

**JAPAN INTERNATIONAL
CO-OPERATION AGENCY**

HEALTH SITUATION ANALYSIS IN ZIMBABWE

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VOLUME I

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FOREWORD

The Japan International Co-operation Agency (JICA) would like to extend its support programme in the health sector. This report compiles an analysis of the health situation in Zimbabwe and will be utilised to determine priority areas for future assistance to raise the health status in the country.

The collection of information on health sectors had the full support of the Ministry of Health and Child Welfare (MOHCW).

Volume I analyses the Health Situation in Zimbabwe while Volume II describes the health development, the health resources, the health monitoring and evaluation, the health information system and the bilateral and multilateral co-operation with countries and international organisations or institutions.

It is the hope that this report contributes to the development of a health programme between the MOHCW and JICA.

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LIST OF ABBREVIATIONS

AFP	Acute Flaccid Paralysis
AGRITEX	Department of Agricultural Technical and Extension Services
ANC	Antenatal Coverage
ARI	Acute Respiratory Infection
ASFR	Age-Specific Fertility Rate
BFHI	Baby Friendly Hospital Initiative
CBD	Community Based Distributors
CBGM	Community Based Growth Monitoring
CDD	Control of Diarrhoea Diseases
CDR	Crude Death Rate
CFNP	Community Food and Nutrition Programme
CMR	Child Mortality Rate
CPR	Contraceptive Prevalence Rate
CRHS	Commonwealth Regional Health Secretariat
CSFP	Children's Supplementary Feeding Programme
CSO	Central Statistical Office
DALY	Disability Adjusted Life Years
DDF	District Development Fund
DDN	Department of National Nutrition
DHS	Demographic Health Survey
DOS	Digest of Statistics
DWD	Department of Water Resources
DWSSC	District Water and Sanitation Sub-Committee
ECSA	East, Central and Southern Africa
EDC	Epidemiology Disease Control
EPI	Expanded Programme for Immunisation
ERU	Evaluation and Research Unit
ESAP	Economic Structural Adjustment Programme
FLE	Family Life Education
FLEWS	Famine Early Warning System
FNMT	Food and Nutrition Management Team
FP	Family Planning
FPL	Food Poverty Line
GDP	Gross Domestic Product
GEM	Gender Empowerment Measure
GM	Growth Monitoring
GNP	Gross National Product
GOZ	Government of Zimbabwe
HDI	Human Development Index
HEU	Health Education Unit
HSAR	Health Statistics Annual Report
IDD	Iodine Deficiency Disorder
IDS	Institutional Domestic Supervisor
IEC	Information Education and Communication
IMR	Infant Mortality Rate

IUD	Intra-Uterine Devices
FP	Family Planning
IRWSSP	Integrated Rural Water Supply and Sanitation Programme
ITCP	Inter-ministerial Technical Committee on Population
LBW	Low Birth Weight
LSCF	Large Scale Commercial Farms
MCH	Ministry of Health and Child Welfare Routine data
MLGRUD	Ministry of Local Government Rural and Urban Development
MMR	Maternal Mortality Rate
MNAECC	Ministry of National Affairs, Employment Creation and Co-operatives
MOF	Ministry of Finance
MWRA	Married Women Reproductive Age
NAC	National AIDS Council
	National Action Committee
NACP	National AIDS Co-ordination Programme
NCHS	National Centre for Health Statistics
NCU	National Co-ordination Unit
NEPC	National Economic Planning Commission
NGO	Non-Governmental Organisation
NHIS	National Health Information System
NPAC	National Programme of Action for Children
NPC	National Population Committee
NNT	Neonatal Tetanus
NNU	National Nutrition Unit
NSC	National Steering Committee
OPD	Out Patient Department
OPV	Oral Polio Vaccination
PAAP	Poverty Alleviation Action Plan
PCC	Primary Course Completed
PDPS	Population and Development Planning Section
PHC	Primary Health Care
PNC	Postnatal Care
PWSSC	Provincial Water and Sanitation Sub-Committee
RDC	Rural District Council
SD	Standard Deviation
SDF	Social Dimension Funds
SIDA	Swedish International Development Authority
SFPP	Supplementary Food Production Programme
SSP	Sentinel Surveillance Programme
STATS	Statistical Yearbook
STD	Sexually Transmitted Diseases
STI	Sexually Transmitted Infections
TB	Tuberculosis
TCPL	Total Consumption Poverty Line
TGR	Total Goitre Rate
TFR	Total Fertility Rate
TT2	Tetanus Toxoid
UDI	Unilateral Declaration of Independence

UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
VGR	Visible Goitre Rate
WB	World Bank
WFA	Weight For Age
WHO	World Health Organisation
YAS	Youth Advisory Services
ZDHS	Zimbabwe Demographic and Health Survey
ZEPI	Zimbabwe Expanded Programme on Immunisation
ZINN	Zimbabwe Infant Nutrition Network
ZNFPD	Zimbabwe National Family Planning Council

EXECUTIVE SUMMARY

INTRODUCTION

"Health For All", continues to be the Government's Policy. It is aiming at equity in Health and improvement of the Quality of Life of the people of Zimbabwe. The Government is committed to provide basic health services through the District Core Health Services. The Government's new Policy direction is geared towards Health Sector Reform through the Decentralisation Process, Health Sector Investment and Partnership in Health.

SOCIO-ECONOMIC AND HUMAN DEVELOPMENT

Zimbabwe is self-sufficient in food, except in periods of drought. The economic development is characterised by an economic growth rate averaged 2.2% per annum in the 1982-1992 period and a population growth rate of 3.1% per annum. The high fertility (TFR of 5.9 children per women for the 1992 Census, TFR of 4.3 children per women for the 1994 ZDHS) in Zimbabwe is a major causal factor in the high population growth, resulting in a young age structure of the population. Even with the impact of AIDS on population growth and the high but declining birth rates, the current population growth rate is unsustainable. The reduction of the population growth rate is a Government priority to influence positively the economic well-being.

Although 62% of the population (15 years and above) is economically active, the unemployment rate increased from 11 to 22 % between 1982-1992 (CSO, 1992/94). The Poverty Assessment Study (UNDP) revealed that 62% of the population is living below the basic needs level. The impact of ESAP, the drought periods of 1991/92 and 1994/95, and the AIDS pandemic have affected the economy. The initial gains in human development and health indicators are currently being threatened.

Educational context

The Government has given high priority to the development of the education sector. Between 1982 and 1992 the adult literacy rate increased by about 18%, from 62% to 80%. In 1995 the adult literacy rate recorded 85%. At primary school level the enrolment between boys and girls is nearly equal but girls tend to drop out at an earlier age than boys, particular at the secondary school level. The positive impact of education on population and health development is significant which is illustrated in census reports, ZDHS surveys and research studies.

DEMOGRAPHIC PROFILE

The last Population Census happened in 1992 (CSO) illustrating a population of 10 411 548 people up from the 7.6 million persons in 1982 which is an increase of 37% between the two censuses. The Government projects a further increase with a 3.1% growth rate, to 13.2 million by the year 2000, 15.0 million by 2005. By 2007 the population would have increased to 16.5 million. With AIDS causing increased deaths, the population would still be growing by 0.8% per year.

After independence, child health improved and the indices of mortality among children declined at national level. Estimates are different from various sources but the trend is consistent. The under five mortality rate of the 1994 ZDHS survey reports however a slight increase 77/1000 live births compared to the 75/1000 live births in the 1988 ZDHS. This means that one in thirteen children does not live to their fifth birthday. The emerging HIV/AIDS epidemic is probably a major contributor to the increase of the under five mortality.

About 69% of the population lives in rural areas but the rural-urban migration is increasing with the urban centres growing with 3.6% per year (1992 Census). The proportion of female headed households in Zimbabwe is high at 33.2%. The life expectancy at birth increased from 57 years in 1978 to 62 years in 1988 but has dropped to 61 years in 1990, partly due to the impact of HIV/AIDS. The cumulative reported AIDS cases were 57 518 by the end of June 1996. But it is estimated that in Zimbabwe, probably more than 300 000 persons have already developed AIDS since the beginning of the epidemic (NACP). AIDS is threatening the social and economic well-being of the country.

The achievements in health and education facilitated the ranking of Zimbabwe as a medium-level human development nation but the gender disparities in the human development indicators are still existent, reflecting the lower socio-economic status of women in Zimbabwe.

COUNTRY HEALTH SITUATION

Morbidity

Respiratory diseases (ARI) have always been one of the major causes for health care attendance with TB becoming very prominent in 1995. The HIV/AIDS epidemic is assumed to be the underlying cause for a lot of the cases. The upwards trend of Malaria is a major cause of concern. The increase in Diarrhoea cases may also be HIV-related. In the above five age group it is noted that Hypertension features among the top 10 causes of attendance confirming the non-communicable diseases importance.

EPI

The achievements recorded in Childhood Immunisation has been significant in the reduction of morbidity and mortality associated with the six childhood diseases such as : measles, tetanus, diphtheria, tuberculosis, poliomyelitis and whooping cough. The country is committed to the eradication of poliomyelitis by the year 2000 and attained the Universal Childhood Immunisation Goal of at least 80% coverage by the late eighties. The incidence of poliomyelitis has been reduced drastically. The intensified Acute Flaccid Paralysis Surveillance is an essential strategy in the polio eradication. Zimbabwe has achieved its target set, regarding the elimination of neonatal tetanus by 1995. The policy of immunising all women of childbearing age with two doses of Tetanus Toxoid (TT2) decreases further the number of neonatal tetanus cases. Measles epidemics continue to occur in Zimbabwe. There has been a shift noticed in the age distribution for measles cases towards the older age-groups. The target set by the World Summit for Children, on which the National Plan of Action for Children in Zimbabwe is based, has not been met. The Hepatitis B vaccination has been launched in 1994 as part of the Childhood Immunisation programme.

Leprosy

Throughout Zimbabwe the prevalence of leprosy cases shows a varied picture but most cases are found in the above five years age-group. Leprosy has its impact on the population and the socio-economic trends through the associated disabilities. In-depth research on the burden of the disease on health and human development is recommended for future programme development.

AIDS

AIDS has emerged as one of the most devastating threats to human health in Zimbabwe. Among the adults, 15 years and over, one out of five is probably infected, or more than 20% of the entire adult population. Zimbabwe represents a classic age distribution of AIDS cases with most AIDS cases (70%) being found in the 20-49 years age-group, being the most economic productive group. The 5-14 years age group is the least affected, emphasising the sexual contact transmission and the peri-natal transmission. According to reports of the NACP the factors contributing to the rapid spread of HIV include : poverty, the high prevalence of STD's, the low health status, dislocation by drought, workers migration, transportation network and culture. The large number of annual new AIDS cases increases the burden on the health care delivery and social system. The burden will increase rapidly on the households in the provision of intensive care for AIDS relatives, the communities and families in coping with the large number of orphans. The costs of an AIDS patient is about Z\$ 4 900 according to CIMAS estimated calculations. The demographic impact of AIDS is enormous. AIDS increases the death rates of infants, children and adults. It decreases life expectancy, reduces

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population growth and distorts population structure. furthermore it increases orphanhood. The magnitude of AIDS/HIV and STD's as reproductive health problems, is enormous. Especially young adults are affected, particularly the young women.

Tuberculosis

Tuberculosis in Zimbabwe remains a public health problem and is a major cause of mortality and morbidity. The AIDS/HIV pandemic coupled with the operational and resource inadequacies resulted in an escalation of the TB epidemic. The 30-54 age group is the most affected. The priority areas of the TB control programme are the reduction of the infection-risk and the psycho-social suffering of the population from TB. Measuring the impact of HIV/AIDS and the disease burden on the health care delivery system at household level will result in the prioritisation of TB interventions.

Malaria

Malaria is among the four major diseases and is a major public health problem in morbidity and mortality accounting for about 20% of childhood deaths in some areas. The focus of the Malaria Control Programme is to prioritise case management at all levels with intensified health education and strengthening of the capacity for quick response.

Schistosomiasis

Schistosomiasis ranks in the top ten causes in terms of prevalence and morbidity. It affects growth and school performance among children while it reduces the economic productivity in adults. The global strategy of the schistosomiasis control is control rather than eradication of the disease. The schistosomiasis programme could be focused on the school going age group.

Disability

The Government is becoming increasingly sensitive to the needs of the people with disabilities. The increasing disability trend causes serious consequences for the health care delivery system in terms of financial and human resources allocation. In Strategic Health Planning and Management. It is becoming crucial to measure the burden of disability on the health care delivery system, the household level and quality of life to determine the MOHCW priorities related to disability prevention and rehabilitation.

Mortality Trends

After independence, child health improved and the indices of mortality among children went downwards at national level (U5MR decreased from 104 per 1000 live births in 1980 to 87 per 1000 live births by 1990). The rate of progress slowed down from 1990 onwards which could be due to the drought, the social impact of ESAP, the inflation and the AIDS pandemic. The overall objective of the National Plan of Action for Children in Zimbabwe is to reduce the IMR to 40/1000 live births and the U5MR to 58/1000 live births by the year 2000.

The major causes of death for the under fives are the Acute Respiratory Diseases, peri-natal conditions, nutritional deficiencies, diarrhoea, malaria and AIDS. With AIDS becoming a leading cause of death, the U5MR may not decline with the same trend in the foreseeable future despite the child survival initiatives. Amongst children born during the period 2000-2005 AIDS-related causes would probably be responsible for more than 75% of the mortality of children under the age of five years.

Maternal Mortality

The Maternal Mortality Rate (MMR) did not show the same decreasing pattern as the infant mortality decline which could be partly due to the AIDS pandemic as well as unsafe abortions. To achieve the goal set by the MOHCW to reduce the MMR to 200 per 100 000 live births by the year 2000, the first priority is the improvement of the accessibility and quality of ante- and postnatal health care delivery. The health burden of various conditions on women aged 15-44 years may be measured, using the Disability Adjusted Life Years (DALY) scale.

Maternal Health Care

The Maternal Health Care is included in the Core Health Services Package. It is focusing on the quality of care for the mother through ante-natal, post-natal and family planning services emphasising safe motherhood. The results of routine data, ZDHS 1988 and 1994, MCH Survey 1984 and 1991 indicate a high ANC coverage. Despite the high utilisation of ANC, 25% of women utilise the ANC services during the third trimester of the pregnancy which is too late to benefit optimal from the ANC services. The proportions of births attended by health personnel increased between 1987 and 1995 with the exception of the 1991-1992 drop in percentage which most probably was due to the cost recovery exercise during ESAP.

It has been observed that although the data related to ANC are illustrating a high coverage, the type and quality of services is not reflected in the health information system.

Tetanus Toxoid (TT2) vaccination is an important component of ANC and is reflected by immunising all women of childbearing age with two doses of Tetanus Toxoid. This emphasises the Governments' commitment to the elimination of neonatal tetanus. The postnatal care (PNC) attendance is low compared to the ANC attendance. The postnatal examinations and the quality of PNC care need improvement so that women appreciate the usefulness of PNC visits.

Family Planning and Reproductive Health

Family Planning Services and Reproductive Health are components of the Core Health Services Package. The further reduction of the fertility rate through improved access and quality of family planning services is a national priority with particular focus on the promotion of contraceptives among rural women and advancement of female education. According to the ZDHS the Total Fertility Rate (TFR) dropped from 5.5 children per woman to 4.3 and is projected to decline further to 3.69 by the year 2002 and 3.4 by 2005. These assumptions were calculated on the basis of the ZDHS data. The assumptions based on the census data are also provided in the report as illustration.

The knowledge of family planning methods is nearly universal with the contraceptive pill (98%) being the most well known among men and women. The pill is the most commonly used contraceptive method (33% in 1994). The Central and Local Government Systems are the country largest providers of family planning services (58% in 1994). Community Based Distributors (CBD) are the principal out-reach mechanism. The success of the family planning programme can be measured by the high contraceptive prevalence rate and the decline in the total fertility rate.

The increase of the FP services by the public and private sectors are priority issues for the Government to reduce fertility rates and to combat sexual transmitted infections and HIV.

Population Policy

The Government's commitment to the formulation of the Country's Population Policy has resulted in a Population Policy Formulation Project been instituted in 1994. Progress has been made since the formulation and a National Population Policy is currently being drafted. The draft will be ready for adoption by 1998.

Family Planning Programmes and Services

The Zimbabwe National Family Planning Council's (ZNFPC) responsibilities are covered in a comprehensive integrated strategy for the country's family planning programme including sub-strategies for Family Planning Training, Information, Education and Communication (IEC) and Youth Advisory Services (YAS), clinic based and out-reach FP service delivery, and FP programme management. The

medical/clinical FP services are provided through the ZNFPC 's network of 34 fixed and mobile clinics. The Community Based Distribution network is the only FP outreach system and covers about 30% of the rural population. The ZNFPC Training Unit has increased the capacity of all FP service delivery agencies in order to deliver training to their own staff. Innovative IEC approaches in the delivery of FP messages are being developed with the participation of the FP users such as the youth and the people with disabilities.

Reproductive Health Approach

The reproductive health concept follows the human life cycle from birth to death through the pre-adolescent child, the youth age group, the reproductive age group and the post reproductive age group. It includes the FP methods and techniques as well as services contributory to reproductive health, prevention, resolving reproductive health problems, sexual health, counselling, and care related to reproduction and sexual transmitted infections. It also consists of the awareness of the social and cultural contexts in which sexuality, reproduction and child-bearing are happening.

The reproductive health needs of adolescents have been ignored in the health system. In order to develop appropriate and effective adolescent reproductive health programmes in depth research related to adolescent reproductive health has to be conducted.

Nutrition

Between the ZDHS of 1988 and 1994, the prevalence of stunting declined but wasting increased. The increase in wasting was probably influenced by the drought conditions preceding the surveys, affecting the food availability and the emerging diseases as ARI and AIDS. The decline in stunting could be due to the responses to drought, through the Child Supplementary Feeding Programme, free tillage and seed-packs distribution and other agricultural/nutrition interventions.

A clear age specific pattern of malnutrition (both stunting and wasting) indicates the vulnerability of children in the 24 months of life, particularly the 12-23 months age group. This period coincides with the time when children are taken off the breast and consequently are becoming more vulnerable to emerging diseases.

The low birth weight cases rate increased since 1987 from 4.9% to 11.7% in 1995 indicating that the health and nutritional status of the mothers and the chances for child survival are deteriorating. Possible reasons for the deterioration are the accumulating negative impact of HIV/AIDS and the severe drought periods.

The National Nutrition Unit is focusing its attention on the major micro-nutrient deficiencies such as Iodine Deficiency, Vitamin A Deficiency, Pellagra and Anaemia. In achieving the mid-decade goal of Universal Salt Iodation, it is possible to reach

the goal of elimination of Iodine Deficiency (IDD) by the year 2000. Vitamin A Deficiency is not considered to be a public health problem in Zimbabwe as the results of a representative study carried out in 1991 revealed a Bigot's spots prevalence of 0.17% and Vitamin A related corneal scarring of 0.02%. Zimbabwe committed itself to the elimination of Vitamin A Deficiency by the year 2000 in a agreement with the World Summit for Children.

One of the major challenges within the Micro-nutrient Control Programme is anaemia. Little is known about the prevalence of nutritional anaemia and more in-depth research is recommended to develop a sustainable programme. Currently, all pregnant women attending ANC clinics are given a four week supply of prophylactic iron sulphate and foliate tablets. Pellagra has received little attention which is a research challenge for the Micro-nutrient Control Programme.

The Institutional Framework

The multi-sectoral dimensions of the food insecurity and malnutrition problem underlined the importance of operation beyond the Nutrition Unit. With the establishment of the Intersectoral Task Force (1996) progress was made in the development of a policy framework paper, which was submitted to Cabinet. Consensus amongst the key stakeholders in Government, private sector and food industry including consumer groups has been reached to make the implementation of the National Food and Nutrition Policy possible.

Nutrition Programmes

There is a need to take stock, review the existing information systems and identify systems which inform policy makers on the problems of food insecurity and malnutrition. Capacity in data analysis and use of the data at all levels needs strengthening.

The Community Based Growth Monitoring (CBGM) is an integral part of the Primary Health Care (PHC) delivery at community level. The coverage of Growth Monitoring (GM) increased from 40% to 80% with the implementation of the CBGM in the pilot programme. CBGM has been adopted as policy and facilitates the community empowerment for food and nutrition actions.

The Children's Supplementary Feeding Programme (CSFP) is a short term relief programme complemented with a Nutrition Education strategy to improve 'young child nutrition' through improved feeding practices. The expansion of the CSFP during recent years reflects not only the disaster that people are facing during drought but also measures the availability to food.

The Community Food and Nutrition Programme (CFNP) strengthens the community's own capacity and technology to respond to food insecurity and complements the CSFP.

