

1980 CENSUS OF POPULATION AND HOUSING

ADMINISTRATIVE REPORT

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PREFACE

The ever increasing awareness among countries for reliable demographic and Socio-Economic information has led many countries to conduct surveys and censuses in much more detail than ever before. Zambia has been no exception in this respect.

Indeed, the first complete census after Zambia's independence was undertaken in 1969 and this was followed by the 1980 Census of Population and Housing. The main objective was to update the information on the size, sex/age structure and other characteristics of the Zambian population, as well as ascertaining any specific changes in the demographic parameters that had taken place since the conduct of the 1969 Census.

The information obtained during enumeration was compiled and published in 4 volumes:

- Volume 1. General Population and Migration Tables
- Volume 2. Economic and Social Tables
- Volume 3. Fertility Tables
- Volume 4. Housing Tables

In addition to the above mentioned volumes the results of the analysis of the 1980 Census and Housing data have been published in the following analytical reports.

- 1. Volume I - Administrative Report
- 2. Volume II - Analytical Report - Demographic and Socio-Economic Characteristics of Zambia's Population
- 3. Volume III - Analytical Report - Major Findings and Conclusions and Policy Implications
- 4. Volume IV - Analytical Report - Fertility and Mortality
- 5. Volume V - Analytical Report - Demographic Projections

The Administrative Report provides a summary of the history of Census taking in Zambia from the pre-independence period; it also gives the importance of Censuses as sources of information of the population size and structure. Coverage of the two post-independence Censuses which are the more reliable sources of information on the African Population is discussed. Furthermore, the sources of population data are also discussed.

The 1980 Census would not have been carried out without the assistance and support of many persons and Organizations. In this respect I would like to thank the following:

His Excellency Dr. Kenneth D. Kaunda the President of the Republic of Zambia who despite his many duties found time to personally oversee the Census arrangement and also to address the Nation on the importance of the Census.

The Party and it's Government for providing financial and other requisite resources for the Census.

The United Nation for Population Activities (UNFPA) for providing both technical and financial assistance.

The National Census Committee under the Chairmanship of the Secretary to the Cabinet Mr. S.J. Kazunga.

Members of technical and Census Implementation Committee.

The Provincial Statistical Officers, Provincial Census Officers and their field staff - for their untiring effort in the preparation of the Census maps and administration of Census operations.

The Masters Trainers for bearing the brunt of technical supervision of the census.

The District Census Officers, Senior Supervisors, Team Leaders and Enumerators - for carrying out the various tasks entrusted to them.

Members of Data Processing Monitoring Committee of the Central Statistical Office.

The editing committee for tirelessly editing this Administrative Report.

Lastly but not the least, to all persons both within the Central Statistical Office and outside who contributed in various ways to make the Census a success.

P. Hamakona
ACTING DIRECTOR OF CENSUS AND STATISTICS

Lusaka
November, 1988

1.0 INTRODUCTION

1.1 A Census

In general, a population census is the total process of collecting, compiling, evaluating, analysing and disseminating demographic and socio-economic data referring to a specific time period for all persons in a particular country. The census is usually a primary source of benchmark statistics on size, distribution and composition of the population. In most instances, frames for subsequent surveys during the inter-censal period are usually compiled from the population census.

The carrying out of censuses in Africa and other developing countries gained momentum with the attainment of independence from the colonial masters. At that time a census formed the only alternative through which the amount of the available resources both human and natural could be known.

Nowadays, censuses have become very important when it comes to comparing the disparity which exists between the rate at which population grows and the rate at which social amenities related to health, education, nutrition and many others are growing. In this respect effective planning has become a major pre-occupation of each country. Indeed in order for the effective planning to succeed, adequate knowledge of the population being planned for, is very important. Sometimes alternative sources of data in these countries might be lacking or where they exist, they might be very unreliable. Thus, the only reliable source of information on population matters is a census. It is through a census that the structure of the population, and estimates of the present and future population growth are known. It should be remembered that the population is not just a problem because of its quantitative nature, but rather its structure in relation to available resources to sustain and improve the quality of life of the majority of the people.

1.2 The Country

The Republic of Zambia is a landlocked country bounded by Zaire and Tanzania in the North, Malawi and Mozambique in the East, Botswana and Zimbabwe in the South, Namibia in the South - West and Angola in the West.

Zambia covers an area of approximately 753,000 square kilometers. The country lies on the Great African Plateau between altitudes of 900 and 1500 metres above sea level. The maximum elevation of over 2,100 metre is in the Mafinga Hills along the Malawian border while the confluence of the Zambezi and Luangwa Rivers marks the Lowest point at 325 metres.

This plateau is entrenched by four main Rivers, the Zambezi in the West, Kafue in Central, Luangwa in the East and the Luapula in the North. As a result, a number of shallow lakes, flood plains and swamps can be seen. The largest of such swamps is the Bangweulu. In the north Eastern part of the country are found swamps surrounding Chambeshi flats and the Mweru - Wantipa Lake. In the Central Province we have the Lukanga Swamps and Kafue flats. In the Western are the Barotse and Luena plains.

The country is divided into nine administrative provinces which have been further divided into a total of fifty-seven districts.

CLIMATE

Zambia lies between 8 and 18 degrees latitude South of the equator and between 22 and 34 degrees longitude east of Greenwich. Zambia has a tropical type of climate. The major aspect of its climate is its division into rainy and dry seasons. The rainy season extends from November to March. The mean annual rainfall decreases towards the south and south west of the Country.

VEGETATION

Zambia's vegetation is classified as woodland savannah which consists of various trees and tall grass which occur on the plateau. Open grassy woodlands are a common feature in Western and parts of Southern Provinces. Closed Woodlands with belts of bamboo and deciduous trees are found in the Northern Province.

1.3 History of Censuses and Population Related Surveys in Zambia

The history of census taking in Zambia is almost as old as the colonial history. The first census in Zambia was conducted in 1911 and covered Non-Africans. Other censuses of Non-Africans were conducted in the years 1921, 1931, 1946, 1951, 1956 and 1961.

The first census to cover the African population was conducted in 1963. Since the attainment of independence in 1964, Zambia has had two population censuses covering all the people in the country. These censuses were conducted in 1969 and in 1980.

The coverage and the scope of these censuses differed from one period to another and from census to census. Hence, we will divide the coverage and scope only in terms of pre-independence and post-independence periods.

1.3.1 Pre-independence Period

During the pre-independence period, the censuses were a complete count for non-Africans. The category of non-Africans included Whites (regardless of origin), Coloured (mixed races) and Asians.

There was no count taken for Africans. Only estimates based on tax-payers registers were made for Africans. However, the basis of these estimates differed from census to census and it is actually not very easy to pinpoint the main base. For instance, one Secretary of Native Affairs would say that "..... the basis of the figures given is the Census taken by the Native Commissioners in their tours of the villages." One might be tempted to come to the conclusion that the figures were adjusted using the ratio of the increase or decrease over the years. Others might conclude that the estimates were obtained from the actual count of one to two villages and then the total adjusted accordingly. However, from all these varying conclusions, it is clear that the Africans never had a real population census.

The first demographic survey which was aimed at actual counting of the African population was in 1950. This survey used the tax-payers register as a sampling frame. Since not everybody was registered, the frame which was used did not reflect the true picture of the total African population. As a result the 1963 Census of Africans showed that the African population was under enumerated by 35 per cent, in 1950.

When it became clear that the country's independence was in the offing, the administrators decided to have a complete Census for Africans. In that respect a Census of Africans was conducted in 1963. The Non-African population was not included because they had theirs in 1961.

This Census had no questions on female labour force and on fertility. The only fertility estimates were derived from child-woman ratio, which is not a very reliable index as it is influenced by difference in infant and child mortality.

1.3.2. Post-independence Period

Zambia has had two full population censuses, that is in 1969 and 1980, following the guidelines as laid down by the United Nations.

During the 1969 Census, the following items were incorporated in the questionnaire: household relationship, sex, age, ethnicity, language, birth place, citizenship, marital status, level of education, migration, disability, economic activity, employment status, occupation, industry, fertility, mortality and housing conditions. Similar items were included in the 1980 Census questionnaire.

TABLE 1: POPULATION TRENDS IN ZAMBIA - 1911 TO 1980

Year	Non - Africans		Africans			Average Annual Growth Rate (%)
	Population	Growth Rate (%)	Population '000'	Growth Rate (%)	Total (000)	
1911	1,536	-	820	-	822	-
1921	3,835	9.15	890	1.78	984	1.80
1931	14,447	13.26	1,330	3.05	1,344	3.12
1946	23,828	3.34	1,660	1.48	1,684	1.50
1951	39,603	10.16	2,450	7.79	2,491	7.83
1956	63,304	9.38	2,790	2.60	2,853	2.71
1961	84,384	5.75	3,240	2.99	3,324	3.06
1963	94,382	5.60	3,405	2.48	3,490	2.44
1969	58,331	-8.02	3,999	2.68	4,057	2.54
1980	40,539	-3.30	5,621	3.06	5,662	3.08

Sources: 1. Helen, J.N. (1968): P.64 (1911-1963)
 2. Central Statistical Office (1975): P.23
 3. Central Statistical Office (1980): P.8

2. THE CENSUS AND STATISTICS ACT

"An act to provide for the taking of a Census, for the collection of Statistics and publication of Statistical information, and for matters incidental to the foregoing....."

Section 6 of the Act on conduct of Censuses States that:

1. "A census shall be taken on such a day in any year as the Minister may fix by Gazettee notice.
2. The Census shall be taken -
 - (a) Of the number of persons or of any class of persons within Zambia or any part thereof; and
 - (b) Of such other particulars whatsoever; as shall be prescribed".

