

# CHAPTER 1

## INTRODUCTION

### 1.1 Geography and Economy

Zimbabwe lies just north of the Tropic of Capricorn between the Limpopo and the Zambezi Rivers. The country is landlocked, bordered by Mozambique in the east, South Africa in the south, Botswana in the west and Zambia in the north and northwest. It is part of a great plateau, which constitutes the major feature of the geography of southern Africa. Although only about five percent of Zimbabwe's land area is more than 1,500 metres above sea level, almost all of the country is more than 300 metres above sea level with nearly 80 percent lying more than 900 metres above sea level.

About 70 percent of the country's surface area is made up of granite, schists and igneous rocks, which serve as the basis for Zimbabwe's mineral wealth. Soil types range from sandy/loamy in the high veld to sandy in the west. The sunny, temperate to hot climate attracts tourists and provides the basis for agricultural production, especially along the central ridge. Generally, temperature decreases and rainfall increases with altitude, ranging from the cool, wet eastern highlands to the hot, dry river valleys of the Zambezi, Limpopo and Sabi rivers.

Zimbabwe has abundant natural resources, including 8.6 million hectares of potentially arable land and over 5 million hectares of forest, national parks and wildlife estates. There are adequate supplies of surface and ground water for electric power, irrigation, and domestic and industrial use. Mineral resources are varied and extensive, including gold, asbestos, coal, nickel, iron, copper, lithium, and precious stones such as emeralds.

The economy is fairly diversified, with relatively developed commercial, industrial, mining and agricultural sectors. Manufacturing and agriculture are the leading producers for both the domestic and export markets, with mining contributing more to export earnings than to the domestic economy. In addition to mining, major industries include food production, construction, chemicals, textiles, wood and furniture, and transport equipment.

Main agricultural exports include tobacco, maize, cotton, sugar, and groundnuts. The agriculture sector has well-developed commercial and communal farming systems. The communal sector output has increased, although it is still lacking essential physical and social infrastructure. Government development efforts lay increased emphasis on strengthening this sector, as reflected in the Government's Economic Policy Statement of Growth With Equity.

One of the major objectives of Zimbabwe's development efforts has been the alleviation of poverty and the fulfilment of basic needs—i.e., health, nutrition, education and training, housing, social services, water, law and order, etc. With the adoption in 1991 of the "Framework for Economic Reform," the Government introduced a five-year Economic and Structural Adjustment Programme (ESAP). With financial support from the World Bank and the International Monetary Fund, the Government implemented adjustment programmes in industry, trade, and agriculture.

### 1.2 Population

In 1992, the population of Zimbabwe was 10.4 million, an increase of 6.4 million from the 1961/62 population census. Estimates of total population are available from the beginning of the century up to 1951

when the census began inclusion of non-Africans. Table 1.1 shows that the average annual growth in the population reached a peak of 3.5 percent in 1951 and 1961, then dropped to 3.0 percent in 1982. The national average annual population growth rate between 1982 and 1992 was 3.1 percent. If growth were to continue at this pace, the population would be expected to double in about 23 years.

Table 1.2 shows a small increase in the percentage of the population that is of African descent, from 98 percent in 1982 to 99 percent in 1992. The population of European descent has decreased from 2 percent to less than one percent in 1992. The 1992 Population Census results estimate the crude birth rate (CBR) and the crude death rate (CDR) to be 34.5 births per thousand population and 9.5 deaths per thousand population, respectively, yielding a natural increase of 25 per thousand. Zimbabwe has a relatively young population; 45 percent of the 1992 census population were below age 15 while about 3 percent were 65 years and over.