The Maternal, Infant and Child Nutrition Programme consists of maternal nutrition (women of child-bearing age), infant nutrition, young child nutrition (6-59 months) and school child nutrition (primary school children). An action plan (1997-2001) has been formulated to focus on the nutrition related problems of women of childbearing age. The MOHCW Breast feeding Policy, recommending exclusive breast feeding until the child is 4-6 months old, remains currently unchanged in view of the limited studies available on the "Breast Milk-HIV-related problem". The Baby Friendly Hospital Initiative (BFHI) has taken firm root since 1993 with efforts been taken to make Baby Friendly Communities beneficial for rural women delivering at home. The problems with wasting, stunting and under-nutrition for the young child (6-59 months) stagnated despite the efforts of breast feeding promotion. The CSFP addressed partly the inadequate food intake due to drought. The complementary programme through Nutrition Education is aiming at the behavioural change in feeding practices of the young child. The nutrition of the school child and the prevalence of factors intervening with learning such as hunger, micro-nutrient deficiencies, poor nutrition and health received little attention and rapid assessment of the prevailing situation is recommended.

Capacity Building in Nutrition

The proposed decentralisation process will have significant implications at the district level in the areas of planning, management and implementation of food and nutrition programmes. The plans for 1997-2001 will focus on competence based training with more performance outputs in order to respond to the new concepts within the context of the Institutional Policy Framework and the Health Sector Reforms.

Environmental Health

The water and sanitation coverage in urban areas is satisfactory (97-99%). In rural areas it varies between 55%-70% for water and between 27%-53% for sanitation. The mid-decade goals to increase the accessibility to adequate amounts of safe water within a convenient distance from the user's dwelling to 80% in communal, 87% in resettlement and 100% in urban areas remained unmet. The overall percentage of households (urban/rural) using safe water is 81% meaning that still one household out of five is still without access to safe water. The results of the Sentinel Surveillance revealed that the mid-decade goals for access to safe sanitation were met. The National Programme of Action estimates that 50% of the rural areas should have access to a flush or Blair toilet by the year 2000. The 40% observed via the Sentinel Surveillance predicts that the target set is achievable. A matter of concern is that still 47% of rural households are still using the bush system.

Considering the Reforms being instituted in the country it is clear that the Rural District Councils will assume responsibilities for the planning, management and provision of water and sanitation services. The sustainability of the programme for primary water supplies and on site sanitation will be enhanced when locally

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produced water and sanitation technology are utilised. A considerable amount of investment is required to continue the programme to reach the target of 100% coverage with safe water and 50% with sanitation in the rural areas of Zimbabwe.

SUMMARY OF SELECTED HEALTH DEVELOPMENT PRIORITIES

Development Target		Health Development Priorities		Priority Actions
Main Indicators	1997	2000		
Infant Mortality Rate U5 Mortality Rate MMR based on ZDHS data	53/1000 77/1000 283/100 000	40/1000 58/1000 200/100 000	<ul style="list-style-type: none"> the reversal of the increase in IMR and U5MR due to HIV/AIDS and other factors (due to AIDS the IMR is predicted to drop only to 44/1000 by 2005) reduction of MMR to 200/100 000 by reducing the health burden of various diseases/conditions on women aged 15-44 years (HIV/AIDS, induced and unsafe abortions, delayed bookings, harmful traditional beliefs, 	<ul style="list-style-type: none"> Child Survival Programme and Management of Childhood Illness Programme Development Reduction of Non-Aids Mortality due to ARI, CDD, TB Development of Comprehensive Reproductive Health Packages (reduction of induced abortions and complications, Strengthening of the referral system at all levels and improve accessibility to quality ANC/PNC and maternity services (deployment of midwives (60%) to rural areas, procurement of delivery kits, FP services, improvement of rural communication system and safe water) IEC development and management training of service providers in MCH NHIS and research
U5 malnutrition (-2SD) Maternal Malnutrition	12% worsening of nutritional status of women	6%	<ul style="list-style-type: none"> reduction of the U5 malnutrition from 12% to 6% by the year 2000 improvement of the nutrition/health status of women monitoring and sustain the IDD Control Programme, assessment of other Micro-nutrient deficiencies 	<ul style="list-style-type: none"> Strengthening the Maternal, Infant, Young Child and School Child Nutrition Programme (CBGM, etc.) Rapid assessment on Young Child/School Child feeding practices and behaviour, implementing food/nutrition education at community level and development of IEC (young child feeding) Research on Maternal Malnutrition and the impact of anaemia and pellagra
Family Planning/Reproductive Health - TFR based on ZDHS	TFR 4.3	3.69	<ul style="list-style-type: none"> improvement of the RH status of the population at all stages of the life cycle. improvement of adolescent RH in reducing adolescent pregnancies, to 10% by 2000 and prevention of STD's and HIV/AIDS among adolescents improvement of knowledge, utilisation and quality assurance of FP - RH services 	<ul style="list-style-type: none"> Expanding IEC, knowledge and data base on RH issues Provision of training in screening, management of STI's, RH care Strengthening of the Cancer Control Programme (cancers of the reproductive system) Increase access to quality and adolescent friendly FP/RH services Development of adolescent health and sexuality in school curricula Design RH programmes for under served groups : elderly and people with disabilities

Development Target			Health Development Priorities		Priority Actions
Main Indicators	1997	2000			
Universal access to safe water for rural areas Universal access to safe sanitation in rural areas	70% 40%	100% 50%	<ul style="list-style-type: none">access to safe water and safe sanitation in rural areassustainability of the water and sanitation supply		
HIV/AIDS and STD Infection	> 20% of population		<ul style="list-style-type: none">to slow down the transmission of HIV and other sexual transmitted diseases (STD)quality but cost-effective health care for HIV/AIDS and community home based care		
Epidemiology and Disease Control Programme			<ul style="list-style-type: none">provision of accurate and timely Health and Management Information at all levels of the health Care Delivery Systemprovision of a "burden of disease/disability" measurement on Health Care Delivery and population		
Malaria	20 % of childhood deaths		<ul style="list-style-type: none">reduction of mortalityincidence reduction of severe and complicated cases and reduction of illness durationcontrol and prevention of malaria outbreaks		
			<ul style="list-style-type: none">Re-organisation and strengthening of Malaria Control ProgrammeEpidemiological Surveillance at all levels and development of data base (outbreaks)Malaria Prevention and ControlCapacity building in programme and case management		

Development Target		Health Development Priorities		Priority Actions
Main Indicators	1997	2000		
Schistosomiasis			<ul style="list-style-type: none"> reduction of schistosomiasis morbidity rates in the school going age group control and prevention of schistosomiasis 	<ul style="list-style-type: none"> Re-organisation and Strengthening of Schistosomiasis Control Programme Epidemiological Surveillance and monitoring at all levels and development of data base Schistosomiasis Prevention and Control IEC development Capacity building in programme and case management
Tuberculosis	< 10% death rate		<ul style="list-style-type: none"> reduction of the incidence and prevalence of TB (case detection) maintain cure rate and treatment completion of 70% of new TB cases reduction of defaulter rate to <15% 	<ul style="list-style-type: none"> IEC development Re-organisation and Strengthening of the TB Control programme (laboratory quality control, Drug supply) Epidemiological Surveillance and Monitoring at all levels and development of data base TB prevention and Control Capacity building in programme and case management
Disabilities			<ul style="list-style-type: none"> Integration of people with disability reduction of public health burden of disabilities and impact on health care delivery & community reduction of causes leading to disability (prevention) 	<ul style="list-style-type: none"> Capacity Building of CBR Managers at District Level for programme and case management IEC Development Improvement of Information base and Surveillance system with appropriate indicators to monitor trends, burden of disability and quality of life Rehabilitation Technology Network Development

1. GEOGRAPHICAL, ECONOMICAL , SOCIAL, POLITICAL, EDUCATIONAL AND ADMINISTRATIVE CONTEXT

1.1. INTRODUCTION AND GEOGRAPHY

Zimbabwe is situated north of the Tropic of Cancer. It is a landlocked country located in the southern region of Africa. Lying between the Zambezi river in the north, the Limpopo river in the south, bordered by Mozambique in the East, South Africa in the South, Botswana in the West and Zambia in the North and Northwest, it has an area of 390 756 square km of which 83% is arable. Although only one fifth of the land area is more than 1500 metres above sea level, almost the whole of the country is more than 300 metres (nearly 80% more than 900 metres) above sea level.

Geographically, the country has a distinctive plateau, "the High Veld" that runs from East to West and is about 650 km wide. This High Veld has been well developed with good infrastructure such as roads and railway lines, with most commercial farms and cities situated in the area. The major cities have most of the industrial activities. The climate on the plateau is cool. Towards the north-west, the country moves into the Zambezi Valley and in the south-east into the Limpopo valley. The valleys are hot to arid. The country has three climatological regions :

- Cool and wet in the Eastern Highlands.
- Dry and hot in the west and in the valleys of the Zambezi, Limpopo and Sabi rivers.
- Moderate in the High Veld.

The main rainy season runs from November to the middle of March. The Eastern Highlands and the High Veld receive most of the rain which have averages of 125 cm or more, while the extreme southern and western parts of the country have averages of only 40 to 65 cm per year.

Health Situation Analysis in Zimbabwe

1.2. HISTORICAL AND POLITICAL CONTEXT

Historically, the African population entered what is now called Zimbabwe during the 15th and 16th centuries. They were later followed by invaders, the Portuguese and Arabs, around the mid-19th century.

The white colonialists settled in 1890, in the then Southern Rhodesia. They established rail communication, mining and farming settlements mainly along the High Veld. The British annexed the country in 1920. In 1930 a "land Apportionment Act" was passed, which reserved half of the land area to the white population, despite their tiny numbers in relation to the African population.

From 1953 to 1963, Southern Rhodesia (later Zimbabwe) was part of the federation of Rhodesia and Nyasaland. The federation was dissolved when independence was gained by Zambia (Northern Rhodesia) and Malawi (Nyasaland).

In Southern Rhodesia, opposition to the white rule by the African majority existed right from the start. The first uprising against white occupation was in 1893 in Matebeleland and 1896 in Mashonaland. When these were suppressed, the country was relatively quiet until the Unilateral Declaration of Independence (UDI) was announced, in 1965. After the struggle for African majority rule a settlement was negotiated (i.e. The Lancaster House Talks), resulting in political independence of Zimbabwe under majority rule in 1980.

Zimbabwe is a multi-party democratic state with three tiers of Government : the central level headed by an Executive President; the provincial level (with ten provinces) headed by a Governor (heading the Provincial Council) appointed by the President; and the district level (58 districts) headed by District Administrators appointed by the government. The Rural District Councils are headed by Chairpersons elected by the population. There are 23 municipalities with the Urban Councils headed by Mayors. A house of Parliament is the legislative arm of the Central Government with the Executive President and the Cabinet of Ministers constituting the executive arm. An independent judiciary complements the Government structure.

Almost the entire population (98.8%) is of African origin with Shona and Ndebele ethnic groups predominating, while people from Asiatic, European and mixed origins account for the remaining 1.2%. The official languages are English, Shona, Ndebele. The religions in the country are Christianity, Islam and various traditional beliefs.

1.3. ECONOMICAL, SOCIAL AND HUMAN CONTEXT

Zimbabwe is a predominantly agrarian society with a per capita GNP level which is quite low (US\$ 500 in 1994). Zimbabwe boasts one of the most diversified economies in Sub Saharan Africa with relatively developed commercial, industrial and mining (40% of GNP), agricultural (13% of GNP) and services' (47% of GNP) sectors. It is ranking second after South Africa as an industrial power. Except in periods of drought, the country is self-sufficient in food and has traditionally been an agriculture exporter of tobacco, maize, cotton, sugar and groundnuts. Mineral resources include : gold, asbestos, coal, nickel, platinum, copper and precious stones such as emeralds.

The economy however has been experiencing a decline since 1983 with an economic growth rate averaged 2.2% per annum in the period 1982-1992 and a population growth rate of 3.1% per annum. The result was a decline in GDP and a deterioration of standard of living of the population. Earnings per employee declined at an annual rate of 3% between 1980-1991 and the unemployment rate increased from 11 to 22% between 1982 and 1992 (CSO, 1994). In an attempt to reverse this decline, the Government introduced a five-year Economic Structural Adjustment Programme (ESAP) in 1991 as part of the second five year National Development Plan (1991-1995) in order to increase investment and stimulate economic growth. Unfortunately, ESAP coincided with the worst drought in this century (1991-92). This drought caused a decline in output of 6%. Another drought occurred in 1994/95, further delaying economic recovery.

The impact of the drought periods of 1991, 1995 and the economic crisis on the quality of life of the population, have been enormous. They have affected the economy as a whole with some sectors showing signs of stress e.g. the budget deficit increased and foreign currency reserves were reduced. The overall slow down in economic growth resulted in a decline in health sector financing (an estimate of 30% decline in the health budget since ESAP). Consequently a deterioration of some of the human development indicators occurred.

The Government has put increased emphasis on the strengthening of the communal sector as reflected in the Governments' Economic Policy Statement of Growth With Equity as well as the recent programmes on Indigenisation and Investment. Recent established programmes (1993) such as the Social Dimension Funds (SDF), the Poverty Alleviation Action Plan (PAAP), are intending to cushion the impact of ESAP on the most disadvantaged groups of society. The Poverty Assessment Study calculated two poverty lines, the Food Poverty Line (FPL) and the Total Consumption Poverty Line (TCPL), which showed that poverty in Zimbabwe was very high with 62% of the population living below the basic needs level.

The major objectives of Zimbabwe's development efforts after independence has been the poverty alleviation and the basic needs fulfilment in health, nutrition, education, training, housing, social services, water.

In spite of the recent economic problems, the country recorded substantial improvements since independence with heavy emphasis on improvements in the social sectors such as health and education. By the end of the 1980s Zimbabwe's social indicators, as indicated in Table 1, compared favourably with those of other developing countries. Life expectancy increased from 57 years in 1978 to 62 years in 1988 but declined to 61 years in 1990. Adult literacy rates increased from 62.3% in 1982 to 80.4% in 1994. (92.8% in urban and 73.5% in rural areas) Primary school enrolment was 83% (83% of persons aged 6-15 were in enrolled in school) in 1994. The gross primary school enrolment even exceeded the 100% by 1990.

About 85% of the population has access to modern health facilities. Thus about 85% of people are living within a radius of 8 km of a health facility. However the national doctor ratio to population is low at 1 : 46 060 (1995) and even lower in rural areas where the ratio 1 : 82 000 is. The 1994 ZDHS showed that 93% of pregnant women received some form of ante-natal care during pregnancy and about 69% of the deliveries took place in health facilities. Post-natal care was relatively low (66%) in 1991 and need further attention. The ZDHS (1994) reported that 67% of the children had received all vaccinations by the age of 12 months. Infant and Under-five mortality were greatly reduced, access to safe water and sanitation improved and malnutrition was reduced as shown in the table with selected key health indicators.

TABLE 1 : SELECTED KEY HEALTH INDICATORS

Health Indicators		1980	1985	1990	1995
Life Expectancy (years)		57	60	61	66
Infant Mortality/1000		86	70	53	53
Under-5 Mortality/1000		128	-	87	77
Immunisation (%)		25	42 (1984)	69	68
School enrolment	Primary (%)	83	-	117*	-
	Secondary (%)	8	-	50	-
Adult Literacy (%)		62 (1982)	-	67	85
Access to potable water	Urban (%)	98	99	99	99
	Rural (%)	35	-	64	73

Source : HSAR (1980 1985 1990 1995)
* gross primary school enrolment

1.4. EDUCATIONAL CONTEXT

Education is considered a basic need and a fundamental right. The formal educational system in Zimbabwe begins with a seven-year primary cycle, followed by a secondary system with three levels : junior, ordinary and upper of which each is a two year course. At the tertiary level, the University of Zimbabwe offers three and four year degree courses, including postgraduate diplomas, masters and doctorates degrees in a number of subjects. Various post-secondary courses also are offered at teacher training-, poly-technical- and agricultural colleges. The non-formal system includes afternoon/evening classes, study groups, private independent colleges, correspondence education, literacy campaigns and post-literacy programmes.

Before independence, there were gross disparities at various levels in the education system, including an overall shortage of schools and inequalities in educational opportunities between racial groups, males and females, rural and urban communities, and other subgroups. Efforts to overcome these inequalities have resulted in a rapid expansion in the education system. This meant an increase at all levels in the number of schools, teachers and the total enrolment as been observed in Table 2 and Figure 2. Enrolment expanded from 1 236 694 in 1980 to 2 482 508 in 1995, outstripping the population growth. At primary level the enrolment between boys and girls is nearly the same but girls tend to drop out at an earlier age than boys at secondary school level. Table 3 and 4 and Figure 3 present more data.

TABLE 2 : NATIONAL ANNUAL DATA 1984-95 FOR PRIMARY SCHOOLS.

Year	No. of Schools	Total	Boys	Girls	No. of Teachers	Teacher/ Pupil Ratio
1984	4 161	2 132 295	1 101 890	1 030 405	54 086	39
1985	4 234	2 216 878	1 142 480	1 074 398	56 619	39
1986	4 297	2 265 053	1 160 166	1 104 887	58 257	39
1987	4 439	2 251 319	1 146 361	1 104 958	57 120	39
1988	4 471	2 212 103	1 122 662	1 089 441	57 762	38
1989	4 504	2 233 340	1 126 992	1 106 348	58 370	38
1990	4 530	2 119 865	1 073 452	1 011 545	60 886	35
1991	4 559	2 294 934	1 168 450	1 126 484	58 436	39
1992	4 569	2 305 765	1 162 565	1 143 200	60 834	38
1993	4 578	2 436 671	1 258 465	1 178 206	60 959	40
1994	4 611	2 365 564	1 202 378	1 163 186	63 347	37
1995	4 633	2 482 508	1 259 822	1 222 686	63 475	39

Source : ZDHS 1988 and 1994
UNICEF, Facts on Education 1996

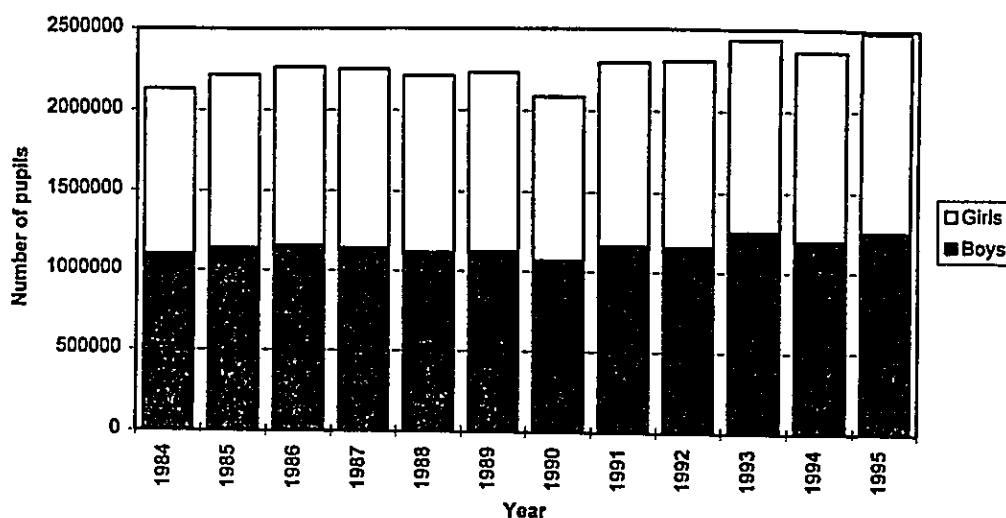


FIGURE 2: NUMBER OF BOYS AND GIRLS ATTENDING PRIMARY SCHOOL 1984-95

TABLE 3: NATIONAL ANNUAL DATA 1984-95 FOR SECONDARY SCHOOLS

Year	Schools	Total	Boys	Girls	No. of Teachers	Teachers/Pupils Ratio
1984	1 182	416 413	248 116	168 297	14 718	28
1985	1 215	482 000	287 061	194 939	17 315	28
1986	1 276	537 427	320 788	216 639	19 487	28
1987	1 395	604 652	354 175	250 477	21 981	28
1988	1 484	641 005	373 026	267 979	23 598	27
1989	1 502	670 552	386 928	283 687	24 549	27
1990	1 512	672 656	381 030	291 626	27 332	25
1991	1 515	710 619	397 954	312 665	25 204	28
1992	1 517	657 344	368 070	289 274	23 233	28
1993	1 518	640 152	355 262	284 890	24 058	27
1994	1 521	657 918	361 835	296 083	26 228	25
1995	1 535	711 094	386 775	324 319	27 320	26