2.1 Legal Aspects of the Census.

The 1980 Census of Population and Housing was carried out under the provisions of the Census and Statistics Act Cap.425 of the Laws of Zambia. Under this Act all persons residing in Zambia except foreign diplomats accredited to Zambia at the time of the Census were required to provide the necessary information. Willing co-operation of the people was most important for the success of the census.

2.2 Confidentiality of Census Information

All Census officials were required to take an Oath of Secrecy, and if it was found that anyone showed the Census forms or in anyway disclosed the information contained on them, to any person other than the Census official, that person would be liable for prosecution in terms of the Census and Statistics Act. All Census officials signed the Oath of Secrecy on the prescribed form in the presence of a Magistrate or a Commissioner of Oaths.

3. PREPARATORY WORK FOR THE 1980 CENSUS

3.1 Sources of Population Data in Zambia

3.1.1 Demographic Sample Surveys

A number of ad-hoc demographic surveys have been conducted in Zambia. In 1974 a national demographic survey was conducted enlisting information on the following items:-

relationship to head of household, sex, age, marital status, ethnic group, citizenship, birth place, duration of residence in place of enumeration, place of residence 12 months ago, education, age at first birth, fertility, mortality, economic activity, employment status, occupation, industry, and housing conditions.

There was another sample survey on interrelationships among infant and childhood mortality, socio-economic factors and fertility in Zambia which was conducted from August, 1978 to August, 1979. The survey covered the city of Lusaka and Keembe (a rural area in the Central Province).

The following items were included in the survey: relationship to head of household, fertility and mortality, migration, pregnancy history, breastfeeding and weaning practices, age at menarche, child birth, breastfeeding and sexual practices, socio-economic factors facilitating and constraining factors on child bearing, nutritional status, health and family welfare, and anthropometric measurements of children under five years of age.

3.1.2 Civil Registration

The exercise of registering births, deaths and marriages began in 1898. The registration exercise was restricted to European, Asian and Coloured communities. After some years the registration of non-customary marriages of the African population started in 1963. In 1964 the Department of National Registration was set up. Its main activities were to register vital events and issue Registration Cards to all residents in Zambia aged 16 years and over. The registration cards are used as identity cards. The registration of births and deaths of the entire country was made compulsory with the institution of Births and Deaths Registration Act of 1973. The Act required the establishment of a Registration Office in each District. In order to streamline this important exercise, various subcentres were set up in school premises, rural health centres and hospitals. Currently there are 1,772 centres for registration activities. However, the registration of marriages is being conducted only at the offices of the district executive secretaries. It is important to note that only couples who get married at the age of 16 and above are allowed to register.

From the available data, the registration system is far from being complete, in that coverage is still small. However, the registration exercise seems to be effective in some urban areas. In the rural areas, the coverage is poor because of long distances to registration centres and lack of understanding of the importance of registering such events. These vital statistics are compiled and published by the Central Statistical Office.

3.1.3 Other Sources

Other sources of population data are in form of monthly returns from health institutions, Ministry of Health Annual Reports, Country Health Profile Bulletin of Health Statistics, immigration declaration forms, completed by persons entering Zambia. The Ministry of General Education and Culture publishes an annual Educational Statistics Report which has information pertaining to school enrolments by sex and region, etc.

3.2 Objectives of the 1980 Census

3.2.1 Long Term Objectives

Long term objectives were to improve the basis for the development of a sound and efficient system for the collection, analysis and evaluation of demographic and related data and to assist in generating sufficient local expertise to handle such enquiries.

3.2.2 Immediate Objectives

The immediate objectives of the Census were, through the provision of expert services, equipment and training facilities to assist the Central Statistical Office in:

1. Creating proper maps with recognizable boundaries for use in the Census as well as other Statistical enquiries.
2. Planning and execution of the 1980 Census
3. Processing the returns of the 1980 Census
4. Planning and execution of the Post Census Quality checks for evaluation of the Census.
5. Analysis of the Census results
6. Training of local personnel on various stages of Census taking.

4. 1980 CENSUS ORGANISATION AND ADMINISTRATION

4.1 Central Statistical Office in 1980

The Central Statistical Office (C.S.O.) is one of the Departments within the Ministry of National Commission for Development Planning, which is responsible for the collection, compilation, analysis and dissemination of statistical data relating to various aspects of human endeavour. In order to carry out this important task more efficiently and effectively, the Office is further sub-divided into various branches. These branches are further sub-divided into divisions. In 1980 the Office had the following Branches and divisions:-

- (i) Economic Statistics Branch
 - (a) Financial Statistics Division
 - (b) Industrial Production and Transport Statistics Division
 - (c) National Accounts Statistics Division
- (ii) Census and Surveys, Population and Social Economic Statistics and Central Administration Branch.
 - (a) Central Administration Division
 - (b) Population and Demographic Statistics Division
 - (c) Census and Survey Administration Division
 - (d) Prices and Consumption Studies Division

- (e) Labour and Manpower Statistics Division
- (iii) Agriculture, Balance of Payments and External Trade Statistics Branch.
 - (a) Agriculture, Fisheries and Forestry Statistics Division
 - (b) Statistical Information Services Unit
 - (c) Balance of Payments and External Trade Division

The Office has established Statistical Units under the Unified Statistical Programme in various Ministries. The Statistical Units are in the Ministries of Health, Education and Culture, Labour and Social Services, and Agriculture and Water Development. These Units are manned by Central Statistical Office personnel on secondment.

The Central Statistical Office has nine Provincial Statistical Offices headed by Provincial Statistical Officers. These Officers co-ordinate the various activities of field work (mapping, data collection, and follow-up of non-response surveys) with the Departmental Headquarters.

The Population and Demography Division co-ordinated all activities relating to Census of Population and Housing census until the final publication of results. The Head of this division reported directly to the Director of Census and Statistics.

4.2 Census Committees

4.2.1 National Census Committee

In line with the 1969 Census preparations when a National Census Committee was formed to look into the contents of the Census with a view of ensuring that, the information obtained from the Census reflect the needs of data users, a National Census Committee was formed for the 1980 Census. It comprised the following:

- (i) Secretary to the Cabinet (Chairman)
- (ii) Permanent Secretaries from the following Ministries: Defence, Education, Finance, Health, Home Affairs, Labour and Social Services, Lands and Agriculture, Local Government and Housing, and National Commission for Development Planning.
- (iii) Permanent Secretary from all the nine Provinces.
- (iv) Director Census and Statistics (Secretary)

The Committee had the following terms of reference:

To report to the Right Honourable Prime Minister and to make proposals for action to be taken on the following matters:

- (a) Fixing the Census date for the Censuses of Population and Housing, and Agriculture.
- (b) Nature of information to be collected in the Censuses.

- (c) Administrative requirements for holding a Census and processing of Census results.
- (d) Methods to ensure full public co-operation.
- (e) Arrangements for dissemination of Census information.
- (f) Co-opt representatives from any other organization for specific purposes.
- (g) Form sub-committees to deal with specific programmes.

To implement (g) above, the committee formed three sub-committees to look into specific issues of the censuses. Two of these together with the composition of their membership and terms of reference are outlined below.

4.2.1.1 Sub-Committee I - Mapping

Membership:

1. Permanent Secretary - National Commission for Development Planning (Chairman)
2. Permanent Secretary - Ministry of Defence
3. General Secretary - National Council for Scientific Research
4. Commissioner - Lands
5. Commissioner - Town and Country Planning
6. Director - Census and Statistics (Secretary)

Their main term of reference was to prepare field maps.

4.2.1.2 Sub-Committee II - Census of Population and Housing

Membership:

1. Permanent Secretary - Local Government and Housing (Chairman)
2. Permanent Secretaries:
 - Ministry of Home Affairs
 - Ministry of Health
 - Ministry of Lands and Natural Resources
 - Ministry of Labour and Social Services
 - National Commission for Dev. Planning
3. Director - Census and Statistics (Secretary)

Their terms of reference were to:

- (a) Design and prepare questionnaires and manuals
- (b) Co-ordinate the activities of data processing until the completion and analysis of tabulated data.

The National Census Committee was to meet at least once every three months and the sub-committees were to meet more often according to business demands confronting them. The nature of business in these committees was to be determined by the Project Committees of the Central Statistical Office.

It should be noted that the National Census Committee met only once.

4.2.2. Project Committees at Central Statistical Office

The Project Committees at Central Statistical Office were formed in order to implement the decisions of the three sub-committees of the National Census Committee. These technical committees were known as Project Committees. The membership and functions of these project committees are outlined below.

4.2.2.1 Project Committee I (Census Mapping Project)

The Committee had the following membership:-

- (i) The Director of Census and Statistics (Chairman)
- (ii) Two Assistant Directors (one as Secretary)
- (iii) One FAO Agricultural Expert
- (iv) One U.N. Demographer
- (v) Two Senior Statisticians
- (vi) One Statistician
- (vii) The Census Administrator
- (viii) One Principal Statistical Officer
- (ix) One Cartographer
- (x) One U.N. Cartographer

At the time of forming this committee no cartographer was available to co-ordinate the activities of mapping work. However, later a UN Cartographer and Government Cartographer became available and were subsequently co-opted as members of the Committee. The purpose of the Project was to define, delimit and map Standard Enumeration Areas (S.E.A.s) and Census Supervisory Areas (C.S.A.s) which were needed for the 1980 round of Censuses and for subsequent social and economic surveys.

