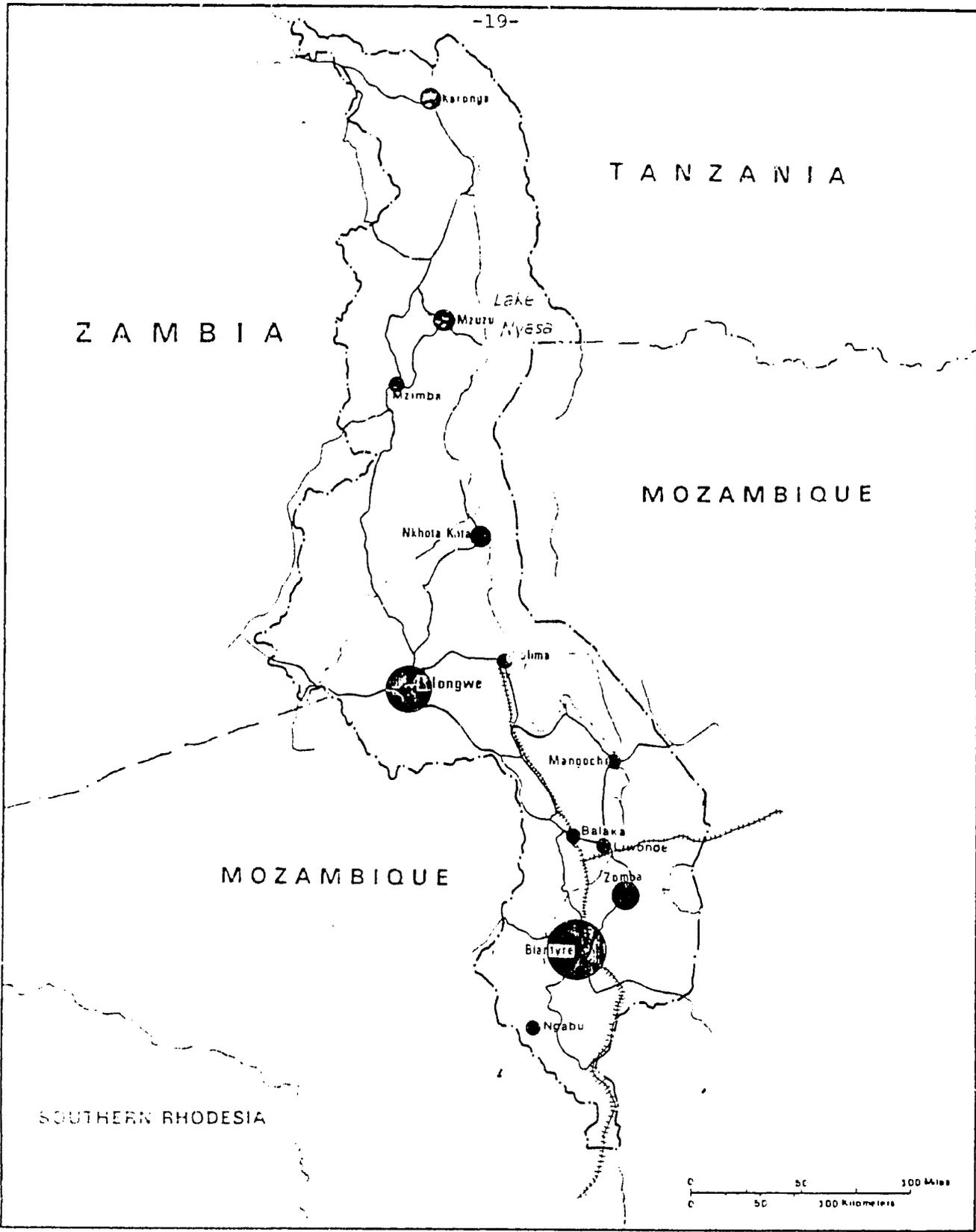


# Lesotho

POPULATION OF MAIN URBAN AREAS IN THOUSANDS

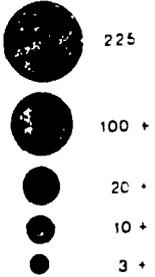
- 43
- 3.5-10

1978 DATA

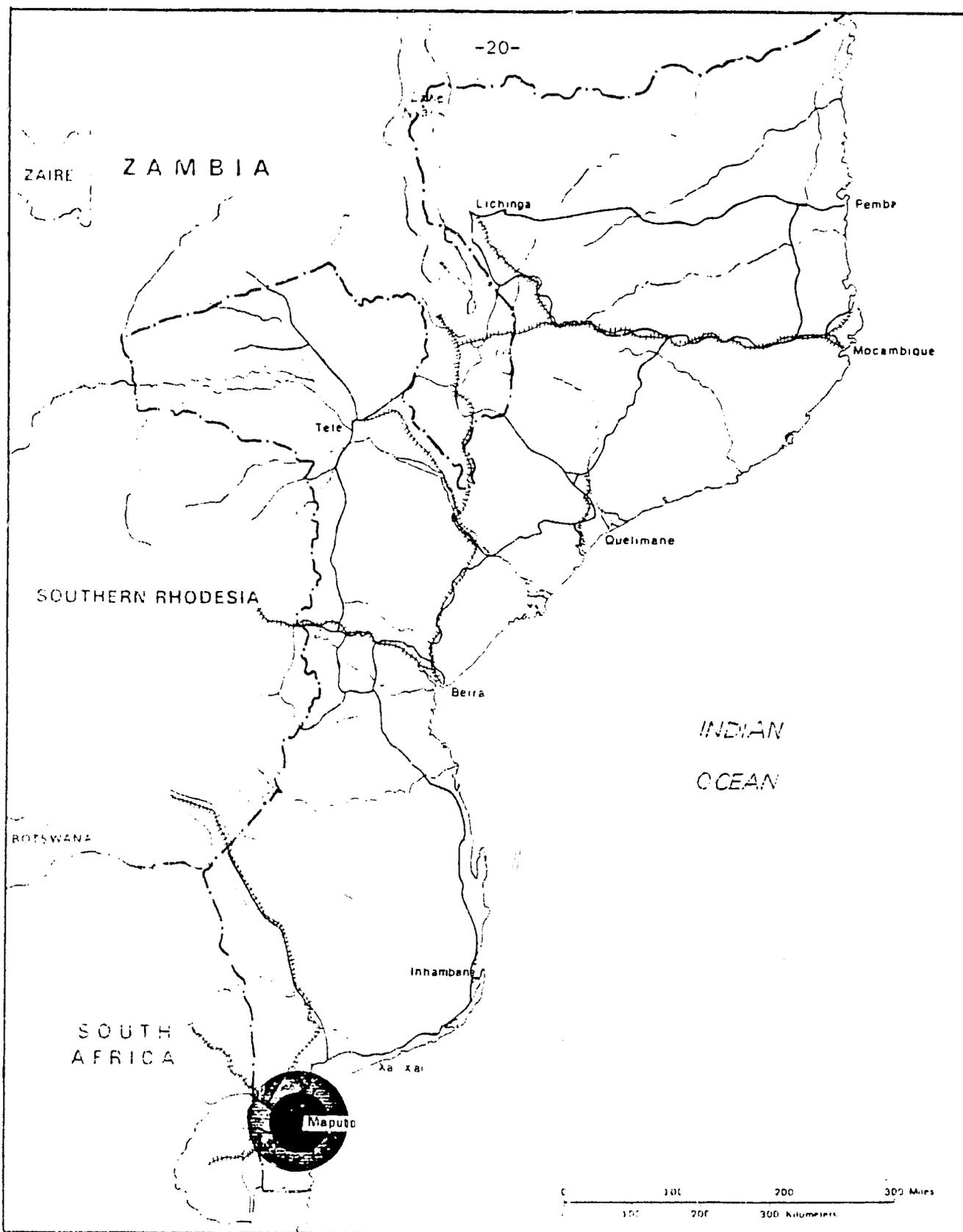


# Malawi

POPULATION OF MAIN URBAN AREAS IN THOUSANDS

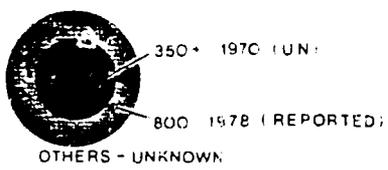


1977 DATA

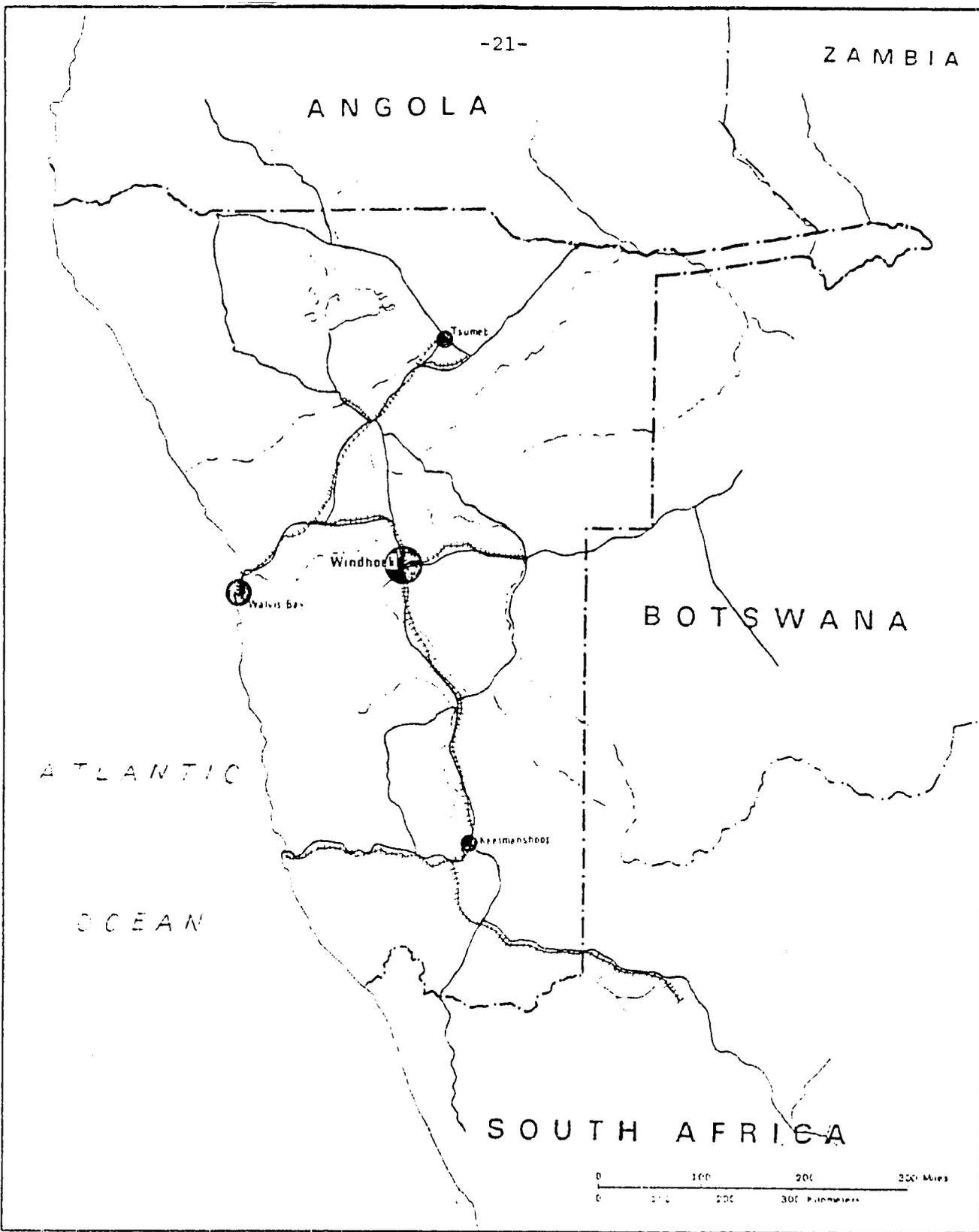


# Mozambique

POPULATION OF MAIN URBAN AREAS IN THOUSANDS



ANGOLA

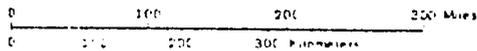


BOTSWANA

ATLANTIC

OCEAN

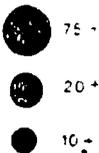
SOUTH AFRICA



# South-West Africa (Namibia)



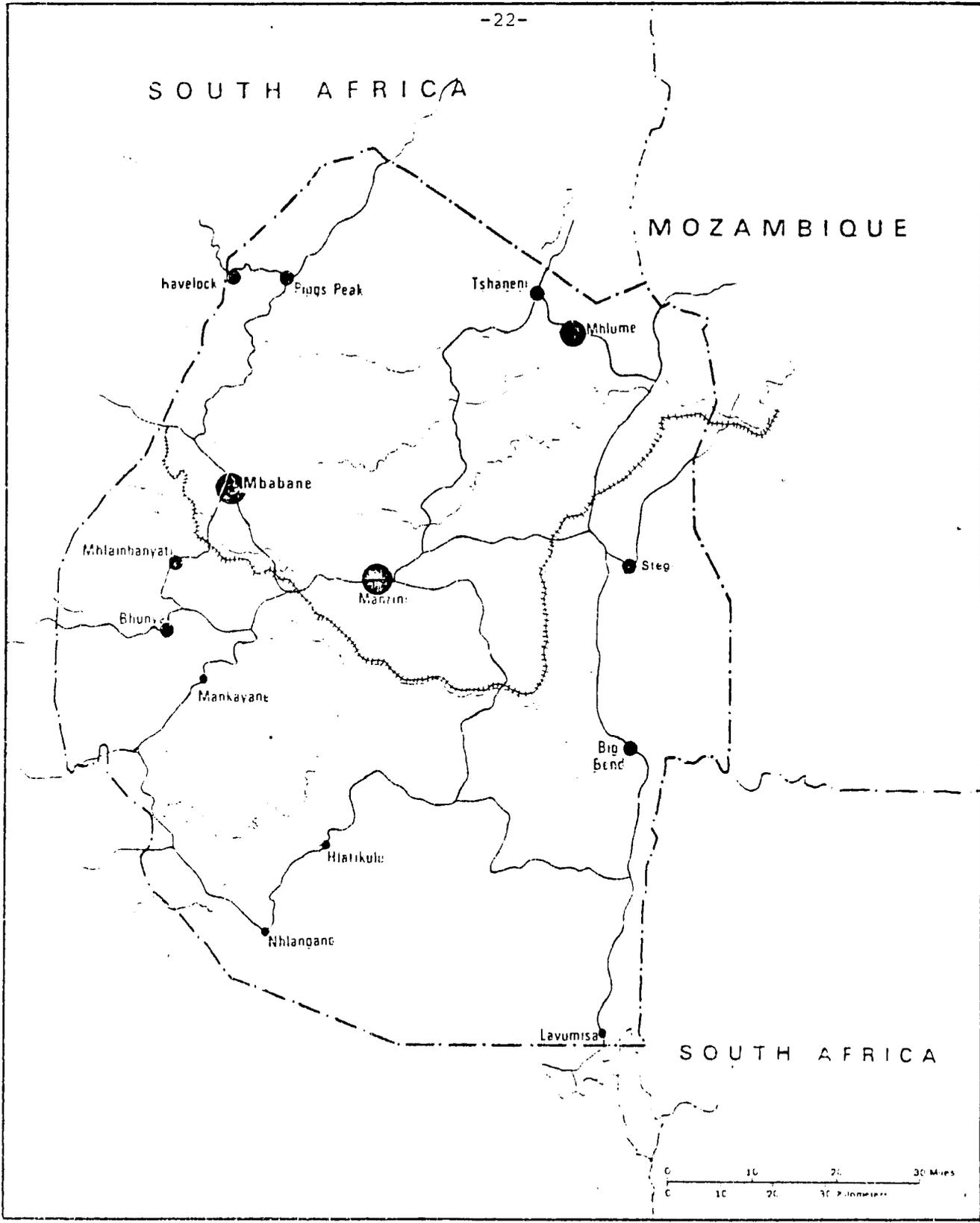
POPULATION OF MAIN URBAN AREAS IN THOUSANDS



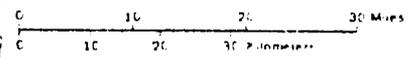
1970 - 74 DATA

SOUTH AFRICA

MOZAMBIQUE



SOUTH AFRICA



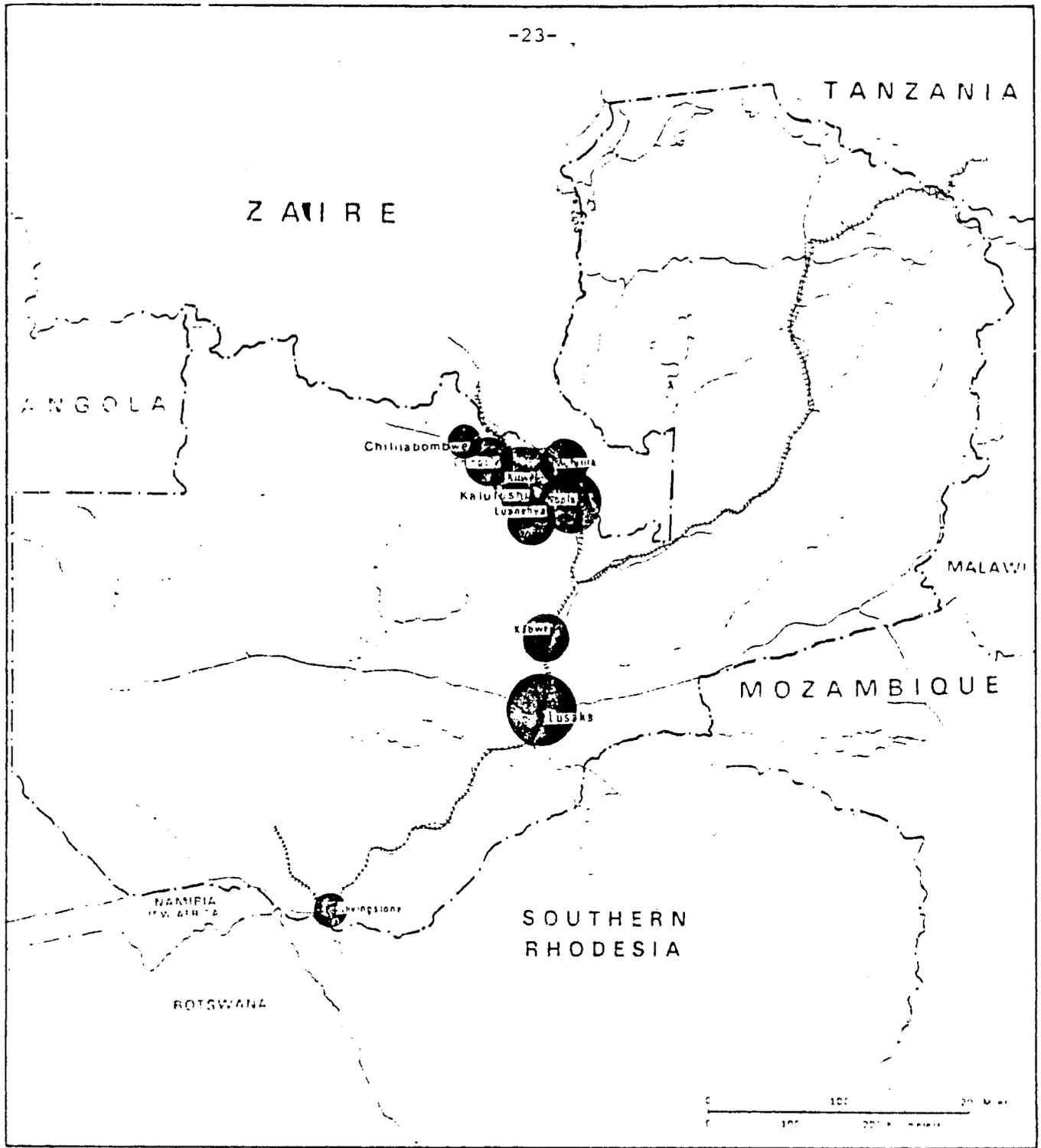
# Swaziland

POPULATION OF MAIN URBAN AREAS IN THOUSANDS

- 25-30+
- 15+
- 3-10
- 5-3

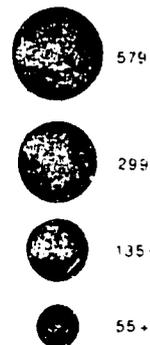
1978 DATA



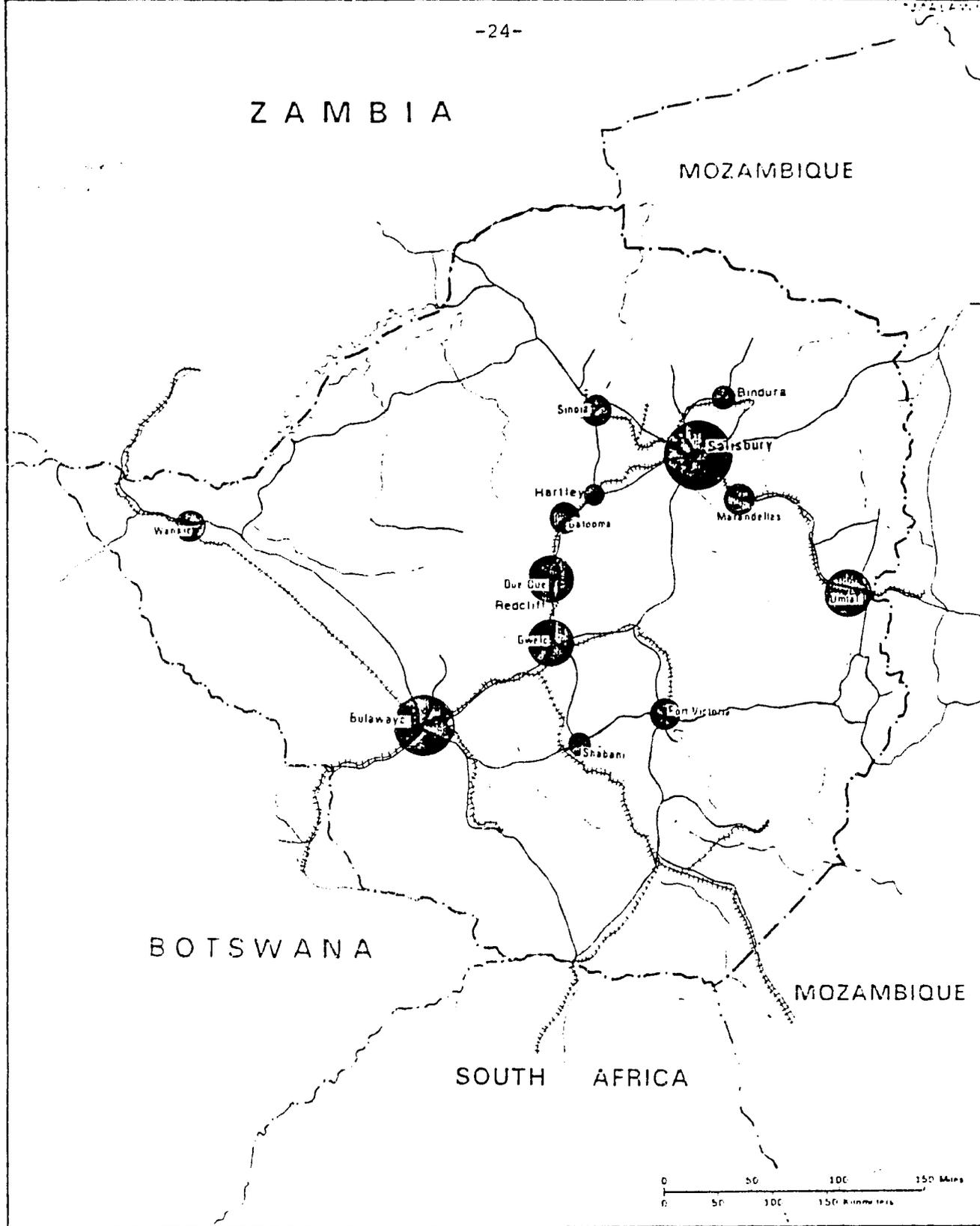


# Zambia

POPULATION OF MAIN URBAN AREAS IN THOUSANDS

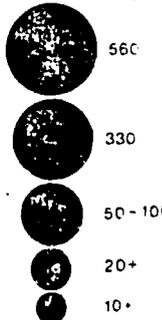


1978 DATA



# Southern Rhodesia (Zimbabwe)

POPULATION OF MAIN URBAN AREAS IN THOUSANDS



1977 DATA



### 3. Patterns of City Size and Functions

While the chief centers in each country are expanding rapidly, a striking characteristic of the region is the number and relatively dispersed locations of other centers--large and small. It is this emerging "network" of communities which provides most of the countries with opportunities to integrate rural development activity with supporting service and production centers that are already in place. It is this array of communities which permits national strategies of decentralized urbanization and provides a context for diverting migration flows away from dominant, primate centers.

An analysis commissioned for AID states the potential in such networks as follows:

"the overconcentration of people and investments in a single primate city or a few metropolitan areas limits development potential and constrains the spread of its benefits to rural areas. A pattern of spatial development is needed that deconcentrates urbanization and promotes a system of cities and towns, integrating rural and urban areas to achieve a more balanced and mutually reinforcing network of development centers. As Johnson argues, 'the underdeveloped economies cannot create tolerably satisfactory market economies without a spatially dispersed hierarchy of rural growth centers, market towns, small cities, and other central places that collectively can counterbalance the pull of their voracious metropolitan centers.'

Similarly, the pattern of migration rather than its volume burdens developing nations. Without a system of intermediate and small size cities reasonably dispersed, rural migrants have nowhere to flock to but the already overcrowded primate city. The inability of the primate city to absorb large numbers of unskilled labor creates many of the physical, social, and economic problems associated with Third World capitals. The existence of a system of cities of various sizes would allow migrants to move progressively from smaller towns to intermediate cities, which might in fact permanently absorb a large percentage of rural migrants."

---

7. Rondinelli, Dennis and Ruddle, Kenneth: Urbanization and Rural Development: A Spatial Policy for Equitable Growth, Praeger, New York, 1978.

The region does have primate centers which pose serious social and investment issues and will require careful national and international attention to control. Interestingly enough, however, the two clear primates are Luanda, Angola and Maputo, Mozambique each in a former Portuguese colony where extremely little information on migration flows, shelter needs, and related economic issues has been available. Both Luanda and Maputo are approaching the 1 million size and apparently exhibit the severe shortfalls in employment, housing, and services characteristic of primate centers. Any overall international development strategy directed towards these countries will clearly require attention to the problems of the primates along with efforts to open up new development areas, matters which may claim considerable amounts of capital investment.

In the five Commonwealth countries and the two minority rule states, however, networks of communities have emerged to provide a strong basis for rural/urban integration.

Even the most urbanized, Zambia, exhibits this potential. Although Lusaka is approaching the 600,000 mark and has the basic control and shelter problems associated with large cities, it is not the overwhelming focus of migration. Zambia has a total of 10 cities with populations over 50,000, several of which have basic infrastructure and services capable of responding to increased population and efforts at economic development. Luanda, Angola is eight times the size of the next largest city. This is in sharp contrast to Zambia with two centers (Ndola and Kitwe) each about half the scale as Lusaka, seven other cities of significant size, and a number of communities below 50,000 which can be considered for market and processing centers.

Reference to the country maps accompanying this paper will demonstrate the evolving urban networks and their positions in relation to major transportation networks.

Rapidly urbanizing Botswana has five cities and towns in place, as well as at least two communities that are technically "villages" but have populations of several thousand people. The diversified economic potential in such networks, well related to resources and transportation is highlighted in the following commentary from the Botswana shelter sector paper prepared for SADAP. It depicts a situation comparable with other countries in the region.

"Gaborone, the fastest growing major town, offers employment opportunities in the government sector, domestic work, and a number of light industries such as brewing, light engineering, and furniture manufacturing. Francistown, traditionally the trading and communications center, will continue to grow since large scale mining is opening up in the northern region. Other Francistown industries include textiles, engineering, brewing and tanning. Selebi-Phikwe services a copper-nickel complex recently completed, and is expected to continue growing at a rate of 8 percent per year from 1975 to 1981. Lobatse's growth is largely attributable to the presence of the Botswana Meat Commission which operates one of the largest meat processing plants on the continent. A shortage of water has kept its growth rate lower than that of the other towns; even so, projected growth is 5 percent per annum. Orapa has operated as a company managed, enclosed town, but the government intends to open it up, and the diamond industry will attract many migrants, so the town is expected to grow at a rate equaling that of Gaborone."<sup>8</sup>