Source : ZDHS 1988 and 1994
UNICEF, Facts on Education 1996

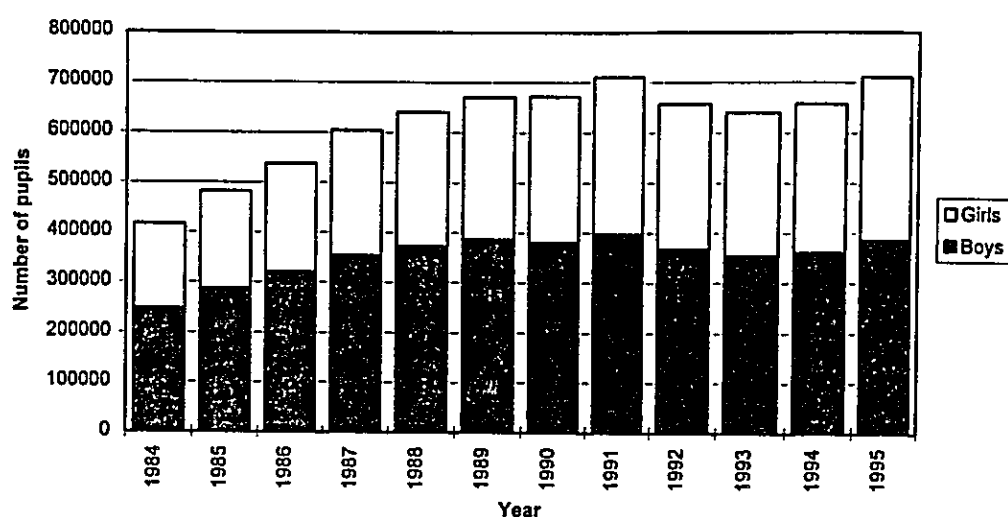


FIGURE 3 : NUMBER OF BOYS AND GIRLS ATTENDING SECONDARY SCHOOL 1984-95

TABLE 4 : SUMMARY EDUCATION DATA x 1000

Enrolment	1990	1991	1992	1993	1994	1995
Primary School	2 119.9	2 294.9	2 305.8	2 436.7	2 365.6	2 482.5
Secondary School	672.6	710.6	657.4	640.1	657.9	711.0
Tertiary School	27.2	28.5	28.2	29.7	29.6	30.3
Higher School	9.0	8.9	8.9	7.8	11.2	12.4
Literacy rate (%)	67*	-	80	77	82	85

Source : UNICEF, Education Facts 1995

Habitat : An Urbanising World : Global Report on Human Settlements 1996

* HSAR 1990

2. DEMOGRAPHIC CONTEXT AND MAIN INDICATORS.

Table 5 provides a summary of selected demographic indicators. More detailed data are presented in Table 6 - 13 and Figure 4 and 5. The last population census happened in 1992 (by Central Statistical Office), showing a total population of 10,412,548 people up from 7,6 million persons in 1982, an increase of 37% between 1982 and 1992 censuses. This represent an average annual growth rate of 3.1%. At this growth rate the population is expected to double in size in about 23 years. The Government projects that the population size will increase further to 13.2 million in the year 2000, 15.0 million in 2005 and 16.5 million by the year 2007, though this projection does not take the potential demographic impact of the prevalence of HIV/AIDS into consideration. The impact of AIDS epidemic on population growth is a significant question.

The country is characterised by a fertility decline but also by an increasing mortality. According to the ZDHS the Total Fertility Rate dropped from 5.5 children per women to 4.3 between 1988 and 1994. It is projected to decline further to 3.69 by the year 2002 and 3.4 by 2005. The assumptions are different than those calculated from the 1992 Census results as shown in Table 12.

Although the Life Expectancy at Birth increased from 57 in 1978 to 58 in 1982 and from 60 in 1984 to 62 in 1988, it dropped to 61 in 1990 partly due to the impact of the HIV/AIDS pandemic. The cumulative number of reported AIDS cases was 57 518 by the end of June 1996. The impact of the AIDS pandemic on population growth is significant but the population would still be growing 0.8% per year meaning that the population would grow from about 10.4 million at the time of the census 1992 to 12.1 million in 2000 and 12.7 million in 2005. Over the projected period 1995-2005, Zimbabwe still does not approach the negative population growth even with the declining birth rates and high HIV prevalence.

The high growth rate has resulted in a relatively young age structure. The Government regards the population growth as unsustainable and aims at its reduction through lowering the fertility level by the year 2000. The population had 45% under 15 years in 1992, while 3% was 65 years and above, showing a high dependency ratio of 94.4. The 1992 census showed a male to female ratio of 95 to 100. The proportion of female headed households is high at 33.2% with 41% in the rural areas. About 69% of the population lives in rural areas, but the country's urban centres grew at 3.6% per annum, largely due to rural to urban migration. About 42% of the urban population lives in Harare. The 1992 census indicated a population density of 27 people per sq. km while in 1969 it was only 13 per sq. km. and 20 per sq. km in 1982.

The achievements in health and education facilitated Zimbabwe's ranking as a medium level human development nation. With a Human Development Index (HDI) of 0.474 in 1992, Zimbabwe ranks the 7th among the Sub-Saharan Countries on the HDI and the 121st among all 174 countries for which the scores were available. But the gender disparities in the human development indicators are still existent, reflecting the lower socio-economic status of women in the country. Zimbabwe

TABLE 5 : SELECTED DEMOGRAPHIC INDICATORS

Population Size		Fertility	
Total :	10 412 548	Crude Birth Rate (Births/1000 population)	34.5
Males :	5 083 537		
Females :	5 329 011		
Sex Ratio		Total Fertility Rate (Average Number of children per woman)	5.9
Sex Ratio (Males/100 females)	95		
Urban/Rural Population		Mortality	
Urban areas	3 187 720	Crude death Rate (Deaths/1000 population) Direct method	9.5
Percent	31%		
Rural Areas	7 224 828	Infant Mortality Rate (Infant deaths/1000 live births) (1990) :	66/1000
Percent	69%		
Area and Density		Child Mortality Rate (Child deaths/1000 children aged 1-4 years) (1990) :	26/1000
Area (km ²)	390 757		
Density (Persons/km ²)	26.7	Life Expectancy 1990 :	61
Age Composition (Percent)		Maternal Mortality Rate	
Under 15 years	45%	(Deaths from maternal causes per 100 000 live births)	395
15-64 years	52%		
65+ years	3%	Growth	
Marital Status (Persons 15 years+)		Crude Rate of Natural Increase (The rate of natural growth per 1000 population)	25
Percent Never Married	33		
Percent Married	57	Annual Growth Rate :	3.1%
Percent Divorced/Separated	5		
Percent Widowed	5		
Ethnicity			
Percent African Origin	99		
Citizenship			
Percent Zimbabwean	98		
Education for population aged 5 years and above			
Percent never been to school	17		
Percent Currently at school	34		
Percent left school	49		

Source : CSO 1992

ranks 2nd on the Gender Empowerment Measure (GEM) in Sub-Saharan Africa, but drops to 82nd when analysis includes the 130 countries for which 1992 data was available.

TABLE 6 : POPULATION DATA 1990-95

	1990	1991	1992	1993	1994	1995
Population in million	9.9	10.2	10.4	10.8	11.2	11.5
Female %	50.8	-	51.2	-	-	-
Male %	49.2	-	48.8	-	-	-
Age Structure (%) *						
0-14	44.7	44.7	45.2	45.1	44.9	44.7
15-60	52.5	52.6	51.5	51.7	51.9	50.7
65+	2.8	2.7	3.3	3.2	3.2	4.6
Urban (%)	-	-	30.61	-	-	-
Rural (%)	-	-	69.39	-	-	-

Source : * DOS 1982-1989-1995
The % of the ages were based on the previous census 1982-92

TABLE 7 : EXPECTED POPULATION x1000

Year		Assumption 1	Assumption 2	Assumption 3
2002	Total	14 493	14 276	14 661
	Male	7 071	6 964	7 157
	Female	7 422	7 312	7 504
2007	Total	16 664	16 452	17 086
	Male	8 126	8 022	8 342
	Female	8 538	8 430	8 744

Source : National Census Report 1992

The population assumptions are based on fertility and mortality assumptions. Assumption 1 and 2 are based on a constant mortality rate (8 or 9 deaths per 1000) while in assumption 3 the mortality is on the decline. Fertility is assumed to decline linearly to the end of the projection period for assumption 1 and 3. For projection 2, fertility is assumed to decline to the level of women with secondary education and then remain constant. However all these assumptions need to be read with caution as the impact of the AIDS epidemic has not been taken into consideration here.

The information collected from the census (1988-1992) is not adequate to give indication on the extent of rural/urban migration. The growth rate of the urban population is not available to calculate the projections.

TABLE 8: VITAL RATES /1000 POPULATION 1982-94

	1982*	1988#	1990°	1992*	1994#
Annual population growth rate (%)	2.9	2.8	3.12	3.14	3.2
Population density (pers/ sq km)	19.5	19.5	26	27	28.5
Crude birth rate/1000 (CBR)	39.5	39.5	41.0	43.51	43.51
Crude death rate/1000 (CDR)	10.5	10.8	9.82	9.49	9.49

Source: * National Census Reports 1982 and 1992
 # Zimbabwe Demographic Health Surveys 1988 and 1994
 ° DOS 1982 and 1989
 CBR estimates using the direct method : 34.5 births/1000 population
 CBR estimates using the indirect method : 43.51 births/1000 population
 (1992 Census, ZDHS 1994)

TABLE 9: EXPECTED CRUDE BIRTH AND DEATH RATE/1000

	Year	Assumption 1	Assumption 2	Assumption 3
CBR	1996/97	43.1	41.6	43.1
	2001/02	40.6	37.5	40.4
	2006/07	34.5	37.3	34.1
CDR	1996/97	9.8	9.7	8.7
	2001/02	9.3	9.1	6.7
	2006/07	8.8	9.0	5.3

Source : National Census Report 1992

Assumption 3 with the low death rate of 5.3 deaths /1000 population is based on the fact that mortality will continue to decline by the same magnitude prior to 1988. But it is highly unlikely that the CDR will have reached that low level by 2007. Assumption 1 and 2 are based on the fact that mortality will level off at the 1990 levels and being maintained during the projection period.

The CBR for Zimbabwe is utilising the indirect method and indicates therefore a higher fertility estimate than the ZDHS figures which are based on the direct method.

TABLE 10 : LIFE EXPECTANCY IN YEARS

	1980	1985	1990	1995	2002	2007
Life Expectancy	57	60	61	66	67	-
Male life expectancy*	56	58	58	64	58 - 63#	58 - 66#
Female life expectancy*	57	62	62	68	62 - 67#	62 - 70#

Source: * National Census Reports 1982 and 1992
Life Expectancy at Birth 1992-2007, Assumptions (1 -2)

Note : The projection of the life expectancy should be read with caution as the impact of the AIDS pandemic is not taken into account in the calculation of the data.

TABLE 11 : MORTALITY 1979-94

	1979 ^a	1982*	1988#	1990 ^a	1992*	1994#
Infant mortality rate/1000	83	64	53	66	61	53
Child mortality rate/1000	37	34	23	26	26	26
Under-5 mortality rate/1000	-	104	75	87	-	77
Maternal mortality rate/ 100 000	264 (1980)	204	81•	80•	395	283
Total fertility rate children/mother	-	5.6	5.6	-	5.9	-

Sources : * National Census Reports 1982 and 1992
Zimbabwe Demographic Health Surveys 1988 and 1994
^a DOS 1982 and 1989
• Institutional deliveries : the maternal mortality rate for institutional deliveries had declined from 81 per 100 000 live-births in 1988 to 67 in 1989 but thereafter increased to 134 in 1993 and 162 in 1994.

Note : National estimates of MMR range from between 395 (1992 Census) and 283 (DHS - 1994, direct estimates of MMR) per 100 000 live-births. These figures are the most reliable and used for further programme planning and implementation.

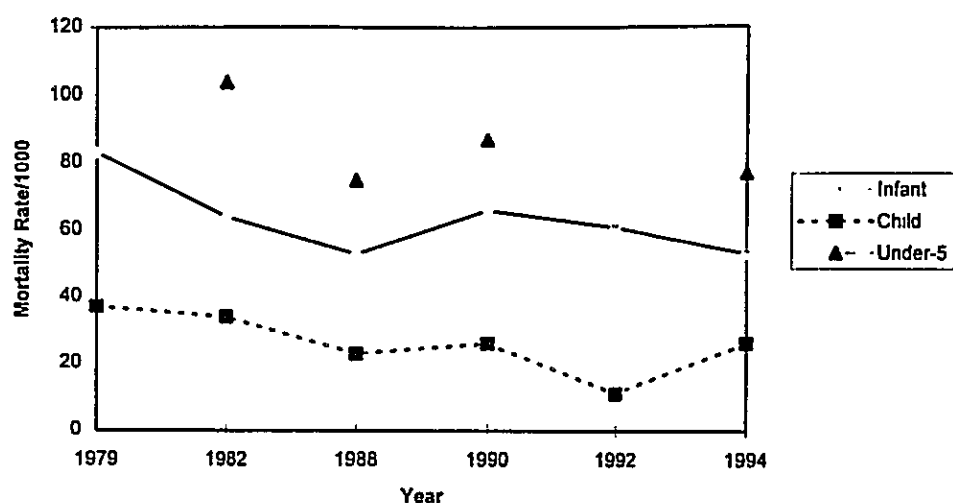


FIGURE 4 : MORTALITY RATE/1000 1979-94

TABLE 12 : EXPECTED FERTILITY

Year	Assumption 1	Assumption 2
2002	4.51	4.61
2007	4.29	4.61

Source : National Census Reports, 1992

Assumption 1 is based on the linear decline of fertility. The declining trend of the fertility during 1987-1992 is assumed to continue throughout the whole projection period. The TFR is expected to decline from 5.91 to 4.29 by the year 2007. Assumption 2 is based on the decline of fertility observed for women with secondary education in 1992. It is assumed that the education of women have a further depressing effect on fertility for the period of 1992-2002 but remains constant at that level for the period 2002-2007.

TABLE 13 : INFLATION RATES FROM JANUARY 1992 TO DECEMBER 1996

Months	1992	1993	1994	1995	1996
January	32.5	45.1	18.5	20.8	25.0
February	33.2	41.7	19.1	24.4	26.4
March	34.1	34.9	23.5	21.6	23.7
April	39.6	30.7	23.7	20.9	24.3
May	42.1	25.5	25.1	20.0	24.7
June	43.1	26.1	23.6	19.6	22.5
July	43.7	26.2	23.1	21.6	22.0
August	49.1	21.7	24.3	23.7	17.7
September	46.9	23.8	22.3	23.0	20.6
October	45.4	24.2	21.6	22.4	20.2
November	45.4	22.1	21.2	26.3	13.9
December	46.4	18.1	21.1	25.8	16.4

Source : CSO Stats Flash Issue No. 1 January 1997

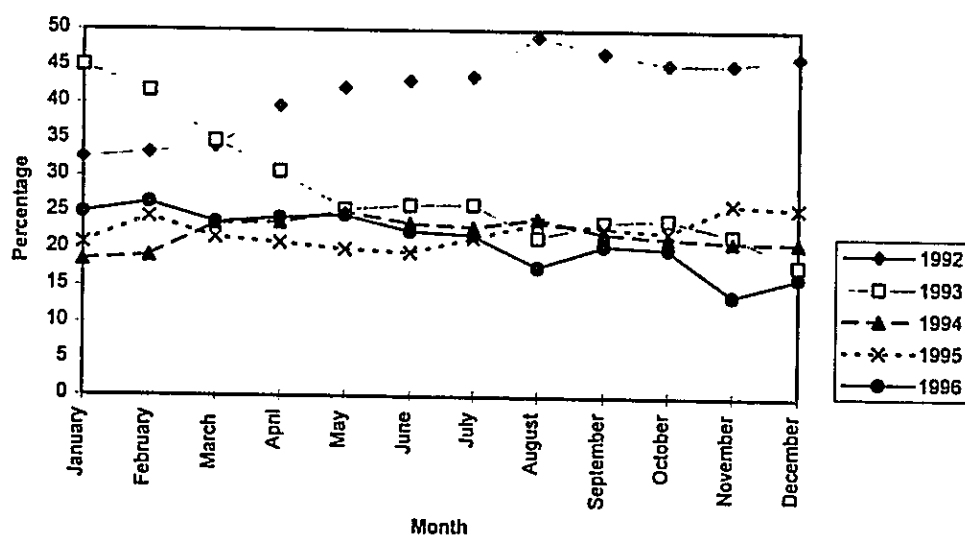


FIGURE 5 : INFLATION RATES 1992-96

3. COUNTRY HEALTH SITUATION

3.1. MORBIDITY

Morbidity data is available for the Zimbabwe population from two types of forms : out-patient data and hospital in-patient data, but no reliable data from the 1980s are available. Full aggregation of the data is also impossible due to the different disease groupings into which out- and in-patients statistics are divided. (AIDS/HIV morbidity was monitored in a separate monitoring system). The principle cause of new out-patients attendance among children under five years of age for the period 1988 - 1992 was respiratory diseases. The ten most common complaints among children under five and the specific rate of out-patients attendance for each, remained remarkable consistent during the period 1988-92.

3.1.1. Top causes of outpatient attendance

TABLE 14 : TOP FIVE CAUSES OF OUT-PATIENT ATTENDANCE

Year	1	2	3	4	5
1991	All other diseases	Respiratory Diseases	STD	Injuries	Other Skin Diseases
1992	ARI	STD	Injuries	Diarrhoea	Other Skin Diseases
1993	ARI	STD	Clinical Malaria	Diarrhoea	Injuries
1994	ARI	Skin Diseases	Malaria	STD	All Other Injuries
1995	TB	Malaria	STD	ARI	Viral Diseases

Source : HSAR 1990, 1994 and 1995

Table 14 presents a summary of the top five causes of out-patient attendance over the 1991-95 period. Respiratory diseases have always been one of the major causes for attendance with TB becoming very prominent in 1995. In a lot of cases the HIV/AIDS epidemic is assumed to be the underlying cause. Malaria is a major cause of concern as it showed an upwards trend.

Table 15 reveals a comparison of the top ten causes in the under five age group and the above five age group. The various epidemiological profiles of the MOHCW reflect that the leading cause of outpatient attendance for the under five age group observed at out-patient departments and for hospital admissions are respiratory diseases. Since 1991 onwards these may be HIV-related. After a slight increase in percentage of cases in 1992 there was a decrease in 1993.

Table 16 illustrates that skin diseases showed a remarkable decrease between 1991 and 1992 and the percentage of attendance stayed remarkable stable from then. Diarrhoea and clinical malaria showed an upwards trend, while injuries, eye diseases and malnutrition showed a relative stable pattern. Skin diseases and diarrhoea may be also HIV-related. Clinical malaria and injuries feature among the top five causes of OPD attendance calling for strengthening of both programmes. The high percentage of malnutrition is reason for concern. Bilharzia, measles and STI are also featuring among the top ten diseases although on a lower scale. The epidemiological reports indicate that although measles is decreasing as a cause of infant mortality it is still featuring in the top ten causes of out-patient attendance.

TABLE 15: TOP TEN CAUSES OF OUT-PATIENT ATTENDANCE 1995/96 IN ORDER OF PRIORITY

Under-5 Age Group	Above-5 Age Group
ARI	ARI
Diarrhoea	STDs
Clinical Malaria/fever	Injuries
Injuries	Clinical Malaria/fever
Eye Diseases	Diarrhoea
Skin diseases	Eye Diseases
Malnutrition	Skin Diseases
Measles	Bilharzia
Scabies	Scabies
Bilharzia	Hypertension

Source : HSAR 1995
Epidemiological Profile 1996

In the above five age-group the leading cause of the top ten causes of OPD attendance is respiratory system diseases which could be HIV-related. There was a decrease in percentages between 1992 following a stable pattern between 1990-1992. STD ranks second but the peak was more prominent in 1991. Skin diseases, diarrhoea and clinical malaria showed an upwards trend. The increase in percentage of diarrhoea cases may be due to HIV-related diseases. Injuries showed a stable pattern but features among the top five causes of OPD attendance. Eye diseases and bilharzia showed stable pattern. It is interesting to note that hypertension featured among the top 10 causes of attendance confirming the need for close monitoring of non-communicable diseases. Table 16 illustrates the incidence of the top target diseases over a period of time as well as the other public health problems as been recorded through the National Health Information System. With the information system in place it is possible for the programme managers to pick up the priority health concerns.

