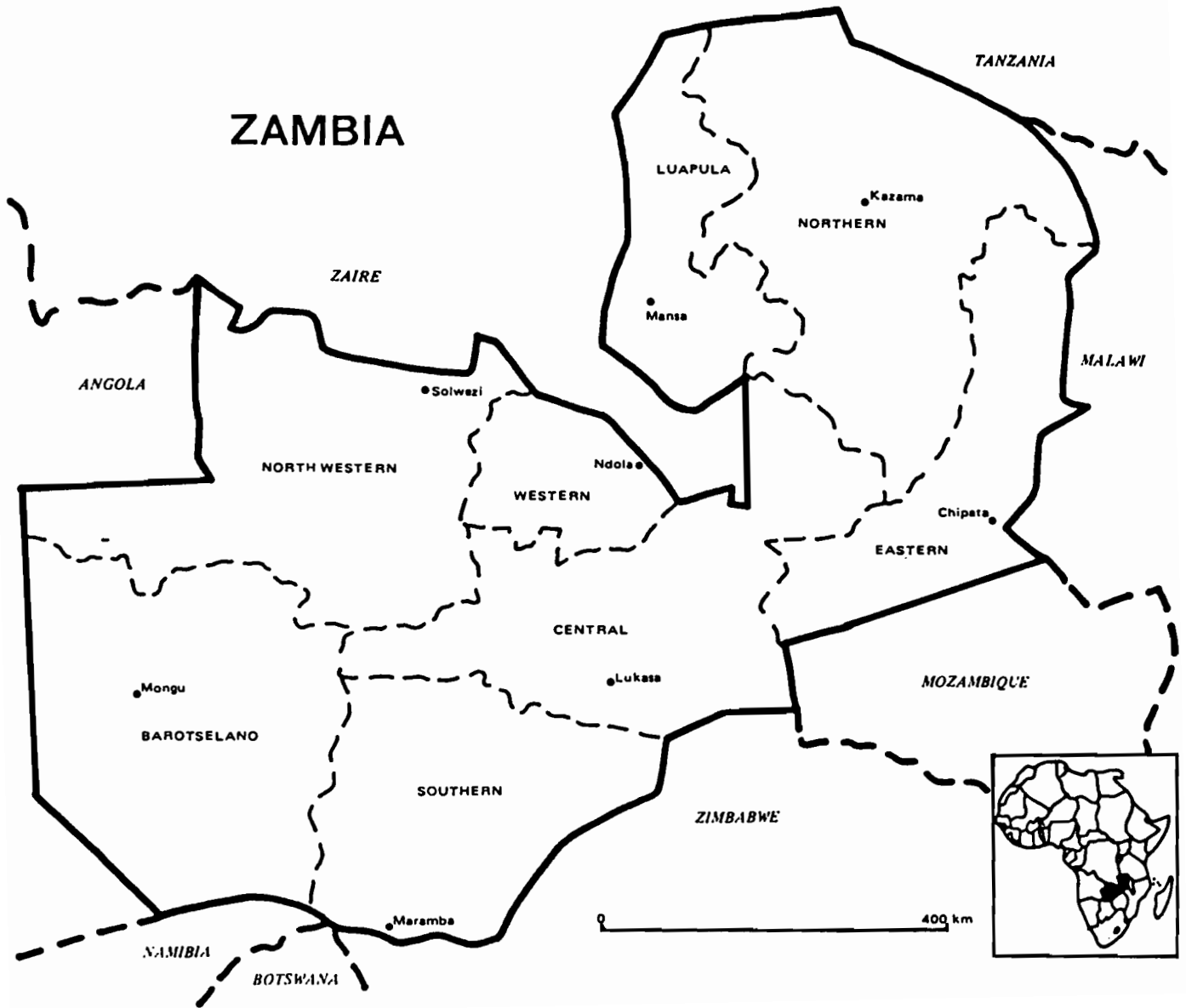


# ZAMBIA

Mpafya S.C. Mulenga

APRIL 1979



## Z A M B I A

I. POPULATION GROWTH

Zambia emerged as an independent country on 24th October, 1964 after about 70 years of colonial rule. The colonisation of Northern Rhodesia (1) (first as two separate territories of North-Eastern Rhodesia and South-West Rhodesia until 1911 when they were amalgamated to form a single territory) under the British took firm root just before the turn of this century. Initially agents of the British South Africa Company governed the Protectorate on behalf of the British Crown through a charter and it was not until 1924 that the Colonial Office took over the responsibilities of administering the territory.