4.2.2.2 Project Committee II (Census of Population and Housing)

The membership of this committee consisted of the following:-

- (i) The Director of Census and Statistics (Chairman)
- (ii) Two Assistant Directors of Central Statistical Office (one of them as Secretary)
- (iii) One United Nations Demographer
- (iv) Three Senior Statisticians
- (v) Two Statisticians
- (vi) The Census Administrator

This committee was responsible for the actual preparations of the 1980 Census of Population and Housing. The functions of this committee were to prepare the questionnaire using questionnaires from previous censuses and responses from data users, enumerators manual (urban, rural), supervisors' manual, coders' manual, 'editors' manual, the list of tables to be incorporated in the final publications, etc.

The Project Committee II was sub-divided into a number of census working committees.

4.2.3 Census Working Committees

Members of the Census working committees were appointed by the Director of Census and Statistics. These committees were given the responsibility of organising the various activities of the census taking. In all, there were nine working committees and these were: census documents, Census frame documents, transport arrangements, construction and other Census materials, publicity, manpower and training, Census operation arrangements, data processing and tabulation and analysis.

4.2.3.1 Census Documents Committee

There were five members in the committee:

- (i) One U.N. Demographer
- (ii) Three Senior Statisticians
- (iii) One Statistician

This committee looked into the printing of the census questionnaires and other documents. The documents printed were: instruction manuals, Census schedules, calendar of events, marker slips, oath of secrecy forms, engagement forms, completion certificates, record of Census enumeration forms, record of Census materials issued, posters and pamphlets.

The committee was also responsible for the distribution of the materials mentioned above as well as census bags, census badges, brief-cases, census maps, stationery items, and accounts forms.

4.2.3.2 Census Frame Documents Committee

This committee had seven members:

- (i) One Assistant Director
- (ii) One U.N. Associate Expert in Agricultural Statistics
- (iii)

This Committee was to arrange and mobilise enough vehicles for Census operations. Departmental vehicles from other Government Ministries were to be mobilised for the exercise in respective districts.

4.2.3.4 Construction and Other Census Materials Committee

The following members formed up this committee:

- (i) Two Assistant Directors
- (ii) The Census Administrator
- (iii) One Principal Statistical Officer

The main function of this Committee was to arrange for office and storage accommodation for the Census personnel and Census documents. They were expected to supervise the construction of new buildings at Central Statistical Office and these had to be completed before census taking was over. Members of this Committee were also responsible for organising the purchase of Census materials, such as bags, brief-cases, census badges and stationery items.

4.2.3.5 Publicity Committee

Membership of this committee consisted of:

- (i) One Assistant Director
- (ii) One United Nations Demographer
- (iii) One United Nations Expert in Economic Statistics
- (iv) One Senior Statistician
- (v) One Statistician.

This committee's responsibility was to make the people of Zambia aware of the coming Census of Population and Housing. The various media were used during their execution of duties.

4.2.3.6 Manpower and Training Committee

Membership of Manpower and Training committee consisted of the following:

- (i) The Director
- (ii) One U.N. Demographer
- (iii) Two Senior Statisticians
- (iv) Two Statisticians.

The committee was essentially responsible for making arrangements for the training of various categories of staff involved in the census.

4.2.3.7 Census Operation Arrangements Committee

Membership of this committee consisted of the following:

- (i) The Director
- (ii) Two Assistant Directors
- (iii) One Statistician
- (iv) The Census Administrator
- (v) One Principal Statistical Officer.

This committee was charged with the responsibility of executing all functions pertaining to field operations of the Census. They were to see to it that the distribution of materials was done and census personnel were deployed to respective enumeration areas in good time.

4.2.3.8 Data Processing Committee

Membership of this Committee consisted of the following:

- (i) One United Nations Demographer
- (ii) One Senior Statistician
- (iii) One Statistician

This committee was responsible for all preparations pertaining to data processing which involved acquisition of data processing facilities and recruitment of personnel.

4.2.3.9 Tabulation and Analysis Committee

The membership comprised:

- (i) The Director
- (ii) Two Assistant Directors
- (iii) Two Senior Statisticians
- (iv) Two Acting Senior Statistician
- (v) One Data Processing Advisor
- (vi) One Statistician.

The Committee was established with the responsibility of monitoring the production of tables and publications of results.

4.3 Census Administrative Divisions

To rationalise the workload of Census operations, the Country was divided into 24 Census regions each of which was headed by a Provincial Census Officer (P.C.O.) who was the in-charge of all census activities within the region. The P.C.O.s were drawn from the senior staff members of the Central Statistical Office and were of the rank of Statistician or Principal Statistical Officer or Senior Statistical Officer. Each P.C.O. was assisted by 2 or more District Census Officers (D.C.O.) who were mainly District Secretaries and in some cases headmasters of secondary schools.

The numbers of personnel recruited were estimated on the basis of population estimates. Besides PCOs there were 60 District Census Officers, 126 Senior Supervisors, 580 Supervisors, 2,841 Team Leaders and 12,593 Enumerators.

The table below gives a detailed distribution of Census personnel by region.

TABLE A - 1980 CENSUS AND DISTRIBUTION OF CENSUS OFFICIALS

PROVINCE	CENSUS REGION	ESTIMATED POPULATION	AREAS COVERED	NO. OF PCO's	NO. OF DCO's	NO. OF SS's	NO. OF SS's	NO. OF SS's	NO. OF ENUMERATORS	NO. OF TL's
CENTRAL	CENTRAL EAST	220,000	Kabwe Rural							
			Kabwe Urban	1	3	6	25		497	117
			Mkushi District							
			Serenje District							
CENTRAL	CENTRAL WEST	280,000	Kabwe Rural	1	2	6	28		609	140
			Kabwe Urban							
			Mumbwa District							
COPPERBELT	COPPERBELT WEST	269,000	Chililabombwe District							
			Chingola District	1	2	4	16		455	76
	COPPERBELT NORTH	247,000	Kelulushi District							
			Mufulira District	1	2	4	15		418	70
	COPPERBELT CENTRAL	341,000	Kitwe District	1	2	6	20		578	97
	COPPERBELT EAST	323,000	Ndola Urban Dis	1	2	5	19		547	91
	COPPERBELT SOUTH	254,000	Ndola Rural Dis	1	2	5	20		497	101
EASTERN	EASTERN NORTH	158,000	Chama District							
			Lundazi District	1	2	4	19		386	97
	EASTERN CENTRAL	244,000	Chadiza District							
			Chipata District	1	2	6	30		596	148
	EASTERN SOUTH	264,000	Katete District							
LUAPULA			Petauke District	1	2	6	32		646	162
	LUAPULA NORTH	174,000	Nchelonge District							
		174,000	Kwambwa District	1	3	4	22			
			Mwansa District		2	6	30		424	105
LUAPULA	LUAPULA SOUTH	187,000	Mansa District						596	148
			Samfya District	1	2	4	23		458	458
LUSAKA	LUSAKA CENTRAL	300,000	Lusaka Urban District							
			(West of Railway)	1	2	5	23		458	85
	LUSAKA CENTRAL	341,000	Lusaka Urban District							
			East of Railway	1	2	6	20		578	95
LUSAKA	LUSAKA EAST	187,000	Luangwa District							
			(Lusaka Rural D	1	2	2	16		314	80

TABLE A - 1980 CENSUS AND DISTRIBUTION OF CENSUS OFFICIALS (CONT'D)

PROVINCE	CENSUS REGION	ESTIMATED POPULATION	AREAS COVERED	NO. PCO's	OFNO. DCO's	OFNO. S's	OFNO. S's	OFNO. S's	OF ENUMERATORS	NO. OF T L's
NORTHERN	NORTHERN WEST	194,000	Kaputa District Mbela District Mporokoso District	1	3	5	25		474	119
	NORTHERN CENTRAL	224,000	Kasama district Luwingu Distric	1	2	5	28		548	137
	NORTHERN SOUTH	229,000	Chinsali District Isoka District Mpika District	1	3	6	29		560	141
	NORTH-WESTERN I	136,000	Mwinilunga District Solwezi Distric	1	2	4	17		334	84
	NORTH-WESTERN II	161,000	Kabompo District Kasempa Distric Zambezi District	1	3	4	22		392	97
SOUTHERN	SOUTHERN WEST	137,000	Choma District Kalomo District Livingstone District Namwala District Gwenbe District	1	4	7	36		760	178
	SOUTHERN EAST	275,000	Mazabuka Distri Monze District Kalabo District	1	3	6	33		674	168
	WESTERN NORTH	299,000	Lukulu District Mongu District Kaoma District	1	3	8	37		730	183
	WESTERN	250,000	Senanga Distric Sesheke District	1	3	7	31		610	154
TOTAL	24	5,834,000		24	60	131	580		13,139	3,017

4.4 Problems

The construction of office and storage buildings for the census was completed long after the end of enumeration.

5 PRE-CENSUS ACTIVITIES

5.1 Introduction

There are three main stages of census taking. These stages are: pre-census, enumeration and post enumeration. Each stage requires proper planning to ensure quality results.

5.2 Manpower and Training

The training of manpower for the 1980 Census started in 1978. At the time of the Census, the situation with regard to manpower training was as follows:-

- (i) One officer had obtained a diploma in demography from Egypt.
- (ii) Two officers had post-graduate diplomas in population studies from Ghana.
- (iii) Two officers were attending a course in census taking techniques in the USA.

To facilitate census data analysis, two officers were sent for training in demography at a Masters Degree level: one in Britain and the other in Ghana.

Apart from these, a post of Census Administrator was established to co-ordinate field operations.

5.3 Cartographic Work

The demarcation of the country eases the collection of Statistical data and hence enables the Central Statistical Office to provide statistical information to planners and administrators at sub-administrative levels.

The basic areas (polling districts) which had formerly been used to define enumeration areas for censuses and surveys were very unsatisfactory in several respects. These basic areas were generally too large and widely varying in size which made them not suitable either as enumeration area or as sampling units. The other major problem with these basic areas, is that, their boundaries generally did not follow clearly identifiable features on the ground to enable an enumerator to identify them while doing field work. Thus the Census Mapping Project was an answer in eliminating most of these problems.

