ZAMBIA'S CHILDREN IN 1995

Key results of a survey to monitor progress towards goals for children
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Please note that, throughout the document, statistics are referred to by year. Information and data, where indicated, comes from the following sources.

1991 - Priority Survey I, CSO, Lusaka
1992 - Demographic and Health Survey, University of Zambia and CSO, Lusaka
1993 - Priority Survey II, CSO, Lusaka
The Government of Zambia is committed to the development of all of its citizens. In a poor country such as ours, the enhancement of human capacity is the key to sustainable improvements in the quality of people's lives.

Children are a particularly important part of this duty, as they are the nation's future. We have a moral responsibility to ensure that every child is given his or her right to education, health, security from abuse and exploitation, recreation and a free conscience.

The Government of Zambia has made a commitment to ensuring that these rights are enjoyed by all children. The Convention on the Rights of the Child was ratified by Zambia in 1991, obliging us to encompass children in our laws, policies, programmes and activities. To guide our national efforts in doing so, in 1994, the Government approved the National Programme of Action for Children (NPA) which sets out Zambia's major goals and strategies to bring about improvements in the lives of all of Zambia's children. Within the NPA, a number of Mid-Decade Goals were also set for achievement by the end of 1995.

In 1994, President Frederick Chiluba re-affirmed the Government's commitment to achieving the Mid-Decade Goals for Children. On 30 November 1994, the President committed himself and his senior colleagues to monitor progress towards these goals and to "ensure that these goals are not only achieved but sustained."

This report is a summary of the findings of the first year of such a monitoring programme. It highlights the key findings of a national survey carried out by the Food Security, Health and Nutrition Information System (FHANIS) of the National Commission for Development Planning in collaboration with the Central Statistics Office. The survey will be administered on an annual basis, providing us with a yearly assessment of the status of our children and will enable us to review progress towards child development goals and raise awareness of the importance of the National Programme of Action for Children. Through this action, we would like to create a broad alliance between Government, NGOs and all concerned organisations and individuals to meet the challenges we face in promoting rights and opportunities for our children, their future and the future of this nation.

Minister of Youth, Sport & Child Development

Hon Rev Dan Pule
Deputy Minister, National Commission for Development Planning
The information contained in this report is based on the results of two household surveys conducted by the Central Statistics Office (CSO) for the Food Security, Health and Nutrition Information System (FHANIS).

Both the urban and rural household survey questionnaire was designed by FHANIS with technical input from a number of key ministries. Both questionnaires collected information on:

- Household structure and composition
- Education
- Water and sanitation
- Health status and diarrhoea management
- Child immunization and Vitamin A supplementation
- Nutrition, child feeding practices, and salt iodisation
- Food security, consumption and expenditure
- Income sources

The rural questionnaire included additional questions on agricultural production and livestock, poultry and crop production.

The surveys were conducted in two stages. Interviews for the urban survey were held between 23 June and 7 July 1995 and for the rural survey between 13 August and 2 September 1995.

In total, 6,810 households were surveyed - 2,620 urban households in twenty-one districts of Zambia and 4,190 rural households nationally. A comprehensive report on the sampling methodology is contained in Annex 1.

Data from the rural questionnaires was entered and cleaned at the provincial level (with the exception of Central Province and a few districts in Southern Province). Urban data was entered in Lusaka at the CSO. Analysis of the data was conducted by researchers and statisticians at FHANIS and the CSO respectively.
To improve the status and promote the welfare of children, the Government pledged to achieve the following goals by the end of 1995:

- Ratify the Convention on the Rights of the Child. **ACHIEVED**
- Reduce 1990 levels of severe and moderate malnutrition by 20% or more. **ACHIEVED**
- Assist 40 target hospitals and clinics to achieve baby-friendly status as a strategy to ensure that all children are exclusively breastfed for the first six months of life. **ACHIEVED**
- Expand immunisation coverage against diphtheria, pertussis, tetanus, measles, poliomyelitis and tuberculosis to 80% or more of children. **ACHIEVED**
- Ensure that at least 80% of children under two are receiving adequate Vitamin A through a combination of breastfeeding, dietary improvement, fortification and supplementation. **ACHIEVED**
- Achieve iodisation of all salt for human and animal consumption. **ACHIEVED**
- Ensure that 80% of diarrhoeal cases are treated with oral rehydration therapy (increased fluids) and continued feeding. **ACHIEVED**
- Increase primary school enrollment and retention rates to at least 80% of school-age children. **NOT YET ACHIEVED**
- Improve enrollment and retention of girls in primary education to reduce the current disparities between girls and boys. **NOT YET ACHIEVED**
- Increase access to clean water for 50% of rural and 100% of urban households by the year 2000. **NOT YET ACHIEVED**
- Increase access to sanitary means of excreta disposal for 50% of rural and 100% of urban households by the year 2000. **NOT YET ACHIEVED**
- Reduce poverty and provide support to children, women and families living in especially difficult circumstances. **NOT YET ACHIEVED**
Good health is essential for the growth and development of children. Without an adequate diet and proper child care or protection from disease, children are unlikely to grow normally and may suffer from malnutrition. Physical and mental growth and development are fastest during the first few years of a child’s life, to the extent that chronic malnutrition may result in a reduction of mental and physical growth and development. Research has shown that malnourished children have poor school performance and often grow into adults with a reduced work capacity. The implication is far reaching. A country with a high incidence of chronic malnutrition is more likely to rely on a labour force whose work output is low and therefore find it difficult to increase economic growth.