TABLE 16: MORBIDITY BY CAUSE FOR GLOBAL TARGET DISEASES CONSIDERED AS MAJOR NATIONAL HEALTH PROBLEMS - 1988-95 (Incidence = Number of new cases per 10 000)

Disease or Condition	Source	1988	1989	1990	1991	1992	1993	1994	1995
1. GLOBAL TARGET									
Acute Resp. Infections	Routine (OPD)	2647	4520.4	2523.2	2660	2098.3	1891.2	2985.9	3045.3
AIDS	Special Report	0.1	1.4	4.7	4.7	7.9	8.5	9.5	11.6
Diarrhoeal Diseases	Routine (OPD)	506.2	695.6	450.3	509.3	528.4	684.2	758.9	782.0
Leprosy	Special Report	0.5	0.4	0.3	0.3	0.5	0.1	0.0	0.0
Malaria	Routine (OPD)	1029.6	1593.1	701.1	604.2	404	801.0	736.2	628.5
Measles	Routine (OPD)	57	157.9	14.6	24.5	16.7	30.0	1.8	7.4
Polio	Routine (OPD)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sexually Trans. Dis.	Routine (OPD)	1096.1	2298.5	1121.6	1290.1	844.6	816.4	730.0	640.4
Tuberculosis	Special Report	6.7	7.5	9.8	12.7	13.4	18.7	21.5	26.8

Disease or Condition	Source	1988	1989	1990	1991	1992	1993	1994	1995
2. OTHER DISEASES/CONDITIONS CONSIDERED AS MAJOR NATIONAL PUBLIC HEALTH PROBLEMS									
1. Skin Diseases	Routine (OPD)	-	-	761.9	1118.3	725.1	826.5	837.1	878.8
2. Injuries	Routine (OPD)	-	-	523.3	794.3	558.8	604.8	742.5	724.7
3. Diseases of Eye	Routine (OPD)	-	-	445	448.3	332.7	367.1	330.9	369.2
4. Bilharziasis	Routine (OPD)	246	517.9	229.1	269.5	230.7	194.5	197.0	212.2
5. Hypertension	Routine (OPD)	232.7	319.3	253	164.1	133.5	64.7	23.2	22.2

SOURCE: EDC-NHIS UNIT 1996-97

3.1.2. Incidence of Specific Diseases

3.1.2.1. Immunisation Coverage Trends - EPI

The government launched the Zimbabwe Expanded Programme on Immunisation (ZEPI) in 1982, in accordance with the document on "Equity in Health" and PHC as its cornerstone. ZEPI, under the umbrella of the MCH programme embarked on a programme to reduce morbidity and mortality associated with the six childhood diseases : measles, tetanus, diphtheria, tuberculosis, poliomyelitis and whooping cough. Extensive training was done at all levels of the health system on all aspects of the programme with particular attention to the implementation levels. In this way the health of children in Zimbabwe is being sustained. Table 17 and 18 and Figure 6 provide more details on immunisation coverages for the target diseases of the EPI programme. The immunisation coverages for all target diseases have been increasing except for the year 1990 where a decrease was noticeable over the whole line due to the same factors responsible for the general decrease in the quality of health services. Intensified campaigns have reversed this decrease to a coverage above 80% for all antigens. Although the measles immunisation coverage seem quite high, the high level of measles incidence is still reason for concern.

TABLE 17 : PRIMARY IMMUNISATION COVERAGE FOR EPI (UNDER 1 YEAR)
BY ANTIGEN AND BY YEAR - 1984-95

Year	Target Pop.	BCG	%	Measles	%	POLIO-3	%	DPT-3	%
1984	291 148	258 280	88.7	225 172	77.3	231 533	79.5	219 431	75.4
1985	300 174	238 615	79.5	217 323	72.4	211 768	70.5	202 333	67.4
1986	315 832	281 896	89.3	243 355	77.1	252 627	80.0	247 175	78.3
1987	320 023	272 862	85.3	252 726	79.0	269 851	84.3	267 052	83.4
1988	326 895	270 814	82.8	264 669	81.0	258 764	79.2	265 291	81.2
1989	334 677	291 549	87.1	265 303	79.3	278 180	83.1	279 348	83.5
1990	332 781	256 652	77.1	262 827	79.0	268 590	80.7	270 352	81.2
1991	337 258	278 573	82.6	272 065	80.7	285 484	84.6	284 972	84.5
1992	348 220	317 027	91.0	280 343	80.5	281 289	80.8	282 189	81.0
1993	348 803	280 175	80.3	275 684	79.0	260 649	74.7	259 802	74.5
1994	355 391	326 857	92.0	282 319	79.4	291 825	82.1	289 768	81.5
1995	366 693	349 601	95.3	305 952	83.4	319 053	87.0	313 808	85.6

Source : EDC-NHIS UNIT 1996-97

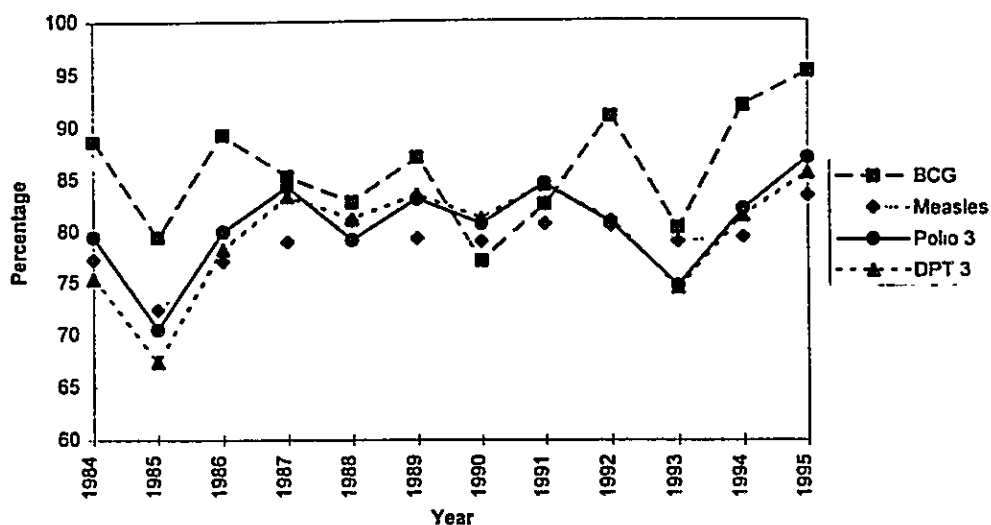


FIGURE 6 : PRIMARY IMMUNISATION PERCENTAGES FOR CHILDREN UNDER 1 YEAR

Figure 6 presents an overview of the immunisation trends over a ten year period. The immunisation coverage for all target diseases are increasing with the measles immunisation coverage scoring the lowest level. Intensified campaigns and National Immunisation Days are attempting to increase the National Immunisation Coverage.

Table 18 illustrates the geographical distribution of the immunisation coverage. It can be noted that the immunisation coverage of the Matabeleland North province is low in comparison with the other provinces. Manicaland province and Matabeleland North province have not yet reached the Universal Childhood Immunisation Goal of at least 80% according to the 1995 data.

TABLE 18: PRIMARY IMMUNISATION COVERAGE FOR EPI (Under 1 Year) BY ANTIGEN AND BY PROVINCE FOR 1995

Province	Target Pop.	BCG	%	Measles	%	POLIO 3	%	DPT-3	%
MANICALAND	56,232	52,031	92.5	44,312	78.8	43,758	77.8	42,844	76.2
MASH. CENTRAL	32,504	27,766	85.4	25,484	78.4	26,982	83.0	26,314	81.0
MASH. EAST	34,200	32,166	94.1	34,060	99.6	33,865	99.0	33,287	97.3
MASH. WEST	38,285	35,990	94.0	31,919	83.4	33,128	86.5	32,967	86.1
MASVINGO	39,411	38,371	97.4	35,892	91.1	37,790	95.9	37,564	95.3
MAT. NORTH	24,920	17,138	68.8	17,437	70.0	19,511	78.3	19,016	76.3
MAT. SOUTH	21,549	17,688	82.1	18,262	84.7	19,775	91.8	19,530	90.6
MIDLANDS	47,949	44,248	92.3	36,391	75.9	38,657	80.6	38,970	81.3
BULAWAYO CITY	20,068	16,336	81.4	17,163	85.5	18,137	90.4	17,230	85.9
CHITUNGWIZA CITY	9,792	8,813	90.0	7,461	76.2	8,755	89.4	8,760	89.5
HARARE CITY	41,783	59,054	141.3	37,581	89.9	38,695	92.6	37,327	89.3

Source : NHIS

3.1.2.2. Incidence of Poliomyelitis, Neonatal tetanus and Measles

TABLE 19 : INCIDENCE OF POLIO, NNT and MEASLES 1981-96

Year	Cases		
	Poliomyelitis	Neonatal Tetanus	Measles
1981	28	114	-
1982	8	428	-
1983	3	85	36,253
1984	4	74	22,829
1985	65	154	17,508
1986	92	358	26,749
1987	5	11	16,707
1988	4	21	50,565
1989	1	58	48,279
1990	0	16	13,658
1991	0	29	24,524
1992	0	23	17,346
1993	1°	12	32,287
1994	2	19	37,785
1995 #	1 (12)	18	8,492
1996 #	1 (3)	18	36,832*

Source : OPD returns excluding Central Hospitals

* Data 1996 : January until October

° 1 polio case reported due to residual paralysis at 60 days

Note : # 1995 and 1996 AFP cases have been reported following the WHO final classification of cases with the criteria for confirming a diagnosis of polio as (residual paralysis at 60 days, wild polio virus in faecal specimens found, death occurred in less than 10 days after onset, loss of follow-up). In 1995 : 12 cases were confirmed with 2 confirmed due to residual paralysis after 60 days follow-up, 10 cases confirmed on basis of loss of follow-up. In 1996 : 2 confirmed cases due to residual paralysis after 60 days follow-up and 1 on basis of loss to follow-up (MOHCW/EPI Report -1996).

The incidence of poliomyelitis had been reduced by 1989-1990 with no cases reported during 1990-1992 period which could be due to the higher coverage levels attained (high oral polio vaccination coverage - OPV) or due to underreporting of the cases.

The country committed itself to the eradication of poliomyelitis by the year 2000 and attained the Universal Childhood Immunisation goal of 80% coverage by the late eighties. The national vaccination coverage was declining in 1990 resulting in an intensified polio surveillance campaign from 1993 onwards. Mainly due to the increased surveillance, cases of poliomyelitis were reported again in 1993/94 and 1995/96. Consequently the national decline in coverage has been reversed to above 80% for all antigens. Zimbabwe did not report a Polio case since July 1989, but the improved Acute Flaccid Paralysis (AFP) Surveillance (investigation of all cases and final classification of all investigated cases), has confirmed a total of 12 cases in 1995 and 3 cases in 1996 (Progress report 1993-1996, MOHCW) as illustrated in Table 23.

Zimbabwe's commitment to the elimination of neonatal tetanus by 1995 defined by WHO as an incidence of 1 case per 1000, has been successful. With 23 cases reported in 1994 the incidence of NNT was 0.05 per 1000 live births in 1994 which means that Zimbabwe has achieved its target set. The declining trend in NNT can be observed in the table above. The number of NNT cases is still declining for 1995/1996 which could be due to the policy of immunising all women of child-bearing age with two doses of Tetanus Toxoid (TT2).

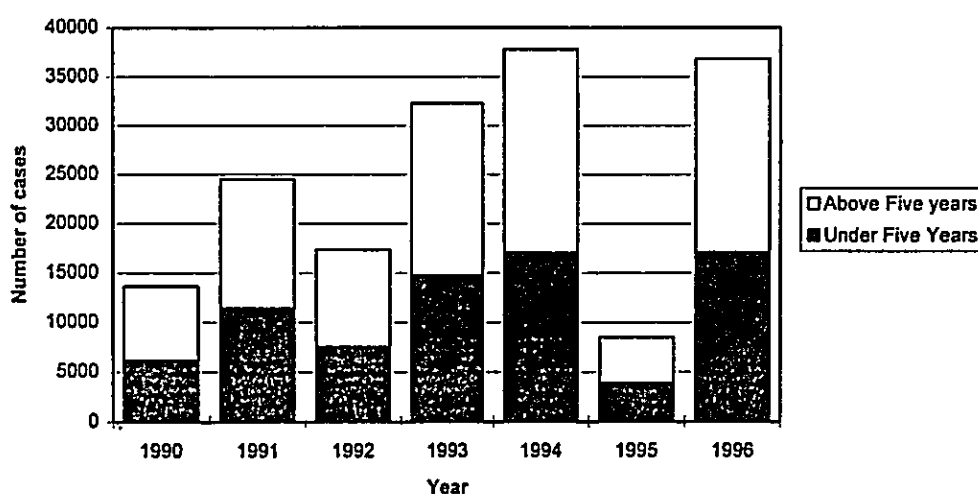


FIGURE 7: MEASLES CASES 1990-96

The measles incidence should have been reduced by 90% but Zimbabwe has not yet reached the level set by the World Summit for Children. (level 1983 - 36253 cases, level 1990 : 13 658 cases, the target for the year 2000 is to reduce the level to 75% - target of the National Programme of Action on Children). Figure 7 provides the measles cases since 1990. Measles epidemics occurred in 1983 , 1988/89 and 1994 and 1996. There has been a shift in the age distribution of measles cases to the older age-group since 1987.

The EPI Unit in conjunction with all the provinces and cities continues to improve the disease surveillance so that the incidence reduction of the diseases is taking place and the elimination and eradication goals are achieved.

It has been observed that since 1994, the Hepatitis B vaccination has been launched as part of the childhood immunisation programme against this deadly disease.

TABLE 20 : NATIONAL TREND IN MEASLES-OPD CASES SINCE 1980

Year	Under Five Years	Above Five years	Total	Rate per 1000 population	Deaths
1980	-	-	23 650	3.3	-
1981	-	-	4 995	0.7	-
1982	-	-	4 941	0.6	-
1983	-	-	36 253	4.6	-
1984	-	-	22 829	2.8	-
1985	-	-	17 508	2.1	-
1986	-	-	26 749	3.1	-
1987	-	-	16 707	1.9	19
1988	-	-	50 565	5.5	84
1989	-	-	48 279	5.1	73
1990	6 171	7 487	13 658	1.4	99
1991	11 470	13 054	24 524	2.4	113
1992	7 543	9 803	17 346	1.7	102
1993	14 763	17 524	32 287	3.0	156
1994	17 034	20 751	37 785	3.4	49
1995	3 885	4 607	8 492	0.7	261
1996*	17 095	19 737	36 832	3.1	81

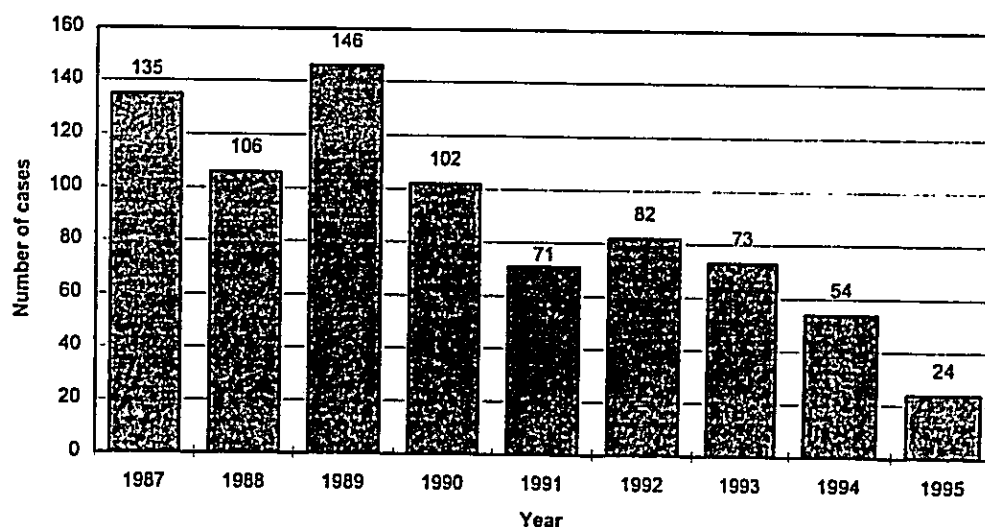
Source : MOHCW, EDC-NHS Unit 1997
 OPD returns excluding the Central Hospitals
 * Data 1996 : January - October.

3.1.2.3. Leprosy

TABLE 21: LEPROSY CASES BY PROVINCES 1995

Provinces/City	New	Cases	Follow-ups	Incidence/ 100 000
	Under-5 years	Above-5 years		
Manicaland	0	1	273	0.06
Mashonaland C	0	3	424	0.31
Mashonaland E	0	2	842	0.18
Mashonaland W	0	11	287	0.89
Matabeleland N	0	4	164	0.56
Matabeleland S	0	1	194	0.15
Midlands	0	1	194	0.07
Masvingo	0	1	483	0.07
Harare City	0	0	23	0.00
Chitungwiza City	0	0	2	0.00
Bulawayo City	0	0	31	0.00
National	0	24	2 917	0.21

Source : T9 MOHCW

FIGURE 8 : LEPROSY TREND IN NEW CASES NATIONAL LEVEL
1987-95Source : T9 Form
EDC-NHIS UNIT
MOHCW

There has been a steady decline in the number of new leprosy cases over time as been illustrated in Figure 8. This may be due to the successful case-finding and treatment management in Zimbabwe since the programme was implemented after independence. The leprosy programme management is integrated with the TB programme in the MOHCW. However the TB programme is of much higher priority in disease control and management particularly with the impact of HIV/AIDS and the burden on the TB programme respectively.

The leprosy control programme although established in 1960s did not expand in terms of management. Only few health workers are trained in the diagnosis and treatment of leprosy patients which makes the management and control including the awareness of the disease difficult in the districts and the communities.

In 1990, 10 000 estimated cases of leprosy were requiring treatment. The prevalence of leprosy cases throughout the country shows a varied picture but no part of Zimbabwe is exempt. Table 21 reveals that 24 new cases were found in 1995 in comparison with the 1990 level of 102 cases. There were no new cases notified in the under five years age-group. The Mashonaland West Province reported during 1995 the most cases in the above five years age-group and the incidence per 100 000 recorded was 0.89 while the national incidence per 100 000 was only 0.21 as illustrated in the table for 1995. During 1996 for the first three quarters, the total number of new cases was 16, but no deaths were reported.

Leprosy has however its impact on the population and the socio-economic trends through the associated disabilities and deformities. The administering of effective treatment is recognised as the way forward to reduce incidence of leprosy in the country.

The leprosy information is gathered through the use of the T9 forms at the hospital level, forwarded to the Central Level via the district and provincial levels. The leprosy data collection system goes through the notification forms on quarterly basis by leprosy centres such as Ngomahuru, Mutemwa and the other hospitals. Once leprosy patients are identified at hospital level, the treatment can be done through a home based or out-patient programme. Only those patients with severe ulcers need special nursing care. Leprosy scouts are placed at the district level for the identification and examination of leprosy patients and notification to the provincial level. A treatment programme is then installed and the notification of leprosy patients follows the system through to the central level.