The chartered Company encouraged white settlers into the territory to open up farmlands and undertake other commercial ventures. These commercial interests of the chartered company had direct bearing on the later patterns of population growth of the non-African community and the migratory patterns of the Africans.

The first truly national census was held in 1969. Prior to this, periodic censuses had been held by the colonial Government for the non-African section of the population. A demographic survey of the Africans and complete census of Africans were conducted in 1950 and 1963 respectively. An intercensal Sample Census of Population was carried out in 1974. The only figures that can be used for proper comparison with the 1969 data are the 1963 Census of Africans and the 1974 Sample Census of Population. However, population estimates for Africans for earlier periods were being made, as will be shown later, through use of provincial administration records of hut/poll tax payers and their dependents. From all these data sources estimates of the population growth patterns of Zambia have been worked out in Table 103 below.

The growth rates have been estimated to have been around 1.2 to 1.5% at the turn of the century rising to around 2.5% in the fifties and early sixties. This further rose to around 3.0% per year in the 1969-1974 period.

---

(1) Zambia was known as Northern Rhodesia during the colonial period until 24th October, 1964, when it changed to the present name on attaining independent nationhood.

Table 103

ZAMBIA - POPULATION ESTIMATES SINCE 1900

YEAR	Census results and estimates				
	Europeans	Asians	Coloured	Africans	Total
1901	(a)	(a)	(a)	690 000	690 000
1911	1 497	39	(b)	820 000	820 000
1921	3 634	56	145	980 000	980 000
1931	13 846	176	425	1 330 000	1 340 000
1946	21 907	1 117	804	1 660 000	1 680 000
1951	37 079	2 524	1 112	2 450 000	2 490 000
1956	65 277	5 450	1 577	2 790 000	2 860 000
1961	74 549	7 790	2 043	3 240 000	2 320 000
1963	61 282	8 500	2 600	3 405 788	3 490 170
1969	43 390	10 785	4 176	3 998 644	4 056 995
1974	29 000	16 000	7 000	4 625 000	4 677 000
1978	22 000	19 000	8 000	5 423 000	5 472 000

(a) negligible

(b) not enumerated

II. ESTIMATE OF THE NON-AFRICAN POPULATION

Censuses of the non-African population have been held regularly in Zambia since 1911. Before the second World War, they were held decennially in 1911, 1921 and 1931. They were interrupted during the war years (1941) and after the war, starting with 1946, these censuses were held at five-yearly intervals in 1946, 1951 and 1961.

These censuses were generally enumerated on a de facto basis. Forms were completed by the head of household on a given census date for all persons including visitors who had spent a night at the house. Intercensal population estimates for Europeans prior to 1951 were based on annual geometric rates of increase as revealed by successive censuses. After 1951 the figures for Europeans were based on details of births, deaths, immigration and estimated emigration, corrected in the light of census results. From 1965 the estimates for Asians were made in the same way as those of Europeans.

### III. ESTIMATES OF THE AFRICAN POPULATION

#### 1) Provincial Administration Estimates 1911-1949

As early as 1902 the Administrator of North-Eastern Rhodesia introduced a hut tax on Africans in order to force them to find work on farms and gold mines south of the Zambesi River. Later hut and poll taxes made African labour more plentiful for labourers in the Zambian copper mines as well as on settlers' farms. As taxation of Africans was the cornerstone upon which colonial rule and settler prosperity was built it was inevitable that extensive records on African adult males and their dependents had to be kept by the administration.

Population estimates for Africans were made by taking aggregates of figures collected for each village when last visited by the District Commissioner. These were usually obtained by calling all the people together in a central gathering and then conducting a count. These estimates generally understated the African population because:

- provincial administration's estimates were aggregates of data collected over a long period (2-4 years) without any correction for the natural increase of the older figures;
- no standard procedures were adopted in the counts made by District Officers;
- counts made through gathering villagers in a central place could not be as comprehensive as intensive questioning in a dwelling-to-dwelling tour;
- as taxation was generally dreaded by Africans there was a general tendency to hide the number of adult males and females especially males with more than one wife as the hut tax increase in proportion to the number of wives. In case of an absentee husband the wife was required to pay the requisite tax or else face prosecution.