**Table 1.1 Population size and growth rate**

Population size and annual rate of increase in the population, Zimbabwe, 1901-1992

Year	Population (thousands)	Annual growth rate (percent)
1901	713	--
1911	907	2.4
1921	1,147	2.4
1931	1,464	2.5
1941	2,006	3.2
1951	2,829	3.5
1961	3,969	3.5
1969	5,134	3.3
1982	7,608	3.0
1992	10,412	3.1

Source: Central Statistical Office, 1994

**Table 1.2 Demographic indicators**

Selected demographic indicators, Zimbabwe 1982 and 1992

Indicator	1982 Census	1992 Census
Total population (thousands)	7,608	10,412
Distribution by ethnic group (%)		
African	97.7	98.8
European	1.9	0.8
Coloured	0.3	0.3
Asian	0.1	0.1
Distribution by age group (%)		
0-14	47.9	45.1
15-64	49.1	51.3
65+	3.0	3.3
Not stated	--	0.3
Crude birth rate (CBR) births per 1,000 population	39.5	34.5
Crude death rate (CDR) deaths per 1,000 population	10.8	9.5
Number of males per 100 females in the total population	96	95
Life expectancy at birth	57.4	61.0

Source: Central Statistical Office, 1994

### 1.3 Family Planning Policies and Programmes

Family planning services have been available in Zimbabwe since 1953. With the establishment of the Family Planning Association (FPA) in 1965, responsibility for the previously uncoordinated family planning services was assigned to a single organisation.

Initially, family planning service delivery in Zimbabwe was largely clinic-based. Government family planning services were integrated into the maternal and child health (MCH) delivery system at hospitals and clinics and only medical personnel were allowed to prescribe hormonal contraceptives. In 1976, the Ministry of Health granted permission for "field educators" to resupply clients with pills and condoms as a strategy for improving clients' access to family planning services. The field educators then became "pill agents," who formed the basis of the current community-based distribution (CBD) system.

In 1985, the ruling party's ZANU-PF Congress resolved to promote family planning not just for child spacing and welfare reasons but to limit family size. In the same year, the Child Spacing and Family Planning Council (CSFPC) became a parastatal under the Ministry of Health through an Act of Parliament and was renamed the Zimbabwe National Family Planning Council (ZNFPC). The ZNFPC's mandate is to promote family planning through the provision of information and services to all sectors of the community. The Council is also required to train medical and para-medical personnel in family planning service delivery. In addition, ZNFPC is tasked with the procurement of contraceptives for the public sector facilities and hence supplies contraceptives to over 1,000 non-ZNFPC hospitals and clinics.

Through its network of 34 clinics and the community-based distribution system, the ZNFPC continues to be one of the major providers of family planning services in Zimbabwe. ZNFPC clinics provide a wide range of contraceptive methods including the pill, condoms, chemical barrier methods, IUDs and injectables. ZNFPC provides female and male sterilisation at two of its facilities, one in Harare and another in Bulawayo. ZNFPC introduced implants in 1992, although provision of this method is still limited to three ZNFPC facilities—the three central hospitals—and a few private practitioners in Harare and Bulawayo. In 1992, in line with its objective to broaden the method mix, ZNFPC reintroduced injectables which, since 1980, had been restricted to a limited clientele.

The Ministry of Health and Local Government health facilities provide pills, condoms, chemical and barrier methods, and injectables. Where the health facility is adequately equipped, IUDs are inserted and sterilisation procedures performed. Voluntary Surgical Contraception (VSC) is generally available in the public sector facilities at district and provincial levels, since these facilities have well-equipped operating theatres and doctors trained in VSC.

The community-based distribution (CBD) system is the principal outreach mechanism for family planning service delivery in rural areas and is generally referred to as the "backbone" of the ZNFPC programme. Community-based distribution (CBD) workers are selected by communities before they are sent for the basic six-week CBD Initial Course. They are trained to inform and educate communities on the benefits of family planning, motivate clients to use family planning, initiate clients who want to use oral contraceptives, resupply established clients with pills and condoms in their homes, and refer clients wanting to use other non-supply methods to local clinics. The work force of 800 CBD workers covers approximately 29 percent of the rural population in Zimbabwe.

The current success of the family planning programme has been made possible partly through the effective and coordinated implementation of the Five Year Strategy (1991-1996). The ZNFPC's strategy has clearly stated and quantified objectives and aims to broaden the method mix with emphasis on long-term and permanent methods of contraception; reduce the total fertility rate from an estimate of 5.5 to 4.5 children per woman; increase financial sustainability through the sale of contraceptives and charging for services while ensuring access by low income groups; and to increase the proportion of family planning services delivered by the private sector from 5 to 17 percent by 1996.