A similar depiction can be made for Malawi and Swaziland. Malawi, like Botswana, has made a decentralized network of towns and cities explicit national policy and has used location of a new capital city as a tool of such policy. That country now has 12 urbanizing centers of various size distributed the length of its territory, some of which have been linked with rural

---

8. "Botswana Housing and Urban Development Sector Paper," Foundation for Cooperative Housing, 1978, p.5.

development programs in their hinterlands. Swaziland, with the smallest principal cities in the region, has a relatively decentralized pattern of settlement resulting from accident of resource distribution and earlier investments in industrialized agriculture rather than explicit settlement policy.

Zimbabwe displays a highly decentralized pattern of some 14 communities over 15,000 in population which could afford considerable opportunity to disperse migration flows after majority rule occurs.

Of the majority ruled countries, only Lesotho evidences an incipient primate city in Maseru which, at 43,000, is four times the size of the second city. Migration to Maseru has--for the scale of the country--achieved serious proportions. Given Lesotho's sparsity of rural resources, the government's newly adopted emphasis on creating wage employment might be directed towards stimulating opportunities in the four other towns as well as Maseru itself. In Namibia, Windhoek clearly dominates, but there is little information to assess the present size and future development potential of the three other cities which were over 10,000 people in 1970.

In viewing the history of rural/urban migration and of urbanization in developing countries, it is appropriate to consider any decentralized networks of towns and cities as "resources" whose elaboration merits attention in national development programs. From this standpoint the countries of Southern Africa appear to be particularly well endowed.

#### 4. Refugees

Yet another factor which demonstrates the fluidity of the settlement structure in the region is the refugee situation. Internal warfare in Zimbabwe, Angola and Namibia has resulted in

displacement of tens of thousands of people, primarily from rural areas. In Zimbabwe, some have shifted within the country and apparently the rigid control over African settlement in Salisbury and Bulawayo has broken down to the degree that in recent months squatter areas have sprung up around these cities. Three majority rule countries have become major receiving areas for the refugees. Estimates vary, but somewhere between 100,000 and 200,000 refugees are now in Botswana, Zambia, and Mozambique. Zambia is the principal reception area, with 65,000 - 100,000. Some of the refugees have been absorbed into existing urban areas and are being educated or have become part of the local labor force. The majority, however, are in refugee camps that have taken on the character of semi-permanent settlements. Major camps are outside Lusaka in Zambia, in the vicinity of Francistown and Selebi-Pikwe in Botswana, and near the Zimbabwe border in Mozambique. International assistance is being applied in these camps, but the needs for shelter, services, and gainful employment are considerable. Of particular concern is the prospect that these or other camps may become long term settlements, pending both the resolution of political change in Zimbabwe and Namibia and the potential of upheaval in the Republic of South Africa. Efforts may be necessary to integrate the camps and their residents into the economies of the receiving countries. Without particular attention to resettlement programs, moreover, the once rural refugees may become prime candidates for urban migration on return to their own lands.

##### 5. Incomes and Employment

Urban areas are the principal generators of wage employment in the region. This is a factor which contributes to increasing migration flows. It is a factor which requires consideration in national development programs and in any international assistance strategy to increase incomes and stimulate new productive enterprises.

The extent and depth of incomes information varies considerably and is not comparable from country to country. Since a clear understanding of income and expenditure patterns is essential to effective development planning for any sector of activity, collection and interpretation of data in this area warrants priority attention.

Some indicative material can be presented however. With the exception of large, primarily expatriate-owned farms in countries such as Botswana, Swaziland and Zambia--and the white owned estates of Zimbabwe--agricultural activity is generally at a subsistence level. Despite poverty in the cities, urban employment in both the formal and informal sector has produced wide differential between urban and rural incomes. In Botswana, for example, median urban family income for 1975 was estimated at double the R630 of rural families. In Swaziland for a comparable period median urban incomes were estimated at three times that of rural. Some substantial amount of the cash income which does exist in rural areas comes both from migrant laborers in South Africa and Zimbabwe and in the form of money sent back by urban relatives. Many of the recent urban settlers in Swaziland and Malawi, for example, maintain their families and primary residence in the rural districts and consider themselves temporary migrants. This is particularly the case in Swaziland, where the country's small size and relatively good transport system allow for maintenance of two residences and frequent travel from one to the other. It is estimated that as many as two-thirds of the rural families in Swaziland receive transfer payments from relatives in the cities or in South Africa.

Although poverty in the cities is extensive along with great income differentials, employment generation has been sufficiently

high to avoid large concentrations of indigent population. Migrants may still come with the realistic hope of work in the formal or informal sector. In Zambia in 1976, 87 percent of wage employment was estimated to be in cities. Of the male urban labor force, almost 90 percent (384,000) were employed and over 80 percent of these were in the formal sector. Less than 50 percent of the women in the urban labor force were employed, however, and over half of these were in the informal sector.

Most recent estimates from the peri-urban areas of Botswana's three principal cities indicated unemployment levels of 15-18 percent for males and 35-48 percent for women.

Rapid population growth and rural/urban migration may be altering what has been a relatively favorable urban jobs situation, however. Estimates in Swaziland suggest that new entrants into the labor force are double the increase in wage employment. Similar situations may be occurring in the other countries; and Zambia, whose economic expansion has been heavily dependent on the market for its copper resources, may be witnessing the growth of an urban underclass as the result of the downturn in copper demand and the influx of refugees to its major cities.