#### 2) 1950 Demographic Sample Survey of the African Population

The 1950 Demographic Sample Survey of the African population was the first attempt to determine on a large scale the vital statistics of the Africans in Zambia. For the rural areas, the village formed the first-stage sampling unit from which a systematic sample with constant sampling fraction was drawn for each administrative district. For the survey of non-African farms (commercial farms on stateland areas operated by white settlers) a systematic sample of 72 farms was selected from a list of "farming propositions".

In the survey of the then nine main towns of Labwe, Chingola, Chipata, Livingstone, Luanshya, Lusaka, Mufulira, Ndola and Kitwe, each town was stratified into two parts, namely:

- 
- the non-African residential areas (1), commercial and industrial stands;
  - the African locations and compounds.

In all cases the sampling unit was a "stand" or "dwelling place". A systematic sample of one in ten of the non-African residential areas, commercial and industrial stands was taken. In the case of African locations and compounds, a 10 percent systematic random sample of dwelling places was selected.

In this survey, information was collected for the Africans both on a de facto basis as well as on the de jure population. The survey showed that about 16 percent of Africans were non-indigenous in the nine main towns, and accounted for about 3.5 percent of the total population.

### 3) 1960 demographic Surveys of Africans in the Eight Main Towns

Between May and August of 1960, a series of demographic surveys were held in the eight main towns of Lusaka, Kabwe, Ndola, Luanshya, Kitwel, Mufulira, Chingola and Livingstone. Systematic sampling was again adopted in the African areas and cluster sampling was used to select plots to be visited in the European areas. The distribution of Africans in the eight main towns by province and country of birth showed the migratory pattern as set out in Table 104.

Already by 1960 some interesting migration patterns had started emerging. One finds the older the town was, the greater is the proportion of persons born from the same town and province (ranging from 24 percent for Chingola to 59 percent for Kabwe, the oldest mining town in Zambia).

### 4) 1963 Census of Africans

The first complete census of Africans in Zambia was held during May and June 1963. The census, unlike the earlier demographic surveys, covered only the de facto African population. The census revealed a much larger African population than was revealed by the Demographic Sample Survey of 1950 (it turned out to be 35 percent above the official estimate based on the 1950 survey).

The demarcation of enumeration areas was based first on administrative boundaries of various districts. Then the various districts were stratified into urban, stateland farming areas and non-stateland (customary lands) areas. The census frames for the urban and stateland farming areas were based on various cadastral and township maps. For the customary lands, the enumeration areas were based on chief's areas.

---

(1) During most of the colonial period, residential areas as well as provision of most of the community and social amenities were organised on racial lines.

Table 104

ZAMBIA - PROPORTION OF AFRICANS IN EIGHT MAIN TOWNS BY  
PROVINCE AND COUNTRY OF BIRTH IN 1960

(%)

BIRTH PLACE (PROVINCE)	TOWNS								ALL TOWNS
	Lusaka	Kabwe	Ndola	Luan- shya	Kitwe	Mufu- lira	Ching- ola	Living- stone	
Central*	38.1	58.9	10.4	12.3	8.3	5.3	5.7	4.8	16.7
Copperbelt	2.1	3.1	32.3	42.5	35.9	33.5	23.6	1.5	25.0
Eastern	23.0	12.9	11.3	10.1	10.0	7.5	5.2	7.9	11.6
Luapula	1.0	1.1	5.3	4.6	7.1	16.8	10.6	0.3	6.4
Northern	8.2	11.6	14.8	15.3	17.2	18.8	26.7	3.4	15.0
North- Western	1.2	1.2	4.2	2.9	5.0	4.0	9.7	2.8	3.9
Southern	4.8	2.7	2.0	0.8	1.7	0.9	4.5	37.0	4.3
Western	2.6	1.4	1.8	0.9	1.5	0.7	1.1	28.3	3.0
Not Stated	0.5	-	1.2	1.6	0.1	-	0.1	0.6	-
TOTAL ZAMBIA	81.5	92.9	83.3	91.0	86.8	87.5	87.2	86.6	86.5
Total Non- Indigenous	18.5	7.1	16.7	9.0	13.2	12.5	12.8	13.4	13.5
GRAND TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* including Lusaka Province

The census results showed that the proportion of alien Africans in the urban areas had declined from 13.5 percent in 1960 to about 10.9 percent, those in stateland farming areas increased slightly to 8.6 percent. However, there was a remarkable increase in the number of aliens in the rural areas from a share of almost zero in 1960 to 5.4 percent in 1963. In total about 60 percent of the alien population live in the rural areas of Zambia.