The success of the family planning programme in Zimbabwe is, therefore, largely due to the Government's political commitment to the programme.

#### **1.4 Health Priorities and Programmes**

The Ministry of Health and Child Welfare (MOH&CW) has made significant progress in ensuring access to health care services for rural communities through increasing the number of health facilities in rural areas. The past decade has seen an expansion of the water and sanitation programme as a strategy to control diarrhoeal diseases; the expansion of the immunisation programme for children under five and expectant

mothers aimed at improving the health status of mothers and children; the provision of free health care services for those earning less than \$Z400 a month, who make up the majority of the population; and the training of traditional midwives in order to improve the quality of care for mothers who do not deliver at health facilities. The supplementary feeding programmes for children under five and expectant mothers in drought-stricken areas has improved the health status of "at-risk" groups. The upgrading of the health care facilities through Family Health Projects I and II has improved the quality of health care services in rural areas.

In line with the Primary Health Care (PHC) approach, the 1980s saw a shift in the emphasis of health service provision from curative to preventive services. The main components of PHC include maternal and child health (MCH) services, family planning, health and nutrition education, expanded programme on immunisation (EPI); control of communicable diseases (CCD), water and sanitation, provision of basic and essential preventive and curative care, and provision of drugs through the Essential Drugs Programme.

All health facilities provide integrated MCH services such that, for example, if a mother visits a clinic with an undernourished child, the nursing staff are expected to also check the immunisation status of the child and to immunise the child if necessary. Other aspects of MCH, such as family planning, should be discussed during client-staff interaction and appropriate services provided, if necessary. This "supermarket approach" allows users access to a whole range of health care services that are normally available under one roof. This minimises unnecessary trips by clients who might otherwise have to come on a special day for family planning and on another day for immunisation.

The majority of health services in Zimbabwe are provided by the public sector, comprised of MOH&CW and Local Government authorities in both urban and rural areas. The Health Service Delivery System is divided into four levels of care, i.e., primary, secondary, tertiary and quaternary (central) depending on the level of staff training at the institution and the equipment available at the facility. In the rural areas, Rural Health Centres (RHCs) are the lowest level of health care facilities and are staffed by state-certified nurses and midwives and environmental health technicians. In urban areas, the Primary Care Clinics are the lowest level clinics and are generally staffed by state-registered nurses and midwives. The RHCs and urban primary care facilities refer complicated cases to District Hospitals, which have both doctors and nurses, are better equipped, and have an operating theatre and a laboratory. The district hospitals, in turn, refer their difficult cases to the Provincial Hospitals which ultimately refer to the Central Hospitals.

The importance which the MOH&CW attaches to MCH services is evidenced by the establishment of an MCH department in the Ministry of Health. The MCH Department, made up of the Nursing Directorate, the Nutrition Unit, the Health Education Unit and the EPI Unit, designs and implements integrated health programmes aimed at improving the health status of mothers and children. The department also identifies and prioritises health problems of mothers and children and formulates strategies to alleviate the problems. Pregnant mothers are encouraged to attend antenatal sessions and to deliver at health centres. The MCH Department, in collaboration with other sectors, convinced the Government to grant pregnant working women 90 days paid maternity leave and one hour of breastfeeding time per day until the child is six months old.

## **1.5 Objectives and Organisation of the Survey**

The 1994 ZDHS is one of a series of surveys undertaken by the Central Statistical Office (CSO) as part of the Zimbabwe National Household Survey Capability Programme (ZNHSCP) and the worldwide DHS programme. The ZNFPC and MOH&CW contributed significantly to the technical development of the ZDHS study design, implementation, and analysis of results. The 1994 ZDHS was funded by the U.S. Agency for International Development (USAID), and technical assistance was provided by Macro International Inc. (Calverton, Maryland, U.S.) through its contract with USAID.