3.1.2.4. AIDS/HIV

TABLE 22 : SUMMARY OF AIDS CASES 1987-96

Year	Female	Male	Unknown	Total
1987	-	-	119	119
1988	-	-	202	202
1989	630	674	7	1 311
1990	1 917	2 405	40	4 362
1991	1 860	2 663	34	4 557
1992	3 501	4 630	49	8 180
1993	3 888	5 225	59	10 647
1994	4 812	5 777	59	10 647
1995	5 835	7 447	74	13 356
1996 : 1 st Q	1 342	1 484	10	2 836
1996 : 2 nd Q	1 350	1 417	7	2 774
Cumulative Total	25 135	31 722	661	57 518

Source: National Public Health Laboratory

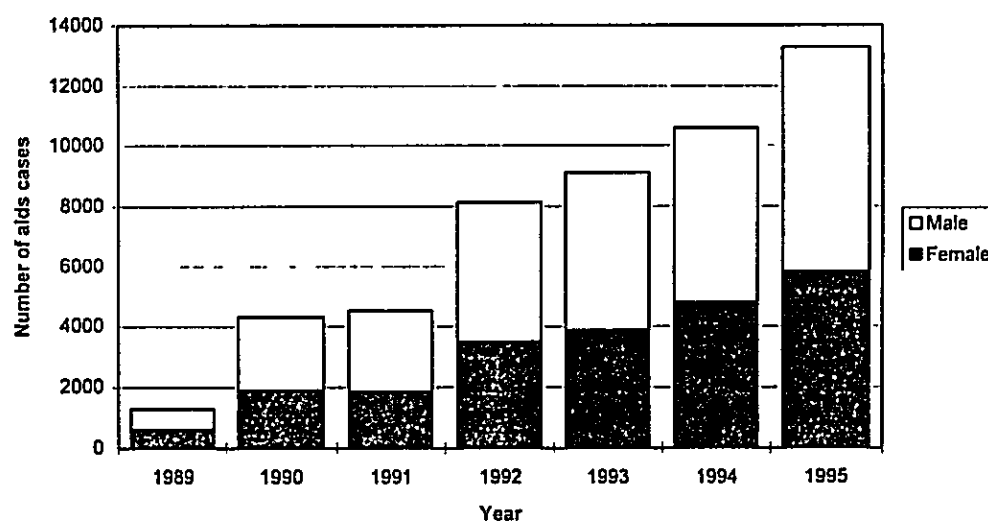


FIGURE 9 : SUMMARY OF AIDS CASES FOR MALE AND FEMALE 1989-95

In the past decade, AIDS has emerged as one of the most devastating threats to human health in Zimbabwe. AIDS has an impact on population dependency with the large number of orphans and has made the reduction of the U5MR very costly. HIV spread in Zimbabwe in the early 1980. The virus that causes AIDS already infects many Zimbabweans, for every five adults one is infected, or more than 20% of the entire adult population of the country. In 1984 the Blood Transfusion Service in Zimbabwe started screening blood for the HIV virus to protect recipients. In 1987 the AIDS cases began to be reported to the MOHCW. The cases has since then increased as indicated in the summary of aids cases by years in Table 22 and Figure 9. However, the National AIDS Co-ordination Programme (NACP) considers the figures to be an underestimate, thus the issue has become one of the major health problems in Zimbabwe. According to the NACP the number could be far more than 300,000. Sentinel surveillance for HIV positively shows that 17-25% of ante-natal patients were HIV positive in 1993. Actual AIDS cases are only the tip of the pyramid. Lots of people are infected by HIV but did not yet contract AIDS. By 1996, an estimated 1.4 million people were HIV positive (1.3 million adults, 100 000 children) (Report on HIV/AIDS in Zimbabwe, Background, Projections, Impact and Interventions, January 1997,NACP).

In the Ministry of Health, the information is collected (a) from hospitals which send their information to the 8 PMDs using T9 forms which is explained in the chapter on National Health Information System (NHIS), then to the head office in Harare. (b) Through diskettes from the cities of Harare, Bulawayo, & Chitungwiza. Zimbabwe has a sentinel surveillance system that provides the basis for estimating the extend of HIV infection. The provinces have designated sentinel surveillance site at different hospitals and HC. Blood samples are taken from sexually transmitted disease (STD) patients for testing as well as blood samples from the first ANC patients at the sites. In the ZDHS 94% of pregnant women received antenatal care and therefore it is representative for the population. This sentinel system is operational since 1990 but the provision of timely and consistently accurate information is necessary for national control of the epidemic.

The number of AIDS cases reported in the second quarter of 1996 fell by 62 cases compared to its first three months as indicated in the table. This does not indicate that the epidemic has reached its peak. The reason could be that not many doctors are referring the people for HIV testing when they can clinically diagnose the patients. In the 3 months ending June 1996 a total of 11,208 HIV tests were conducted by the National Public Laboratories country wide. Of these tests 2,774 were full blown AIDS cases. An average of 2000 people died of AIDS every week in 1996. In 1995 the cumulative number of AIDS deaths from the beginning of the epidemic was about 200 000. Projecting this over the period of 1995-2005 at least an additional 1.7 million persons are likely to die from the disease. The cumulative deaths by 2005 would be 1.9 million. Several factors seems to contribute to the rapid spread of HIV such as poverty and the low health status, the high prevalence of other STDs, patterns of the workers migration including the transportation network, dislocation caused by drought, cultural factors and beliefs.

TABLE 23: TOTALS AND PERCENTAGE OF ATTENDANCE BY HIV/AIDS PATIENTS FOR 1994-96

Province	Total HIV/AIDS attendance New Dis/FW-UPs			Total OPD attendance			% HIV/AIDS		
	1994	1995	1996	1994	1995	1996	1994	1995	1996
Manicaland	5 461	8 268	4 665	2 881 088	3 447 390	2 818 230	0,1895	0,2398	0,1655
Mashonaland C	2 611	2 890	1 555	1 642 747	2 036 583	1 570 062	0,1589	0,1419	0,0990
Mashonaland E	3 308	5 000	2 851	1 938 480	2 384 093	1 854 646	0,1706	0,2097	0,1537
Mashonaland W	8 834	7 609	4 205	2 292 146	2 738 774	1 802 768	0,3854	0,2778	0,2332
Matabeleland N	1 144	1 140	790	1 001 184	964 834	1 282 968	0,1142	0,1181	0,0615
Matabeleland S	2 625	3 457	2 503	723 365	959 068	792 357	0,3628	0,3604	0,3158
Midlands	6 444	6 270	3 092	2 298 660	2 353 942	1 899 988	0,2803	0,2663	0,1627
Masvingo	6 180	7 284	5 135	3 826 238	3 894 809	2 536 325	0,1615	0,1870	0,2024
Harare	2 186	3 851	2 053	842 444	1 142 269	1 105 241	0,2594	0,3371	0,1857
Chitungwiza	407	760	310	402 856	358 445	241 131	0,1010	0,2120	0,1285
Bulawayo	14 846	10 371	5 558	1 224 184	1 350 615	1 048 699	1,2127	0,7678	0,5299
TOTAL	54 046	56 900	32 717	19 073 392	21 630 822	16 952 415	0,2833	0,2630	0,1929

Source : T5 Form, EDC-NHIS Unit MOHCW
For 1996 : period January-October

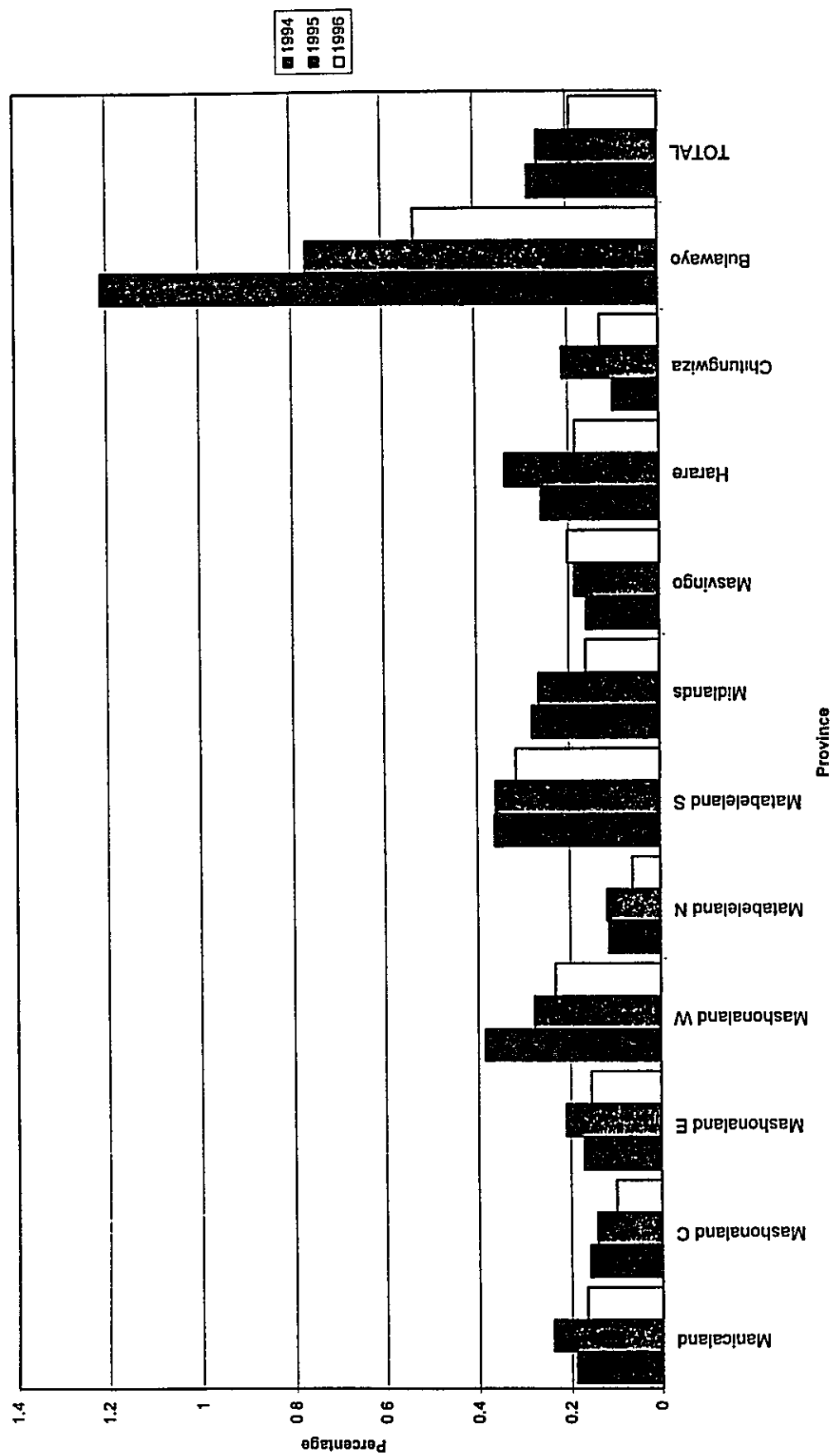


FIGURE 10 : PERCENTAGE HIV/AIDS FOR PATIENTS CHECKED 1994-96 (for 1996 : January - October)

TABLE 24 : NATIONAL TOTALS STI CASES & CONDOMS ISSUED 1989-96

Condition	1989	1990	1991	1992	1993	1994	1995	1996	Totals 1989/96
STIs	1 078 293	963 436	1 240 596	878 366	879 307	811 418	904 348	1 079 206	7 834 970
Condoms Issued	-	-	-	-	-	5 567 378	6 987 201	10 741 284	23 295 863

Source : Annual Reports MOHCW
T5 and TB Notification Forms MOHCW
EDC-NHIS Unit 1996

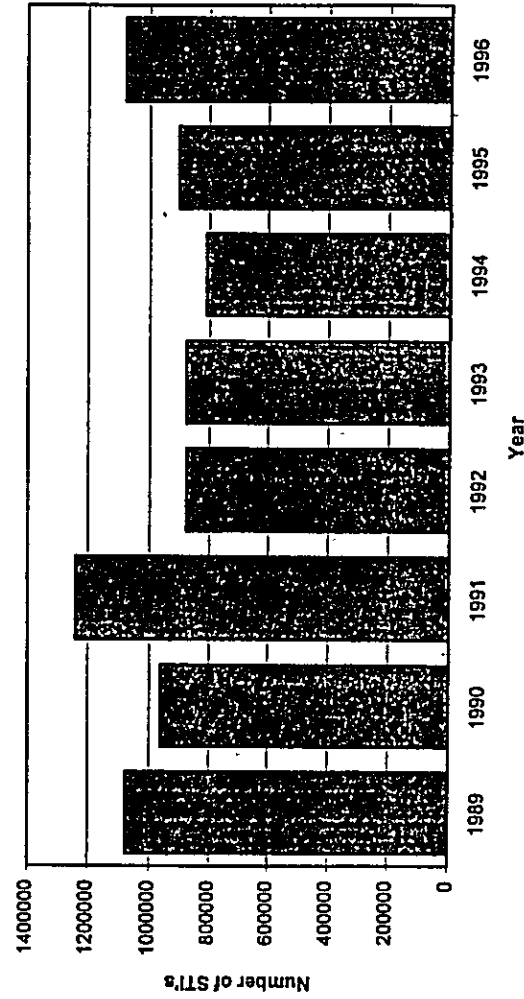


FIGURE 11 : NATIONAL STI's DATA FOR 1989-96

Although females are more vulnerable to AIDS, the cumulative number of the reported AIDS cases through 1995 showed that males are more affected than females as can be noticed in Table 22. More than 70% of the AIDS cases are found in the age-group of adults between 20 and 49 years which is the most economic productive population group. The deaths toll increases in all age groups but most in the reproductive age group with impact on the family, educational and economic development. The peak ages for AIDS cases are 20-29 for females and 30-39 for males. Young women in the 15-29 age-group are more than five times more likely to be infected as the males in the same age-group. A significant number of AIDS cases are reported among children which received the infection from their mothers. The age-group of 5-14 years represent only a small proportion of AIDS cases. This emphasises that the main transmission modes are through sexual contacts or perinatal transmission. Zimbabwe represents a classic age distribution of AIDS cases where the cases are found in the sexually active population group and children under five years of age (NACP Report, 1997).

The current HIV adult prevalence can increase to 22 % by the year 2000 with the number of HIV infected persons in the population rising from the 1.4 million in 1996 to 1.7 million in 2000 and 1.9 million in 2005. Reasons are the increase in the HIV prevalence rate together with a rapid population growth due to high birth rates. Consequently the number of AIDS cases each year would rise to 187,000 in 2000 and 217,000 in 2005. The large number of annual new AIDS cases increases the burden on the health care delivery system including the households in the provision of intensive care for AIDS patients. This is illustrated in Table 23 and Figure 10 where the HIV/AIDS patients attendance figure is compared with the total OPD attendance of patients for all other diseases. The percentage HIV/AIDS patients is increasing in all provinces and is very high for Bulawayo because of the concentration of health facilities and the recording system.

CIMAS estimated average direct costs of an AIDS patient at Z\$ 4,900 in 1994. Home-base care will have to replace institutional care in many cases. The demand on health services caused by AIDS can be shown in looking at hospital beds occupancy. The average stay is longer than for other diseases, sometimes as long as 60 days. Health staff estimated that 70% of bed occupancy in government hospitals is the result of HIV/AIDS. Over the next 10 years the demand will increase by 2.3 times if the epidemic continues which will reduce the resources available to deal with other health problems.

Sexually transmitted diseases have stabilised over the 1992-1994 period but increased again in 1995-1996 although the amount of condoms issued was increasing each year. Data are provided in Table 24 and Figure 11. Sexually transmitted diseases are still seen as a serious public health problem as illustrated in the table on national totals of STI cases and condoms issues over 1989-1996 period. Condom use and STI prevention and treatment are available interventions and can reduce the number of new HIV infections.

In 1993 the Multi-sectoral National AIDS Council (NAC) became operational for advocacy and resource mobilisation and AIDS programme co-ordination. HIV/AIDS

including STDs are integrated programmes within the Primary Health Care delivery system. The IEC activities are implemented through the use of the media. They target specific groups such as adolescents and out of school youth, The training on HIV/AIDS is integrated into different training curriculum including the Primary, Secondary and Higher education since 1992. NACP has a focal person for promotion, supporting and co-ordination of programmes on AIDS prevention, control and care targeted at women.

A national HIV/AIDS policy document has been prepared for discussion in 1996. It tries to ensure the development of effective ethical clear and consistent responses to the epidemic and to safeguard the rights of people living with HIV/AIDS (health care, home care, counselling, research, information, legal and human rights). The policy document will be discussed and further refined during the course of 1997.

A review of the AIDS Programme was done and based on the results the Second Medium Term Plan (1994-1998) was developed including the work plans. Quarterly and annual epidemiological surveillance are giving information about HIV/AIDS and STD and reports are produced and distributed accordingly.

3.1.2.5. Tuberculosis

TABLE 25 : INCIDENCE OF TUBERCULOSIS 1980-95

Year	Cases	TB Rates/ 100 000	Deaths	Population
1980	4 057	57	488	7 107 072
1981	4 051	55	306	7 320 254
1982	4 577	60	212	7 477 443
1983	3 881	49	236	7 696 532
1984	5 694	70	199	7 922 040
1985	4 759	57	139	8 154 156
1986	5 233	61	161	8 393 073
1987	5 848	66	160	8 638 990
1988	6 002	65	235	8 892 112
1989	6 812	72	872	9 152 651
1990	9 132	93	1 303	9 420 824
1991	12 198	114	1 500	10 121 073
1992	15 237	146	1 091	10 412 548
1993	20 125	187	1 381	10 778 964
1994	23 959	230	3 549	11 150 006
1995	30 831	277	2 955	11 526 558

Source : MOHCW : TB Annual Report 1995

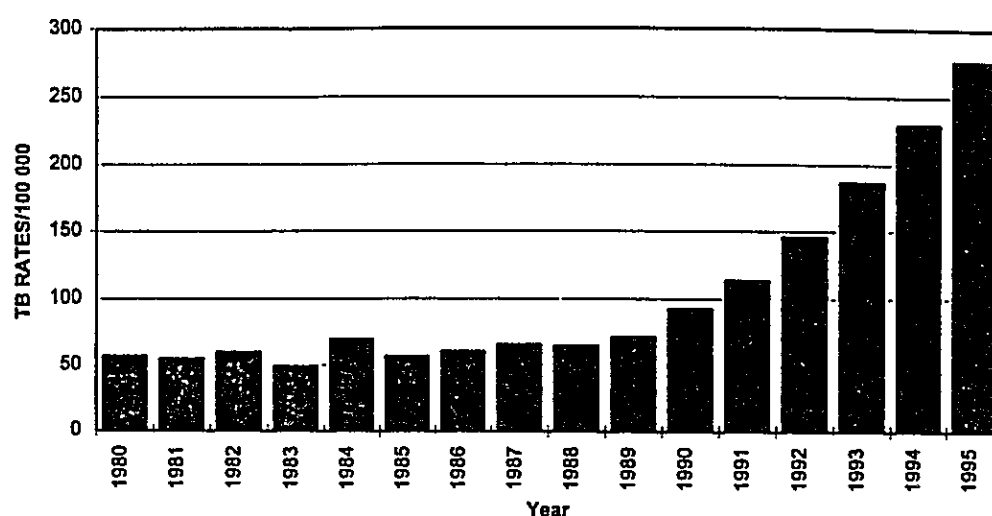


FIGURE 12 : NATIONAL TB RATES/100 000 FOR 1980-95

Tuberculosis (TB) in Zimbabwe, remains a public health problem and continues to be a major cause of mortality and morbidity as indicated in Table 25 and Figure 12. The incidence was 230 per 100 000 and there were 3,549 deaths in 1994 and 277 per 100 000 and 3,955 deaths in 1995 based on the in-patient data. Since 1989 the number of TB cases and death have been increased fourfold. The AIDS/HIV pandemic has certainly attributed to it. The association with HIV infection, coupled with operational and resource inadequacies resulted in an escalation of the tuberculosis epidemic. 20% of the cases however, are relapses and defaulters. The people most affected are the 30-54 followed by the 15-29 age groups. 8,235 cases of tuberculosis were reported in the quarter April-June 1996, showing a decrease of 3.8% when compared with the same quarter in 1995. But the total number of TB cases for 1996 increased to 35,835. The TB notification by sex and age group indicated 58.4% male TB cases in 1995 with the highest proportion of males found in the 30-54 age group.

Table 26 and Figure 13 indicate the incidence/100 000 per age group for 1991-1995. The incidence in the 5-14 years is low in comparison with the age group of the 30-54 years. The high incidence in the latter age group could be related to the high percentage of HIV/AIDS in the same age group. The total number of cases in the 5-14 years age group is only 4.2% with an equal male/female proportion. Incidence rates have increased in all age groups over the years.