#### 5) 1969 Census of Population and Housing

The 1969 census of population and housing was the first comprehensive census held in Zambia. For the first time the census collected information from all household units regardless of ethnicity and race. The census obtained de facto population estimates of Zambia and revealed that the population was growing at the rate of 2.4 percent per year. In terms of mobility it was found that out of the total population in the country about 22 percent were living in a different district than the one they were in the previous year.

The 1963 census of African population had mainly used the administrative boundaries and the chiefs' areas to demarcate the enumeration areas. These areas having approximately 5 000 people were too large to be of much practical use after the census was completed. Further, it would have been ideal if a complete list of all villages in the country had been available with the locations marked on the map. However, villages as a unit of enumeration are impracticable because the names of the villages change often and it is not rare to find a whole village shifted to a new location. At times one also finds that a particular village is known by two, three or four names so it became extremely difficult to use the villages as frames for any statistical work. As there was insufficient time and resources for mapping out the whole country uniquely into identifiable enumeration areas, it was therefore decided to use the polling district boundaries of 1968 to demarcate the enumeration areas which had a mean population of 3 000 persons.

On the data collection front, the country was divided into urban and rural areas. For the urban areas all questions, covering a variety of topics, were canvassed whereas in the rural areas an abridged version omitting the economic questions was used. However, a 10 percent random sample of polling districts was selected where the full questionnaire was canvassed. Estimates of economic characteristics for the rural areas were based on this sample.

#### 6) 1974 Sample Census of Population

The 1974 Sample Census of Population was held in the intercensal period in order to obtain information on many population characteristics which had been changing rather rapidly. These include population size itself, geographical distribution, particularly urban/rural, educational attainment, occupational distribution, etc.



For sampling purposes, the country was divided into three area types:

- large urban areas, having estimated population sizes of 30 000 or over,
- small urban areas and townships (including all small districts - bomas), having estimated population sizes of less than 30 000,
- rural areas, consisting of the remaining areas of the country.

In the case of large urban areas, data were required for each individual urban area. It was decided that a suitable sample size for each large urban area was 10 000 persons (adjusted for finite population where necessary), and on this basis an overall sampling fraction for each town was derived and applied to each enumeration area within that town. The enumerator first numbered sequentially and listed all houses in his enumeration area, recording at the same time the number of people who slept in each house on the night preceding his visit. He was then given a list of house numbers which had been drawn to form a simple random sample of the houses in that enumeration area, and then returned to the houses identified by house numbers on the list and conducted a full enumeration of all persons who spent the night preceding his visit in the selected houses.

In the case of small urban areas and townships, data were required for each individual township. These were too small for sampling to be worthwhile and so these townships were enumerated completely.

For the rural areas, it was decided to use the basic areas (polling districts) as used during the 1969 census. These basic areas (B.A.'s) are rather too large (on average above 3 000 to 4 000 people) and have very large variability in size of population (ranging from a few hundred to eight or nine thousand). Because of this, it was decided to use probability proportional to size sampling, using the population figures obtained in the 1969 census as the measure of size. A sample size of 10 B.A.'s was required for sampling errors to be reasonably small. However at district level, a sample of this magnitude would have meant very high sampling fractions, so high that complete coverage would have been called for. It was thus decided to obtain reliable estimates at provincial level particularly in view of the fact that the characteristics of provincial rural populations do not vary substantially. On the supposition that a province containing a larger number of districts will exhibit greater variability of population characteristics, and that variations within districts will be less than variability between districts, it was decided to stratify by districts (minor strata) and take a sample of 2 B.A.'s for each district, this gave a sample of at least 10 B.A.'s from each province. The overall sampling fraction worked out to be 14%, which was considered satisfactory.

The Sample Census results have shown that the annual rate of growth for the period 1969-1974 was 3.0%. This implies an increase in the rate of growth from 2.5% (2.7% Africans only) in the 1963-1969 period to 3.0% in the 1969-1974 era. Further, a noticeable slowing down in growth rates of urban areas from 8.9% in 1963-1969 to 6.8% in 1969-1974 was indicated.