While the surplus of unskilled urban labor is building throughout the region, the shortage of highly skilled indigenous personnel to direct activities of government and enterprise is acute. Each of the majority rule countries depends heavily on expatriate personnel for middle and upper level jobs. Emphasis on "localization", e.g. the replacement of expatriates with citizens, is growing. However, in all sectors of the economy, especially in urban areas, the supply of trained people is well below even present levels of need. Thus, a principal

thrust in any international program must be assistance to expand the supply of skilled personnel, especially in urban areas which contain the principal private and public enterprises.

Serious issues of income and employment exist in all of the countries. While the most pressing priority may be raising the level of the rural economy throughout the region, special and simultaneous attention will be needed within urban areas where the structure for expanding jobs and incomes already exists.

## II. Shelter...Characteristics and Needs

Settlement patterns in the region are shifting and changing. One set of physical consequences is the continuing creation of shelter to house increased population both in burgeoning cities and in rural areas. A concern with shelter and its adequacy is explicit in AID's legislative mandate. The World Bank, U.N. and many of the bilateral assistance programs have interests in housing as well. This section of the paper provides an overview of shelter conditions and needs within the region.

### A. Rural Shelter

By and large, rural populations of the region are able to provide their own shelter adequately, through the use of traditional materials and construction techniques. These are primarily pole framing for structure, mud bricks or stone for walls, and thatch or metal roofing. There is great similarity of rural building style, technique, and materials from country to country. These similarities exist even though the living patterns in which the shelter is organized differ in response to population density, tradition, and agricultural practice. The form of rural settlement varies from the often isolated individual homesteads of Swaziland, to dense village clusters in Malawi, to large concentrated villages whose population ebbs and flows in Botswana.

Rural housing problems do occur, but (again, with some exceptions) they are not normally problems of the shelter unit itself--its cost, available materials, techniques of construction, or even durability. For although not "durable" by contemporary standards, predominant shelter types are products of a long, symbiotic relationship between man and his habitat. Rudimentary quality is deemed acceptable. The continual rebuilding process poses a problem mainly in so far as it demands time from hard working rural women that might better be spent in learning more productive agricultural techniques and applying them or earning cash income through cottage industry.

The most significant rural shelter issues are availability of potable water and fuel wood, access to markets, schools, health centers and other supporting services. These are problems, less directly of housing than of public health, human resources and enterprise development. They bear some responsibility for the continuing "push" out of rural areas to the cities. For as the rural "environment" becomes less tenable for maintenance of human life, the cities--with all their difficulties--may seem more attractive by comparison.

Hard data on the quality of rural living accommodations and services are extremely sparse. However, each of the country shelter papers in the SADAP review has flagged potable water and services (including roads, schools, clinics) as the primary needs associated with rural shelter. Some illustrative measures do exist, however.

In Swaziland, some 52,600 rural homesteads lack a source of treated drinking water. In Malawi, only 30 percent of the rural population had access to safe drinking water. In Zambia, only 5 percent of the rural houses had access to "services" which can be interpreted as reliable, safe water supply. The only country where building materials available for rural shelter construction appears to be an issue is Lesotho, where erosion and overgrazing has sharply reduced the supply of wood and thatch for traditional dwellings. Wood for fuel is in short supply in Malawi as well as Lesotho.

Rural development has, for some years, been a priority concern to most of the countries, and the priority has been re-affirmed in the most recent development plans of Botswana, Zambia, Swaziland, and Malawi. Much of the actual rural development effort has been concentrated on improving agricultural production, with relatively little attention to the service base of the communities.

Botswana's ARDP did provide 31 new village water supplies between 1974 and its termination in 1976. Malawi's NRDP has a short term target of extending safe drinking water to 50 percent of its rural houses. Swaziland has a major resettlement and land reorganization program under way, assisted by AID and the World Bank. It has devoted little attention, however, to preparing housing sites or services for the resettled families. Perhaps the most ambitious community-oriented rural program is that of Mozambique, where 1,500 communal villages have been established since independence. Strengthening this network through investments in roads, infrastructure and agro-processing industry is the main thrust of the rural and overall national development program (as suggested by creation). Early in 1978, a super-ministerial level National Commission for Communal Villages was created, underscoring the importance of the village development strategy to the government. Information on results is not yet available.

In weighing priorities for international assistance to rural development efforts, improvement to the service base of settlement merits consideration, both from a humanitarian standpoint and to reinforce the attractiveness of rural living conditions as a brake on urban migration.

#### B. Urban Shelter

It is in the urban areas that shelter problems per se assume serious, and in some respects, frightening, dimensions. What is tolerable under rural conditions if some attention is provided to services, becomes a matter of serious national concern in an urban setting. All of the country reviews indicate that new shelter growth in cities is increasingly provided in the same fashion as rural housing. Despite programs by governmental and private building institutions, most new urban housing is built of poles, mud brick and other readily scavenged materials characteristic

of rural shelter production. Despite the great diversity among the countries and their urban economies, the similarity in materials and methods of this self-built housing is extraordinary-- as demonstrated in the accompanying illustrations of self-built shelter in the urban areas of Botswana, Malawi, and Swaziland.

On the one hand, the human energies invested in this self-built shelter represent important resources for growing economies. Where the formal sector has been unable or unwilling to provide-- the people have stepped in with their own skills and done the job.

Yet serious issues arise, which are the substance of the urban shelter problem.

#### 1. Public Health

Generally, the self-built units lack waste disposal facilities and accessible sources of potable water. Materials are largely non-durable and subject to destruction in heavy rains. The densities at which these units are built--while often low by urban standards elsewhere in the world (see below)--are considerably higher than what exists in rural areas. When hundreds or thousands of families are settled together under these conditions, the public health risks become severe.

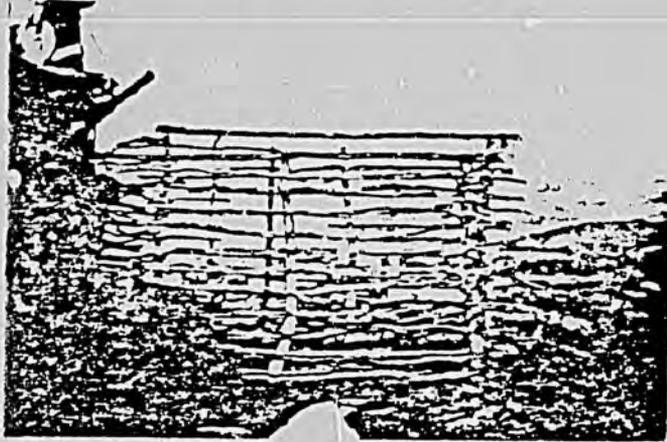
#### 2. Siting

Most of these self-built units are located illegally on government or privately owned land. The builders lack secure tenure. More important, unlike conventional subdivisions where streets, lots, and utility lines are laid out in advance, the informal settlements materialize before platting or utilities provision occurs. Because they are illegal and occurring at a scale which taxes the resources of even the most caring governments, it becomes extremely difficult and expensive to install services after the fact.

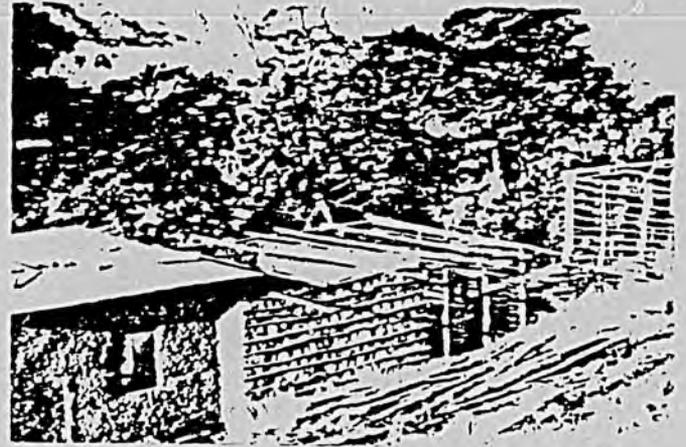
# URBAN SELF-BUILT HOUSING - UNDER CONSTRUCTION BOTSWANA SWAZILAND MALAWI



In Ndirande, Blantyre, Malawi, a wattle and daub addition to a finished house.



Typical framing of sticks and poles nailed or wired together - Nkwalini, Swaziland

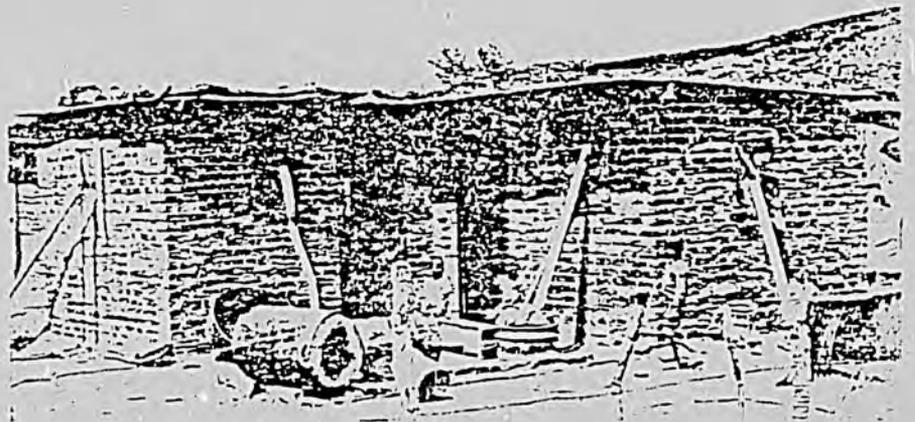


An excellent illustration of the standard process of housebuilding in Swaziland with (from right to left) stick frame, rock or mud-ball infill, and finished mud-stucco coat.



In Francistown, Botswana, a combination of traditional and modern materials in these houses

A house made of locally produced burned bricks in Malpaafela - Woodhall area of Lobatse, Botswana



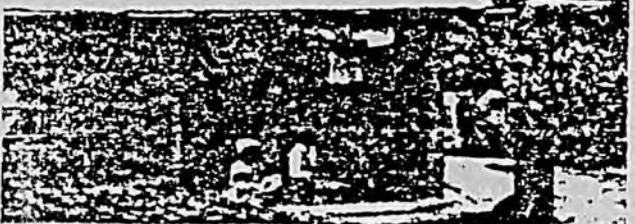
# SIMILARITIES OF TYPES AND MATERIALS - SELF-BUILT URBAN HOUSES IN BOTSWANA SWAZILAND AND MALAWI



In Nkwalini, Swaziland this house is an upgraded version of informal shelter with manufactured windows, doors and roofing.



In Madeli squatter community, Botswana, a combination of traditional and modern materials with catch basins for rain.



In Malawi this self-built house is capped with a metal roof and has walls plastered and painted.



In Nkwalini, Swaziland, wires poles secure the roof sheeting against heavy storms.



In Mzuzu, Malawi, these densely placed wattle and daub houses are typical.



In Gaborone, Botswana, an extra roof made with poles and canvas for roof and stacked beer cartons for walls. Typical use of found materials.



Weather damage makes restoration a necessary repetitive part of the building process - Mbabane, Swaziland.

As migration flows intensify, these informal settlements increase in scale and ring the formally developed and planned portions of the cities. They block functional, efficient and cost-effective patterns of urban expansion; and the prospect of vast squatter areas around the principal towns is now a serious concern. Only Malawi, among the majority rule countries, has been able to control squatter settlement. This has occurred, partially through effective policing to prevent new squatter areas and partially because of an extremely permissive attitude towards what is built on formally allocated government owned plots. But even in Malawi, the control system is breaking down as the government's allocation of prepared housing sites has been out-paced by the level of migration. Some 15 percent of the housing in Blantyre is now represented by squatters on unregularized plots.

### 3. Overcrowding and Rental

Overcrowding within the units is also a serious matter. In addition to families, many single migrants gravitate to the squatter areas and become renters, living one or more to a room attached to the main dwelling or built as a separate "motel-like" structure. Rentals are common in Swaziland and Malawi, and it is estimated that 40 percent of the residents of squatter areas in Maseru are renters.

Overcrowding within the units is often more serious than overcrowding on the land itself. The density levels in the informal settlements pose public health dangers, but are generally much lower than those in many Latin American and Asian cities. Densities of 10 or fewer units per acre are common, providing opportunity for open space, production of vegetables, even livestock. As presently established, these densities, combined with haphazard siting, contribute to

inefficient land utilization. If adequate levels of utilities and services could be provided, however, the basic densities would be tolerable; allowing for eventual replacement or extension of dwellings with more durable materials as income levels rise.

#### 4. Income Levels

To a great degree, these informal settlements house the poor. It is inappropriate, however, to characterize them as ghettos for the poor alone. Because of universal shelter shortages and the inability of formal institutions to respond to the scale of shelter need, informal shelter areas house a broad spectrum of income groups. Many of these people could afford formal housing if land and financing mechanisms were made available. Indeed, some of the squatter areas include houses of concrete block and other modern materials....and not a few automobiles. At least 10 percent of the squatter area residents in Swaziland, for example, are estimated to be above the median urban income level.

#### 5. Positive Features of Informal Settlements

The informal settlements themselves have potential as resources for social and economic development. First of all, they tend to be "communities" rather than merely housing areas, with strong internal organization and thus serve an important social control function in a rapidly urbanizing society. Secondly, these areas, as illustrated in the accompanying photographs, serve as the breeding ground for commercial and industrial enterprises--small in scale, to be sure, but demonstrating an entrepreneurial capacity and providing employment over and above that which the formal sector has been able to generate. These enterprises can become the direct targets of international assistance as programs to stimulate local economic development intensity.

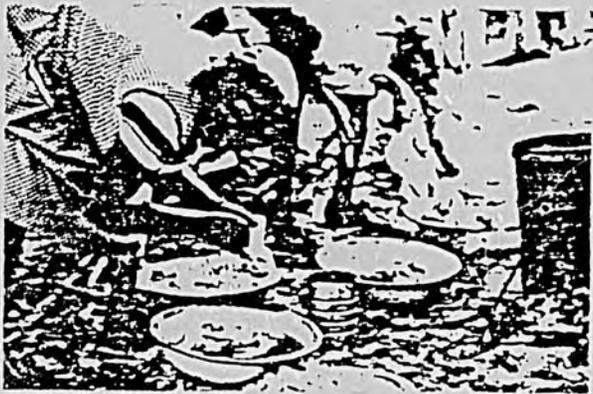
# ECONOMIC ACTIVITIES IN SELF-BUILT URBAN COMMUNITIES



Chairmaker in Msunduzi, Sw



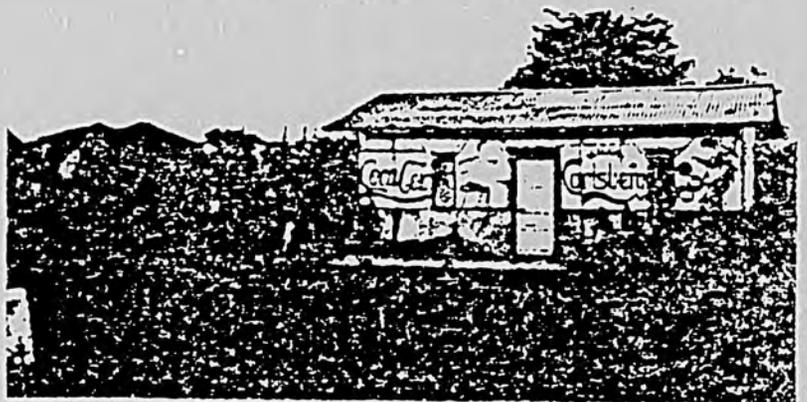
A shopping street in the center of a residential area - Lobatse, Botswana.



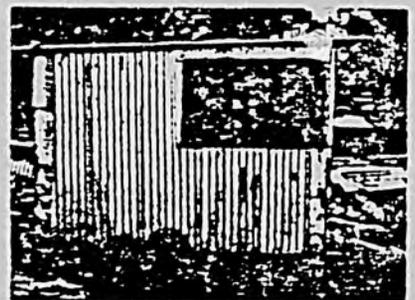
Women processing and selling produce in Mbabane, Sw



Private bus service connects Nkwalini and other squatter communities with employment, shopping and other facilities - Sw



A store next to traditional thatched huts - Malawi

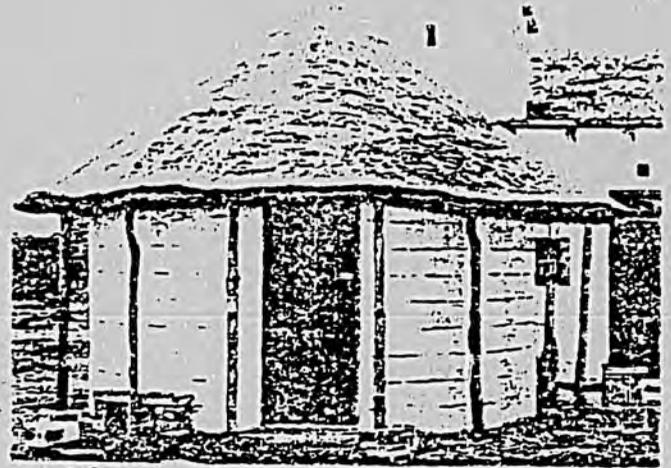


A makeshift roadside shop in Msunduzi, Sw

# VARIOUS SERVICES IN SELF-BUILT URBAN COMMUNITIES



A fresh fruit and vegetable market in Nkwalini, Swaziland



In Selebi-Pikwe, Botswana, a clinic with an experimental concrete roof formed with traditional pole framing but with concrete spread over wire mesh.