Initial training of Senior Staff to form the Provincial Supervisory Staff was carried out in two lots from April to June, 1978. The theoretical training was done by the staff of the National Council for Scientific Research in Lusaka and field operations by the Senior Staff of the Central Statistical Office. The delays in the creation of operational and particularly the lack of requisite materials, equipment and transport made it not possible to immediately expand the training programme.

Arrangements were made for cartographic work at Central Statistical Office, these included financial resources, office accommodation and transport facilities that were to be used during the whole exercise.

5.3.1 Census Mapping Project

As pointed out in Chapter 1 concerning earlier Censuses, what was defined as an enumeration area was the Polling District (P.D.) which were very large. This was because at the time these were the smallest geographical units which were demarcated.

Another problem was that these areas did not have clearly defined boundaries which an enumerator would readily identify on the ground. This created a lot of problems during enumeration resulting in omission or duplication of population. This necessitated the need to have small areas of manageable population for enumeration with clearly defined boundaries easily identified both on the map and on the ground.

* The concept and purpose of the Census Mapping Project was thus to increase the accuracy and decrease the costs of a variety of censuses and sample surveys.

5.3.2 Pilot Study

The aim of the pilot study was to investigate:

(a) The method of defining enumeration areas. As different landscape present different problems of mapping, it was decided to study seven landscapes as follows:-

- (i) Fixed urban residential area;
- (ii) Industrial and commercial area;
- (iii) Site and Service Scheme;
- (iv) Un-authorized settlement (Squatters);
- (v) Rural Township;
- (vi) Farms;
- (vii) Rural Area (Village), and

(b) To estimate the cost in terms of time, money and staff for the project as a whole according to the magnitude of the problems encountered.

The landscape types in which the study was satisfactorily carried out were (i), (ii) and (iii) and those in which some work was done were (iv) and (v). Landscape types (v) and (vi) were not studied.

5.3.3 Map Scales Available for Demarcation of Enumeration Area Boundaries

A: Maps of 1:500,000 Scale

These cover the whole country and were produced between 1960 and 1962 and they have not been updated. They are of too small a scale to define enumeration areas containing 300 to 500 people satisfactorily.

B: Maps of 1:250,000 Scale

These cover the whole country and were produced between 1960 and 1972. These also proved unreliable and too small to define small enumeration areas adequately. Moreover, a comparison of 1:500,000, 1:150,000 and 1:50,000 Maps revealed discrepancies which could not be put down to scale changes.

C: Maps of 1:50,000 Scales

This series cover about 75% of Zambia and were produced between 1954 and 1974. All these maps were accurately surveyed and could be relied upon to reproduce river patterns and topography correctly. Human Data was unreliable and so were the names. Originally this scale was intended to cover the whole country and the maps proved to be a suitable scale for demarcated small enumeration areas.

D: Maps of 1:5,000

The majority of urban areas are covered by this series. The series is very useful as it shows individual buildings and plot boundaries and not regularly updated.

E: Cadastral Maps

These are prepared for special areas and therefore cover small areas of Zambia. They could be used in particular instances otherwise the scale was too large to be convenient. Usually they are up-to-date since buying and selling of land must be accompanied by an accurate survey of the land in question.

5.3.4 Population Data

Given that Census areas are required to contain a certain number of people, an estimate of numbers of people living in a given region and their approximate location is necessary in order to have some idea of the limits of the proposed enumeration areas for efficient allocation of time and personnel.

The pilot study reviewed that this type of information could be obtained from valuation rolls, aerial photographs, 1969 Census and Village Registration. However, the results from Pilot Mapping Project were more satisfactory and hence the start of the Census Mapping Project.

5.3.5 Census Mapping Project: Purpose

The Central Statistical Office occasionally carries out census and surveys in which information on population and areas is sought. In all cases, be it a sample census, a pilot study or a census, areas of operation should be fully covered without omission or duplication. Unfortunately, without proper and clear maps showing enumeration areas with properly defined boundaries which can be easily identified both on maps and on the ground, an enumerator cannot achieve this goal effectively. Therefore, the purpose of the CMP was to map, define, demarcate Standard Enumeration Areas (SEAs) and subsequently Census Supervisory Areas (CSAs) for use in Censuses and Surveys.

A standard enumeration area is defined as an area that contains between 300 and 500 people in rural areas and between 600 and 800 people in urban areas and which has clearly defined boundaries such as roads, rivers, tracks and hill ranges, etc. A CSA is made up of 2-4 SEAs for rural areas and 4-7 SEAs for urban areas.

5.3.6 Training

Training of Provincial Statistical Officers (PSO), their deputies and Supervisors took place at the National Council for Scientific Research from 24th April to 2nd June, 1978. The field practicals took place in an area covering Choma and Kalomo Districts in Southern Province. This first phase of the project afforded participants some experience at an early stage.

A number of problems were identified during training and this necessitated amendments to be made to the instructions manuals. Among the problems include the following:-

- (i) Use of dye line prints which easily faded away rendering features and names on these maps ineligible due to exposure to light.

- (ii) Non-availability of plastic bags for safe keeping of mapping materials such as rulers, protractors, set-squares, etc.
- (iii) Lack of medical facilities (drugs) especially anti-snake bites.
- (iv) Lack of standard format for the collection of community statistics such as Police Post, Schools, Hospitals, Clinics/Health Centres/Health Institutions. Recording of this information in notebooks differed from mapper to mapper and hence need for a standardised format.
- (v) Magnetic Variation:

Magnetic north is the direction in which the compass needle points (unaffected by any local conditions) i.e. the direction of the magnetic pole at any point. The magnetic north pole changes from year to year and thus the magnetic variation, which is the angle between true north and magnetic north, varies from year to year as well as from place to place.

It should be noted here that, (i) every ordinary compass has its own individual variation which will differ by a constant number from the local magnetic variation and (ii) compasses are affected by local attraction such as a hill in which magnetic ore is to be found. Thus, before using a compass for accurate work, certain precautions must be taken.

Non-correction for the magnetic variation led to misplacement of features on the map during plotting. Finally, magnetic variations for all places were worked out and necessary corrections made.

5.3.7 Procedure

The procedure adopted was that the 1968 Polling Districts were modified in such a way that, their boundaries followed clear and identifiable boundaries. The Polling District (P.D.) so modified would then be known as work area (WA). The identification number assigned for the work area was the same as the P.D. number. The PDs were mapped at a smaller scale of 1:250,000 as the P.D. boundaries had to be transferred to 1:50,000 base maps. This scale is very good as it showed almost all the topographical features required for the project. These 1:50,000 maps were joined together until the entire area of operation was covered. Thereafter, PD boundaries would be superimposed on them (making sure they followed identifiable features such as roads, tracks, fences, rivers, range of hills etc.). When this was done, tracings of each individual work area were drawn from the 1:50,000 base map and sent to the field.

Each team (the mapper and his assistant) was provided with two bicycles. One of the bicycles with a milometer fixed onto the handle bars (for recording distances), prismatic compass for taking bearings, blockboard clippers for holding and tracing on the blockboards, pencil, erasers, set squares, ruler and compass. The team was provided with traced map of the work area and a topographical 1:50,000 map covering the area to be mapped.

In areas where maps at a scale of 1:50,000 were not available, aerial photographs, photo laydowns, and mosaics were used. The affected areas were Northern, North-Western, portions of Southern and Western Provinces.

5.3.8 Mapping

The mapping of a work area was done by a Mapper and an Assistant Mapper. While working they were responsible for finding out, by travelling all over the area, details of all settlements of population (including size) and all physical features, prominent buildings and other features potentially useful for identification of boundaries by use of milometers and prismatic compasses to record distances and positions of features respectively.

After completing an area, the team was to compile community statistics of the area such as source of water, electricity supply, school, hospital, postal agency, police post etc., and then divide the W.A. into SEAs.

After a district was completed and all SEAs properly demarcated the next step was the demarcation of CSAs.

The maps used in urban areas were of a larger scale ranging from 1:2,500 to 1:10,000 whereas in the rural areas maps of the scale of 1:50,000 were used.

After the demarcation of CSAs and SEAs and completion of community statistics forms, the maps and forms were sent to the Cartographic Section at Central Statistical Office in Lusaka. Here the fair drawing of the CSAs were produced on sheets of very stable plastic materials. All the information recorded by the mappers which included new villages, other features and names of all localities were shown on the final maps.

The CSAs were identified by a code such as:

WES/52/R-CSA/027, where WES = Western Province,
52 = District number (Senanga),
R-CSA = rural CSA and
027 = CSA number.

The Code Number was written on the top right hand corner of the map. Further, each map contained a box in which the title of the map, the province, district serial number and scale, origin of base map and a few notes about demarcations, copyright, etc were written.

The transparencies were produced on ammonia (diaz) machines on azalar/ozafilm material. They were the prints from which all subsequent paper copies were made while original fair drawing went to the archives not to be used again in the day to day work. After the pilot study in 1978, it was estimated that the total time required for field work to be satisfactorily completed was 21 months and for preparation of fair drawings an estimated 3 years would be needed.