The primary objectives of the 1994 ZDHS were to provide up-to-date information on: fertility levels; nuptiality; sexual activity; fertility preferences; awareness and use of family planning methods; breastfeeding practices; nutritional status of mothers and young children; early childhood mortality and maternal mortality; maternal and child health, and awareness and behaviour regarding AIDS and other sexually transmitted diseases.

The 1994 ZDHS is a follow-up of the 1988 ZDHS, also implemented by CSO. While significantly expanded in scope, the 1994 ZDHS provides updated estimates of basic demographic and health indicators covered in the earlier survey.

### **1.5.1 Sample Design and Implementation**

The area sampling frame used for the 1994 ZDHS was the 1992 Zimbabwe Master Sample (ZMS92) developed by the Central Statistical Office following the 1992 Population Census. The ZMS92 included 395 enumeration areas (EAs) stratified by province and land use sector. For purposes of the ZDHS, 18 sampling strata were identified: urban and rural strata for each of 8 provinces, plus Harare (including Chitungwiza) and Bulawayo, which are exclusively urban strata.

The sample for the 1994 ZDHS was selected in two stages. In the first stage, 230 EAs were selected with equal probability. Then, within each of these 230 EAs, a complete household listing and mapping exercise was conducted in March 1994, forming the basis for the second-stage sampling. For the listing exercise, permanent CSO enumerators were trained in ZDHS listing and cartographic methods at the University of Zimbabwe over a three-day period. Institutional populations (army barracks, hospitals, police camps, etc.) were not listed.

From these household lists, households to be included in the ZDHS were selected, with the sample "take" from each EA being proportional to its size based on the household listing results. All women age 15-49 years in those households were eligible to be interviewed in the ZDHS. Further, a 40 percent systematic subsample of these households was selected, within which interviews with all males age 15-54 years were to be conducted as well.

Since the objective of the survey was to produce estimates of specific demographic and health indicators for each of the 10 provinces, the sample design allowed for an oversample of smaller ZDHS strata. The overall target sample was 6,000 women and approximately 2,200 men. The ZDHS sample is not self-weighting at the national level (weights are required to estimate national-level indicators).

Details concerning the ZDHS sample design are provide in Appendix A; estimations of sampling errors are included in Appendix B.

### **1.5.2 Questionnaires**

Four types of questionnaires were used for the ZDHS: the Household Questionnaire, the Women's Questionnaire, the Men's Questionnaire, and the community-level Service Availability Questionnaire. The contents of these questionnaires were based on the DHS Model "A" Questionnaire, which is designed for use in countries with moderate to high levels of contraceptive use.

The Household Questionnaire was used to list all the usual members and visitors of selected households. Some basic information was collected on characteristics of each person listed, including his/her age, sex, education, and relationship to the head of the household. The main purpose of the Household Questionnaire was to identify women and men who were eligible for the individual interview. In addition, the Household Questionnaire collected information on characteristics of the household's dwelling units, such

as the source of water, type of toilet facilities, materials used for the floor of the house, and ownership of various consumer and durable goods.

The Women's Questionnaire was used to collect information on women age 15-49. These women were asked questions on the following topics:

- Background characteristics (education, residential history, etc.)
- Reproductive history
- Knowledge and use of family planning methods, including compliance with pill use
- Fertility preferences
- Antenatal and delivery care
- Breastfeeding and weaning practices
- Vaccinations and health of children under age three
- Marriage and sexual activity
- Woman's status and husband's occupation
- Awareness and behaviour regarding AIDS and other sexually transmitted diseases
- Adult mortality including maternal mortality.

Unlike the 1988 ZDHS, a "calendar" was used in the 1994 ZDHS to collect information on the respondent's history since January 1989 concerning reproduction, contraceptive use, reasons for discontinuation of contraception, marriage, and migration. In addition, interviewing teams measured the height and weight of all children under the age of three years and women who had a birth since January 1991.

The Men's Questionnaire was administered to all men age 15-54 living in every 2.5 households in the ZDHS sample (i.e., a 40 percent subsample). The Men's Questionnaire collected much of the same information found in the Women's Questionnaire, but was shorter because it did not contain questions on *reproductive history and maternal and child health*.