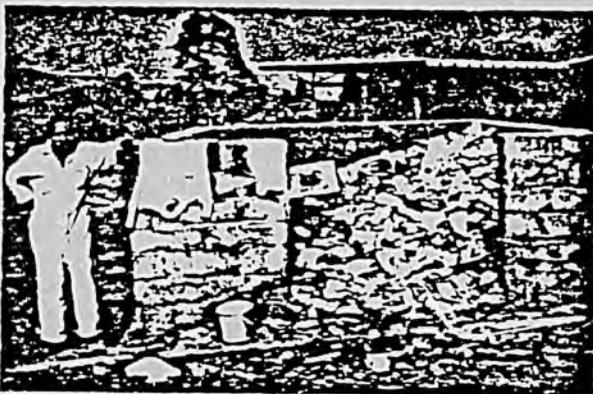
A self-help school house in Botshabelo squatter community in Selebe-Pikwe, Botswana



A water selling kiosk in Lilongwe, Malawi. Sales price is approximately one U.S. cent per 8 gallons



An improvised pipe carries water from a stream near the top of Nkwalini to a neighborhood collection point



A receptacle for solid waste in Ntshundza, Swaziland



A neighborhood church built of mud and concrete block in Gaborone, Botswana

The very mass of continuing housing production represented in the informal settlements can constitute a significant market for new locally produced construction materials and home accessories which, in turn, can mean jobs for a growing labor force. The pattern of informal settlement poses serious national problems, but the settlements themselves, and the energies of their populace, are a potential force for support of national economic and social objectives.

6. Some Illustrative Statistics

Below are some illustrative statistics which underscore the scale of shelter and service problems in existing informal settlements.

- Angola : The last available estimates from the Portuguese in the early 1970's indicated that 64 percent of the population in Luanda was "poorly housed".
- Botswana : In 1975, squatter population in the four main towns comprised between 27 and 60 percent of all households.
- Lesotho : In 1973, approximately 40 percent of the housing stock in Maseru was traditional mud huts for ownership or rental.
- Mozambique: The last available estimates by the Portuguese indicated that 87 percent of the urban housing stock built between 1960 and 1970 was non-durable in character.
- Swaziland : As much as 50 percent of annual shelter production in Mbabane and Manzini is now in squatter areas. Some 14,600 existing urban housing units are nondurable or partially durable in character and over 4,500 are without access to potable water and sanitation.
- Zambia : As of 1977, the proportion of urban dwelling units without services ranged from 31 to 49 percent in the various cities.

C. Dimensions of Urban Housing Need

Even if natural increase and urban migration were to level off, the upgrading and regularizing of present squatter areas would be a source of national concern. However, the march to the cities appears inexorable. For some of the countries, estimates have been made of anticipated urban shelter needs which show the requirements to be far larger in scale than present formal sector capacities.

Lesotho : Annual need for new urban housing units is estimated at 1,570 plus replacement of 800 existing dwellings, an equivalent of 15 percent of the present urban housing supply. Capital costs for this scale of production are estimated at R5,000,000. Only R3.34 million has been budgeted for housing within the current five-year plan.

Malawi : Annual urban housing need is projected at 7,750 for the next 10 years plus about 4,600 plots for sites and services. Current formal housing production is only 3,500 units per year. Capital requirements for housing are estimated at K 18-30 million annually. Current annual investment in permanent housing is K 5 million and in sites and services, K 500,000.

Swaziland: Annual housing need in the two main towns of Mbabane and Manzini is estimated at 1,200. This is twice the current level of formal sector production.

Zambia : Only 30 percent (20,000 plots) of the programmed sites and services activity in the 1972-76 Second National Development Plan were completed by the end of the plan period and 50 percent of the programmed squatter upgrading (16,000 units). Current needs in "large" urban areas are estimated at 18,500 new units annually and 20,000 units annually over the next five years.

Thus, whether the absolute demand is small--as in Swaziland--or large--as in Zambia--the capacities of formal institutions under present conditions appear to be well below anticipated requirements.

It is not hard to conclude that there are serious needs to increase, improve, and rationalize both production and distribution of urban housing in the Southern Africa region. Given the scale of demand, however, it is unrealistic to consider formal, contractor-built shelter as more than a partial contribution to bridging the gap. Recognition, on the part of both the countries and potential donors, of the importance of self-built housing in urban areas is critical. Resolution of shelter problems will require considerable attention as to how the energies of the informal sector can be aided and channeled more effectively; and as to how the attendant issues of public health and urban organization can be resolved.

III. The Institutional Framework for Addressing Settlement Patterns and Shelter in the Commonwealth Countries

Governments in the region are sensitive to the shifting settlement patterns, their economic and social implications, and to the shelter needs being generated. Some have created policies and institutional mechanisms to address the issues. Others have considered such policies and mechanisms, which are still in process of formulation. In certain respects governments are channeling urban growth and grappling with shelter requirements. With some exceptions an institutional framework exists or can be mobilized, suggesting that effectiveness in meeting needs is more a question of capacity and resources than conception of appropriate devices. Any international assistance efforts should be sensitized to the institutional structure currently in place. This section provides an overview of that structure for the five majority rule commonwealth countries (Botswana, Lesotho, Malawi, Swaziland and Zambia) where a base of information exists.

Accompanying this discussion is a matrix which displays the existence of various mechanisms and institutions in the five countries and will be referred to in the text.

A. Spatial Development Policy

A spatial development policy is one which attempts to program public investments by regions or areas of a country. It formulates measures to direct (or otherwise encourage) rural-urban migration to more than a single community; both as a means for decentralizing economic development and for relieving pressure on a principal urban area. A spatial development policy identifies linkages between rural and urban development on a regional level and establishes priorities for investments which support such linkages (e.g. transportation, shelter, aggregation of services, industrial location, market formation). None of the five countries has formulated comprehensive spatial development strategies, similar

Institutional Framework for Spatial Development  
and Shelter - Five Countries

	<u>Policy</u>			<u>Production Institutions</u>			<u>Mortgage Finance</u>	<u>Programs for Urban Poor</u>		
	<u>Spatial</u>	<u>Shelter</u>	<u>5-year Plan Targets</u>	<u>Gov't</u>	<u>Parastatal</u>	<u>Company</u>		<u>Self Help</u>	<u>Sites Serv.</u>	<u>Squatter Upgrading</u>
Botswana	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	
Lesotho			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		
Malawi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Swaziland			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Zambia		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

to those which guide public investment commitments in developing countries who have had greater experience dealing with the subject; i.e. Turkey and Malaysia.

In two cases, however, Botswana and Malawi, principles of spatial integration are explicit in national development programs. Considerable effort to evaluate options has been made in Zambia, although formal policies have not been established. In Swaziland and Lesotho the approach is under consideration at the highest levels of government.

Botswana is clearly the furthest advanced in formulating spatial strategy. The cornerstone of this has been creation of a new capital city, Gaborone, to divert migration from the principal communities existing at the time of independence. Planned and built with assistance from the U.K., Gaborone has fulfilled this objective and has become a growth area oriented towards government, while the other settlements have maintained their own functional specializations. Selebi-Pikwe and Orapa were also new towns. Two more have been considered: Jwaneng to be built in association with a diamond mine and Dukwe (presently a refugee settlement) to service a second abattoir and meat cannery.

Botswana has recently conducted growth studies of each urban center except Orapa and the large agricultural villages. An outgrowth of these studies and Botswana's concern to retard rural/urban migration has been the requirement that all urban projects (infrastructure and shelter) be self liquidating.

Any available subsidies are to be directed towards rural areas and rural development. As part of its strategy to decentralize urban growth, Botswana has orchestrated international assistance activity among the four major centers:

"In urban towns other than Gaborone, foreign assistance seems to follow a territorial pattern: In Francistown, the World Bank is the only major donor to date; in Selebi-Pikwe, World Bank and EDF aid predominate; in Lobatse, the British Overseas Development Ministry (ODM) is the sole donor. This territorial allocation of foreign assistance has been arranged by the Government of Botswana for several reasons: 1) having a sole donor makes it clear and known who to turn to in case of needs or problems; 2) donors tend to become interested in a particular place and may continue to give aid to see projects through in one place; 3) programs financed by multiple donors are complicated because each donor requires different record keeping and delays in draw-downs from one donor can slow the entire project."<sup>9</sup>

The considerable USAID assistance (see Sec. V below) has been directed primarily towards shelter expansion in Gaborone.

In Botswana, a Division of Urban Affairs in the Ministry of Local Government and Lands is responsible for formulating urban policy.

Less information exists on the mechanisms for formulating spatial policy in Malawi, but decentralized rural as well as urban development has been, since independence, among explicit national priorities. Creation of a new capital city at Lilongwe in the central region was largely in response to over population in the south and in the chief city of Blantyre. Lilongwe is apparently now pulling population from the south. Its growth is in some fashion being coordinated with a major rural development effort in the surrounding agricultural region according to the country shelter review prepared for SADF.

---

9. "Botswana Housing and Urban Development Report, SADF", op.cit., p. 28.

"The highest priority of the Malawi Government is the National Rural Development Program (NRDP). The NRDP includes extensive efforts to distribute development projects and industrial employment opportunities throughout the country and projects to develop smaller urban centers, or 'secondary cities' in order to stem migration to the larger cities and limit urban growth. Another strategy for decentralized and rural development has been to encourage growth in the less urbanized central and northern regions... development of a new town at Lilongwe with the encouragement of siting heavy industry close to a water/rail transshipment point, construction of a railway/port at Salima, and establishment of a pulp mill at Chintcheche--have deliberately been located in the more sparsely populated urban regions."<sup>10</sup>

Not known is how effectively the provision of services, shelter, agricultural marketing opportunities, credit and other measures to support communities have been coordinated with these major location decisions. In Lilongwe City, however, a Capital Corporation has been charged with creating shelter and services as well as new governmental facilities.

Zambia, as the most "urbanized" country, has considered issues of spatial planning, although no mechanism is yet established. Papers presented at a National Housing Policy Conference of a few months ago reviewed the necessity of creating such investment guidance. The following approach was recommended:

"...a regional development approach whereby deliberate settlement and development patterns would be adopted in both rural and urban spheres in an effort to increase the absorptive and productive capacities of urban and rural areas, to reduce disparities within urban areas, between rural and urban areas, within provinces and regions, and between regions."<sup>11</sup>

Swaziland has a decentralized pattern of urban and rural settlement as the result of its resource distribution, but no policy mechanism to reinforce this structure. There, the Mbabane - Manzini "urban corridor" is the primary target for internal

---

10. "Malawi Housing and Urban Development Sector Report", SADAP, Foundation for Cooperative Housing, 1978, p. 2.

11. Dol, J., "Institutional Framework for Housing Development," in National Housing Policy Conference, March 15-18, 1978 (Lusaka: Government of Zambia, 1978), p. 3.

migration. The recent AID supported Shelter Sector Assessment for Swaziland recommended formulation of spatial policy and is now under study. Lesotho, also, lacks a policy framework, and Maseru is fast becoming the only "urban" center. But, legislation has been drafted for a Town and Country Planning Act which would specifically emphasize urban growth centers related to agricultural development programs.

#### B. Shelter Policy

Guidance for dealing with specific requirements of shelter may come in two forms; a comprehensive shelter policy treating a range of issues and options; targets in national development plans for the scale, type and location of public shelter investment. The two are complementary.

##### 1. Comprehensive Shelter Policy

A comprehensive policy is one which reviews housing demand and supply, means of finance and production, other issues such as land availability and manpower, and provides guidelines for governmental action in these related areas. Under USAID sponsorship, each of the five countries has recently cooperated in consultant preparation of a Shelter Sector Assessment. The SSA is a factual portrait of shelter conditions and issues, and includes action recommendations to the governments. As such, it can serve as an important reference base for policy.

Three of the five countries (Botswana, Malawi, and Zambia) have thus far formulated publicly disseminated shelter policies. Botswana's is the most comprehensive and spells out a range of measures to expand housing supply in urban areas. These range from extensive reliance on governmental provision of sites and services for both the poor and higher income groups, to establishing individual leasehold tenure on government owned

land. Botswana's policy includes elimination of subsidies for civil servant housing and the requirement that all urban shelter and infrastructure investments be on a self-liquidating basis. Botswana has established minimum but flexible standards for shelter provision and services as part of its policy formulation. Zambia and Malawi have also expended considerable effort to spell out shelter objectives and approaches. Neither Swaziland nor Lesotho have formal shelter policies, although both are considering means of moving in this direction.

## 2. Five Year Plan Targets

All five countries have set targets for governmentally assisted production of shelter in past and current national five year plans. These quantitative targets, and the investment levels they represent, are helpful guides. However, actual production results have fallen short in every case. Disparity between development plan targets and actual performance suggests that implementation and resources, more than planning, produce the principal roadblocks.

## C. Formal Sector Instruments of Housing Production

Each of the five countries has formally established institutions whose function is to produce housing or housing sites. Some of these may also handle installation of roads, water, sanitation and other services although support facilities are generally the province of other (mainly government) entities. These institutions are of three types:

### 1. Government

Government housing production institutions are of two kinds; those which produce government "pool" housing for civil servants, and local town councils who operate sites and services programs.

Each country has a ministerial agency to build and operate pool housing allocated on a rental basis to civil servants-- both in the main towns and in outlying communities where teachers, administrators, etc. are stationed. Often the housing produced is of high quality and includes furnishings. Two related problems of government pool housing are relevant to all five of the countries.

One is the supply. Production is in all cases well below the number of occupants who would qualify for the dwellings. Because of the high, "European" standards generally employed in government pool housing, available construction funds create far fewer units than the demand.

Generally those units which have been built are heavily subsidized, and rentals do not return the costs. Civil servants who are allocated the housing are given rental allowances. Comparable allowances have not been available to others who must obtain shelter on the private market. As a result, inequitable conditions have occurred. Many middle and lower income officials are forced into inadequate, even squatter shelter, while others of comparable incomes enjoy government quarters in comparative luxury. The subsidy approach--even when occupants have incomes to pay an economic rent--has diluted the government housing effort and retards the amount of resources that can go into production. Botswana has dealt decisively with the issue recently by eliminating subsidies, and Zambia is doing the same. Both are providing financing to encourage home ownership among civil servants. Swaziland is in the middle of a 10 year program of gradual subsidy reduction and is also providing favorable terms for home ownership. In both Malawi and Lesotho, the practice continues.

Council built and managed housing (as with the government pool concept) is an adaptation of the earlier British system. It has proven particularly successful in Botswana and Zambia where the sites and services programs which form the backbone of public shelter efforts are operated by local town councils. This level of government provides infrastructure, welfare, and other social services in support of the housing effort. But, the council programs are--primarily because of lack of skilled managerial manpower as well as funds--far below both the demand and the official targets of five year plans.

## 2. Parastatal

All of the countries also have parastatal organizations chartered to build or otherwise assist in the production of housing. The precise nature of parastatal functions varies. The Botswana Housing Corporation is directly responsible to a cabinet ministry. It both builds and manages housing for government and private employees. In Zambia, the National Housing Authority is a regulatory and planning body as well as a builder. In Swaziland the Industrial Housing Company builds and manages flats for employees of small private firms (not covered by the law requiring shelter provision by firms employing 25 or more workers<sup>12</sup>). In Malawi, a Housing Corporation produces sites and services for a range of income levels as well as conventional housing, supplemented by Lilongwe by a Capital Development Corporation which builds shelter as well as public facilities. Lesotho has two organizations, a Housing Corporation which builds for middle and upper income groups and expatriate experts, and a Lower Income Housing Company to sponsor cooperatives and self-help housing for the poor.

These institutions have considerable flexibility about the kind and locations of projects they undertake, and tend to be

---

12. An interesting aspect of the law allows these large firms to provide transportation allowances in lieu of housing. This has led to a new entrepreneurial activity in the informal sector--several private bus companies who provide good transportation from squatter areas in Mbabane and Manzini to commercial and industrial centers.

self-liquidating without subsidy. But here again, the fundamental issue of capacity arises, for the scale of production continues to be quite small in relation to demand. In Swaziland, for example, the IHC has produced fewer than 500 rental units in four years of existence and is just beginning a modest sales project of 30 houses. In Lesotho, the Housing Corporation has fewer than 100 units under construction, and LEHCOOP will have assisted in 200 units in two years. Malawi has a waiting list of over 5,000 for Housing Corporation plots, a comparable number to the Swaziland applicants for IHC units.

### 3. Company Housing

Large industrial, agricultural, and mining companies have assumed a housing responsibility and are particularly instrumental in providing quality shelter for their employees. The result has been company towns in Zambia, Swaziland, and Botswana with relatively high standards of housing and services. While this has relieved government of considerable responsibility in the particular communities, company housing has often been provided at even higher subsidy levels than for government employees. Some of the operations (e.g. copper in Zambia and wood pulp in Swaziland) are particularly vulnerable to world market prices for their goods and cannot continue to provide units at the same level as in the past. The result has been a reduction in shelter provision, and growing squatter communities near the company towns as well as the major cities.