At the time of the census i.e. August, 1980, the following districts were fully mapped:-

<u>Central Province:</u>	Kabwe Rural, Kabwe Urban, Mkushi and Mumbwa.
<u>Copperbelt Province:</u>	Chililabombwe, Chingola, Kalulushi, Kitwe, Luanshya, Mufulira and Ndola Urban.
<u>Eastern Province:</u>	Chadiza, Chama, Chipata, Lundazi, Katete and & Petauke.
<u>Luapula Province:</u>	Kawambwa, Mansa, and Mwense.
<u>Lusaka Province:</u>	Lusaka Rural, and Lusaka Urban.
<u>Northern Province:</u>	Chinsali, Isoka, Kaputa Kasama, Mbala and Mpika.
<u>N-Western Province:</u>	Kasempa, Mwinilunga, and Solwezi.
<u>Southern Province:</u>	Mazabuka and Monze
<u>Western Province:</u>	Mongu

One UN Cartographer helped with the Census Mapping Project in terms of supervising the operations of the project.

5.4 Data Collection Instruments

5.4.1 Draft Questionnaires

The Director of Census and Statistics requested major users of population data to submit their data requirements on which the questionnaire design would be based. The requirements together with comments on the same by the Project Committee were forwarded to the National Census Committee for final decision on the topics to be included.

Once topics were selected and approved by N.C.C., Population and Demography Division of CSO prepared draft questionnaires (Forms A and B). Thereafter, Project Committee II (Census of Population and Housing) met to discuss the questionnaire formats. At the same time draft instructions manual for enumerators was prepared. The drafts were discussed and necessary modifications made. Unlike the 1969 census questionnaire, space for coding was provided.

5.4.2 Pilot Census

After the questionnaires and instruction manuals to enumerators were revised, a pilot census was conducted in March 1980. One urban and two rural districts were selected for the pilot.

5.4.3 Census Workshop

After the pilot, a sub-regional workshop on the Organisation and conduct of "Population and Housing Census" was held in Livingstone, Southern Province. The workshop was funded by UNFPA and lasted for three weeks. The workshop was attended by the following countries: Botswana, Kenya, Lesotho, Malawi, Namibia, Tanzania, Uganda and Zambia; and the following agencies: Regional Institute of Population Studies (RIPS), Ghana, United Nations Fund for Population Activities (UNFPA) and Bureau of the Census, USA.

The aims of the workshop were:

- (a) to review the sub-regional experiences in census taking;
- (b) to benefit from the experience of other countries and regions of the world and;
- (c) to provide training to junior professionals and middle level personnel in Census Methodology.

The workshop proved very successful and this was achieved through (i) papers presented in plenary meetings (ii) discussions and exchange of views and experiences in working study groups and (iii) laboratory, demonstration and field experiences.

At the workshop the results of the pilot census and field experiences were discussed. During the discussions, suggestions and modifications were made both to the Census questionnaire and Instructions for Enumerators.

A field trip was arranged for workshop participants to acquaint them with the mapping exercise which was taking place in all areas of the country in preparation for the census. The participants visited parts of Monze district where mapping was in progress.

The Workshop was a good training for the Zambian officers who were to be engaged in the actual census enumeration.

5.4.4 Questionnaire Finalization

After the Census workshop, the Population and Demography Division prepared the final draft questionnaire for discussion by the Project Committee. The committee worked on the final questionnaire. Two main questionnaires were prepared: a short questionnaire, Form B, which was used in rural areas and a long questionnaire, Form A, which was used in urban and selected rural areas. The difference in these questionnaires was that, the long questionnaire, apart from general questions on population characteristics had fertility and housing questions. Special questionnaires were prepared for institutions such as hotels, hospitals, etc. The questionnaires (Forms A and B) were bound in booklets of 25 forms each and the inside of the front cover was printed with instructions from the enumerator's manual.

5.4.5. Calendars of Events for Age Estimation

Since part of the population in Zambia is ignorant of their exact ages, or dates of birth, calendars of events were prepared in order to minimize the number of persons with age not stated. The Provincial Statistical officers were directed to update the calendars used in 1969 with the help of District Secretaries, Chiefs, and Village Headmen.

A resident UN Demographer assisted during questionnaire design and other pre-census and census activities.

5.5 Publicity

The success of a Census depends on the willingness of the people to respond to the Census questions and the 1980 Census was no exception. In order to achieve this there was need to inform the populace about the coming census. This task was carried out by the Publicity Sub-Committee within the CSO. Radio programmes were organised in which the purpose of Census of Population and Housing was explained.

A number of posters were produced and distributed to all parts of the country. Party Chairmen/Officials, village headmen and chiefs as well as school teachers were used as communication media to distribute the census publicity materials.

Launching the Census, His Excellency the President of the Republic of Zambia, Dr. K. D. Kaunda addressed the nation on both radio and television. He explained the importance of the exercise and called upon the nation to co-operate with the census officials.

Apart from this Census T-shirts marked "Census 1980" were issued to all Census Officials as part of the publicity campaign.

The Ministry of Information and Broadcasting helped in publicity together with the whole Zambia Mass Media system. The Ministry officials helped translate census radio programmes in various languages for broadcasting. These broadcasts were put on the air several times a day and it is on doubt many people were made aware of the coming exercise through these programmes.

5.6 Logistics, Transport and supply of materials

Mechanical Services Department (MSD) of Ministry of Power, Transport and Communication was another department that played a major role in the Census. They helped to raise extra vehicles and drivers to work on the census. They provided trucks to transport census materials to various provinces in the country. A census vehicle that broke down was given priority as far as repairs were concerned to ensure that census work was not disrupted. The transport sub-committee at CSO worked on this.

Since CSO has no printing facilities to handle such a job, it was the Government Printer Department that did the printing of Census materials. Special time was allocated to the printing of census materials, it is worthwhile noting that very high priority was given to this work. No problem was encountered and the work went on well. The sub-committee at CSO entrusted with printing work played its part well.

5.7 Recruitment and Training

This was one of the most important steps in Census operations. The coverage and accuracy of information collected depends largely on the type of census personnel and the training they receive. Before the Census operations were started the post of Census Administrator was established, and this officer had to co-ordinate the field operations with the head office.

Although Zambia has an established permanent census office, it still needs the co-operation of other government departments if a census has to be a success. The Ministry of Education and Culture through its schools assisted in providing teachers who worked as supervisors and team leaders, the students worked as enumerators. During the census operations. Selected schools were used as the training centres, in fact all facilities at these institutions were put at the disposal of the census officials. Enumerators in rural areas especially, used schools as residences during the census enumeration period.

Master Trainers

Eleven Senior Statisticians from the Census Statistical Office were trained in census operations and census taking as Master Trainers. Their work was to help with recruitment procedures and to train supervisors, as well as look after the technical aspects of the census operation.

Regional Census Officers

There were 24 Regional Census Officers who were drawn from the senior staff members of the Central Statistical Office and were of the rank of Statisticians or principal Statistical Officers or Senior Statistical Officers. They were in-charge of all Census activities within their regions.

District Census Officers

The District Census Officers were the District Secretaries of each respective District and were responsible for the storage and distribution of Census materials and general handling of administrative matter and worked closely with the regional Census Officers on one hand and senior supervisors on the other.

Senior Supervisors

The Senior Supervisors were members of staff of the CSO and had responsibilities of assisting the supervisors in their work. It should be pointed out that most of these people did not receive any training related to Census taking.

Supervisors

These were secondary school teachers and were given training in census taking for a week. They in turn trained the team leaders and Enumerators in the presence of the Master Trainers.

Team Leaders

These were primary school teachers and their work was to supervise the enumerators. Generally, their training started three days before the Enumerators joined them.

Enumerators

These were Secondary School students in form IV or V. Wherever possible these were recruited to enumerate people in their areas of residence. As Zambia has over 70 dialects it was important to engage people who understood the local customs and who could interpret the questions in local dialects correctly. The training took about two weeks to complete. Enumerators were supposed to be recruited depending on their performance during the training period.

5.8 Sampling in Census

The country was stratified on the basis of Administrative districts. In 1980 there were 57 districts out of which 10 were urban and the rest rural.

Schedule A was administered in all urban areas and in selected rural areas. This schedule was more detailed, had information on fertility, economic activity and housing. On the other hand schedule B was canvassed in all rural areas except those which fell in the sample.

In each district a sample of clusters i.e. SEAs were listed and a sample of about 20 was selected.

The fixing of the sample size to about 20 or 21 SEAs per district was meant to facilitate the administering of work-load among the enumerators. In view of the varying sizes of districts in terms of the number of SEAs, different Sampling fractions were used for different districts. The districts which had less than 25 SEAs, were covered on a complete enumeration basis.

5.9 Budgeting and Scheduling

5.9.1 Scheduling

The 1980 Census was held from 25th August to 7th September, 1988.

Zambia being a vast country, and localities in rural areas spaced out, it is not possible to enumerate everybody within a day, thus enumeration was done in 14 days. Where the terrain is difficult, enumeration was extended for a few more days depending on the need. The enumeration period was not chosen arbitrarily, but for the following reasons:

1. It is a slack period in Agricultural activities, and as such people in the rural areas are likely to be found at their homes.
2. It is a period when schools and institutions of higher learning are on vacation and therefore the services of school pupils and teachers can be obtained.
3. It is the dry season and enumerators can work full days without interruptions by rain.

The 1980 Census was de facto in that statistics were collected on each person, each household and each housing unit found within Zambia with the exception of information pertaining to persons, households and housing units that were covered under the provisions of section 8 of the Diplomatic and Privileges Act, Chapter 36 of the Laws of Zambia.

5.9.2 Budgeting

It was estimated that, the census would cost approximately K9 million. However, this estimate was surpassed due to a number of factors such as prolonged data processing and increased cost of materials.

The breakdown of expenditure is as follows:

Census Mapping	K2,595,417
Pilot Census	600,000
Census Count (Field Operations)	4,117,594
Post Enumeration Survey	10,125
Data Processing	1,870,408
Equipment and other charges	3,364,860
Total	K12,558,404

5.9.3 UN Contribution

At the beginning of the Census preparations, the United Nations Fund for Population Activities had approved US \$2 million to be spent on the Zambia's 1980 Census. The bulk of this money was spent on purchase of vehicles, equipment and materials, for the Census Mapping Project. The exercise was a costly venture.