The Service Availability Questionnaire was administered to community leaders during the household listing operations in March 1994. Community-level information was collected on the nearest health and family planning services available to residents of each of the 230 clusters of households included in the ZDHS sample.

### **1.5.3 Training and Fieldwork**

The ZDHS questionnaires were pretested in April 1994. Twenty qualified nurses were trained to implement the pretest during a three-week training period. Three language versions of the questionnaires were produced: Shona, Ndebele, and English. The pretest fieldwork was conducted over a one-week period in areas surrounding Gweru, where both Shona and Ndebele households could easily be identified. Approximately 150 pretest interviews were conducted, debriefing sessions were subsequently held with the pretest field staff, and modifications to the questionnaire were made based on lessons drawn from the exercise. Pretest interviewers were retained to serve as field editors and team supervisors during the main survey.

Training of field staff for the main survey was conducted over a four-week period, June-July 1994. Permanent CSO staff trained 70 incoming interviewer trainees, most of whom were trained nurses. The training course consisted of instruction in general interviewing techniques, field procedures, a detailed review of items on the questionnaires, instruction and practice in weighing and measuring children, mock interviews between participants in the classroom, and practice interviews with real respondents in areas outside ZDHS sample points. Trainees who performed satisfactorily in the training programme were selected as interviewers, while the remainder were retained to assist in office operations. During this period, field editors and

team supervisors were provided with additional training in methods of field editing, data quality control procedures, and coordination of fieldwork.

The fieldwork for the ZDHS was carried out by 10 interviewing teams, one designated for each province. Each team consisted of one team supervisor, one field editor, five to six female interviewers, one or two male interviewers and one driver. Thus, in total, there were 10 team supervisors, 10 field editors, 54 female interviewers, 12 male interviewers and 10 drivers. Six permanent senior CSO staff coordinated and supervised fieldwork activities. Data collection took place over a four-month period, 20 July to 28 November 1994.

#### 1.5.4 Data Processing

All questionnaires for the ZDHS were returned to the CSO for data processing, which consisted of office editing, coding of open-ended questions, data entry, and editing computer identified errors. The data were processed on five microcomputers. Data entry and editing were accomplished using the computer program ISSA (Integrated System for Survey Analysis). Data processing commenced on 1 August 1994 and was completed on 14 December 1994.

#### 1.5.5 Response Rates

Table 1.3 shows response rates for the ZDHS. A total of 6,483 households was selected in the sample, of which 6,075 were currently occupied. The shortfall was largely due to households no longer existing in the sampled clusters at the time of the interview. Of the 6,075 existing households, 5,984 were interviewed, yielding a household response rate of 99 percent.

In the interviewed households, 6,408 eligible women were identified and of these, 6,128 were interviewed, yielding a response rate of 96 percent. In the 40 percent subsample of households, 2,339 eligible men were identified, of which 2,141 were successfully interviewed (92 percent response). The principal reason for non-response among both eligible men and women was the failure to find them at home despite repeated visits to the household. The lower response rate among men than women was due to the more frequent and longer absences of men. The refusal rate in the ZDHS was very low (less than 1 percent for both women and men).

Result	Residence		Total
	Urban	Rural	
<b>Household interviews</b>			
Households sampled	1,829	4,654	6,483
Households occupied	1,759	4,316	6,075
Households interviewed	1,711	4,273	5,984
<b>Household response rate</b>	<b>97.3</b>	<b>99.0</b>	<b>98.5</b>
<b>Individual interviews</b>			
Number of eligible women	1,833	4,575	6,408
Number of eligible women interviewed	1,745	4,383	6,128
<b>Eligible woman response rate</b>	<b>95.2</b>	<b>95.8</b>	<b>95.6</b>
Number of eligible men	766	1,573	2,339
Number of eligible men interviewed	681	1,460	2,141
<b>Eligible man response rate</b>	<b>88.9</b>	<b>92.8</b>	<b>91.5</b>

Rural response rates were higher than urban response rates; the difference being especially pronounced for the men's survey. In urban areas, 89 percent of eligible men were interviewed compared with 93 percent of men in rural areas.