Residents in company shelter are, like the civil servants in the government pool, vulnerable to losing their homes if laid off or retired. This, combined with the subsidy strain, has led several companies to consider inaugurating home ownership programs of some kind which would give their workers a better sense of long term security.

Interestingly enough, there is little other private creation of formal sector housing units in the five countries. Major home development corporations do not exist, and most conventional "European" flats and houses that are not built by institutions represent lot-by-lot production by small contractors largely for higher income families. Coupled with the lack of a private development industry is the relative absence of one major problem that has constrained shelter production in many other developing countries--private land speculation. Government, institutions (and in the case of Swaziland, the Swazi Nation) control most developable urban land and private speculation is negligible.

D. Finance Institutions

Although the scale of lending is small, four of the countries have created financial institutions which permit private individuals to execute home mortgages. Lesotho is without such an institution, but plans to enact legislation creating a Building and Finance Corporation to receive savings and make mortgages.

Building societies are currently sources of housing finance in the four other countries. They attract savings and lend this capital as mortgages, typically only to middle and upper income levels. A secure deed is required for collateral. Some building societies also rely heavily on the issuance of bonds to attract capital for mortgage lending. They typically are not financed by government support. In their present situations, building societies are not equipped to deal with housing finance for people with low and very low incomes. Down payment requirements are high (25-30 percent), repayment terms may be short (15 years in Swaziland, 20 in Botswana, 30 years in Zambia), and interest rates vary widely (8-8½ percent in Zambia and Malawi, 11½ percent in Botswana and Swaziland).

Some building societies have or may soon have help in reducing down payment requirements through government guarantees which reduce the borrowers' deposit to 5 percent (Malawi and Botswana) and 10 percent in Swaziland. Building societies are usually constrained in their ability to offer low rates or to offer numerous loans by the fact that they must attract savings as their source of capital. Operating expenses may be high in maintaining numerous small savings accounts and in administering home mortgage loans to individual families.

Some countries have established development banks which are primarily oriented toward agriculture and industry, but which may also offer mortgage loans. The Swaziland Development and Savings Bank is by far the most important source of home mortgage finance in its country. In Botswana, the Development Bank makes housing loans to local government. In Malawi, the National Housing Corporation, primarily chartered to develop housing, may offer mortgage financing if funds are available (Malawi).

Pension funds can be sources of housing finance in two ways. The Provident Funds (equivalent to social security system in U.S.) of Zambia and Swaziland allow their depositors to withdraw certain of their retirement benefits for the purpose of building a house. The pension fund for local government employees (Super-Annuation Fund) in Zambia offers 7 1/2 percent 40 year mortgages to its beneficiaries.

Commercial banks are usually not sources of mortgage funds, but may be sources of construction financing (or "bridge financing") for private or parastatal projects.

Central banks (as well as commercial banks) typically concentrate lending activities on large scale government and private transactions, and thus are not prepared to deal with long term finance to individual

homeowners. They may, however, invest in building society or development bank securities and thus be a source of funds for mortgage finance. Central banks may also play an important role as standby facilities to meet liquidity crises at mortgage lending institutions whose sources of funds are far shorter in term than their investments.

Building materials loans for self-help housing have been offered in Botswana and Zambia, usually financed by government or an external donor in conjunction with a sites and services or squatter upgrading project. They act in lieu of mortgages for the lowest income levels. These loans would not easily be handled by financial institutions because of collateral difficulties (homeowner may not have clear tenure rights), and the large number and small size of the loans. These loans are typically low interest and short term (6½ percent 15 years in a government project in Zambia).

Housing finance in Southern African countries exists but suffers several weaknesses.

1. It typically serves middle and upper income groups.
2. Repayment of loans is often required on relatively short term basis, much shorter than the life of the house.
3. Collateral difficulties often result from communal land ownership and lack of appropriate leasehold mechanisms (see below).
4. The majority of households, even in urban areas, may have irregular and low income such that traditional lending mechanisms are inadequate. New schemes for lending to site and service and squatter areas need to be developed.
5. The quantity of capital available is far short of the capital requirements to meet the actual housing needs.

One conclusion from review of housing costs and housing finance is encouraging. Housing delivery can work on economic terms if sufficient levels of financing are available. For example, a one bedroom house of 37 square meters, with utilities at density of 13 per acre, can be built by government-hire labor in Swaziland for \$5,300 and could be affordable on market terms (11 percent 25 year mortgage) by more than half of urban families. An array of self liquidating standards has been developed for Zambia for different income levels, including partial and full services, self-help, core housing, and formal low cost housing. This array could reach all but the lowest 14 percent of urban families in Zambia.

E. Programs for the Urban Poor

All of the countries have in one form or another enacted special housing production programs directed towards the urban poor, some of which have been supported by international technical and financial assistance.

The programs fall into three categories: sites and services, self-help housing and squatter upgrading.

Sites and services has been by far the most popular undertaking. It forms the backbone of shelter assistance programs in three countries: Zambia, Botswana, and Malawi. Essentially, the program involves the provision of regularly laid out plots with basic water, waste disposal, and road services, to families who will proceed to erect their own shelter on the plots. Provision of plots and services in advance obviates the worst problems of unplanned squatter settlements and takes advantage of the ability of the informal sector to erect its own shelter using traditional materials. The program is also combined with a form of secure tenure instrument that guarantees the occupant rights to the land--an element absent from traditional squatter settlements which have no legal status. Sometimes, as in Zambia and Botswana, the plot provision is also combined with loans for building materials to allow for more durable housing.

In Zambia, where land has been nationalized, the major urban housing emphasis is on sites and services and the World Bank has contributed to financing of 31,000 finished plots in Lusaka with a comparable number proposed for smaller cities. AID has also committed a \$10,000,000 housing guarantee loan for this activity which has not yet been implemented by the Zambian government.

In Botswana and Malawi other large scale efforts are underway. Botswana has explicitly developed its program to serve a wide range of income levels, and coupled its grant of tenure with the requirement that the recipient construct a permanent shelter within a two year period or lose his rights in the land.

In Malawi the sites and services program is heavily subsidized, resulting in ground rents well below the cost of plots and servicing. This contributes to the large gap between the number of applicants and available plots.

Self-help housing has been a mode of assistance in both Swaziland and Lesotho, each aided by United Nations technical assistance. Under self-help conditions, mortgage loans are offered for families on land and building materials. The labor is primarily that of the families themselves, but technical assistance is provided in the form of a prototype housing plan (at higher standards than traditional squatter shelter), supervision, and some contractor work in site grading, roof construction, etc. While reports from both countries indicate that the self-help programs have been well received and implemented, with many more applicants than opportunities, the scale of production has been quite low. In Swaziland, about 100 units have been created in three years, and in Lesotho about 200 in a comparable period.

Squatter upgrading, a means of improving housing conditions with utilities and durable materials for those already in rudimentary shelter, has not been a significant focus for national interest. Only in Zambia, where some 16,000 units in Lusaka have been upgraded during the recent five year plan, has a rehabilitation program drawn priority. Swaziland has made some effort to provide water standpipes and garbage disposal facilities to existing squatter settlements, but not on a concerted basis. It continues to emphasize clearance measures for informal settlements combined with new self-help housing--an approach which does little to increase the overall supply of shelter.

F. Summary Comments

It is clear from efforts that have been undertaken, that the five Commonwealth countries are trying to grapple with their urban shelter problems. Policy frameworks are or are being formulated. Institutions for direct production and assistance are in place. Financial mechanisms for individual ownership have been established. Programs have been launched, both to provide conventional units with modern materials and to utilize the energies and building capabilities of the urban residents. From an institutional standpoint, many essential mechanisms are in place, but the problems of supply and adequacy remain far from resolution.

IV. Special Issues and Opportunities Relating to Urban Shelter

In reviewing shelter conditions and requirements in the region, several other key matters bearing on shelter merit consideration.

A. Construction

The construction industry, and the role which housing plays in its evolution, has profound significance for national economies in the region. Construction is a major source of jobs in both the formal and informal sectors. It is also one of the most promising industries for creation of new, small scale enterprise. Except for the indigenous materials used in self-built shelter, however, all of the countries import large components of their building materials; a practice which drains foreign exchange or reinforces dependence on South Africa. It is also a practice which reduces opportunities which might be otherwise available for stimulation of local enterprise and employment.

Formal sector construction is a principal employer in all of the countries. The numbers are significant in economies where every wage-paying job is important: e.g. 70,000 workers in Zambia, 6,500 in Botswana, 3,000 in Swaziland. In Lesotho, employment in private sector construction grew by over one-third between 1975 and 1978, from 2,500 to 3,700. Although subject to a great many economic vagaries, there are few "industries" within the countries at a comparable employment scale. The industry is characterized in each country by a few expatriate owned firms which employ large numbers of workers on heavy construction activity, and many small contractors. In Swaziland, for example, five large firms employ about three-quarters of the labor force in private sector construction, and 19 other firms divide the rest. In Swaziland, however, the impetus for national control is quite strong, and development agencies of the Swazi National Council have recently purchased half ownerships in the two largest construction firms. Government agencies (public works departments who build pool housing and town councils who manage sites and services programs) also employ substantial

numbers of construction workers. Beyond this there are numerous small contractors, not even listed on official "registers" who may fabricate and install window frames, lay block, or otherwise supplement the labor applied to self-built housing in the informal sector. Although most formal sector construction labor is provided by men, women have played a major role--both in normal self-built shelter, and in the special self-help projects of Lesotho and Swaziland where more contemporary construction methods and materials are employed. They too are now a resource of skills to be mobilized.

One of the factors preventing the increase and the stability of locally owned small contracting firms has been lack of access to financing. In Swaziland, however, the Small Enterprise Development Company has begun a program of financial aid combined with management training for small contractors.

The potential for expanded employment and enterprise in construction is directly related to the growth of cities. The cities have grown rapidly and will continue to do so at even greater rates than the past. Building work in the formal sector is bound to increase with new office buildings, hospitals, schools, water lines, roads etc. The rate of formal sector housing production--at least for upper income levels--is bound to grow as well, and even the large areas of self-built shelter can absorb some component of skilled construction labor as their scale increases. In Swaziland, for example, under expenditure levels projected for the new five year plan, formal construction industry employment would rise from 3,000 in 1976 to over 5,400 by 1982.

Potential secondary effects of construction to stimulate new enterprise could be important as well. Furniture making is one example of a local activity, as both residential and commercial building increases, which could partially replace the heavy reliance on imported goods.

Each of the countries has flagged increases in jobs and small enterprises as priority needs. Thus, construction should be considered a "growth" industry to receive special attention (e.g. through availability of financing, skill training, and technical assistance) in formal efforts to meet these needs.

Construction employment and enterprise can expand as a response to urbanization, even if additional efforts are not made at substitution of building material imports. If successes can be achieved in import substitution, however, the consequences will be far reaching; not only more job and business opportunities for local people, but considerable savings in funds which leave the countries.

While all of the countries import substantial amounts of building materials, the situation is somewhat different between Malawi and Zambia on the one hand and the BLS countries on the other. The BLS countries are members of the South African Custom's Union and operate in a "free trade" area with certain interchangeability of currency. They are heavily dependent on South Africa for the purchase of almost all modern building supplies (e.g. 70 percent of the materials used in Lesotho, about 90 percent in Botswana). Although costs for these materials may be less than local production and many would be unavailable otherwise, the modern construction sector in these countries becomes extremely dependent on South Africa, and even more so as demands for new building grows.

In Malawi and Zambia, the situation involves expenditures of needed foreign exchange (e.g. hard currency) because they are not part of such a customs union. The problems may be illustrated by the following commentary in the Zambia shelter paper prepared for SADAP:

"National stocks of building materials decreased greatly in 1977, and current economic prospects do not suggest a national capacity for restocking the building materials inventory. As a result, now and in the near future, most houses will have to be built without some or all of: asbestos or corrugated iron roof sheeting, windows, flush toilets, imported timber, and a range of fittings. The availability of crushed stone and cement may also be in jeopardy.

The foreign exchange component in construction is said to account for 7.2 percent of the cost of settlement schemes, 20 percent of low-cost housing, and 28 percent for high-cost housing schemes. The housing need for 1978-1983 totalling 150,000 units is reported to require K53 million in foreign exchange. This figure is substantially higher than the K26-37 million of foreign exchange estimated to be available for housing in the same period."<sup>13</sup>

Concerted efforts at import substitution of building materials will require a far better base of information on resources, market demands, and costs than currently exists anywhere in the region. The opportunity, however, merits investigation and international support in such investigation. Markets within the countries will be growing along with urbanization and may begin to represent a "critical mass" to warrant increased local fabrication or production of finished items (e.g. window frames, roof trusses, etc.) from semi-finished materials instead of importing finished products.

The resource base of the countries could be evaluated for production of more materials related to construction. In Malawi, for example, limestone deposits have been found which could act as the base for a local cement industry. Reforestation programs can be directed towards growth of wood species suitable for lumber. Swaziland, for example, has the largest "man-made" pine forest on the African continent where trees for wood pulp which would take 45 years to mature in Europe can be harvested in 15 years because of favorable climatic conditions. That forest is the base for the country's pulp industry. Perhaps similar conditions would pertain to pine grown explicitly for timber in Swaziland, Botswana, and in Lesotho where the domestic lumber shortage is extreme.

---

13. "Zambia Housing and Urban Development Sector", SADAP, Rivkin Associates, Inc., p. 12.

Some initial steps have been taken. In Lesotho, LEHCOOP has begun to produce cement block and wooden building components. The Basotho Development Corporation plans to expand and improve the quality of the brick industry and import rock crushers to modernize and expand rock quarrying. In Swaziland the government has commissioned a study to identify possible building material import substitutes. The study has recommended 10 products which could be locally fabricated; including interior woodwork, laminated board, paints, cast iron, bricks, and wood chemicals. The local councils (SHHA's) in Botswana who aggregate markets through their sites and services activities have a materials development program and have opened discussion with local industrial groups.

The opportunity is there to reduce dependency on South Africa and the drain on foreign exchange, to create employment and enterprise, and eventually--as local markets increase--to reduce the overall cost of construction through mass production of materials.

#### B. Manpower

Even at the present level of limited formal sector output, shortages of skilled manpower to manage urban development and to produce housing exist in all of the countries. These shortages encompass planners, architects, economists, financial managers, community development workers, middle level technicians, and artisans.

Much of the trained manpower in these fields, as well as others dealing with modern enterprise, is currently provided by expatriates either under direct hire by the governments or through external assistance. In the case of Botswana, particularly, a cadre of expatriates has been a principal factor in effectiveness of current governmental efforts in urban planning and in provision of low income shelter. The same is true in Swaziland, where one foreign adviser both designed and managed the U.N. supported self-help housing program, and has no trained Swazi personnel to follow up on an expanded program.

The countries are all trying to "localize" skilled jobs with their own citizens. But they are receptive to foreign technical assistance personnel, suggesting that an even larger component of such assistance can be absorbed if the countries step up their efforts to grapple with urbanization and shelter provision. At the same time, however, increases in technical aid have little long-run significance unless coupled with training of local personnel to replace the expatriates. Without major expansions in skilled manpower, projected urban and shelter development needs cannot be met even if all the proper program and financial arrangements are established.

Limited training institutions exist in these fields (e.g. the Swaziland College of Technology, vocational schools in Malawi) and are mostly for technicians and artisans. Salary levels are generally low, and there is some indication that skilled and semi-skilled construction workers (at least in Botswana) migrate for higher paying jobs to South Africa.

The countries have not made serious evaluations of personnel needs in housing and urban development, even though some such assessments have been made in other fields. In the event that shelter and settlement needs are given a high priority within the region, a major effort to identify skill requirements and to increase supply of personnel will be absolutely essential.

#### C. Land Tenure

The status of land tenure in urban areas is an important consideration both for directing urban growth and for providing appropriate, sufficient sites for an expanded housing supply. In this respect, all of the countries in the region are extremely fortunate. Prevailing land tenure patterns allow government to direct and control patterns of urban development and housing. The phenomenon

of extensive and costly land speculation which has contributed to problems of urban management in many other developing countries does not exist in the region.

Government ownership of undeveloped land adjoining built-up urban areas is common. Zambia has nationalized all land. In Swaziland, the dual system of government (formal government and Swazi Nation) has produced both government and Swazi Nation ownership of territory. There most rural land is owned by the Swazi nation (with occupancy rights allocated to individual homesteads by local chiefs), although Swazi Nation land also extends to the periphery of towns. A similar situation occurs with tribal lands in Lesotho. Botswana and Malawi have extensive governmental land ownership. Private ownership of individual parcels and larger sites suitable for development is limited in all of the countries, other than Zambia where there is no private ownership of land.

The "theoretical" basis for governmental direction and control exists, although presence of squatter colonies on public, tribal, and even private land suggests that the control is not being exercised as effectively as possible.

Three of the countries have made particularly creative responses to tenure as applied to shelter construction. Malawi, Zambia, and Botswana have each established leasehold programs for their sites and services schemes on government owned land. Under these leasehold arrangements, individuals can own and obtain financing on the shelter units themselves. Both Botswana and Malawi have adopted time limits for shelter construction on these lots or will re-assign them to another applicant, thus helping to expedite actual production of shelter. (In Botswana, the unit must be completed within two years. In Malawi, it must be started within 6 months of allocation.)