The UNFPA also assisted with calculators and data entry machines.

During the prolonged data processing, the UNFPA continued to assist Zambia, so that the cost towards the whole project became more than the original approved budget of US \$2 million.

5.9.4 Government Allocation of Funds

The Government of the Republic of Zambia contributed the bulk of the fund, both in terms of money and manpower. It has not been possible to separate the government expenditure from other expenditures.

5.9.5 Other material Inputs for the Census

New offices were constructed to store the Census materials, equipment and staff as stated above. 30 Vehicles which were used for the Census Mapping and Census taking were purchased. The data entry machines were bought to facilitate keying in of census data. UNFPA also bought a micro computer for the Census and other demographic data processing.

5.10 Problems

Pilot study was not completed satisfactorily because

1. Permission was not obtained to make enquiries in rural areas and unauthorised settlements.
2. The officer conducting the study was about to leave the country and there was no immediate replacement.

The delay in the completion of field work can be attributed to four reasons:

(a) Floods

Areas such as Kalabo, Lukulu and Senanga in Western Province; Chilubi, Mansa and Samfya in Luapula and Luwingu in Northern Province get flooded in parts of the year. During such periods, these areas are impossible and the only possible means of transport is either a canoe or a speed boat.

But these boats used do not have milometers mounted on them. However, with the use of prominent features it was possible to plot features using the inter-section or the resection methods.

(b) Sand

Another major problem experienced in North-Western and Western Provinces was that of sand. It was found out impossible to use some types of vehicles available in such sandy areas. Also, it was not possible to cycle through sand easily and the only way to measure distance was by pushing the bicycle - a very slow process.

(c) Landmines

As a result of landmines planted during the Rhodesian war, work in some parts of the country was rendered very slow.

(d) Materials

Acquisition of some mapping materials was sometimes delayed due to bureaucratic procedures such as those by the Central Supply and Tender Board.

Since Census Mapping was not complete, it was not always possible to know the actual number of enumerators. This led to over employment in certain districts, resulting in extra costs being incurred.

6. FIELD OPERATIONS

6.1 Preparations

6.1.1 Census Materials

On the basis of experience gained during the Pilot Census, a comprehensive list of Census documents/materials likely to be used for the main Census was prepared. See Appendix for details.

An estimation of quantity of census materials and documents required by each census district was made at Central Statistical Office headquarters several months prior to the census enumeration. These materials were procured and then packed separately for each districts. An addition of about 20% of the estimated census materials for the province was sent to the provincial headquarters as reserve. D.C.O. was responsible for the receipt and distribution of census materials in his district with the support of Senior Supervisors. Meetings of D.C.Os at their provincial headquarters were held in early August 1980 to discuss Administrative arrangements, distribution of Census Materials, training of enumerators and the conduct of census itself.

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The D.C.O.s insured that transport was available for Census purposes during the Census period and also helped in publicising the Census activities.

6.1.2 Deployment of Personnel

6.2 Census Enumeration

It was decided that Census enumeration period would be two weeks, i.e 25th August - 7th September, 1980 as per Gazette notice number 1060 of 25th July 1980. This period coincided with school holidays.

An enumerator was to enumerate all the persons in a assigned to him/her within the two weeks. For the purpose of defacto enumeration, all those, whether a resident or a visitor, who spent a night prior to enumerato's visit to the household were included. Transient population, i.e., people who were found at bus stops, railway station, etc. were enumerated as the enumerator went to those premises during the course enumeration. a special form, Form S, was used to enumerate inmate of institutions (persons staying in hotels, lodges etc). In cases where an enumerator could not reach them the institutional authorities were provided with copies of Form S' and were to provide some minimum information on residents of their institutions. The housing particulars of institutions were recorded on a special form, Form H. In all other cases, the Census household schedule Form A or Form B was used. Each schedule A or B had provision to record information of up to 10 persons of a household. If a household had more than 10 persons, then two or more schedules were used.

Census enumeration commenced on 25th August, 1980 in most of the areas. Team leaders, supervisors and other senior Census field workers were going round in their respective areas to check the progress of enumeration. Technical and logistic problems were tackled jointly by team leaders and supervisors.

After enumerating the household, the enumerator made a quick review of the entire questionnaire before leaving the respondent's house, thereby ensuring coverage of all the eligible persons in the household(s). The enumerator put a sticker on the main door of each household interviewed to avoid omission and/or duplication of households.

If a particular household was not found during the first visit, the enumerator had to note down the address of such a household and call back in the evening or early the following morning. Neighbours were also consulted, if necessary, to know the whereabouts of some households. When a book of schedules was complete, enumerators checked them at the end of the day for consistency of information recorded. At times, they had to re-visit the households enumerated earlier to remove inconsistencies particularly during the first few days of enumeration.

While the master trainers, Provincial and District Census Officers and Senior Supervisors were mainly engaged in preparation, supervision and administrative support operations of the Census, the enumerators, team leaders and supervisors were mainly responsible for actual field work. The team leaders and supervisors were required to visit all the SEAs assigned to them at least once a day to learn of and solve the field problems of enumerators. They were also supplying census books and other materials to the enumerators. Further, team leaders were asked to check the entries on the front cover of each book completed by enumerators. By adding total number of persons entered on each book, the population of each SEA was arrived at and was recorded in the team leader's record sheet before handing over all the books of schedules to supervisors.

6.3 Problems

Release of transport from some Government Ministries was delayed and this affected commencement of enumeration in certain rural areas. Due to inadequate transport facilities the Census forms and materials were not supplied as and when necessary to some of the enumerators. This led to extension of enumeration in some areas.

As a result of landmines in some parts of Western Province, particularly in parts of Senanga and Sesheke districts, enumeration staff were ferried by helicopters and considerable delay was experienced in completing enumeration of households in these areas.

Even though 20 rural SEAs per district were selected for Form A, it was impossible to administer the form in all cases because, if an enumerator ran out of schedules and the supervisor was long in coming with additional supply, the enumerator would just borrow schedules from his nearest neighbour. In most cases these were form B schedules. Furthermore during the packing stage, only form B were packed for a rural district. When the mistake was discovered the forms could not be shifted on time which necessitated use of the nearest form.

The Master Trainers and Provincial Census Officers visited their respective areas during enumeration period and assisted the field staff in resolving problems. It was observed that lack of transport in several districts was a major constraint in carrying out the field checks effectively. In addition to these, and due to the large administrative work load assigned to the supervisory staff, a closer supervision of the field work was not possible.

Special authority was obtained to enumerate freedom fighters persons in barracks and refugee camps.

Village headmen and party officials helped in overcoming the problems of non-cooperation or refusals. In urban areas, particularly in low cost housing areas, the Party proved to be the most effective organ for soliciting co-operation from the public.

7. POST ENUMERATION ACTIVITIES I

7.1 Introduction

After the Census enumeration, all the books of schedules and materials were sent to the office of district Census Officer with identification of documents by CSA and SEA within a district. Before making final payments to enumerators, team leaders and supervisors, the District Census Officers and Senior Supervisors confirmed that all the Census forms used and unused were handed over.

7.2 Summary Counts

The Census forms and materials were then sent to provincial headquarters. Senior Supervisors who were staff members of Central Statistical Office worked hand-in-hand with the P.C.O.s during the summary counts. Before starting the summary counts, the P.C.O.s were required to make sure that all the census books of schedules issued to various DCOs were returned.

After receipts of all Census documents at provincial headquarters, the summary information given on the front cover of every census book was used to prepare preliminary estimates of population by SEAs, CSAs, districts and provinces. This exercise took about a month.

The summary counts compiled by PCOs for all the provinces and districts were checked by population and Demography division staff of Central Statistical Office. A preliminary report on the Census, giving population by sex, rural/urban classification for each district and province in Zambia was released in January, 1981.

7.3 Storage of Census Materials

After the collection of data and completion of summary counts, all the census books, from all provinces were brought to Central Statistical Office headquarters between October and November 1980.

There was no proper place to store the census forms and materials which came to Lusaka because extension of Central Statistical Office was still under construction. Therefore Census forms and materials were stored in Zimbabwe House at the Lusaka Showgrounds. The Census materials were eventually shifted to CSO in June 1981

All the census books were stored on open racks, arranged according to CSAs within a district and province. The CSAs were arranged in ascending order. Each rack was clearly labelled. The information contained on the labels were:-

- (i) Province
- (ii) District
- (iii) Rack Number
- (iv) Shelf Number and
- (v) CSA Numbers

This system helped in retrieving books quickly. After arranging books on the racks a list was compiled showing the total number of census books, by type of forms used for each district and province.

7.4 Conduct of Post Enumeration Survey (PES)

The Post Enumeration Survey was conducted in November, 1980. This covered the whole country, that is, standard enumeration areas were selected in all provinces.

As a result of problems encountered it was decided that the PES data should be used for testing of the computer programs that were being written for the Census.

7.5 Data Processing

7.5.1 Control of Material

All the census books were recorded in a "Register Book" to control their movements. All other forms were carefully sorted out and filed.

All the books submitted for key punching were recorded in special books called "Control Registered".

Other control measures introduced were (i) the use of "Batch Control Slips" (ii) batching of books before they were submitted for data entry and (iii) the use of "Daily Record of Performance forms".

7.5.2 Manual Editing and Coding

The estimated number of editors and coders required to do the manual editing and coding of the census data was 200, but only 88 were recruited due to financial constraints. Of the 88 people recruited, 29 were especially recruited as key Punch Operators.