TABLE 26 : INCIDENCE TB/100 000 PER AGE-GROUP FOR 1991-95

Age-group	1991	1992	1993	1994	1995	% Increase
0-4 years	87	89	130	135	185	113%
5-14 years	24	24	29	32	38	58%
15-29 years	120	162	204	230	314	161%
30-54 years	254	317	425	509	638	151%
55 >	239	264	274	300	329	38%

Source : TB Annual Report 1995, MOHCW

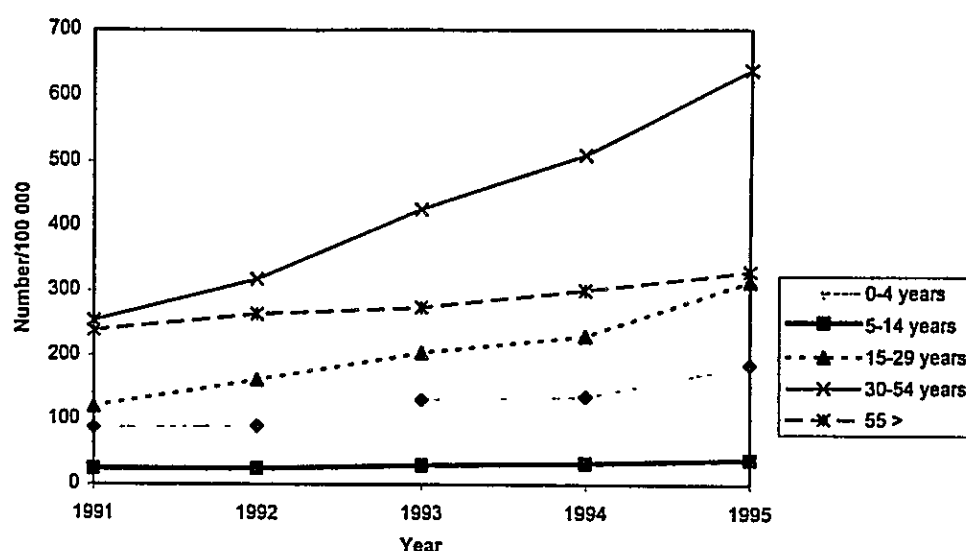


FIGURE 13 : INCIDENCE TB/100 000 PER AGE-GROUP

The impact of HIV on the increase of cases is apparent but it will not change the public health priority aiming at reducing the risk of infection for the whole population but it increases the burden on the TB programme. The number of Tuberculosis cases has been rising rapidly. The MOHCW reports a 390% increase in the TB incidence since 1985. At least 60% of the TB patients are reported to be HIV positive. In the absence of HIV, the number of the new TB cases would be limited to about 0.2% of the population according to some reports and estimates, which would result in 15,000 to 22,000 new TB cases a year. With AIDS the number of new TB cases will continue to rise. Assuming that amongst the people with HIV and latent TB, 8% develops TB each year then the additional number of TB due to HIV infection would be about 70,000 by 2005 (NACP Report 1997). The risk of tuberculosis increases for the whole population. Drug-resistant strains of TB are making it much more difficult and expensive to treat tuberculosis which put stress on the health budget.

Information is gathered through the use of TB forms at Hospital Level, then forwarded to Head Office via the District, and Province where the data is combined according to each level. The National Tuberculosis Programme has been developed since 1962 and reorganised in 1982 with a clear strategy of decentralisation to the district level within a Primary Health Care delivery system. The programme was strengthened as of 1994. A TB manual was produced in 1994 aiming at the provision of a uniform effective and efficient care programme for TB patients in public and private sector. The focus of the TB programme is on effective control measures at primary and first referral level. The major goals are to reduce the incidence and prevalence of tuberculosis and to reduce the physical and psycho-social suffering of the population from TB. The main focus of the programme is to ensure that adequate supplies of drugs including the two year buffer-stock at Central Medical Stores are available and that the TB Treatment-outcome reporting system is in place in all provinces.

3.1.2.6. Malaria

The National Malaria Control Programme introduced in 1948 has been expanding following a major outbreak in 1981 and reorientated towards the strategy of reducing mortality and morbidity and not only preventing epidemics. Malaria continues to be one of the major single disease problem of Public Health importance in morbidity and mortality in Zimbabwe accounting for up to 20% of childhood deaths in some places. It contributes to about 20 - 30% of out-patient attendance of the age-group of 5 years and above. Malaria is among the four major diseases on the weekly Epidemiological Report. The government has to spend more than US\$ 2,000,000 annually on malaria control.

The malaria situation is hetero-genic and depends on geographical conditions (mostly altitude and rainfall) which provides a good basis for stratification of malaria. The level of malaria transmission ranges from hyper-endemicity in the Zambezi Valley (Low Veld) to zero endemicity in the High Veld. The malaria transmission free band stretches from north-east (1200 m altitude) to south-west (900 m altitude) of the plateau, dividing the high malaria transmission zone into two isolated parts, the northern and southern part respectively. Based on the linkage of altitude and malaria transmission as well as the pattern of rainfall during the year, Zimbabwe is stratified into three zones of malaria :

- Stratum A : Areas below 900 m in the North and 600 m in the South characterised by endemic malaria with perennial transmission (Low Veld) - areas of year-round transmission.
- Stratum B : Hypo to meso-endemic areas with seasonal transmission and in absence of control with yearly epidemics (Middle Veld - between 900 - 1200 m in the North and between 600 - 900 m in the South).
- Stratum C : Areas with no to negligible transmission but at irregular intervals epidemics could occur in the High Veld - above 1200 m in the North and 900 m in the South).

The population living in strata A and B (45% of Zimbabwe's surface area is perennially or seasonally endemic), is about 40% of the total population of Zimbabwe and represents four million people. This however does not include the population of stratum C which can only be estimated through research. More epidemiological research and studies are required to determine if the creation of a stratum D from C is necessary. Harare and Bulawayo are recognised as malaria free. The *Plasmodium falciparum* predominates in Zimbabwe and produces most infections (99.7% of confirmed cases in 1991) although the *Plasmodium ovale* and *malariae* are also present. The widespread use of anti-malarials to which *P. malariae* and *ovale* are more susceptible have decreased the proportion of these species. Continuous vector control affects indirectly the natural immunity of people resulting in a more uniform distribution of incidence except for the Midlands and Mashonaland Central Provinces. The transmission of malaria often peaks between March/April because of consistent rainfall. The factors limiting the malaria transmission at low altitude after the main rains are a reduction of vector population by low humidity and decrease in number of breeding places. The parasite incidence (PI) correlates mostly with increasing rainfall (seasonal malaria) as demonstrated in the tables on seasonal pattern.

TABLE 27 : NATIONAL TREND MALARIA IN OPD CASES SINCE 1987

Year	Under 5	Incidence Rate < 5 yrs/1000 Population	Five yrs+	Incidence Rate > 5 yrs/1000 Population	Total	Incidence Rate All Ages/1000 Population
1987	122 704	83,77	345 857	46,55	468 561	52,7
1988	245 337	162,11	724 664	94,55	970 001	105,7
1989	174 243	111,59	558 903	70,68	733 146	77,4
1990	158 889	98,62	474 737	58,18	633 626	64,9
1991	146 925	88,38	434 243	51,58	581 168	57,6
1992	94 760	55,25	325 377	37,46	420 137	40,4
1993	180 514	102,00	697 220	77,79	877 734	81,8
1994	146 340	86,24	651 320	68,90	797 659	71,5
1995	137 012	77,89	584 364	59,83	721 376	62,6
1996	313 541	174,01	1 352 147	133,80	1 665 688	139,9

Source : OPD returns excluding Central Hospitals

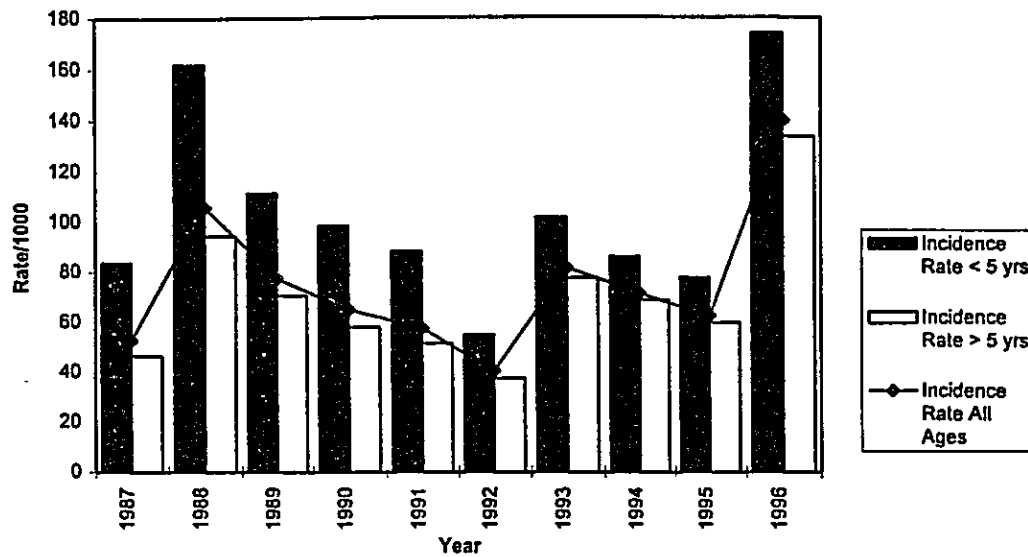


FIGURE 14 : INCIDENCE RATE MALARIA/1000 FOR OPD FOR DIFFERENT AGES 1987-96

The malaria OPD new cases increased during 1980-1988 but the malaria incidence has been declining since 1989 until after the severe drought of 1992, the incidence went up again in 1993 with good rainfall. 1994-95 were stable periods believed to be due to the various strategies adopted by the Malaria Control Unit. It is observed that in 1996, the incidence was very high again. Table 27 and Figure 14 reveal more details on the national trend in OPD cases since 1987. With a rainfall of 700 mm the seasonal pattern of malaria and the corresponding incidence during 1996 is quite relevant. Figure 15 compares the malaria cases with the amount of rainfall. The pattern of rainfall had not correlated with malaria up to 1988. This could be due to underreporting from the then fewer health facilities as the National Health Information System and Control Programme was not yet fully operationalised in the provinces by 1986. In Zimbabwe, malaria cases are increasing from January with peaks at around March/April/May. With the cold season around June the trend falls. But peaks again during July because of the influenza enrolment by ratios of the influenza season. During the hot dry season of August to October it phases down. Figure 16 indicates this seasonal pattern. The trend on case fatality per 1000 inpatient admissions showed an upwards trend from 1989-1992 into 1995 and 1996 which could be due to poor case management, chloroquine resistance, delay in patient seeking treatment, patients seeking treatment from traditional healers before coming to the health facility.

TABLE 28 : MALARIA INCIDENCE RATE OPD NEW CASES BY PROVINCE AND AGE -GROUPS 1996

Province/City	New Cases <5 yrs	Incidence Rate/1000	New Cases 5-14 yrs	Incidence Rate/1000	New Cases 15+ years	Incidence Rate/1000	New Cases All Ages	Incidence Rate/1000
Manicaland	66 284	236,8	100 933	174,5	200 343	221,9	367 560	208,7
Mash C	44 138	281,9	56 730	183,2	118 468	226,6	219 336	221,8
Mash E	23 704	136,0	36 745	97,5	69 624	111,8	130 073	110,8
Mash W	25 913	136,3	27 770	73,7	101 861	144,3	155 544	122,2
Mat N	74 001	593,1	100 012	423,0	195 303	522,6	369 316	502,5
Mat S	6 065	54,9	9 351	42,6	26 644	77,4	42 060	62,4
Midlands	45 623	194,0	50 904	108,5	127 527	159,7	224 054	149,1
Masvingo	16 625	77,5	24 757	52,6	59 559	82,6	100 941	71,8
Har. City	6 847	36,8	3 540	12,2	16 078	17,5	26 465	19,0
Chitungwiza	1 690	37,4	1 874	24,1	5 209	26,9	8 773	27,7
Byo. City	2 651	26,4	3 359	21,0	15 556	34,2	21 566	30,1
NATIONAL	313 541	174,0	415 975	116,6	936 172	142,8	1 665 688	139,9

Source : OPD returns EDC-NHIS Unit ,MOHC

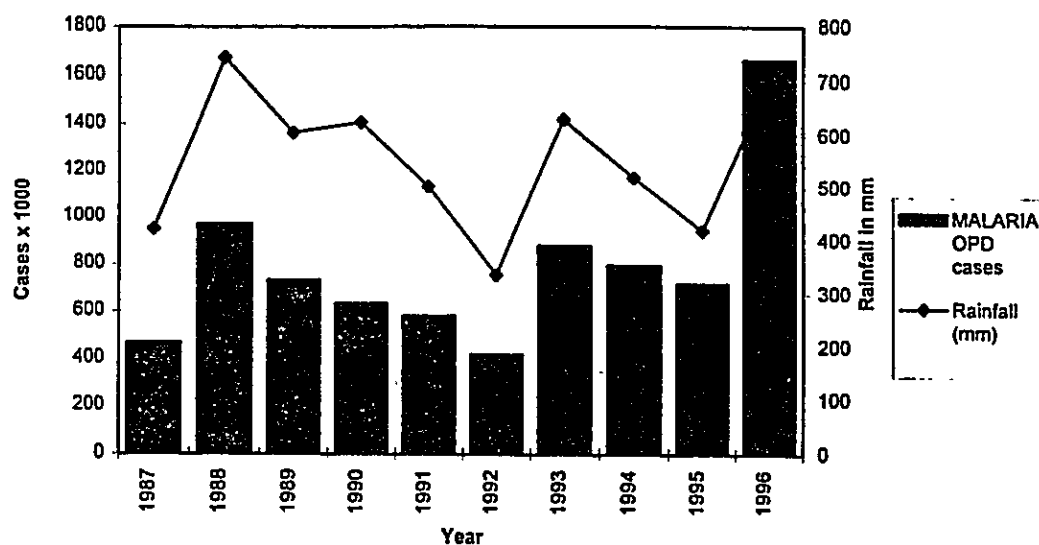


FIGURE 15 : MALARIA AND RAINFALL COMPARISON OVER TIME SINCE 1987

Source : OPD return forms EDC-NHIS Unit

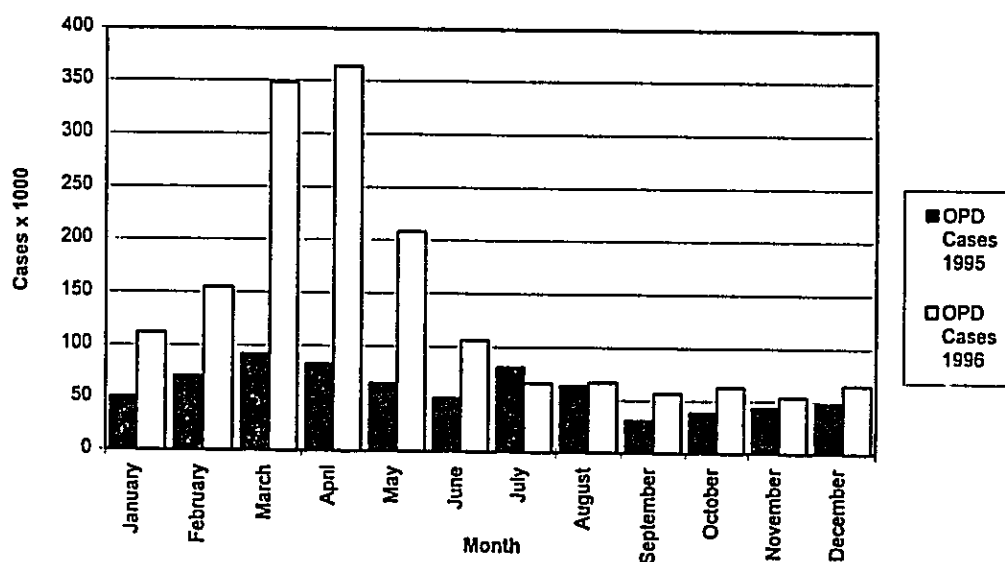


FIGURE 16 : SEASONAL PATTERN OF MALARIA - NATIONAL PICTURE 1995-96

Source : OPD Return forms EDC-NHIS Unit

The focus of the Malaria Control Programme is to prioritise case management at all levels (to ensure correct case management of 90% of the fevers, proper referral of severe and complicated cases in 90% of the cases and 100% proper treatment of

referred cases). The health education component on current ecological changes, social dynamics and epidemiological parameters need to be intensified. The capacity on early warning indicators of pending epidemics and quick response for rapid deployment of insecticides, equipment, drugs, manpower to the affected areas has to be strengthened. The focus will also be on transmission-reduction in epidemic areas through selected spraying, personal protection and other vector control measures.

3.1.2.7. Schistosomiasis

Schistosomiasis affects significantly the Zimbabwe population. It ranks in the top ten causes in terms of prevalence and morbidity. Reports indicate that the prevalence of *Schistosoma haematobium* is much higher than that of *Schistosoma mansoni* but both are highly prevalent in the country.

Among children it affects growth and school performance while among the adults it affects productivity and is responsible to an extent for the reduced agricultural output.

Blair Research Laboratory has done a lot of research in the epidemiology and control of schistosomiasis. The information derived from their research has made it possible for health planners to define priority areas in the schistosomiasis control as it has been found through research that the transmission of the disease is seasonal and focal. The routine data collection does not reflect this trend completely because only the more severe cases are presenting themselves to the health facility as illustrated in Table 30. Effective control measures include chemotherapy, snail control, health education and improved water and sanitation supplies.

The strategy to use chemotherapy and chemical molluscicides is however very expensive and unsustainable for the country. The most effective schistosomiasis control method appears to be morbidity control, through combined efforts of selective treatment of individuals and control of new transmission in killing the intermediate host snail at the site of infection. The focus is now on introducing plants with snail killing effects in the habitat of the host, through community participation and health information.

At present the global strategy of schistosomiasis control is to reduce the schistosome related morbidity rather than the eradication of the disease. The objectives of the schistosomiasis programme are to implement and strengthen the control programme and activities in eight pilot districts of the eight provinces and specifically target the reduction of the morbidity rates of schistosomiasis in the school going age group. A plan of action is currently been drawn up for the next five years (1998-2002). A policy related to essential drugs and treatment procedures as well as the control measures and health education will be developed and guide the country in the control of schistosomiasis.

Table 30 presents the geographical distribution of the schistosomiasis incidence of new cases by age groups. It is noticed that the above five age group is more affected in all provinces than the under five which could be due to the fact that children under five are not left unattended near unprotected water sources and stay mostly close to the homesteads. A high number of cases has been observed in Mashonaland Central for all age groups (the under five 11.9/1000, in the 5-14 years age group 68.4/1000 and the age group of above fifteen 27.1/1000), in Manicaland the new cases are high in the age group of 5-14 years.

Table 29 illustrates an overview of the cyclic trend of schistosomiasis over years. The years 1989, 1991/92, 1995 recorded more than 230 000 new cases a year. Figure 18 presents the overview of schistosomiasis incidence rate for all ages over the period 1987-1995 with rainfall. As previously mentioned the cases presented at the health facilities are mostly seriously affected cases. In depth research to investigate the seasonal trend of schistosomiasis need to be executed. Figure 17 reveals that the above five age group is mostly affected by the disease. The reason previously mentioned may be applicable.