#### IV. OTHER SOURCES OF DATA FOR EVALUATING DEMOGRAPHIC CHARACTERISTICS

##### 1) Employment

Censuses of employees for all races other than employees of African employers in rural areas were held in 1946, 1951, 1956 and 1961. These, together with maize meal rationing figures for 1950 in urban areas, have been used in evaluating the quality of demographic surveys (1950 and 1960), and census (1963) data.

##### 2) Household Budget Surveys

Household Budgets for Africans were held periodically from the forties during the colonial period, the last being undertaken in 1960. The first in the post-independence era were undertaken in 1966-1968 in the urban areas of Zambia. Those of non-Africans were held regularly from 1940. In 1970 an expenditure survey was carried out for the group in Lusaka. The first integrated household budget surveys embracing all racial groups, urban and rural areas, were held in 1974/75 and the last in 1975/76. Household budget surveys have been used extensively in evaluating qualitative demographic information on the African household size, composition and structure particularly for the urban areas of Zambia.

##### 3) Agricultural Sample Surveys and Censuses

Censuses on Commercial Agriculture have been conducted annually since the Second World War. Data on employment have been used extensively in evaluating the agricultural population found in various demographic surveys and censuses.

Various sample surveys on agriculture have been held on traditional African agriculture since 1965. Initially (1965-1969) most of the surveys were intended to collect information useful in evolving methodology for data collection. The first ever census of agriculture on a sample basis was carried out in the 1970-71 agricultural year. In subsequent years, annual sample surveys were carried out. In addition, special surveys on area measurements and crop harvesting to find out objective size and yield rates of traditional agriculture have been undertaken. The other surveys have been on crop forecasting of principal food and commercial crops. As in commercial agriculture, the data from the surveys are being increasingly used in improving the quality and availability of rural population data.

## V. DEMOGRAPHIC SURVEYS AND POPULATION CENSUSES SINCE 1911 - AN APPRAISAL

### 1) Reference Population

As can be inferred from the brief discussion in the earlier paragraphs, one observes that early population surveys and censuses were organised both on de facto and de jure basis. However, as complexity of population survey/census operations increased, only the de facto population was enumerated. Further, one sees that all earlier censuses (1911-1961) were conducted for the non-African settlers (mainly European) whereas population estimates for the African population were based on provincial administration records which were tied to the taxation, "situpa" system, of the male adult African. As urbanisation increased, particularly after the Second World War, it became necessary to carry out properly organised demographic studies of the African population. The 1950 demographic survey of Africans revealed a larger population than the provincial administration estimates (10% more). The reasons for taking complete censuses of the non-Africans were two-fold: the first being that almost all the non-African household heads were literate and could be covered cheaply through mailing. The second is that, though few compared to the African population, they exerted influence and dominance far greater than their numbers indicate. The non-indigenous African population initially was concentrated in the urban areas as well as in the commercial farming lands, obviously attracted by paid employment opportunities. These aliens accounted for about one sixth of the total urban population in 1950; this declined to a share of about one tenth by 1969. However, the share and size of alien Africans in Zambia has been on the increase, from a share of 3.5% in 1950 to 7.2% of the population in 1969.

### 2) Migration and Urbanisation in Zambia

The critical factor in the migratory patterns and urbanisation in Zambia had been the deliberate effort by successive administrations during the first half of this century to force, on one hand, the indigenous African population to move into the settler farms and towns through taxation, and encouragement of white settlers into the country on the other. This is borne out by the large numbers of Africans estimated living outside their province (rural) of birth. In 1950 the national level works out to be 26% of inhabitants, and the detailed distribution is shown in Table 105.

At the same time there was a comparable 3.5% non-indigenous African population that had come into the country. This mobility accelerated in the post independence era of the sixties, resulting in annual urban rates of increase of around 8.9%, but declining to about 6.8% during the 1969-74 period. The urban-rural migration stems principally from increased job opportunities due to the post inde-

pendence boom. However, the movement into the urban areas in the seventies is not so much the result of the historical movement (1) but is now mainly due to low returns to an increasingly educated rural youth (2). General mobility has become so manifest that according to the 1969 Population Census as much as 22% of the population were living in a different district from the one they were in a year before.