The manual editing, coding and checking of the census books started during the second week of February, 1981, with "Post Enumeration Survey" books. The reason for starting with the Post Enumeration Survey were:-

- (i) To check the accuracy of the Main Census Data.
- (ii) To use the data for testing the various Computer Validation Programs which were being developed;

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- (iii) To get the Editors/Coders experienced in order to minimise errors when they came to work on the Main Census books; and
 - (iv) To give more time to Editors/Coders to understand the work in general.

The Editors/Coders were put in groups of six (6) to seven (7) people. Each group was headed by a supervisor who was answerable to a Senior Supervisor. This scheme of operation helped to control and monitor the daily performance of each Editor/Coder. The daily output of each Editor/Coder was recorded on a "Daily record of Performance Form."

Initially, every field in the book of schedules was coded using red pencils but later this system was stopped when the U.N. Data Processing advisor joined CSO in January 1982 and revised the coding system. Fields for "Not Applicable" entries were skipped in order to reduce time spent on editing and coding.

It took almost six (6) months to complete editing, coding and verifying of PES data. In order to minimise coding errors, 100% verification was done by supervisors and senior supervisor.

7.5.3. Data Processing Equipment and Computer Facilities

According to the recommendations made by UNECA Mission to Zambia in 1980, data capturing for the Census data needed fifteen (15) dual stations. Of these UN pledges to contribute nine (9), while the Government was to contribute six (6).

The new IBM 5280 distributed data entry equipment, bought by UNFPA, finally arrived in March, 1983 after a delay of more than two years.

Capturing of the Census data started in March, 1982 with eight Data Entry Operators who were increased to twenty four in late July, 1982. Using the allocated four stations (8 keyboards), the operators were put in three shifts. The first group of eight worked from 7.00 to 15.00, the second group from 15.00 to 19.00 hours and the third group from 19.00 to 23.00 hours. This arrangement continued until November, 1982 when it was interrupted by the National Voters Registration exercise where all data entry stations in Lusaka, including CSO's twenty-four operators, were mobilized for the work.

In February, 1983 the Census data capturing work resumed with the above arrangements and thirty experienced Data Entry Operators from the Ministries of Home Affairs and Finance were engaged on overtime basis. In addition to these, fifty stenographers/typists were deployed to do Census work for a period of one month to cover up for the lost time during National Voters Registration work.

After training and orientation of staff on the new equipment, actual work started in May, 1983. Data capturing operational duties were organised in such a way that out of CSO's twenty-four Data Entry operators, nineteen were operating on the newly acquired equipments at CSO premises on full time basis and the remaining eight at the Ministry of Finance. Nineteen operators, (twelve from the Ministry of Home Affairs, six from Government Stores and one from Water Affairs) were assigned to work on the Census data from March, 1983 to October, 1983 on full-time basis. In addition to this, ten CSO stenographer/typists were trained and assigned to key in census data on overtime basis. the data entry operation was completed in October, 1983.

Since CSO experienced some difficulties in getting high priority for data processing at the Ministry of Finance, it became necessary to find alternatives. As a result in July 1982 CSO was able to have access to the Ministry of Home Affairs Computer facilities.

At the Ministry of Home Affairs, the office did the following:-

- (i) The installation of program packages like COCENTS, CONCOR and SPSS.
- (ii) Testing and preparing tabulation parameters specification for COCENTS.
- (iii) Testing and running of edit parameters specification for CONCOR.
- (iv) Testing and running other editing special purpose programs; and
- (v) Any other related activities.

The use of these facilities stopped in October, 1983 due to hardware and software problems.

7.5.4 Administrative Organisation of DPU

The Estimated number of editors and coders required to do the manual editing and coding of Census data was 200, but only 88 were recruited due to financial constraints. Of the 88 people recruited, 29 were especially recruited as key punch operators.

The training of the editing and coding staff was organised as follows:

12th - 19th January, 1981 Supervisors
20th - 30th January, 1981 editors/coders

Furthermore, 8 key Punch Operators underwent training which lasted for one month starting from the 12th January.

7.6 Machine Editing

Initially, most of the Computer Validation Systems were designed in consultation with the Ministry of Finance's System and Program Unit. The basic editing specifications which consisted of (i) Range Checks (ii) Consistency Checks and (iii) Structural Checks were prepared before the manual editing and coding started.

The approach used in resolving the errors turned out to be tedious. This system was revised and tested on the Post Enumeration Survey data after the editing exercise. A Population Check Master file was generated at SEA level in order to counter-check the number of population record entered at SEA level as stated above. The main aim and objective of this exercise was to control the data entry records captured by the Data Entry Operators and to ensure that all books were entered.

Generally, the machine editing procedure was implemented by writing special purpose programs and program packages to undertake the following stages:-

- Stage I: Tackling the format of the data; the entry of the geographical codes; duplicate cases; missing cases and entry of books by batch.
- Stage II: Structure of the data. This was for checking whether all acceptable records were entered for each household, especially fertility data for eligible women, as well as the presence of household characteristics in the case of Form A.
- Stage III: Checking of each variable. The range in the case of numeric values and acceptable code entries in the case of alphanumeric entries in addition to consistency checks of two or more variables was undertaken.
- Stage IV: Checking of population records against the population Masterfile.

7.7 Post Census Mapping

By April, 1982 mapping in all provinces and districts was completed, except portions in the Western parts of Senanga and Sesheke districts where landmines still posed a great danger to mappers.

7.8 Problems

Although Zimbabwe House in the showgrounds was spacious, there were problems when it rained due to leakages.

Due to lack of accommodation the department was not able to employ the required number of Editors/Coders for the Census work.

Data entry did not move very fast in the initial stages due to the following reasons:-

- (i) Lack of enough Key punch machines due to the late arrival of data entry equipment pledged by the UN.
- (ii) Low priority given to census work by the Ministry of Finance during the normal working hours.
- (iii) Lack of enough diskettes because many diskettes were being held up waiting to be converted onto magnetic tapes.

One of the major problems faced during coding was identifying appropriate codes for occupation and industrial classifications. Other errors were found in :-

- (i) Language (for young children);
- (ii) Length of residence 12 months ago (especially for young children);
- (iii) Employment Status and Economic Activity; and
- (iv) Fertility

The other problems which were faced during the editing and coding work were:-

- (i) The use of two types of forms (i.e. Forms A and B) in one SEA;
- (ii) The use of the wrong form in some rural SEAs;
- (iii) Some books of schedules had no CSA and SEA numbers because mapping had not been completed in some parts of the country at the time of the census;
- (iv) The unnecessary number of codes allocated to variables like "Disability" and "Professional/Vocational Training" with three digits entry each; and
- (v) The mixing of numeric and alphanumeric.

Although CONCOR editing program package was installed in October, 1982 to facilitate the machine editing it was not implemented on full scale due to the following reasons:-

- (i) The package was found to be extremely slow when executing.
- (ii) Since the "Relationship to Head of Household" field was not coded and keyed in, the 'Hot-deck' System in which CONCOR has an advantage over other currently available editing program packages could not be applied.

During machine editing, a lot of difficulties were encountered. The major one was computer time at the host computers. The computer at the Ministry of Home Affairs as stated above broke down, thus affecting the processing of the data. The second problem was staff. The number of staff allocated to handle correction work for an estimated 9.6 million records were originally only ten (10) which was later increased to twenty-five (25). The third reason was unavailability of funds for over-time.

The results obtained from PES were used only to test the computer programs written for the Census. The problem was that, no written sampling procedures were found. A few evaluations done Highlighted a number of problems. It was discovered that each province/district followed it's own sampling procedure. In cases where errors were noticed during the Census, the PES was used as a correction factor.

The problem found with the PES was that, some SEAs used never existed at the time of the main Census. thus making comparisons impossible. Since the mapping had continued after the Census it is possible that new SEAs could have been created. Although the PES was conducted to evaluate census coverage, problems encountered made it impossible to achieve this objective except in a few cases.

8. POST ENUMERATION ACTIVITIES II

8.1 Tabulation schemes and Preparation of Tables

In the 1980 Census, an attempt was made to collect comparable and consistent data with previous censuses, as well as meeting growing basic data needs. The tabulation plans followed the United Nation Population and Housing Censuses recommendations as much as possible.

The tabulation of the 1980 Census data was based on the two types of schedules, Form A and Form B. The characteristics on which data were collected, and captured for computer processing and tabulation plan were:-

A From Form A and B

1. Sex
2. Age, (in years and months)
3. Marital Status
4. Ethnic Group
5. Languages (first spoken as child, first and second communications.
6. Length of residence in the enumeration district (in years and months)
7. Place of residence (12 months ago)
8. Birth place
9. Country of citizenship
10. Education (whether attending and level attained)
11. Disability
12. Agricultural activity (applicable to the entire household)

B. From Form A only

(i) For every person 12 years and over

13. Economic activity
14. Employment Status
15. Occupation
16. Industry

(ii) For all females aged 12 years and over

17. Age at first birth
18. Children everborn: living here (male and female), living elsewhere (male and female), and died (male and female).
19. Children born in last 12 months (living here, living elsewhere and died).
20. Month and year of last child born alive.
21. Age at marriage.

(iii) Housing Characteristics-applicable to the household only

1. Type of house
2. Occupancy
3. Ownership/tenancy
4. Number of living rooms and bedrooms
5. Kitchen in house
6. Cooking facilities
7. Water supply
8. Toilet facilities
9. Material of walls
10. Material of roof
11. Number of persons in house
12. Sex of the head of household
13. Age of the head of household
14. Occupation of the head of household
15. Material Status of the head of household

The Census Tabulation Plan had 98 basic tables which consisted of six major groups. There were:-

Group A - General Population, 12 tables

B - Economic, 13 tables

C - Social, 15 tables

D - Migration, 8 tables

E - Fertility, 25 tables

F - Housing, 25 tables

All tables were produced at National, provincial and district (urban and rural) levels.