TABLE 29 : CYCLIC TREND - SCHISTOSOMIASIS OPD NEW CASES ANNUAL NATIONAL TREND BY AGE-GROUPS 1987-95

Years	OPD New Cases			Rainfall
	Under 5yrs	Above 5 yrs	All ages	Oct - Apr/mm
1987	16 159	180 880	197 039	422
1988	10 484	207 922	218 406	744
1989	11 502	245 416	256 918	605
1990	9 199	194 039	203 238	625
1991	11 611	247 621	259 232	502
1992	11 102	228 891	239 993	335
1993	7 464	202 076	209 540	630
1994	6 873	186 956	193 829	519
1995	7 017	232 800	239 817	419

Source : OPD T5 Forms MOHCW
EDC-NHIS Unit, Sept 1996

TABLE 30: INCIDENCE RATE BILHARZIA OPD NEW CASES, BY PROVINCE, CITY, NATION AND BY AGE-GROUPS - 1995

PROV/CITY/NATION	New Cases Under 5 yrs	Incidence Rate/1000	New Cases 5-14 yrs	Incidence Rate/1000	New Cases 15 yrs +	Incidence Rate/1000	New Cases All Ages
Manicaland	1 823	6,7	32 417	57,9	22 657	25,9	56 897
Mashonaland C	1 794	11,9	20 483	68,4	13 691	27,1	35 968
Mashonaland E	927	5,5	28 345	77,4	18 397	30,4	47 669
Mashonaland W	646	3,5	12 219	33,4	10 155	14,8	23 020
Matabeleland N	132	1,1	2 121	9,3	2 185	6,0	4 438
Matabeleland S	92	0,9	2 326	10,9	1 648	4,9	4 066
Midlands	421	1,9	11 320	25,0	9 725	12,6	21 466
Masvingo	747	3,6	21 883	48,1	15 586	22,4	38 216
Harare City	245	1,4	2 473	8,8	2 123	2,4	4 841
Chitungwiza City	71	1,6	831	11,1	669	3,6	1 571
Bulawayo City	119	1,2	647	4,2	899	2,0	1 665
Nation Total	7 017	4,0	135 065	39,1	97 735	15,4	239 817

Source: MOHCW, EDC-NHIS Unit, Sept. 1996

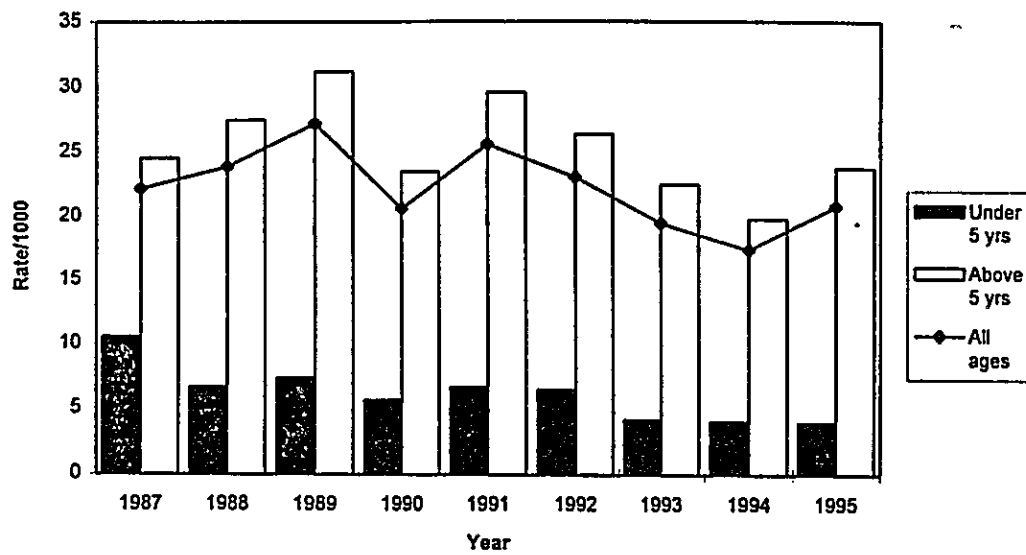


FIGURE 17 : SCHISTOSOMIASIS INCIDENCE RATE 1987-95 - NATIONAL ANNUAL TOTAL BY AGE GROUPS

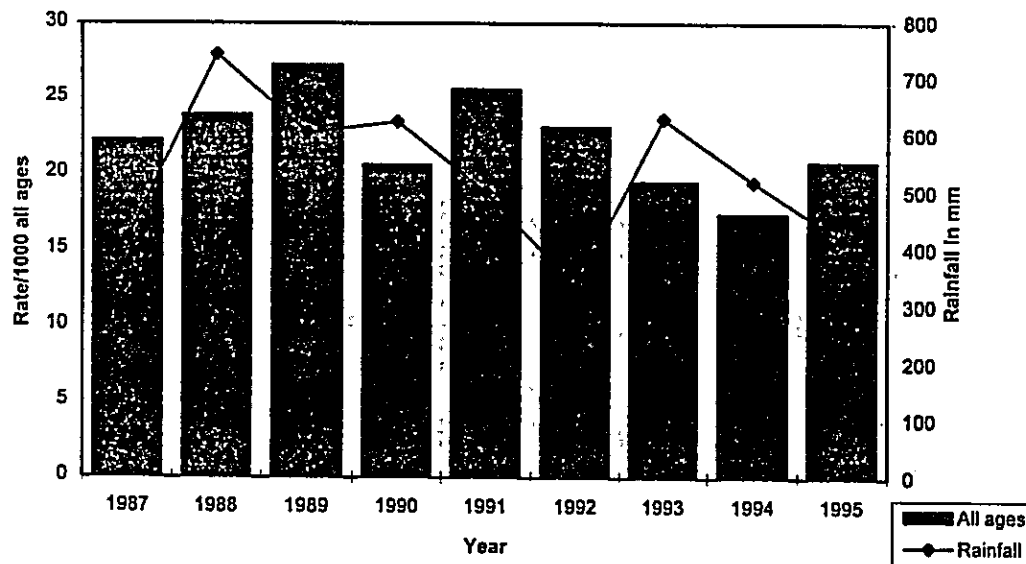


FIGURE 18 : SCHISTOSOMIASIS INCIDENCE RATE FOR ALL AGES FOR PERIOD 1987-95 COMPARED WITH RAINFALL BETWEEN OCTOBER AND MAY

3.1.2.8. Disability

The need for services for people with disabilities was illustrated by the disability survey conducted in 1982 by the Ministry of Labour and Social Services and UNICEF. The survey gave an estimated 276 300 people with disabilities in Zimbabwe. Given that the population in 1982 was estimated at 7.5 million, the percentage of the population with a disability was estimated at 3.7%. A 1991 evaluation of the Community Based Rehabilitation programme estimated that about 7% of the total population is suffering from either a physical, sensory, mental or learning disability. It was hoped that the 1992 census would have included information on the presence of disability but this did not occur.

Increasingly sensitive to the needs of the people with disabilities the Government enacted the Disabled Persons Act in 1992 with the aim to integrate children with disabilities in the mainstream schooling and offering equality in health and employment opportunities.

Table 31 presents the summary of new cases by their mayor type of disability. It is noted that orthopaedic conditions are the leading type of disability. Injuries caused from home, traffic or work accidents are causing most orthopaedic or soft tissue related disabilities. The increasing number of neurological disabilities can be related to the increasing problem of hypertension in the adults age group which if not treated can lead to cerebro-vascular accidents resulting in hemiplegia. The mental health problems are represented in Table 31 as psychiatry. This disability is mostly underestimated and not fully recognised as a serious health issue and rehabilitation.

Figure 19 illustrates the trend of the three mayor types of disabilities over time. The increasing trend may cause serious consequences for the health care delivery system in terms of orthopaedic aids and appliances, long term health and rehabilitation care. This puts a serious financial burden on the health system.

The MOHCW embarked on several programmes related to disability prevention and rehabilitation such as the National Injury Control Programme (1982), the Prevention of Blindness Programme (1989), the Community Based Rehabilitation Programme (1988). In 1993, 32,125 new disabled persons were attended to. In 1995, the number of new cases was 42,144. Table 31 provides more details on the number of new cases per type of disability. There is still uncertainty regarding the proportion of people with disability in contact with the health care delivery system. Most new cases requiring a rehabilitation programme are identified but those with minor disabilities and those in very remote areas may go undetected.

TABLE 31 : SUMMARY OF NEW DISABLED PERSONS BY MAJOR TYPE OF DISABILITY 1990-95

Disability Type	1990	1991	1992	1993	1994	1995
Medical Respiratory	2 914	3 209	4 071	4 230	5 239	6 506
Orthopaedic/ Soft tissue	10 690	12 705	13 652	16 325	17 587	20 539
Neurological	2 874	3 838	3 912	4 009	4 773	5 682
Burns	1 679	1 831	2 447	2 197	2 072	2 591
Psychiatry	612	660	972	859	946	1 423
Cerebral Palsy	1 081	1 349	1 110	1 099	930	1 054
Mental Handicap	722	820	881	877	1 012	928
Congenital Deformity	579	671	772	834	741	833
Visual Impairment	196	219	457	652	289	518
Hearing/Speech Impairment	356	648	687	789	2 031	1 911
Multiple Disabilities	193	186	239	255	191	159
Total	21 896	26 386	29 200	32 126	35 811	42 144

Source : STATS, Dec 1995.

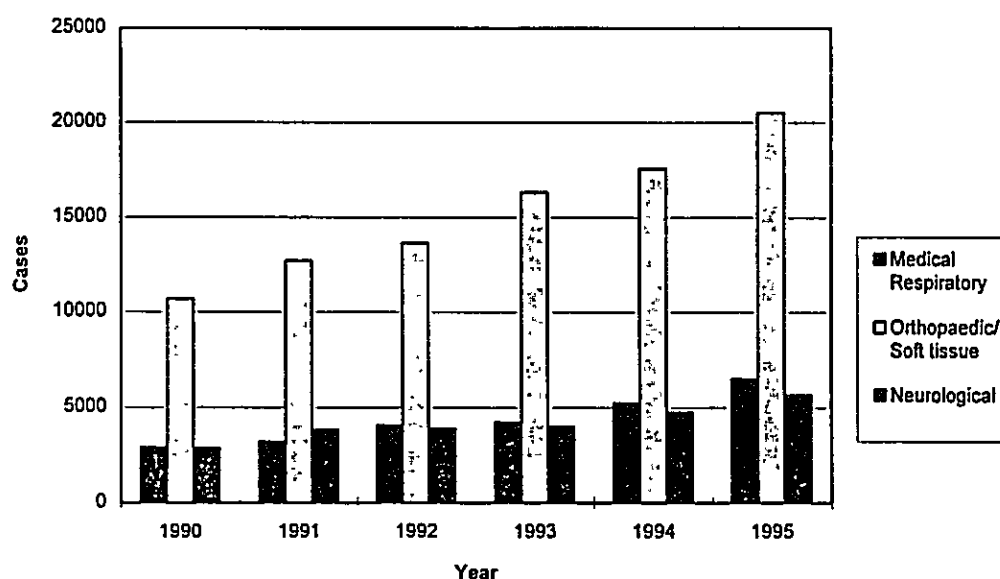


FIGURE 19 : NUMBER OF NEW DISABLED PERSONS ACCORDING TO THE THREE MAIN CAUSES 1990-95

A rehabilitation related information form is completed at health centre level. This includes some data on age and sex as well as the origin of the disability. These forms follow the same route as other standard statistical forms. This information is used to ensure the rehabilitation workers can provide adequate services to the people with disabilities in the communities. Data are presented in quarterly and annual reports for newly disabled persons at rehabilitation centres by cause of disability (e.g. injury in terms of home, work or road accidents). Most of the data collected from the rehabilitation forms remain uncollated and therefore limiting its usefulness.

TABLE 32 : THE MAIN CAUSES OF DISABILITY IN 1993

Causes	Percentage
Orthopaedic/soft tissue	50%
Medical/Respiratory	13%
Neurological	13%
Burns	7%
Psychiatric	3%
Cerebral Palsy	3%
Mental Handicap	3%
Congenital deformity	3%
Hearing/speech impairment	3%
Visual impairment	2%
Multiple Disabilities	1%

Source : HSAR, EDC-NHIS Unit 1993

Reports related to injury and accident surveillance indicate that the major causes of disabilities are the road traffic accidents. Injuries form in terms of morbidity, mortality and disability a serious health problem in the country. In 1991, 26386 new disabled persons were seen at rehabilitation centres. Of these 9 402 (35.6%) resulted from domestic injuries, 1 882 (7.1%) from work related injuries, and 1 363 (5.2%) from road traffic accidents. Injuries as a group represented 47.9% of the causes of new disabilities in 1991. This appears fairly consistent over the years. In 1993, 48% of the disabilities (orthopaedic, soft tissue) resulted from accidents with the same sort of proportions. The other major causes of disabilities are diseases (24%) and congenital causes (7%).

The priorities of the rehabilitation programme are the full integration of the services in the MCH services and the reduction of the morbidity of disabilities. This can be achieved through health education, rehabilitation interventions as well as sensitising and mobilising the communities so that the quality of life for people with disabilities improves and fully integration in socio-economic development is taking place.

3.2. MORTALITY

3.2.1. Life Expectancy at Birth

TABLE 33 : LIFE EXPECTANCY AT BIRTH 1978-95

Year	Males	Females	Total
1978	57	58	58
1980	56	57	57
1982	57	59	59
1984	60	61	61
1985	58	62	60
1986	61	61	61
1988	61	63	62
1990	58	62	61
1991	59	63	61
1992	59	62	61
1993	61	64	63
1994	62	66	64
1995	64	68	66

Source : Combined Demographic Analysis, EDC-NHIS Unit

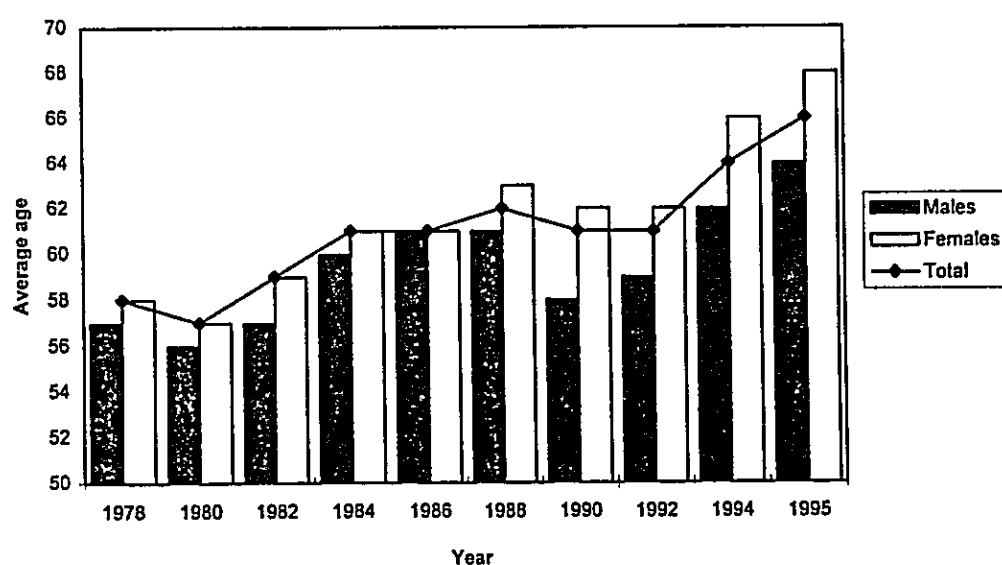


FIGURE 20 : LIFE EXPECTANCE AT BIRTH 1978-95

Although the life expectancy at birth for females is higher than for males, as illustrated in Table 33 and Figure 20, the female index of achievement of life expectancy (0.575) is slightly lower than that of males (0.592). Life expectancy increased from 57 years in 1978 to 62 years in 1988 but declined to 61 years in 1990. Despite the post-independence improvements in health service provision the life expectancy of the Zimbabwean female is still further from its maximum potential than male life expectancy (maximum values for females are 87.5 years, for males are 82.5 and minimum values for females are 27.5 years and for males are 22.5 years). The disparity is even higher in the rural areas (UNDP 1995).

3.2.2. Mortality Trends

3.2.2.1. Trends in infant, child and under-five mortality

After Independence child health improved and as evidence all indices of mortality among children in Zimbabwe went downwards at national level. The IMR declined from the pre-1980 levels of 120-150 per 1000 live births to 61 per 1000 live births by 1992. Mortality among children 1-4 years of age (CMR) declined to 26 per 1000 live births during the same period. As an aggregate, the mortality among all infants and children under five years of age (U5MR) decreased from 104 per 1000 in 1980 to 87 per 1000 live births by 1990. The rate of progress made, slowed down over the years which could be due to the drought periods, the social impact of ESAP, inflation and AIDS. The overall objective of the National Plan of Action for Children is to reduce the IMR to 40/1000 live births, to reduce the U5MR to the level of 58/1000 live births by the year 2000.

The major causes of death as presented in the tables for the under fives in Zimbabwe are Acute Respiratory Infections (ARI), perinatal conditions, nutritional deficiencies, diarrhoea, malaria, and AIDS. AIDS became the leading cause of death in children 1 - 4 years in the major cities of Harare and Bulawayo in 1992. In Harare the rate increased from 24/1000 to 43/1000 over the last four years. The observations along with the projections of the impact of HIV/AIDS on the U5MR suggests that the U5MR will not decline with the same trend in the foreseeable future despite the child survival initiatives as immunisation, control of diarrhoeal diseases and acute respiratory infections (ARI), and micro-nutrient supplementation programmes.

Strict comparison between the data is not possible because of differences in the classification of the conditions and sources of information over the period after independence till 1996 as presented in the tables.

The infant mortality rate is the number of infants that die during the first year of life per 1000 live births. The IMR for the 1988 ZDHS were calculated for the five and ten year period preceding the ZDHS and estimated at about 53 representing a continuous decline throughout the eighties. The estimates indicated a declining trend in mortality from 1978 to 1990 from 83 to 61 infant deaths per 1000 live births, but increased between 1988 and 1990. The male infant mortality is higher than the female. The

child mortality rate follows the same pattern. The calculation for the 1994 ZDHS reported the same rates. The ZDHS collected data from a small sample so that strict comparison between males and females was not possible from that source. Between the two ZDHS no improvement in IMR was noticed which could be due to the above mentioned reasons. With the continuation of the AIDS epidemic, the infant mortality would likely drop very slowly to about 44 by 2005 but could have dropped to the mid 20 for the same period in absence of AIDS. The estimated infant mortality rates are presented in Table 34 as well as in Table 35, 36 and 37 for the child mortality and the under five mortality rate from different sources over time. Figure 21 provides the infant and child mortality.

TABLE 34 : INFANT MORTALITY RATE/1000 LIVE BIRTHS OVERVIEW

Year	Male	Female	Total
1978	87	79	83
1980	89	84	86
1981	83	75	79
1984	73	66	69
1985	80	60	70
1986	68	61	64
1988	65	57	61
1990	69	62	66
1992	N/A	N/A	61
1994 *	N/A	N/A	53 *
2000 #	-	-	40 #
2005	-	-	44 §

Source : 1992 Census

#: Estimated reduction of Infant mortality by the year 2000 (reduction 40/1000), Zimbabwe National Programme of Action for Children (1992).
The Census data were collected from direct assessment (1978-1992).

§: The infant mortality rate would likely drop very slowly to about 44/1000 in 2005 with the continuation of the AIDS epidemic.
By contrast in the absence of AIDS the infant mortality could potentially be in the mid "20" per 1000 live births by that time.

*: The ZDHS (1994) data were collected from a sample and therefore too small for making a relevant comparison between male and female infants.

The Child Mortality Rate (CMR) is the number of deaths of children in the age group 1-4 years per 1000 children in the same age group. The general trend is that of declining between 1978 and 1988. This could be associated with the general improvements in health care following independence. An increase in mortality between 1988 and 1990 was noted. It could be associated with the impact of AIDS, enforcement of fee-collection in health institutions and budget constraints affecting the quality of health care as previously indicated.

TABLE 35 : CHILD MORTALITY RATE/1000 LIVE BIRTHS - MALE/FEMALE - OVERVIEW 1978-94

Year	Male	Female	Total
1978	40	34	37
1982	37	32	34
1984	31	26	28
1986	27	23	25
1988	26	21	23
1990	29	24	26
1992	N/A	N/A	26
1994*	N/A	N/A	25.6*

Source : 1992 census and * ZDHS 1994

TABLE 36 : CHILD MORTALITY/1000 BY PROVINCE, URBAN/RURAL AND SEX DISTRIBUTION 1990

	Rural	Urban	Male	Female	TOTAL
Manicaland	41	28	42	35	39
Mashonaland C.	35	25	37	32	34
Mashonaland S.	25	25	27	23	25
Mashonaland W.	32	28	34	28	30
Masvingo	33	29	34	30	32
Matabeleland N.	16	17	16	16	16
Matabeleland S.	14	19	14	14	14
Midlands	29	23	30	25	27
Bulawayo City	-	13	13	12	13
Harare City	-	19	22	17	19

Source : MOHCW - EDC-NHIS

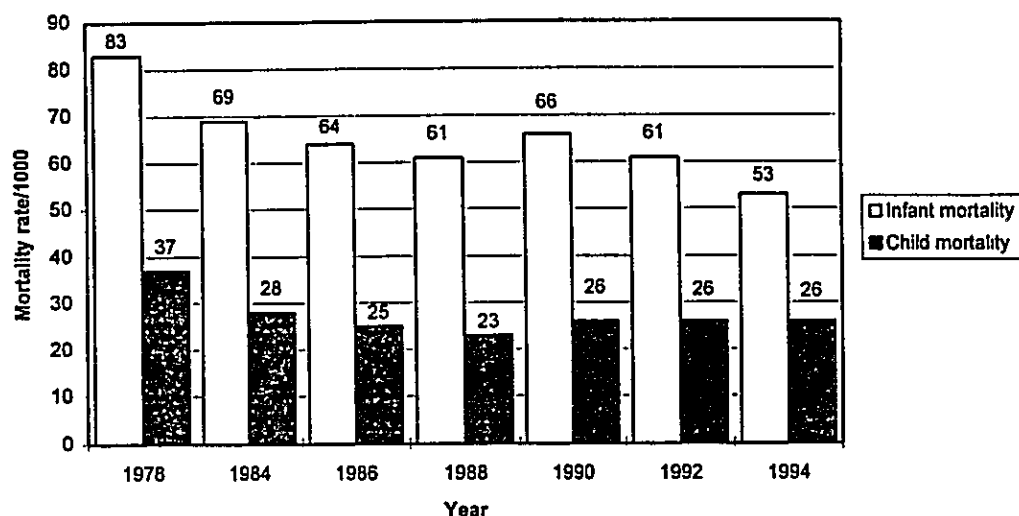


FIGURE 21 : INFANT AND CHILD MORTALITY RATE/1000 IN ZIMBABWE

TABLE 37 : CENSUS AND ZDHS MORTALITY RATES/1000

	1978*	1988#	1990*	1994#
Infant Mortality Rate	83	53	66	53
Child mortality Rate	37	24	26	26
Under 5 Mortality Rate	-	75	-	77

Source : * Census Results
Demographic Health Survey

Note : It should be noted that the DHS data was collected from a small but representative sample of population, by direct assessment for deaths occurring over a period of four or more years. On the other hand the census data was collected on a total sample using indirect methods of assessment for deaths occurring in the twelve months preceding the survey. These differences may account for the variations in levels of IMR and CMR obtained from ZDHS surveys and Census reports.