Table 105

ZAMBIA - PROPORTION BY PROVINCE OF AFRICANS LIVING IN OTHER PROVINCES, URBAN AREAS OR ABROAD

Province (rural areas)	Urban Areas	Farmlands and elsewhere	Outside Zambia	% Africans living in other provinces or in urban areas or outside the country
Central			} } } } } }	37.5
Copperbelt				23.6
North-Western & Luapula				25.5
Eastern	18.4	4.1		29.8
Northern				30.3
Southern				22.0
Western				
TOTAL	18.4	4.1	4.5	26.0

Looking at the migratory pattern of non-indigenous Africans one finds that around 1950, the total alien share in urban areas and European farmlands was of the order of 15-16%. This dropped to 11% in 1963 and declined further in the 1969 and 1974 censuses, although the total non-indigenous African population in rural areas has been going up from almost zero percent in 1950 to 5.4% in 1963. This implies that the alien African migrants were not coming into the country principally because of urban employment opportunities. Of course, this pattern of migration has now been very much influenced by the geo-political position of the country in the Southern African region.

(1) Poll tax was abolished in 1963 by the African nationalist dominated colonial administration.

(2) Primary school enrolment as a percentage of the nominal primary school age-group (7-14) stood at 86.3% in 1976 for Zambia.

The migratory pattern for non-Africans has been fairly straightforward, starting with almost no such population at the turn of the century to reach 84 000 by the early sixties. However, with changes in government at independence and after, there has been a marked decline, particularly in the European population. The Asian community has on the other hand been increasing throughout to reach an estimated 19 000 in 1978.

## VI. THE ZAMBIAN DEMOGRAPHIC CENSUSES AND SURVEYS - AN OVERVIEW

The history of census taking for Zambia is fairly short, apart from the ones on the small but fairly dominant non-African population. The first large sample survey of Africans took place in 1950. This survey depended on villages for its primary sampling units in the rural areas over which a systematic sample of one in ten was drawn. The urban sample on the other hand was drawn by taking a systematic sample of one in ten of dwellings. However earlier population estimates were based on the taxation system (the "situpa") whereby hut/poll tax payers were recorded and such records domiciled to their native districts. Dependents were also noted at the same time. However, because the tax system was hated, incomplete population accounting was the result.

Several socio-economic and demographic surveys were carried out in urban areas between 1950 and 1963. These gave valuable information on patterns of urbanisation, employment structure and on socio-economic characteristics of the urban African. However, it was not until 1963 when the first complete African census was conducted. As by this time the hut/poll tax system was no longer in existence, there were no up-to-date village frames and the census had to depend on the chiefs' boundaries for their primary units, which varied in size from as little as 2 000 to over 20 000 persons in some cases. However, villages and chiefs' boundaries suffered from several drawbacks as good frames. There are no discernible fixed boundaries for them. Furthermore, they could expand, contract, overlap, disintegrate, have two or more names and so forth. These frame problems for the rural areas led to the use of polling district boundaries of 1968 in the 1969 census. These were well defined but were much too big with an average population of about 3 000.

The 1974 sample census also used these polling district boundaries. However, these are much too large for proper sampling purposes and have enabled the Central Statistical Office only to provide province-wise estimates of results. Because of this, particularly in view of the present government's desire to devolve the decision making process, district level estimates cannot be given. It is with this in mind that it has been decided for the 1980 round of Population, Housing and Agricultural censuses to undertake first a census mapping project. This aims at demarcating the whole country into standard enumeration areas which will have uniquely identifiable boundaries with an average population of 400-500 persons. Once this project is complete it will be easier for the Central Statistical Office to undertake various demographic surveys which will have both national and local import.

---

BIBLIOGRAPHY

- 1.- "Annual Censuses of European Agriculture of the Federation of Rhodesia and Nyasaland", Central Statistical Office, Salisbury
- 2.- "The Census Mapping Project - an Outline", Central Statistical Office, Lusaka
- 3.- "Census of Agriculture 1970-1971", First and Second Reports, Central Statistical Office, Lusaka
- 4.- "Census of Population and Housing 1969 - Final Report", Central Statistical Office, Lusaka
- 5.- "Final Report of the May/June 1963 Census of Africans", Central Statistical Office, Lusaka
- 6.- "Final Report of the September 1961 Censuses of non-Africans and Employees", Central Statistical Office, Lusaka
- 7.- JACKMAN (M.E.), "Recent Population Movements in Zambia - Some Aspects of the 1969 Census", *Zambian Papers* n° 3, Institute of African Studies, University of Zambia
- 8.- MULENGA (M.S.C.), "Population Policies in Zambia", presented at the Expert Group Meeting on National Population Policies and Programmes, Addis Ababa, 11-14 November 1974
- 9.- OHADIKE (P.O.), "Development of and Factors in the Employment of African Migrants in the Copper Mines of Zambia 1940-1966", *Zambian Papers* n° 4, Institute for Social Research, University of Zambia
- 10.- "Population Monograph 3 - Projection of Labour Force 1969-1984", Central Statistical Office, Lusaka
- 11.- "Population Projection for Zambia 1969-1999", Central Statistical Office, Lusaka
- 12.- "Preliminary Report - Sample Census of Population 1974", Central Statistical Office, Lusaka