Based on the Census Tabulation Plan, writing of program parameters started in July, 1982 by a selected group of senior CSO officers who formed a "Tabulation Task Group" (TTG) using the COCENTS (Cobol Census Tabulation System) program package provided free of charge by the US Bureau of Census Washington D.C, USA.

The TTG trained for about three weeks by the UN Data Processing Adviser.

All these program parameters were compiled and tested at the Ministry of Home Affairs Computer installation. It took six months to write, compile and test the tabulation program parameters by the group. Production of tables was done at the Ministry of Finance Computer. The amount of co-operation received from the TTg was quite remarkable and it should be taken as a good example for the future in implementing projects of this nature.

In order to overcome this problem, a special purpose was written in COBOL to record and convert variables.

3.2 Evaluation and Analysis

Characteristics related to fertility, economic activity and housing were collected only from urban and selected rural areas. Since the proportion of the selected areas at district level varied from district to district and there was a need to adjust the data at provincial and national levels, the question of blowing-up of information to provincial and national levels arose. To fulfil this need, a special purpose program was written in COBOL to calculate the blowing-up factor for sample Form A where certain characteristics were collected for selected rural areas.

The characteristics used in calculating the blowing-up factor were single years of age, sex and ethnic group for all persons in rural areas and sample as numerator and denominator respectively.

A prorata adjustment was made to the rural total per district to adjust the factor in order to obtain comparative total figures already blown on characteristics like age and sex.

As data processing advanced, a demographer/analyst from UN was sent to CSO to help with the analysis of the Census data. The work of this analyst was to organise local personnel who would participate in analysing the data and do analysis of some of the data himself. His main job was to train and guide local staff who were involved in the analysis.

8.3 Analytical Reports: It was felt that Zambia, like other countries could produce detailed analytical reports from the data collected. Thus, a technical committee was formed to set up groups and identify agencies/officers who could write these analytical reports. Groups were formed to write on:

- Administrative Report
- Age/Sex valuation
- Fertility
- Mortality
- Economic Activity

- Education
- Migration and Population Distribution
- Households and Housing
- Disability
- Projections

From these, the following analytical reports were produced:-

- Volume I Administrative Report
- Volume II Demographic and socio-Economic Characteristics of the population of Zambia.
- Volume III Major Findings and Conclusions and Policy Implications.
- Volume IV Fertility and Mortality
- Volume V Population Projections

It is anticipated that these reports will be widely used by various planners, researchers and other users.

8.4 PUBLICATION AND DISSEMINATION

8.4.1 Tables

A very detailed tabulation plan was produced that was circulated to main users for their comments and additions. After these comments the tables were increased from the planned 98 to well over one hundred.

From these, the following volume of tables were produce:

- Volume 1 General Population and Migration Tables
- Volume 2 Economic and Social Tables
- Volume 3 Fertility Tables
- Volume 4 Housing Tables

Most of these tables are tabulated up to district level. As production of tables began more requests came in for special tables and these included population distribution by locality, by CSA, by SEA etc. There were also requests for census results at ward level, for political purposes.

8.4.2 Special Data Tapes, Detailed Tabulations

and Computer Print Outs

A Data Library was set up with the assistance of UN data processing expert. All information being processed was entered on tapes and a copy kept in the library. The library is open to the users, who are allowed to get any information they need. They can identify their data requirements and some copies could be run for them at a nominal fee or this could be free of charge.

8.4.3 Dissemination of Census Results - National Seminar

The Central Statistical Office organised and conducted a national seminar to disseminate the 1980 Census results. This seminar, on "Dissemination and Utilisation of the 1980 Census Results" drew participants from policy makers, programme managers, opinion leaders in addition to population experts and researchers within and outside the country. The primary objective of the seminar was to publicise the results and availability of the 1980 Census and install awareness of population matters to the public at large. the seminar was held from 25 to 29 November 1985 at Mulungushi Hall, Lusaka.

The papers presented at the seminar are listed below :-

- (a) Function and Services of CSO
- (b) The 1980 Census data Exercise, Experience and Recommendations for the 1990 Census
- (c) Background Paper on the Demographic Situation in Zambia
- (d) Internal Migration
- (e) The Effect of Migration on Fertility
- (f) Population and Socio-Economic Development in Zambia
- (g) Population Redistribution and Planning for Rural and Urban Development
- (h) Population Growth and Energy Resources in Zambia
- (i) Women and Development in Urban Areas
- (j) The Economic Contribution of Rural Women
- (k) Population Labour Force and Employment Planning
- (l) Population Factors in Rural and Urban Housing
- (m) Population (Growth) Distribution and Movement and Educational Planning
- (n) Distribution of Secondary School Enrolment in Zambia
- (o) The Impact of Population Growth on Adult Literacy Programmes in Community Development
- (p) Population Distribution Affecting Agricultural Development
- (q) Population Growth and Agricultural Factors Affecting Nutrition
- (r) The Role of Mortality and Fertility Patterns in Health Planning
- (s) Population Projections
- (t) Population and Family Planning
- (u) Policy Implications of Population Growth in Zambia

8.5 Problems:

Blowing up figures from the sample to the national level was a problem because sampling procedures were not documented.

9. CONCLUSIONS AND RECOMMENDATIONS

9.1 CONCLUSIONS

The process of Census taking goes beyond simple collection of population data. In Zambia, the 1980 Census started with a mapping exercise which took almost two years to complete.

While the mapping exercise was still going on, plans and preparations for the actual Censuses were also progressing. This means questionnaires, tabulation plans and manuals were prepared. Plans for analysis, Publication and disseminations were also made.



Like the 1969 Census the 1980 Census combined both the population Census and Housing Census. For the smooth operations of the Census, a National Census Committee comprising of Permanent Secretaries was formed. This was a policy making committee. Apart from this, there were technical and working committees who were responsible for the technical aspect of the census operations.

During the Census, two types of Census Schedules were used, one short schedule for rural areas and a long schedule for urban areas and a sample for rural. This was done in order to reduce the workload and the general belief that populations in rural areas are generally homogeneous. However blowing up the population to the national level proved to be a problem because of lack of documentation of sampling procedures used.

Further, most of the programs were developed after the Census. The other contributing factor was low priority on computer time given to census work.

The census was eventually evaluated and disseminated in 1985.

This census was the first to be executed by indigenous Zambians with minimum technical assistance from Non-Zambians.

9.2 Recommendations

The experiences of the 1980 Census of Population and Housing are varied and invaluable for the conduct of similar exercises in the future. The proposed 1990 Censuses of Population, Housing and Agriculture is a case in point. Indeed a number of recommendations can be put forward for consideration and these may include the following :-

- (a) The CSO should acquire/procure its own data capturing, and computer processing facilities for the 1990 Census of Population, Housing and Agriculture to avoid or reduce the problems encountered during the last Census of "borrowing" machines from other agencies.
- (b) All the different cadres of Census personnel to receive some training all Census operations, unlike last time when Senior Supervisors did not have any form of training at all.
- (c) It should be ensured that the mapping exercise of the country is completed and fair drawings by the Cartography Section are accomplished well in advance for all areas in the country. It cases where this will not be possible, it is suggested that sketch maps be drawn well in advance by professionally competent personnel of Cartographic Section.

- (d) D.C.O.'s to be adequately briefed and possibly let them attend training sessions together with Supervisors to enable D.C.O.'s have a fair understanding of Census operations/objectives etc.
- (e) All the computer programs necessary be developed before the 1990 Census. This should also apply to the preparation of the Coding and Editing manuals.
- (f) The formation of task groups such as the Tabulation Task Group to write computer programs should be encouraged and supported in the future.
- (g) Documentation of Census activities, Procedures etc to be well undertaken in future Censuses.
- (h) Census storage facilities should be available well in advance before Census enumeration
- (i) Transport requirements for all Census operations to be mobilised in good time, such as 4- wheel drive vehicles for sandy and hilly areas, speed boats for floods, lakes etc.
- (j) The roles of different Census officials to be clearly spelt out to ensure effective and efficient operations.
- (k) Identification of individuals to analyse and prepare appropriate Census reports should be done well in advance.
- (i) Administrative Report to be prepared soon after the dissemination of Census results.

APPENDICES

Census Materials and Distribution Procedures, Logistic Problems, Transportation, Publicity, Census Kit, Badge and Identity for Census officers.

On the basis of experience gained during the pilot Census, a comprehensive list of Census documents/materials likely to be used for the main Census was prepared as follows:-

List of Census Forms and Materials

- Instruction manuals for enumerators (separately for Form A and Form B)
- Notes for team leaders
- Census schedules (Form A books, Form Bbooks, Form H,S, and D)
- Calender of Events
- Marker slips
- Census bags for enumerators, team leaders and supervisors
- Census badges
- Brief-cases for Provincial Census Officers and District Census Officers
- Oath of Sercecy forms
- Census Supervisory Area Maps
- District Census Maps
- Engagement Forms for spervisors/team leaders
- Engagement forms for enumerators
- Supervisor's/Team Leader's completion certificate
- Enumerator's completion certificate
- Record of Census enumeration forms issued by District Census Officer.
- Record of Census enumeration forms issed by Supervisor
- Record of Census forms and materials issued by team leader
- Record of materials issued to supervisors
- Record Census materials issued to team leaders
- Stationery items (pencil, rubber, sharpener, manils folder, notebook, ball-point pen).
- Publicity materials (posters and pamphlets)
- Accounts forms (field cash book, Payment voucher, paysheet).