Neither Swaziland nor Lesotho has yet adopted leasehold tenure arrangements. In both cases, there is, as a result, limited land available for legal shelter. In Swaziland, lending institutions will not give mortgages on a leasehold. Yet both countries are reconsidering this practice, and Swaziland is in the process of establishing a leasehold instrument for Swazi Nation land. If adopted, this will allow the country's first large scale residential estate (2,000 units) to proceed with a home ownership component.

D. What Can be Learned from Each Other: The Reservoir of Regional Experience

Despite very great differences between countries, cultures, and economies, common problems are shared. Urban issues and shelter needs are being faced by all of the countries. The similarity of issues, along with similarities of climate, traditional building materials and techniques (and, in the case of the five Commonwealth countries, a working language) suggests that much could be learned through cooperative, intra-regional research and discussion. Even now, lessons from promising measures adopted by each of the countries could be important sources of knowledge for the others; if an intra-regional means of communication in the settlement fields were fostered. For while none has been able to keep pace with demands of shifting settlement patterns, each has taken bold steps to address one or more facets of the process. Below is a listing of certain promising measures adopted by one or more of the countries, which have at least conceptual relevance to the region as a whole.

1. Settlement Patterns as National Policy

Here the experience of both Botswana and Malawi in creating new cities and in tying decentralized urban development to national investment policy merits attention by all.

2. Squatter Settlement Control

Malawi is the one majority rule country which has been partially affective at controlling squatter settlement. Strict security measures to prevent illegal colonization have been combined with allocation of leasehold plots and a permissive governmental attitude towards the type and scale of units built on these plots.

3. Sites and Services

Zambia, Malawi, and Botswana have all elected this approach to low income shelter, but Zambia has had particular success at organizing and implementing production at a fairly large scale in Lusaka.

4. Leasehold Tenure

While all three have instituted the system, Botswana and Malawi have adopted procedures to stimulate actual unit construction in phase with plot allocation.

5. The Cooperative Approach

Lesotho is the one country which has experience in creating cooperative urban shelter. Indeed, the United Nations has sponsored, in 1977, an international seminar to review the Lesotho experience.

6. Self-Help Housing

Swaziland has the most extensive self-help project, involving governmental financial assistance, now in place.

7. Private Sector Responsibility

Swaziland, Botswana, and Zambia all have examples of well-built and served company towns.

8. Prototype Units and Standards

Several of the countries have made experimentation with prototype low-cost shelter for low income families, ranging from government-built units to plot and utilities layouts for sites and services schemes. The standards, costs, and construction techniques employed in Swaziland, Botswana, Zambia, and Malawi should be of considerable intra-regional interest.

9. Organization for Settlement Production

Here the activities of local town councils in Botswana and Zambia may provide important insights.

10. Small Contractor Support

Swaziland is the one country which has instituted some formal mechanisms to provide credit and technical assistance to small building construction firms.

All of the above come from the five commonwealth countries, and other examples of innovative measures can probably be identified. Perhaps the most important, or at least far-reaching effort is being conducted outside of these countries in the communal village program of Mozambique. Were information available on the conduct and effectiveness of this program, it might be relevant to resettlement activity in Swaziland and Botswana.

The point is simply, that a repository of regional experience exists. As urbanization in these countries accelerates, and as the process extends eventually to Zimbabwe and Namibia, lessons from this regional experience can be certainly as important as new insights and approaches brought through the vehicle of international technical aid.

V. Current External Donor Activity in Shelter

As a backdrop to proposals for future U.S. shelter activity in the region, it is appropriate to summarize the nature of present assistance by other donor groups and by AID.

The scale and type of external assistance programs in shelter varies widely among the countries. Large scale projects assisted by external donors are underway in Zambia and Botswana. In Lesotho and Swaziland, a variety of shelter-related programs are being financed by external donors, but these are on a relatively small scale. Botswana has the most diversified base of external assistance in housing and urban development, largely through bilateral programs. Malawi has in the past received loans for permanent housing construction and for sites and services infrastructure from British and West German sources.

The World Bank is presently active in Zambia, Swaziland, and Botswana, and is contemplating funding sites and services in Lesotho. Bank-supported projects within the region include squatter upgrading and sites and services in the capitals and secondary cities of both Zambia and Botswana, and the urban water systems for several communities in Swaziland. The Bank is funding \$20,000,000 of the single largest shelter program in the region, a 29,000 unit (\$41,200,000) upgrading and sites and services scheme in Lusaka. It has proposed a project of similar scale to be divided among secondary cities in Zambia. In Botswana, the Bank has funded upgrading and sites and services efforts for Francistown and Selebi-Pikwe, but at a much smaller level (\$5,000,000).

The British, through the Overseas Development Ministry and the Commonwealth Development Corporation are assisting programs in Lesotho and Botswana. In Lobatse, Botswana, the British are funding development of over 2,000 sites and services plots. A British mission was recently in Swaziland to review possible ODM participation in a proposed squatter upgrading program.

Canadian assistance is being applied, with a resident technical adviser, in two upgrading projects in Gaborone, Botswana, and negotiations are under way between CIDA (the Canadian International Development Agency) and the Government of Lesotho for assistance on a major sites and services program in Maseru.

The United Nations plays a capacity-building role in the region, primarily through technical assistance to national ministries charged with public works and housing. In Swaziland and Lesotho, the emphasis is on self-help shelter. Projects thus far have been small in scale (100-200 units). Grants for building materials have also been made in Lesotho, and the resident adviser is working on building code revisions. In Botswana, a U.N. adviser served for five years as chief town planner of Gaborone and helped draft the present planning act.

By far the most substantial current U.N. technical assistance commitment is to Mozambique. There U.N. advisers have been supporting the National Housing Directorate, have worked on emergency housing for flood victims in Maputo and Beira, and are beginning to work on squatter upgrading within Maputo. In recent months the U.N.'s housing and urban development headquarters have moved from New York to Nairobi. With this setting and a current policy re-evaluation, it is probable that U.N. activity in the region will increase--especially when independence comes to Namibia and Zimbabwe.

AID's present participation within the region is limited. It has been extremely influential in establishing a shelter information base for all the countries by commissioning detailed Shelter Sector Assessments within the past three years. These are detailed compilations of data and analyses of housing conditions on a national basis, and include recommendations to the governments for policy and program action. Active AID programs are in Botswana and Lesotho. In Botswana, AID is supporting installation of low-cost sanitation through loans and has provided loans

for building materials, both programs financed at 9.4 percent over 30 years. In both Lesotho and Botswana, AID is providing grants for technical assistance to self-help housing institutions, and in Lesotho the Agency provides seed capital through grants to a building materials production enterprise. The largest program presently contemplated by AID in the region is a \$10,000,000 housing guarantee loan commitment to Zambia. That commitment has not yet been exercised by Zambia, and the allocation may be re-examined.

VI. Urbanization and the Draft SADAP Country Development Strategies <sup>14</sup>

The draft SADAP country strategy papers deal principally with the countries' overall economic situation, the status of the poor and with traditional sectors of investment, e.g. agriculture, mining, transportation, power, human resources, etc. Urban development, to the extent it is discussed, is treated primarily as a matter of shelter. The focus of such urban strategies as are suggested, is on ameliorating living conditions in the large cities which have been targets of rural-urban migration. It appears that urban growth is regarded as a "problem" of development--one whose solution is dictated principally by humanitarian concerns. Urban development thus tends to be accorded a lower priority relative to development efforts considered as economic investments.

Although the country development strategies contain many elements with strong implications for urbanization they seem to miss a number of important connections. When these additional aspects of urban development are recognized, the significance of urbanization (i.e. the formation, growth and functional diversification of settlements) as an economic opportunity, can be more fully appreciated. The need will become clear, then, for explicit attention to settlement policy in the national development strategies.

The relationships between settlements and shelter and the country development strategies fall into three general categories: 1) the impacts on settlement patterns (hence shelter and infrastructure needs) resulting from pursuit of sectoral or area development strategies, 2) a strategic role in the overall development program that can be played by a system of rural villages, market centers, towns and cities linked with other objectives and 3) the economic benefits of a settlement development program--as a generator of employment, a stimulus to domestic production of material inputs and furnishings, and a means of mobilizing small scale but widespread savings and investment within the country.

---

14. Reviews were made of those draft countrywide strategy papers and papers in other sectors that were available as of Nov. 10, 1978. Material from the draft country papers dealing with housing and urban development prepared by the Foundation for Cooperative Housing and Rivkin Associates has been incorporated in other sections of this overview.

A. Impacts of Capital Works and Area Development on Migration and Settlement Patterns

The sectoral and area development strategies, as well as the regional political events, outlined in the SADAP country papers will have impacts on the shifts of population within the respective countries. These programs stand to affect the timing, the rates of flow and the direction of migration. To the extent that they influence the location of jobs, transportation facilities and available services they will also influence population movements and the resulting pattern of settlement. Where and how and under what conditions the migrants settle will be very much a function of the advance preparations made for them.

For the most part, heavy infrastructure and industrial investments are not emphasized in the SADAP country strategies. Nevertheless, there are a number of projects which do involve major construction efforts.

Regional transportation links are discussed in terms of providing alternative export routes for landlocked countries, enabling the exploration of undeveloped mineral deposits and contributing to the integration of regional markets.

SADAP recommends study of new lines which would link Zambia with Mozambique across Malawi, Botswana's main line with Sua Pan soda ash deposits and Namibia's railhead at Gobabis to the west, or Zambia's main line with Angola or Namibia. Improved highway connections between Swaziland's rail facilities and resource areas in the north of that country are also cited. Planning for these new transportation facilities need not be limited to regional and export objectives however.

These rail lines and highways can have even more extensive impacts on the countries they pass through, particularly if they are planned

with road connections that extend beyond their immediate vicinity. The Zambia country study points out how the existing north-south rail corridor there has been a magnet for economic activity and population.

New investment in enterprises and services can be directed to the settlements which will be attracted by the new facilities in any event. Communities built up along the line of rail or highway may have transportation cost advantages over settlements that are farther away. They may generate additional domestic traffic, improving the cost effectiveness of the transportation facility itself. Moreover, where security is a matter of concern, the proximity of settlements offers distinct advantages.

Repeatedly, the transportation sector and country strategy papers stress needs for training in management, maintenance, goods handling, engineering and construction related to transportation. New transportation links and facilities for transshipment of goods or system maintenance can be allied with training facilities. Wherever located, such installations will require shelter and community infrastructure. Beneficial impacts can be extended, however, if, in selecting locations, preference is given to nodes along the transportation corridor where other activities already exist. Market centers or places with potential to become such centers, for example, would be good candidates. Nucleus communities where various functions are combined can become lively places, attractive as new alternative destinations for rural migrants. With foresight, advance preparation can be made for shelter beyond the needs of staff and students at the new training facilities alone. Such preparation might be limited to provision of water supply and basic serviced plots, but it will increase the incentive for newcomers to settle in these communities rather than continue on to the primate centers of the country. Initially, the construction of the whole new complex will generate jobs. Later, the expanded settlement itself will stimulate opportunities for informal sector income or small scale enterprise.

Other major regional training institutions are proposed in the strategy papers as well. Their subject matter ranges from livestock disease control to drought planning policy to rural and urban sanitation, mining technology, building trades and urban development/shelter planning. Careful thought should be given in the choice of locations for these facilities as to support they will require--shelter and infrastructure for construction labor, staff and students--and to their strategic possibilities for building up district centers.

Another project involving more than one of the SADAP countries is the multi-purpose Zambezi River Basin development. The strategy papers describe aspects of this scheme including navigation, irrigation, flood control, hydro-electric power, fisheries development, environmental health and livestock improvement. Certainly projects of this scale and complexity will have impact on the formation and growth of settlements in the vicinity. Planning for the shelter and community facilities to support the people involved in such a major undertaking needs to be included from the outset.

These large scale regional schemes can be major stimuli to the formation and growth of settlements in the countries they touch. Advance preparation for the impacts may enable the respective nations to take greater advantage from the new facilities.

In addition, several large capital works projects are cited among the individual country strategies: Malawi's Nkula B electricity project with transmission lines to Chintcheche and Lilongwe, Botswana's road improvements to Kazanguela on the Zambian border and to Ghanzi and Maun in the western part of the country, Lesotho's transport and communications network links. Although very little information is available, it seems that considerable need remains for repair of Angola's war-damaged transport network as well. While each of these is discussed in terms of the specific needs it is designed to fill--bringing power to an important underserviced district,

opening new opportunities for tourism, development, or integrating the country's dispersed geographic regions--each has the potential for secondary impacts on urbanization as well. Each may become a significant tool in the spatial allocation of the country's growth.

Although the SADAP strategy papers generally veer away from large capital works or infrastructure projects they do include a number of themes which involve new construction. These projects may be quite dispersed within the individual countries but they will have impacts on migration and settlements nonetheless.

One such recurrent theme is that of area development programs. Their objective is to correct or modify regional imbalances, i.e. to spread the benefits of economic growth more broadly throughout the population and the national territory. Their focus is distinctly rural. Malawi, Botswana, Zambia and Mozambique are the key examples. Swaziland's rural area development program is less well articulated but may fit and Lesotho may have a few elements in common with the others.

Emphasis in some parts of the area development strategies may differ from one country to another (e.g. for Zambia and Mozambique, both very short on food, the focus is on intensive estate or communal village agriculture; Malawi and Swaziland, against a background of successful estate production and export-oriented agro-based industry, are turning to improvements for small holders; Botswana's narrower range of agricultural resources has inspired a mixed approach featuring rural commerce as opposed to industry, with new settlements in support of mining enterprises and group ranches for intensified livestock operations by communal associations). Yet they all have a number of other features in common: increasing farm income through improved marketing, extension services and farmer training, and credit for higher quality inputs; increasing farm productivity

through introduction of new small scale technology; wider access to health facilities, safe drinking water and market/supply centers; and farm-to-market roads.

Certainly, higher farm incomes will keep some rural families in agriculture. Increased productivity, however, will release other rural population to seek opportunity elsewhere. They will be able to travel out via the same roads built to carry produce to market. Where they go, however, can be subject to some guidance and control.

The roads, the health facilities, the market sheds and shops and, to some extent, the boreholes and associated systems for pumping, storing and monitoring drinking water supply, will all need to be built and maintained. Whether they are scattered or concentrated at a market center settlement will probably not affect the number of jobs generated by the construction projects initially. But the concentrated settlement has a greater prospect for expanding local employment in the long run. Provision for shelter projects in conjunction with these market centers can create additional jobs and attract some of the rural migrants who would otherwise go to the larger cities.

Concern for the pressing big city problems of squatters should not be allowed to deprive major new investment sectors of the settlement and shelter support they need. Such support can serve both to make decentralized investments more viable and to divert migration from the largest cities.

B. Role of Settlements in the Development Strategy

Prospects such as those described above are not entirely overlooked by the country strategists. Indeed, many of the development initiatives proposed involve quite explicitly the creation of new settlements or the expansion of existing ones. Numerous different objectives are cited, varying from establishing foci for rural development (Zambia's Rural Reconstruction Centers) to support of new mining or commercial operations (Botswana), to resettlement of rural families in the interest of improving cropping patterns and range management (Lesotho and Swaziland).

In addition, the strategy documents express many development objectives which could be promoted were they linked with an effort to expand and diversify existing settlements.

Yet, location is not mentioned as a criterion for selection or implementation. A network of centers where multiple economic and administrative functions as well as social services are performed may be the most efficient means for achieving these goals because the investments support each other. If each of these centers is well connected to its hinterland, health services and training opportunities may be made accessible to larger numbers of people. The same centers could become district headquarters or depots for road maintenance and repair projects, conservation work crews (Lesotho, Malawi and Zambia), or the self-help rural water works and small scale power schemes (Zambia). A program to achieve more decentralized administrative decision-making could focus on these same settlements, particularly the most active district centers.

The combined shelter needs of teachers, health workers, government administrators, agricultural extension workers and trainers, and transportation project employees suggests that a general community building effort would be justified. It is better than separating housing projects for each group of employees.

As salaried employees in such a setting, the cadre of economic development workers would enjoy a relatively high status. This in turn, has the possibility of increasing their effectiveness. Also, as residential neighbors, they would be less isolated from their counterparts in other fields.

With the addition of sites and services for anticipated migrants, even the relatively small increments of shelter need attributable to the individual sectoral projects could make for an efficient scale of development. (One major complaint of contractors who build outpost housing is that there are so few units over which to spread the costs of transporting materials and inputs of managerial time.) The opportunities for creating amenities would also be increased, enabling these smaller settlements and district centers to attract and hold the trained people they need.

The resultant concentration of population would itself represent a market for agricultural produce, for personal services, for construction trades, public transportation services, and for the products of local small scale enterprises. This factor should be considered in the investment and technical assistance programs for small scale manufacturing which virtually every one of the SADAP country strategy papers recommends.

By yielding sources of supplementary cash wages to members of rural families or seasonal non-farm jobs, manufacturing operations in these decentralized settlements may have a significant role in carrying out national incomes policy. The Zambia and Swaziland strategies both include a goal of reducing the differential in incomes between rural and urban areas.