The Under five mortality rate is the number of children that die before reaching their fifth birthday per 1000 live births. Estimates are different from varying sources but the trend is consistent. The under-five mortality fell by about 28% from 103.6 per 1000 in the period 1978-1982 to 75.1 per 1000 over the period 1983-1988. The ZDHS 1994 reported an under five mortality rate of about 77, which is actually higher than the rate indicated in the ZDHS of 1988 survey with 75 per 1000. This means that one in thirteen children does not live to the fifth birthday. About one-third of under five deaths occur during each of the three relevant age segments : neo-natal mortality (< 1 month)

is 24 per 1000 live births, post-neonatal mortality (1-11 months) is 28 per 1000, and child mortality (1-4 years) is 26 per 1000 live births. Infant mortality stands at 53 deaths per 1000 live births.

The emerging HIV/AIDS epidemic was probably a major contributor to this increase. In the absence of AIDS, the rate would continue to decline between 1994 and 2005. With the epidemic the mortality rate will actually increase with about 27 % over that period. AIDS resulted in about 5% of the child deaths among children born over 1986-90 period. In the projections that proportion is rising. Amongst children born over the period 2001-2005 AIDS-related causes would be responsible for more than 75% of the mortality of children under the age of five.

3.2.2.2. Main causes of Mortality

TABLE 38: TOP TEN CAUSES OF UNDER-1 MORTALITY IN ORDER OF PRIORITY

1983	1993	1994	1995
Perinatal Conditions	Perinatal Conditions	Perinatal Conditions	Perinatal Conditions
Intestinal Infections	ARI (Other)	ARI (Other)	ARI (Other)
ARI	Intestinal Diseases	Infectious Diseases	Infectious Diseases
Measles	ARI (Upper)	ARI (upper)	Congenital Anomalies
Meningitis	Nutritional Deficiencies	Nutritional Deficiencies	Viral Diseases
Congenital Anomalies	Ill-defined Conditions	Viral Diseases	Other Bacterial Diseases
Nutritional Deficiencies	Viral Diseases	TB	Nutritional Deficiencies
Signs, Symptoms, ill-defined Conditions.	Malaria	Signs, Symptoms & Ill-defined Conditions	Signs, symptoms & Ill-defined Conditions.
	Diseases of the Nervous System.	Malaria & Other Anthropod borne Diseases.	Veneral Diseases.
	TB	Diseases Of the Nervous System.	Rickettsiosis.

Source : HSAR, 1995

The Table 38, 39, 40 and 41 are reflecting the changes in causes of deaths over a period of time. The leading cause of the top causes of deaths in the under 1 age group was peri-natal conditions although they showed a downwards trend between 1990-1993. Respiratory system diseases ranked second with a notable increase in number of deaths between 1992 and 1993. Intestinal infectious diseases, nutritional deficiencies and diseases of the nervous system (meningitis) were the other diseases among the top 5 causes of death. The high percentage of meningitis cases may be due to the effects of the AIDS pandemic. The rest of the top 10 causes of death were clinical malaria, ill-defined conditions, viral diseases (measles), tuberculosis and diseases of the blood system (anaemia).

TABLE 39 : TOP TEN CAUSES OF MORTALITY FOR CHILDREN (1-4 YEARS)
IN ORDER OF PRIORITY

1982	1983	1990	1993
Diseases of the Respiratory system	Measles	TB	Nutritional deficiencies
Conditions originating in perinatal period	Nutritional Deficiencies	Intestinal Infections	Intestinal Infections
Measles	Intestinal Infections	Malaria	Malaria
Intestinal Infections	Diseases of Lower Respiratory Tract	Acute ARI	Viral Diseases
Nutritional Deficiencies	Meningitis	Viral Diseases	Endocrine Metabolic and Immunity Related Diseases
Transport Accidents	Diseases of Upper Respiratory Tract	Pulmonary, Circulation Diseases	Tuberculosis
Homocide and Injury	Malaria	Digestive System Diseases	ill defined signs and symptoms
Pulmonary, Circulation Diseases and Other Heart Disease	Pulmonary TB	ill-Defined Conditions	Other Respiratory Diseases
Cerebro-vascular Disorders	-	Hypertensive Diseases	Diseases of the Nervous System
Pulmonary TB	-	Endocrine System Diseases	Diseases of the Digestive System

Source : HSAR, 1995

The leading cause of the top causes of deaths in the 1-4 years age group shows that nutritional deficiencies have been increasing in this age group, especially when the children are being weaned. The other major causes of death are respiratory system diseases and intestinal infectious diseases which showed an upwards trend. Clinical malaria, viral diseases (measles) tuberculosis, ill-defined conditions, diseases of the blood system (anaemia), endocrine diseases (diabetes) and the diseases of the nervous system (meningitis) were the other causes of death in this age group. It should be noted that diabetes is among the leading top 10 causes of death in this age group.

TABLE 40 : TOP TEN CAUSES OF UNDER FIVE MORTALITY IN ORDER OF PRIORITY

1985	1993	1994	1995
Nutritional deficiencies	Nutritional Deficiencies	Nutritional Deficiencies	ARI
Infectious Diseases	Intestinal Infectious	Infectious Diseases	Diarrhoea
ARI (Other)	Malaria	ARI (Other)	Skin diseases
Viral Diseases	Viral Diseases	Viral Diseases	Clinical Malaria
Burns	Endocrine, Metabolic & Immunity Related diseases	Malaria & Other Anthropod Diseases	Injuries
Congenital Anomalies	TB	TB	Eye Diseases
Diseases of The Nervous System	ill-defined signs & Symptoms	ARI (Upper)	Scabies
TB	ARI (Other)	Signs, Symptoms, ill-defined Conditions	Malnutrition
Rickettsiosis	Diseases of The nervous System	Diseases of the blood & blood-forming organs	Measles
Signs, Symptoms & Il-defined Conditions	Diseases of the Digestive System	Diseases of the Nervous system	Bilharzia

Source: DOS 1989 and 1995

TABLE 41: TOP TEN CAUSES OF ALL-AGES MORTALITY IN ORDER OF PRIORITY

1995	1994	1993	1992
ARI	TB	TB	ARI (other)
STD	Malaria & other anthropod	Intenstinal Diseases	AIDS & HIV related Diseases
Injuries	Infectious Diseases	Malaria	TB
Clinical Malaria	ARI (other)	ARI (other)	Diseases of the other parts of the digestive system
Diarrhoea	Viral Diseases	Viral diseases	Infectious Diseases
Skin Diseases	Diseases of pulmonary circulation	Diseases of the Pulmonary circuation	Diseases of the Pulmonary circulation
Eye Diseases	Signs, symptoms & ill-defined Conditions.	Diseases of the digestive system	Diseases of the Urinary System.
Bilharzia	Diseases of the other parts of the Digestive system	Ill-defined conditions	Diseases of the Nervous system
Scabies	Diseases of the nervous system	Hypertensive Diseases	Other bacterial diseases
Hypertension	Cerebrovascular Diseases	Endocrine	Cerebrovascular Diseases

Source : DOS 1989 and 1995
HSAR 1995

In the above 5 years age group the leading cause of death was tuberculosis, which could be due to HIV-related conditions. Respiratory system diseases and tuberculosis were second and third in ranking. Intestinal infections diseases and clinical malaria and diseases of the pulmonary circulation were the other notable causes of death. Cancers are cause for concern with the majority of female deaths caused by cancer of the cervix. This stresses the importance of the cancer programme. Another non-communicable disease causing death in this age group was cerebro-vascular disease. Other causes of death are viral diseases (measles), diseases of the digestive system and ill-defined conditions. It should be noted that measles is affecting older children although the cold chain has been kept intact. Timely mass immunisation campaigns are needed to counter act this health problem.

Table 42 illustrates an overview of the deaths by cause for the target diseases per age-group as been recorded through the various sources of data collection methods in the National Health Information System. The same trends can be noted as in the previous tables.

TABLE 42: MORTALITY BY CAUSE FOR GLOBAL TARGET DISEASE AND OTHER DISEASES OF MAJOR NATIONAL PUBLIC HEALTH IMPORTANCE FOR 1985-95

1. Global Target Diseases

Disease/Con	Source	1985			1986			1987			1988			1989			1990		
		<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >
Acute respiratory infections	Vital Registration	658	300	1187	752	286	940	847	267	1325	862	298	1400	1165	310	1465			
	Routine Inpatient															545	530	480	
AIDS/HIV	Special Reports														33	77		120	359
Diarrhoeal diseases	Vital Registration	366	250	320	411	259	287	441	260	288	438	342	384	373	258	378			
	Routine Inpatient															145	188	302	
Malaria	Vital Registration	44	77		16	47	251	21	39	238	62	135	860	33	69	545			
	Routine Inpatient															56	52	413	
Measles	Vital Registration	84	183	101	106	243	143	35	8	148	69	104	113	44	72	113			
Tuberculosis	Vital Registration	8	46	570	31	33	668	22	26	711	46	48	902	39	55	992			
	Routine Inpatient															45	36	743	

Disease/Con	Source	1991			1992			1993			1994			1995		
		<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >
Acute Resp. Infections	Routine Inpatient	730	395	850	1366	437	881	783	839	943	1240	380	1239	1433	443	1430
AIDS/HIV	Special Reports		130	438		31	171									
Diarrhoeal diseases	Routine Inpatient	235	292	415	425	456	820	342	734	1383	315	451	1190	325	504	1136
Malaria	Routine Inpatient	69	61	374	57	39	489	91	186	1120	72	153	1299	69	135	1152
Tuberculosis	Routine Inpatient	26	48	1203	48	106	1520	65	158	1814	109	139	2460	95	115	2981

2. Other Diseases or Conditions of major Public Health Importance

Disease/Con	Source	1985			1986			1987			1988			1989			1990		
		<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >
Nutritional Deficiency	Vital Registration	80	453	57	95	426	142	118	563	192	149	798	242	132	492	180			
	Routine Inpatient																		
Cancers	Vital Registration	13	40	2341	7	33	2478	2	36	3159	8	43	2603	6	35	3158			
	Routine Inpatient																1	4	575
Heart Diseases	Vital Registration	1	0	1010	0	8	1154	2	7	1009	5	5	1086	3	2	1066			
	Routine Inpatient																0	3	249
Injuries	Vital Registration	198	289	3024	209	279	2989	151	275	3252	244	274	3273	224	304	3438			
	Routine Inpatient																61	20	203
Certain Perinatal conditions	Vital Registration	2848	0	0	2726	0	0	2862	0	0	2950	0	0	3268	0	0			
	Routine Inpatient																914	0	0

Disease/Con	Source	1991			1992			1993			1994			1995		
		<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >	<1	1-4	5 >
Nutritional Deficiency	Routine Inpatient	124	514	98	159	789	193	164	1078	212	134	524	96	169	687	123
Cancers	Routine Inpatient	5	2	372	5	63	422	2	6	299	1	5	290	2	1	291
Heart Diseases	Routine Inpatient	0	2	307	4	39	904	2	1	253	0	1	244	3	2	294
Injuries	Routine Inpatient	48	48	210	69	65	261	59	62	248	41	42	291	47	51	441
Conditions in Perinatal Period	Routine Inpatient	1043	0	0	1614	0	0	1101	0	0	1095	0	0	1148	0	0

Source : EDC-NHIS Unit, MOHCW, 1997

All indices of mortality among children in Zimbabwe generally showed a downwards trend at national level.

3.2.2.3. Maternal Mortality

Maternal mortality is defined as the death of a woman during pregnancy, childbirth and the first six weeks (42 days) post-partum, from any cause related to, or aggravated by pregnancy or its management, excluding accidents. The maternal mortality rate (actually a ratio) is calculated as the number of death of women of child bearing age divided by the number of live-births per 100 000. A similar decline as with the infant mortality has not happened yet with maternal mortality, which remains a great burden on family and society. The wide range of maternal mortality is a reflection of the risk of death, a woman is vulnerable to, when she becomes pregnant. Surveys and the census give an overview of the available estimates and are reflected in Figure 22.

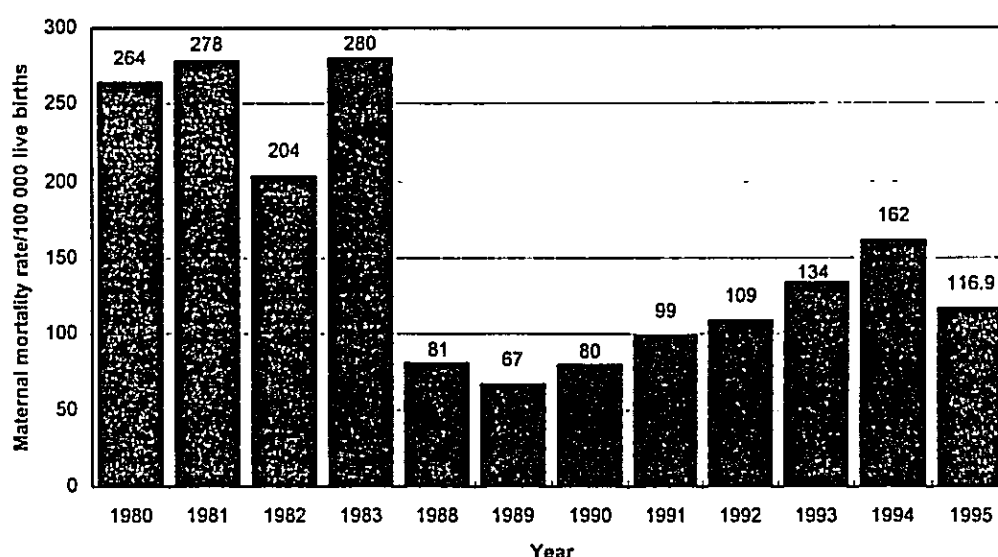


FIGURE 22: MATERNAL MORTALITY RATE/100 000 LIVE-BIRTHS 1980-95

Source : Routine Data T5
EDC-NHIS Unit MOHCW, 1997

While the rate of pregnancy-related deaths in health institutions, or institutional maternal mortality rate (MMR) declined from 264 per 100 000 live births in 1980 to 67 per 100 000 in 1989, the MMR increased steadily thereafter as noted in Figure 22. By 1993 the MMR had climbed to 134 per 100 000 per live births even up to 162 for 1994. The reasons for this are not clear although the increasing AIDS epidemic and growing economic burden might be responsible for some of the deaths as well as abortions. Since 1995 the MMR has been showing a declining pattern.

It should be noted that the institutional MMR excludes pregnancy-related deaths which do not occur in health facilities and therefore the level of maternal mortality is understated (in the three years preceding the ZDHS of 1994, 30% of the births did not happen in health facilities). Although community based studies found higher data, the

true MMR is still the subject of debate. The 1992 population census and the 1994 ZDHS showed MMRs above 250. The difference of 395 and 283 per 100 000 live births respectively is quite big. Given the growing incidence of HIV/AIDS among female and the association of pregnancy with HIV a decline in MMR is questionable. Routine data are useful for spotting trends and for the adjustment of programme policies, quality of services and assessment of the nature of the problem. To achieve the goal set by the MOHCW, to reduce the maternal mortality to 200 per 100 000 live births by the year 2000 including the reduction of the levels of maternal morbidity, the first priority is the improvement of the accessibility and quality of ante- and postnatal care.

The data available indicated that the MMR differs by rural/urban situation as indicated in Table 43. A community based survey placed the MMR at 88/100 000 live births for Harare and 168/100 000 for rural Masvingo (MBIZVO, 1994). The difference between the rural and urban data illustrates the importance of the distance people have to travel to get to a health facility in rural areas and the means of transportation available in an emergency situation. It shows also that delays in presenting to the health facility and the delays in diagnosis and management are contributory factors to the maternal fatalities.

TABLE 43: MATERNAL MORTALITY/100 000/PROVINCE, URBAN/RURAL 1992

	Rural	Urban	TOTAL
MANICALAND	452	398	447
MASH CENTRAL	-	560	399
MASH EAST	-	379	449
MASH WEST	297	302	516
MASVINGO	379	280	374
MAT. NORTH	320	414	328
MAT. SOUTH	280	282	280
MIDLANDS	380	249	355
BULAWAYO	-	241	241
HARARE	-	404	404

Source: MOHCW

The levels and trends in Maternal Mortality as provided in Table 44, may be explained through the summary of different studies conducted on maternal deaths. The studies of MacPherson (1981) and Brown (1978) are showing the importance of antenatal care in reducing the risk of maternal death. Crowther (1986) study reflected the possible improvement of socio-economic status of women after independence. Ashworth (1990) reported a MMR of 122/100 000 at Harare hospital, an increase from the 1983 figure of 114/100 000. It is however significant that the routine data collection by the MOHCW and the data collected through studies at Harare Hospital showed the same observation namely the decline in maternal mortality during the 1980s but an increase since 1990.

TABLE 44 : SUMMARY OF TRENDS IN MATERNAL MORTALITY/100 000 IN GREATER HARARE MATERNITY UNIT 1973-93.

Year	Rate	Death	Source	Title
1973	170	73	MacPherson	retrospective study over period 1972-73
1978	330	56	Brown	booked pat. 59/100 000
1983	114	51	Crowther	booked pat. 29/100 000 unbooked pat. 430/100 000
1987	122	39	Ashworth	study (1990)
1988	136	-	-	-
1989	219	-	-	-
1991	251	-	-	-
1992	335	-	-	-
1993	258	-	-	-

Source : Safe Motherhood in Zimbabwe, A Situation Analysis
MOHCW and UNICEF 1996
Routine data Harare Hospital Maternity Unit 1993

TABLE 45 : CAUSES OF MATERNAL DEATHS 1991-93

1991 (%)	1992 (%)	1993 (%)
Complications of abortion, ectopic & molar pregnancy (28%)	Infective and parasitic cond. Complicating pregnancy, childbirth & puerperium (14%)	Malaria (24%)
Postpartum haemorrhage (17%)	Postpartum haemorrhage (11%)	Infective and parasitic conditions complicating pregnancy, childbirth & puerperium (sepsis) (13%)
Hypertension, eclampsia (10%)	Hypertension, eclampsia (11%)	Postpartum haemorrhage (7%)
Complications during labour and delivery (10%)	Unspecified haemorrhage (8%)	Renal failure (6%)
Infective & parasitic conditions complicating pregnancy, childbirth & puerperium (sepsis) (7%)	Obstructed labour ruptured uterus (6%)	Unspecified haemorrhage (5%)
Complications during pregnancy not classified elsewhere (6%)	Malaria (5%)	Obstructed labour, ruptured uterus (5%)
Obstructed labour, ruptured uterus (3%)	AIDS-related causes (4%)	Hypertension, eclampsia (4%)
Complications during puerperal period not classified elsewhere (3%)	Cardiac arrest (4%)	Pneumonia (4%)
Antepartum haemorrhage (2%)	Cardiac failure (3%)	Pulmonary oedema (2%)
Intercerebral haemorrhage (2%)	Pulmonary oedema (2%)	Hypovolaemia (shock) (2%)

Source : Maternal Mortality Forms MOHCW

In Table 45 it is illustrated that the maternal conditions have the highest health burden, followed by STD and HIV with tuberculosis following. The maternal death causes can be direct or indirect. The direct causes arise from complications of pregnancy and indirect are conditions that are aggravated by the pregnancy. The top five causes of maternal death are haemorrhage, sepsis, abortion, ectopic pregnancy, pre-eclampsia or eclampsia. The indirect causes are viral hepatitis, anaemia, cardio-vascular diseases, diabetes, malaria and hypertension. The sexual transmitted diseases including HIV have become a very significant cause of morbidity among women. The increasing AIDS epidemic might be responsible for some of the maternal death. As a summary it

is noticed that the maternal mortality has declined after independence but is rising again. The maternal mortality rate seems higher for rural than for urban women especially for unbooked patients.

Based on the above observations and literature study, the major causes of maternal mortality in Zimbabwe can be summarised as :

- eclampsia
- abortion complications
- puerperal sepsis
- haemorrhage

Obstructed labour is not seen as a major cause of death (between 3 and 6% for the period 1991-1993). Various studies explored on the factors contributing to maternal death and whether these factors could be avoided. A classification of these factors include the social factors (divorce, head of household, inability to have support for pregnancy and delivery), reproductive risk factors (maternal age more than 35, failure to successful pregnancy), medical risk factors (haemorrhage, eclampsia), factors related to the health care delivery system (availability of doctor, distance to the health facility, transport inadequacy, lack of contraceptives, un-booked patients). (Mbizvo, 1994 ; Crowther, 1986 ; Brown, 1978 ; Fawcus, 1992).