- 
- 14.- "Report on the 1950 Demographic Sample Survey of African Population of Northern Rhodesia", Central Statistical Office, Salisbury
- 15.- ROTBERG (R.I), "The Crisis of Nationalism in Central Africa; the Making of Malawi and Zambia, 1873-1964"
- 16.- "Urban African Budget Surveys held in Northern Rhodesia, May to August 1960", First and Second Reports, Central Statistical Office, Salisbury
- 17.- "Urban Household Budget Survey in Low Cost Housing Areas, 1966-1968", Central Statistical Office, Lusaka

\*

\* \*

Reference may also be made to the "Monthly Digest of Statistics" and statistics of civil registration (births, deaths, marriages), migration and pastoral and agricultural production published by the Central Statistical Office of Lusaka.



**Groupe de Démographie Africaine**

IDP\_INED\_INSEE\_MINCOOP\_ORSTOM

**POPULATION SIZE  
IN AFRICAN COUNTRIES :  
AN EVALUATION**

Volume I

Paris  
1986



## **Le groupe de Démographie africaine IDP - INED - INSEE - MINCOOP-ORSTOM**

est un organisme de liaison non officiel entre les statisticiens, démographes et autres techniciens qui s'intéressent aux questions de population dans les pays d'Afrique.

Il effectue des travaux de synthèse ou méthodologiques à partir des données recueillies ou des techniques mises en oeuvre dans ces pays ; il rend compte des travaux qui y sont réalisés dans le domaine de la démographie et d'une manière générale s'efforce d'informer les personnes intéressées par toute question ayant trait à la démographie africaine.

### **PUBLICATIONS DU GROUPE**

- « Démographie africaine », bulletin de liaison :
  - n° 0 2<sup>ème</sup> trimestre 1971 à n° 28 septembre-décembre 1978 (poursuite de cette publication à Yaoundé - IFORD)
  - numéros spéciaux 1 à 13.
- « Études et documents », prolongement des numéros spéciaux du bulletin de liaison.
- « Afrique Noire, Madagascar, Comores - Démographie comparée » tomes I et II - INSEE, INED, DGRST, Paris 1967.
- « Les enquêtes démographiques à passages répétés » Application à l'Afrique d'expression française et à Madagascar - Méthodologie - ORSTOM, INSEE, INED, Paris 1971.
- « Sources et analyse des données démographiques » - Application à l'Afrique d'expression française et à Madagascar - INED, INSEE, MINCOOP, ORSTOM, - Paris 1973-1977.
  - 1<sup>ère</sup> partie : Sources des données
  - 2<sup>ème</sup> partie : Ajustement de données imparfaites
  - 3<sup>ème</sup> partie : Analyse des données (tomes I et II).
- « Le traitement informatique des enquêtes statistiques » - Groupe de démographie africaine, INSEE - Paris 1978.
- « Le recensement des nomades mauritaniens » - Yves PACCOU - Paris, 1979.
- « Recensements africains - 1<sup>re</sup> partie : Monographies méthodologiques » - Paris, novembre 1980 et février 1981.
- « Recensements africains - 2<sup>e</sup> partie : Synthèse méthodologique » - Paris, octobre 1981.
- « Les structures par sexe et âge en Afrique » - Gilles ROGER, Dominique WALTISPERGER et Christine CORBILLE-GUITTON - Paris, 1981.
- « L'évaluation des effectifs de la population des pays africains », tome I, Paris, janvier 1982.
- « L'évaluation des effectifs de la population des pays africains », tome II, Paris, octobre 1984.
- "Contribution à l'analyse des données démographiques imparfaites des pays africains" - Rémy CLAIRIN - Paris, octobre 1985