In Lesotho, prospects for substantial improvements in the agricultural sector are less promising than in some of the other countries. Among the proposals in Lesotho's strategy paper is a strong emphasis

on development of towns. Other proposals are for several major weaving centers where many workers could be trained in the skills needed to process that country's mohair. These strategies might be combined. Together with a major effort to draw rural families off the land, the result could represent a substantial improvement in the lives of the migrants. Meanwhile, the lands they vacate could be covered by massive reclamation efforts or reforestation projects. Indeed, if the mohair-bearing animals are to continue as the basis for an industry continuing long into the future, there will need to be continuing programs of land reclamation to restore the areas damaged by the intensive grazing.

An intangible sense of excitement and opportunity accompanies construction projects and the aggregation of activities in one place. If the evidence of opportunity and growth is pervasive enough it may help to divert the flow of talent that would otherwise head for the primate center. If local decision-making is to be strengthened (a goal expressed in the Zambia paper) and local entrepreneurship fostered, such aggregation will be crucial to prevent a rural brain-drain.

When the country strategies speak of spreading the benefits of economic growth into the hinterland it should be recognized that access to the collection of facilities and services afforded by even a small town is one of the benefits that needs to be spread. The Botswana paper addresses this point most directly where it indicates that several of the very large, seasonally-occupied tribal villages were ready to benefit from urban planning.

The foregoing amounts to a strategy of opportunism in aggregating urban functions. The object is to fill the hierarchy of settlements between small rural village and big city with a variety of towns and cities of intermediate size. Some will need to be quite large

(10-50,000 in population) before they can reach their best potential as aggregate markets for domestic manufacture. Others may be able to support multiple central functions at sizes ranging from 5,000 to 10,000. There should not be a set standard.

There are, however, at least two important planning considerations if such a strategy is to work well. One is that transportation links between these settlements and others in the hierarchy are necessary. The second involves project planning and review criteria, i.e. careful attention to shelter and settlement support needs and associated impacts; detailed consideration of locational alternatives; and an effort to create as many linkages as possible with the greatest possible frequency. Spatial allocation planning may serve as a general guide. It can be implemented through expanded project planning. Projects should be planned and reviewed not only with concern for their feasibility and impacts on recurrent budgets (as the SADAP papers discuss) but also with concern for secondary impacts such as their community development, settlement-building, rural employment generating, training, local purchasing and servicing potentials.

Finally, there is the question of urban development or settlement and shelter policy for the largest cities.

#### C. Roles for the Large, Established Urban Complexes

There was a time when the primate centers of the developing world were high in the favor of economic development theorists. They were the places where investments in commerce and industry had the biggest payoff in growth of the GNP. They were dynamic and less bound by restraints to economic growth. The gross national "pie" was expanding and everyone would eventually have some taste of the benefits.

But, the growing national wealth was not "trickling down" through society. Disillusioned to see the gains remain in a relatively few

pockets, many reoriented their thoughts about the objectives of economic development. Social welfare dominates today's concerns, particularly the social welfare of the rural poor.

The problems of the large urban centers have not held high priority in the development strategies. Nevertheless, the large urban centers are still attracting thousands of rural migrants. The cities are home to them and the hundreds of thousands of migrants who have preceded them. The headquarters of central government are in the cities as well as the hubs of existing transportation systems, the core of the nations' skilled manpower and educational facilities as well. Moreover, these cities take on special importance for the refugees of urban background and the migrant labor without ties to the land that may return in massive numbers for repatriation.

Clearly, the large urban areas represent too many resources, and their fate touches too many peoples' lives for them simply to be ignored. The Zambia country strategy paper points out that that country is so urban already the problems of the poor majority cannot be addressed in rural areas alone. Refugees seem to be flooding the cities of Zimbabwe. Lesotho's report indicates rural development prospects for supporting that nation's population are so slim as to make almost mandatory some sort of development strategy that centers about urbanization.

What then is an appropriate approach for the cities? The theme emerging in the SADAP country strategy papers is: deal with public health, basic serviced plots or squatment upgrading as a humanitarian matter. This is the basic human needs approach. The elements of this strategy are not to be faulted. But the rationale gains strength when some important, additional factors are considered. These points, together with the central objective, i.e. improved living conditions for the lower income groups, make attention to the urban areas a more compelling issue and one that merits higher priority than it has been receiving.

The first point is that virtually every one of the SADAP countries faces a crisis in the wage employment sector. The numbers of jobs are not growing nearly so fast as the numbers of unemployed and underemployed people seeking them. Problems are compounded by the prospect of growing numbers of refugees from areas of civil strife seeking means of support, and by the possibility of drastically diminished employment opportunity in South Africa. The pressing short run need for jobs may very likely exceed what the road maintenance, conservation and small scale enterprise programs can generate. Construction work with its highly labor intensive characteristics can make an important contribution to the employment picture. Major urban infrastructure and shelter projects need to be regarded as a great deal more important than they have been, because of jobs.

A second critical point is that of construction materials. Most of the SADAP countries are currently importing the largest portion of their building materials. Many of the imports come from or through South Africa. Even when the sources are different the materials are still taking scarce foreign exchange. Several of the SADAP countries, the strategy papers reveal, have the raw materials which could be the basis for domestic production of building materials. (Swaziland has good clay for bricks, asbestos and some lumber; Malawi, Zambia and Mozambique have limestone needed for the manufacture of cement and concrete.) Development and success of such new industries, however, would require fairly substantial domestic markets for the products. In this respect, as in the employment situation, shelter projects of large enough scale to aggregate demand (and their supportive infrastructure) would make an important contribution. Malawi has already experienced need for a second cement factory due to increases in domestic demand. The increases are due principally to development efforts in Lilongwe and the central region in general. Some demand--and capacity--for export are implied as well. Small scale industry, e.g. window frames or chairs, would also have new markets.

The uneven distribution of resources and, hence, materials production among the SADAP countries further opens possibilities of developing regional markets and paying freight traffic on the regional transportation facilities. Should the prospect become imminent of interrupted supply from present building materials sources, the value of early attention to alternative sources will be great indeed.

As a final point, the large cities represent substantial markets to stimulate intensive agriculture at their peripheries. Two countries, Zambia and Mozambique, have posited strategies to foster high value cropping of this sort on the outskirts of their major urban areas. In Mozambique the scheme is combined with a systematic effort to upgrade squatterments on the fringes of Maputo. The desired effect is a reorientation of these fringe communities (55,000-60,000 population each) away from the old commercial metropolitan center and toward newer agricultural associations. Both functional and ideological goals enter into the program.

The construction employment, as well as aggregated markets for building materials and agricultural produce (both of which, in turn, are labor intensive activities) are important aspects of urban development to consider. They can be mobilized relatively rapidly and once developed, can be utilized in many dispersed settlement locations also. Therefore, the need for urban development and shelter sector strategies set forth in this overview paper merits nearly and serious consideration as well as a high priority for action.

## VII. Strategies for Assistance in Settlement and Shelter

The following proposals for international assistance support the objective of increased capacity in each country to manage shifting settlement patterns and to provide shelter. Although applicable to any of the bilateral and international donors, they are directed towards the U.S. Agency for International Development which has conducted this SADAP review. AID can bring a variety of instruments to bear in pursuit of the objective: Technical assistance, training, feasibility analysis and research, demonstration projects and basic guidance extended through its country missions. It also has a variety of mechanisms to finance these approaches: Grants, development loans at concessionary rates and the Housing Guaranty Program, using private U.S. lenders to provide long term loans at rates approximating U.S. mortgage lending.

The first sections of this chapter deal with an overview of measures which can be applied in the Commonwealth countries of Botswana, Lesotho, Malawi, Swaziland, and Zambia. Given the special circumstances-- institutions, traditions, political structure, as well as settlement and shelter problems--of each country, it is well to emphasize that any assistance program need be directly tailored to these circumstances. Thus, detailed strategy proposals for each country are treated in the individual housing and urban development papers prepared for the SADAP review. It is also clear that some opportunities for creative regional cooperation exist. These are examined below.

Concluding sections will treat briefly opportunities which may become available in Angola and Mozambique, and in Namibia and Zimbabwe after their independence.

### A. Formulation of National Policy

This paper has stressed the need for each country to direct its evolving patterns of settlement. There is an opportunity for policy and program guidance to be in place prior to application of many key investments now under consideration. Control of large cities; deflection of rural/urban migration to a network of administrative, market and processing centers; and establishment of

mutually supporting investments in productive activity, shelter, and services within these centers are all challenges to which the countries can respond with international help. Two levels of policy formulation are required:

1. Spatial policy to guide the location, combination, and sequence of investments.
2. Shelter policy to establish realistic production targets, methods and levels of finance, and to guide organization and implementation of shelter projects.

AID and other agencies can contribute to formulation and implementation of effective policy in these areas through long and short term technical assistance.

The proper locus for spatial policy assistance is in the various agencies which perform national economic development policy and prepare the country five year plans. Botswana and Malawi have for some time made a commitment to the spatial development approach. Zambia is close, and both Lesotho and Swaziland have the prospect under consideration. AID and other international agencies can call on many technical advisers who have by now considerable experience in settlement policy formulation elsewhere in the developing world.

Through its Shelter Sector Assessments and various short term consultant missions AID has already begun to help form shelter policy in the countries. Ministerial agencies directly charged with housing responsibilities are the appropriate mechanisms for further technical support.

Technical support should be provided both for plan and program formulation and for improving the data for policy-making. There

is considerable need throughout the region for more ample, accurate information on existing conditions and trends in a multitude of subjects: family incomes and expenditures, population movements, prices of materials, quality of existing housing stock, transportation costs, etc. Methods for collecting, assembling and analyzing such data on a continuing basis can be established at a national level with international technical assistance.

B. Identification of Specific Communities for Linked Investments

AID and other agencies should help the countries pinpoint communities or districts in which mutually supporting productive and service investments can be made. Some development proposals generated by the governments are place-specific and provide the basis for such evaluation. In several of the countries, however, plans for rural development, transportation and human resource investment are frequently vague as to the location and sequencing of programs. Even proposals for minerals exploitation or industry at specific sites may not be linked with provisions for services, shelter, or assistance to allied enterprises which could strengthen the economic development role of the selected communities.

AID and other agencies can encourage more integrated spatial development in three ways:

1. Through performing impact analysis on projects requested by the host governments. If the governments themselves have not assessed the settlement impacts of investment projects (e.g. in stimulating migration, or providing opportunities for geographically related investments) the agencies can perform such impact analysis in the course of their program and project feasibility reviews. Compliance with the National Environmental Protection Act requires AID to perform environmental impact assessments on major country commitments. Among the NEPA

requirements are certain analyses which could provide the necessary insights. These include evaluation of social and economic impacts (i.e. potential population movement and effects on settlement patterns) and evaluation of alternative solutions (which could include the placement of related investments or technical assistance to maximize contributions to economic growth). AID can perform settlement impact analysis as part of its normal feasibility and NEPA reviews. The annual program documents prepared for each country can, moreover, address impacts of contemplated measures. They can also include recommendations for conducting related projects in specific communities to reinforce a balanced network of settlement.

2. Through using shelter assistance projects to demonstrate an integrated approach to community and economic development. The recommendations on shelter assistance strategy below stress a pivotal role for such projects in strengthening development capacity of specific communities.

3. Through capital assistance directed towards particular market towns, processing centers, or secondary cities. A decentralized network of urban settlements cannot function effectively unless the key communities have sufficient infrastructure (e.g. water supply, power, sanitation, roads) to service anticipated growth. If communities are targeted for special support, AID could consider provision of infrastructure loans, perhaps at concessionary rates, to stimulate community performance. Such loans could be considered for mineral and meat processing communities in Botswana, for example, as part of efforts to build-up counter-magnets to Maseru in Lesotho; or as a way of underpinning market towns to support Zambia's major rural development program.

C. Expansion of Urban Shelter Supply

1. Conceptual Guidance

Two concepts are important in guiding AJD's own efforts to support provision of shelter in urban areas.

a. The concept of scale: Within growing urban areas of the region it is imperative to increase the availability of habitable shelter for middle income levels as well as the poor. Unless the scale of production grows, and grows rapidly in each of the countries, the gap between habitable accommodation and population needs will widen dramatically. Squatter colonies will proliferate as illegal, self-built shelter fills the gap for lack of alternatives.

b. The concept of linkages: Housing should be perceived as a means of stimulating economic development. It is inappropriate to consider shelter strictly as a social welfare investment, and the provision of urban services solely from the standpoint of public health. Expanded production of housing and infrastructure can provide employment and generate new enterprises in construction and allied industries. Expanded urban housing can also provide a domestic basis for mass production and import substitution of certain materials and furnishings--saving foreign exchange, decreasing dependence on South Africa, and generating additional enterprise and employment. When the scale of production is small, these linkages are extremely difficult to establish. It is only as the size of individual projects increases and the numbers of people affected grow that the economic spinoffs from housing can be fully realized. These potential economic effects are all the more reason for considering increased scale of production as an objective for shelter support.

## 2. The Project as a Focus

The concepts of scale and linkage can provide selection criteria for specific projects in which AID should participate.

a. In the principal cities, where housing shortages are acute, AID should support a limited number of large scale undertakings. These projects may be squatter upgrading, sites and services, new contractor-built units or combinations of types and approaches. They should, however, encompass the range of family income levels for which housing supply is inadequate. AID need not be the sole or even principal international participant in such projects, but its contribution should be a catalyst for governmental shelter efforts which realistically address the scale of housing demand.

The precise scale threshold could vary depending on the country or city involved. In a large, diversified city such as Lusaka, Zambia where considerable government assisted shelter experience exists, the minimum project scale might be 1,000 units. In Mbabane, Swaziland, with a population less than 30,000 and no past formal sector project larger than 100 units, a 500 unit threshold may be appropriate. It is the relative scale that is important. For unless international assistance contributes to major expansion of housing production in the principal centers beyond current levels, there can be little justification for such assistance.

Large projects will, moreover, invariably allow for more efficient, less costly (per dwelling unit) installation of water, sewer, roads, schools and other infrastructure than small projects or a number of undertakings scattered through a given urbanizing area.

Large scale, mixed income projects can also permit differential pricing of lots and utilities. Those families who can afford higher costs can thus assist in defraying costs of the lowest income levels. Considerable interest has been evidenced in such a cross-subsidization approach. It is one which has merit, however, only within large, contiguous development areas which permit unified project management and budgetary control.

Large scale residential construction projects can also provide a stimulus for employment and enterprise. Combined with AID financial and technical assistance to shelter provision, such projects can generate a critical mass of demand that warrants support of small contractors, fabricators, furniture makers and other enterprises which can contribute to economic development and import substitution.

b. In the secondary cities and market towns, the economic development or "linkage" objectives warrant support of shelter efforts, conducted in phase with investments to create new economic activity in these centers. If migration is to be channeled away from the principal cities, and if the smaller communities are to function effectively as distribution or processing points attention must be given to the adequacy of their service base and community facilities.

Along with water supply, sanitation and other utilities, shelter is an important component in an adequate support system. It should not be more difficult for newcomers to settle themselves in these centers than in the principal cities. Rather, the prospects for success will be improved if these centers offer relatively more attractive opportunities for jobs and living conditions.

As for small-scale enterprise and income-generating activities in the informal sector, opportunities available in these intermediate cities and towns will depend on the population they can concentrate as well as on access to a wide hinterland. Therefore, scale is an important consideration in these centers--although the threshold may be measured in hundreds rather than thousands of household units.

D. Broadened Financial Mechanisms

While AID's project support can play a catalytic role, it should be coupled with efforts to encourage an expansion of housing finance in each of the countries. These would include such measures as:

1. Broadening of the coverage to reach middle and lower income families through such devices as government guaranties of repayment, external loans to be used only for this purpose, etc.
2. Longer term amortization periods (20-30 years) to allow for more reasonable periodic payments by middle and lower income groups.
3. Special programs geared to residents of sites and services plots who have leasehold rather than fee-simple tenure.
4. Generation of increased private savings to be used for housing.
5. Application of pension funds and other domestic capital sources to shelter finance.
6. Technical assistance in support of the above.

E. Rural Housing and Services

AID's shelter capabilities are best addressed to urban housing problems on a priority basis. To the degree that shelter assistance can be a component of comprehensive rural development programs, however, international agencies should consider providing loans and technical aid. For unless rural economic conditions stabilize or improve, the migration flow which produces the urban shelter problem will intensify.

The most critical "shelter" issue throughout the region is availability of potable water to villages and homesteads. Although all of the Commonwealth countries are engaged in major rural development programs, provision of safe water supply to everyone has had a high priority only in Malawi. A second issue is expansion of farm-to-market roads and their connection to more isolated settlements. A third is resettlement where rural development plans call for relocation of families.

Development loans might be applied to expanding the availability of utilities and roads, and preparing relocation sites for households displaced in rural development programs.

Although the rural population is skilled at utilizing traditional materials in house building, stabilized soil block bricks, asbestos roofing, and other modern materials could contribute to permanence of the shelter itself. Building materials loans might be made available to improve and stabilize rural housing as part of an organized rural extension program.

Swaziland is an example of one country with a major rural development and relocation effort that receives AID assistance. The AID program currently being considered will include funds for large earth moving equipment. Swaziland's RDA relocates families to new sites for consolidated settlement and razes their existing homesteads. The program emphasis is on re-allocating grazing and arable lands, and no assistance is provided to the families in preparing housing sites or in building. Water supply is not always available at the resettlement sites either. Assistance, in the form of loans for building materials and water supply along with site grading could well be offered within the context of AID's present program interest. A well planned and organized resettlement program could offer rural families multiple positive incentives to cooperate in the land use improvement schemes. At present, the program with its concomitant dislocations is perceived as threatening by many families.

F. Technical Assistance and Training

1. Foreign Advisers and Counterparts

Lack of trained manpower in almost every facet of shelter provision has been identified as a pressing issue in each country. At the same time, the countries are willing to utilize expatriate personnel in both advisory and operational roles. Thus far, expatriates in shelter-related fields have engaged in only limited training activity during their assignments. This may provide some temporary intellectual capital, but is sure to lead to failures in ultimate execution.

The U.S. has considerable capacity to provide technical help in these fields. This capacity should, however, only be used in conjunction with counterpart training. If Americans are to be placed in key agencies for immediate assistance needs, it is essential to link their presence with nationals--even though these nationals lack full academic qualifications--who would take over assignments upon their departure.

The concept of counterpart training places a burden on both the U.S. and the host countries: the United States to select and train advisers who have the capability and willingness to perform on-the-job teaching; and the host countries to assign counterparts from the outset of advisory missions and accept a training component in their work.

To the greatest extent possible, this on-the-job training should emphasize learning experience for a working team of nationals rather than individual counterparts only. There are a number of reasons for doing this. The work of programming, project planning and implementation in community development and shelter calls for application of complementary skills. It is very important for those engaged in this field to learn to work as

a group and for managers to learn techniques of directing such teams. Further, the training of a cadre has advantages over individual training in that absence or eventual re-assignment of individuals can be less disruptive to the overall operation. Finally, there can be advantages to morale, mutual support and sense of mission within the local staff when a team comprises the training unit.

The professions needed and available include; urban planners, architects, civil engineers, bankers, economists, statisticians, accountants, real estate property managers, community development and social workers. Over the past few years, the supply of Americans in these professions has been ample for domestic needs. Many have been underutilized and without professional challenges. The importance of the Southern African countries, the ability to use English as the working language, and the excitement of the assignments could all be utilized to attract appropriate individuals.

It is interesting to note that every sector of activity analyzed in the SADAP review has evidenced a severe manpower shortage. Should AID conduct a broad scale effort to recruit technical advisers in these fields, then establishment of a special, intensive training and orientation program for them in advance of mission is warranted. That program could be the means to impart on-the-job teaching skills and to sensitize them to the counterpart team development issue.

## 2. Long Term Training Plans

As a sectoral activity, shelter warrants advance planning for the level and number of personnel to manage a country's enterprises. AID should, therefore, consider offering short term technical assistance to the countries for the purpose of preparing training needs assessments and plans in shelter-related

skills (from draftsmen, quantity surveyors and artisans up to mortgage banking specialists and civil engineers). Such plans have not yet been prepared by the countries, and as each moves deeper into policy formulation and programs, realistic personnel targets become critical. AID has provided this assistance in other fields within the countries (i.e. education) and the U.S. has the management organizations to provide such services.

### 3. Short Term Training Programs

Some clear training needs can be identified now, however, which could be addressed through the offer of institutional support within the U.S. or third countries: for example, planners, civil engineers, and community development workers available to support squatter upgrading and sites and services projects. Universities, vocational schools, and some special short term training programs could be utilized through direct AID grant or enlisting the support of foundations and third countries. The third country possibility is important because American institutions may not be the most appropriate for training in all cases. For example, one Swazi planner is taking a graduate degree at the University of Nairobi, an African institution whose exchange activities could be expanded. Both the Development Planning Unit in London and the Bouwcentrum in the Netherlands have short, intensive training programs for developing country nationals in urban planning, construction management and other fields.

As a general principle, however, training of this nature should be restricted to highly specialized, short term subjects or skills related to ongoing projects that are not feasible to provide in-country and in the context of the work in progress. Competence and applied knowledge should be emphasized over academic qualifications in any event.

G. Specific Study Assistance

AID can also provide staff and consultant assistance for specific studies or research undertakings within a given country. One set of studies is the recent series of Shelter Sector Assessments which provide a base of data and analysis for formulation of national shelter policies. These studies, and other country reviews, have suggested the need for certain related or follow-up investigations. Below are examples:

1. The possibility of import substitution in building materials and accessory products is apparent in each of the countries. Relatively little information exists, however, on such key matters as price structure, existing local capability, potential markets, and training requirements. A great deal needs to be known about national physical resources which could be utilized or converted--for example, the possibility of planting lumber pine forests in a number of the countries. Perhaps the greatest priority for commissioned research should go to such building materials investigations in each of the countries.

2. In Botswana, there are two large villages, each with almost 40,000 people at various periods of the year, which have both rural and urban characteristics. These villages warrant special examination and program assessment to evaluate the roles they might play in Botswana's decentralized settlement pattern.

3. In Swaziland, a thorough feasibility study will be needed if the government elects to proceed with a large scale program for new settlement and squatter upgrading on a 900 hectare private farm adjoining Mbabane. A feasibility study conducted with AID assistance, possibly involving the World Bank and other institutions, would be best suited to analyze the physical and economic requirements of such a project.

4. Zambia is considering the establishment of peri-urban agriculture outside of Lusaka. Not only would this afford the opportunity for high value cash crops to the urban market, but it could provide labor opportunities for residents of the city. This concept also merits a feasibility analysis.

5. Malawi has been unable to make an accurate assessment of family income levels and expenditure patterns throughout the country. An AID supported research project here could be a prototype for needed investigations in the other countries.

#### H. Regional Opportunities

The five nations share certain conditions of climate, commonwealth-inspired institutions, and English as a working language. It would be highly desirable if "regional" approaches to facets of the shelter problem could be initiated under international auspices. An earlier section of this paper has identified specific aspects of shelter and settlement development where the positive experiences of one or more countries should be of interest to the others.

Below are three suggestions for regional cooperation. Each of these could be applied in a national or less-than-region-wide context if larger scale activity were not feasible.

1. Building Materials and Technology

The countries share many common characteristics in regard to building materials and techniques. Native or traditional materials of poles, mud, thatch are a common idiom both in the rural areas and in self-built housing within the cities. Some of the countries have begun to experiment with locally manufactured materials. Several have developed housing and site and service prototypes, experience which could be documented and shared.

Shared research and information can well be a matter for inter-country cooperation. The base materials and the production problems are similar. Our concept is to start by identifying particular institutions within the countries which could act as centers for research and information (e.g. the University of Botswana and Swaziland). Library collections could be built with U.S. grant funds. Particular individuals in the construction fields could be identified within the several countries who might be interested in undertaking projects with outside funding. An inter-country exchange would be built into the research support.

This is not to suggest creation of a new or central institution in the building field at the present time. One may indeed be desirable for the Southern African region, certainly as an alternative to the present research institute within South Africa itself. For such an institution, however, we believe that Zimbabwe may be the key--both because of its central physical position and the scale of shelter issues it may confront once the present political situation is resolved. In a stable, majority rule country, a new building research institute to generate shelter ideas for all the independent countries of the region may be an appropriate target for AID support. Until the Rhodesia situation becomes clearer, a more informal beginning to shared research can be made.

### 2. Conferences

Each year AID sponsors a housing conference for African countries. These conferences have proven useful affairs for information and idea exchange and for making personal contacts. Given the number of common issues shared by the Southern African countries, we are suggesting that a second, supplementary, regional conference be held on an annual basis within these countries. There is much to share in the way of achievements as well as problems.

The proposal is that AID sponsor an annual Southern Africa regional conference on settlement, shelter and spatial development planning, open to all of the countries in the region, including Mozambique, Angola, Namibia, and Zimbabwe, and meet each year in a different country.

### 3. Short Term Specialized Missions

Within the region, there may be opportunities for lectures, discussions and conferences by prominent Americans in the shelter field whose expertise is relevant to shared shelter issues. These would be people who have limited time available, but on a circuit tour of 5-7 countries could provide ideas to stimulate professionals in the shelter field. Although America's housing requirements and production capabilities are extremely different from those within the region, no country has been more successful at utilizing scale and materials production concepts in shelter. The economies that can be achieved from scale, the variety of shelter types which it permits, the possibilities of creating a skilled and permanent construction labor force are all concepts which successful American real estate developers can convey. It is interesting to note that James Rouse, the developer of the new town of Columbia, has been retained as an adviser to Tanzania on planning for its new capital of Dodoma. Rouse and others represent the kind of individuals who would be available, on short travel trips, to meet with shelter officials and to be sensitive to the particular needs and institutions of the country. People from other fields, prominent mortgage bankers, architects, construction managers, etc., who have little time but much to convey, can provide equally important resources under short term U.S. sponsored missions.

I. AID Resources for Shelter and Human Settlements

AID's principal and preferred resource to assist LDC's in the shelter sector is the Housing Guaranty Program. However, development loan and development grant resources may and should be utilized selectively when they will contribute to AID's shelter objectives.

Through the Housing Guaranty Program, loans from U.S. private lenders provide long term financing for shelter projects which have been approved by AID in a developing country. The U.S. Government underwrites these transactions through the provision of a full faith and credit guaranty to U.S. lenders to compensate for any losses incurred. In turn, AID requires a host country (borrower) guaranty of repayment of the principal and interest.

Once a project is authorized by AID, the borrower is given a commitment to guaranty. The borrower then enters the U.S. capital market and selects the lender (with AID approval) who offers the best terms and conditions. Interest rates, including a fee AID charges for its guaranty, are essentially the same as World Bank rates (or the current cost of money in the U.S. mortgage market). Recently, this has translated into 9-10 percent, 30-year untied dollar loans. After the borrower has selected a lender and agreements have been signed between lender, borrower, and AID, project implementation begins. Loans are usually disbursed periodically over several years, with disbursements contingent on progress. After disbursements are completed, repayment to the U.S. lender is monitored by AID for the repayment period, usually 30 years.

Housing Guaranty projects are required by AID policy and Congressional legislation to address the needs of low income groups. Of the aggregate face value of housing guaranties, not less than 90 percent are to be issued for shelter and related services affordable by families with incomes below the median income in the localities in which projects are located.

The kinds of programs financed by the Housing Guaranty Program in recent years include:

1. "Slum and squatter upgrading" which may include improving or providing water, sewage, electricity, roads, community services and facilities.
2. "Sites and services" for which vacant areas for homesites are prepared by providing the land, installing water and sewerage lines, dividing the land into uniform lots on which families may build a shelter with their own labor and construction of some common-use facilities.
3. "Core housing" which is basically a sites and services project with the addition of a rudimentary housing shell on each lot designed to be improved and expanded by the owner; and
4. "Small loans" for home improvement and construction.

Recent legislation passed by the U.S. Congress also provides for the use of Housing Guaranty authority to finance a broader range of community services in support of projects authorized to improve shelter occupied by the poor. Such services could include the delivery of health care, day care, recreational, education, and job training services.

Under Sec. 106 of the Foreign Assistance Act, authorization is available for AID to undertake special projects involving technical assistance and development support. One of the categories cited for potential activity (paragraph 6) deals with programs for community and urban development "with particular emphasis on small, labor intensive enterprises, marketing systems for small producers, and financial and other institutions which enable the urban poor to

participate in the economic and social development of their country." An ancillary grant resource funded under Sec. 106 is the Integrated Improvement Program for the Urban Poor (IIPUP). IIPUP funds used in tandem with Housing Guaranty loans can be deployed to undertake in-depth studies and provide resident technical assistance to design and implement social and economic components of shelter projects.

An increasing trend in AID's shelter approach is to blend housing guaranty, grant, and concessional loan resources in projects which demonstrate an integrated approach to shelter development. In addition to housing, therefore, community needs for employment generation, job skills training, small scale enterprise development and community organization can be served through a project which takes advantage of AID's varied resource pool.

Through a selective use of agency resources available for shelter and related services, human settlement programs at an appropriate scale and location can be created in Southern Africa. These programs could directly improve the shelter and productive capacities of low income families and strengthen institutional capability of the countries in the region.

J. Prospects for the Future--Zimbabwe and Namibia

Until the present volatile political conditions are resolved, it is not possible to judge the potential prospects for or receptivity to international aid in the shelter field for these countries. That shelter will be an issue, and one of painful dimensions, under majority rule government is quite clear, however.

Southern Rhodesia, particularly, shares physical and climatic conditions and English as an official language with the five majority rule countries of the region. It also reflects a decentralized pattern of urban development. But within that pattern, shelter

conditions are entirely different. There are no squatter colonies (or were not at least prior to the recent influx of refugees from the countryside). The government has (in the same manner as South Africa) practiced squatter removal from the towns. African movement to the cities has been rigidly controlled. Accommodations inside the cities are largely servants' quarters and barracks for company workers. The prime family arrangements for urban workers are in Black townships located 10-20 kms. from the city centers. Standards in these townships are low. Commuting to urban employment is arduous. The physical pattern and shelter provision pattern of majority housing in Rhodesia has directly reflected the pattern of government control.

Once an independent Zimbabwe is established, this pattern will be clearly unacceptable. Fundamental changes may be expected in the urban areas, and the nature and implementation of these changes will help determine appropriate external assistance. In all probability, the population of cities will increase dramatically and rapidly. They will be opened up to Blacks for occupancy in any area, and the future of the distant townships will be in doubt. Land tenure arrangements will probably be altered. The issues of housing subsidy, manpower, appropriate approaches to low income shelter, will probably all surface quickly--dependent for answers to a great degree on the governmental system ultimately adopted and the strength of the economy that results. A great deal of the shelter situation--along with other aspects of social and economic organization--will depend on whether the Whites are to stay and maintain their housing and enterprises or will (as in Mozambique and Angola) leave rapidly. Urban management, and the maintenance of utility systems, will certainly become issues.

For the moment, these and scores of other issues related to urban development are matters of speculation. Once they have been resolved, however, experience elsewhere in the region--especially in shelter

activity assisted by external donors, such as sites and services-- could well be relevant to conditions in the new republic.

Although considerable data on present conditions within Rhodesia exists from secondary sources (see accompanying country paper) the kinds of shelter sector assessments sponsored by AID could represent an early priority for an independent nation. Such assessments, along with the formulation of at least a rudimentary housing policy, would be necessary as the base for whatever technical assistance, development loan and grant, manpower training and other long term programs are to be considered.

Because no formal external assistance exists in Rhodesia now, and external assistance will be new to an independent Zimbabwe, some aspects of support may be initially quite open. Donor agencies might well consider joint programs whereby the strengths of various agencies--already tested within the region--could be combined and a coordinated effort brought to bear on priority programs of the new government. In this way, development aid resources could be maximized to address what will inevitably be problems of extreme urgency.

The population base and urbanization of Namibia are considerably less than in Rhodesia and its economy much more rudimentary. Yet, similar restraints on the settlement of African have applied. With independence a flow to the towns may also be expected, necessitating some early measures to deal with shelter. Here, too, however, the future role for external assistance is completely unknown. The role currently being played by the United Nations suggests that it may become the principal instrument for donor intervention after independence.

K. Prospects for the Future--Angola and Mozambique

Considerably less is known about present shelter conditions in these countries than in Rhodesia and Southwest Africa. Potential American assistance to them is further complicated by the socialist nature of their governments and by their Portuguese language and institutional background. In the event that assistance opportunities do materialize in the shelter field, U.N., World Bank, and Portuguese technical aid may be the appropriate initial vehicles. However, judging from the serious shelter conditions in the main centers reported by the Portuguese prior to independence, overall shelter assessments could well be undertaken before specific assistance efforts are designed. AID has had much background in carrying out such assessments within the region. It may be that these nations have made such assessments themselves. There is evidence, certainly, that settlement and shelter have received considerable policy attention in Mozambique, for example.

One aspect of the urban development situation in both countries bears particular attention: the primate city. Unlike most of the other countries within the region, Angola and Mozambique have displayed relatively large concentrations of population, economic base, and shelter problems in their capital centers. This could suggest that technical and financial assistance would involve a heavy component of metropolitan scale planning. That planning would include detailed attention to water, sewer, road transport and community facilities requirements--as well as shelter--within these primary urban regions. On the other hand, national objectives might dictate that the relative importance of these centers be reduced. To the extent that this is the case, assistance in building up dispersed regional centers might be preferred.

Mozambique has conducted the most far-reaching rural development and resettlement effort in the region--its communal village program.

Not only may it afford opportunities for international assistance, but an eventual evaluation of the program and its effectiveness at linking economic and community development may well warrant international support.

L. Concluding Note: Priority Attention to Urbanization and Spatial Development

Out of the SADAP review will come proposals to USAID and Congress for assistance to the region as a whole and to individual countries. These proposals will deal both with the nature and the level of prospective support. Given limited resources available for such assistance, priorities will be set and choices made. Based on the evidence available for this study, resolution of urbanization and spatial development issues merits priority attention, along with the opportunities to meet basic human needs which such resolution affords.