Malnutrition is caused by one or a combination of factors. The most immediate causes are disease and poor dietary intake. These in turn are caused by household food insecurity, inadequate child care, poor health environment and lack of access to health services. These underlying factors are influenced by general economic, social and cultural conditions.

In Zambia today, nearly one in every five children born alive, dies before five years of age. Many of these deaths are due to preventable diseases. Children who are not fully immunised and those whose diets are poor are vulnerable to infections, easily become sick and are more likely to die due to minor illness than well nourished children.

Children receiving inadequate diets tend to suffer from micronutrient deficiencies (iodine, Vitamin A, iron, etc.). A diet that is deficient in Vitamin A causes poor growth, apathy, poor mental development and can cause irreversible blindness. Vitamin A deficiency increases mortality in children especially those suffering from diarrhoea and measles. It can be prevented by the inclusion of dark green vegetables in the diet. However, the problem in Zambia is not due to the low intake of leafy vegetables, but rather lack of dietary oil intake which is essential for the absorption of the vitamin. In the short term, the provision of Vitamin A capsules, which are presented in an oil rich medium, is one of the most effective ways of ensuring that at-risk children are able to absorb and utilise this essential nutrient. The long term solution is ensuring that dietary intake of oil is increased.

Iodine, an important component of the thyroid hormone, supports growth of all cells including brain cells. It’s deficiency can lead to debilitating conditions, permanently affecting children’s mental and physical development, and endangering the lives of millions of children worldwide every year. The content of iodine in the food depends upon the amount of iodine in the soil. Generally, the soils in Zambia are deficient in iodine, and hence the major sources of food will not provide sufficient amounts of iodine. As a result, the provision of iodised salt has become an adopted public health practice throughout the world.

Growing poverty, frequent childbirth, and AIDS deaths are putting an increasing strain on families. Under such conditions, children are more likely to suffer poor health and malnutrition. This, however, can be alleviated through provision of primary health care services and better education of mothers and care givers concerning baby and child care, breastfeeding, weaning, immunisations and diarrhoea treatment. Promoting baby-friendly hospitals, providing immunisation facilities, distributing Vitamin A supplements to particularly vulnerable groups, and ensuring all salt is iodised can improve child health and nutrition, even in a poor country.

Ensuring that our children are healthy is a moral responsibility, adopted by Zambia along with 165 other countries, through the ratification of the UN Convention on the Rights of the Child. Prioritising children’s health is also crucial in building the nation’s future and securing a sure path towards improved human, social and economic development.
Malnutrition, especially in the early years of life, reduces a child's mental and physical growth and development. Malnutrition makes children more susceptible to disease. They are more likely to die even from minor illnesses. Children with milder forms of malnutrition have twice as much risk of dying than those who are well nourished. The risk is tripled for moderately malnourished children.

Chronically malnourished children tend to be stunted (a low stature for a given age). By measuring children’s height-for-age, it is possible to determine whether they are suffering from chronic malnutrition or growing normally. Stunting does not vary by season, and can be compared over time. Other measures such as weight-for-height fluctuate according to short term food availability or illnesses, which can confuse comparisons for both urban and rural children. Height is compared to an international standard for all ages, and cases less than two standard deviations from this norm count as moderately malnourished, whilst those less than three away are considered severe.

Chronic malnutrition has risen in recent years. Currently, 53% of Zambia's children suffer from chronic malnutrition.

- At present, 53% of all children under five years of age are stunted and therefore chronically malnourished. Thirty per cent of all children are severely stunted. These rates of malnutrition have increased steadily over the past few years. Chronic malnutrition has increased from 40% in 1992 and 48% in 1993 to current levels.
- In urban areas, following a decrease in malnutrition rates from 1991 to 1992, the rates of urban malnutrition have risen from 39% to 44% in 1995. In rural areas, this has risen from 52% in 1992 to 60 percent in 1995.
- Far from reaching the stated goal for mid-decade progress, Zambia has seen a rise in malnutrition of 8% in rural areas, and 5% amongst urban children.
Breastmilk is the best food for babies and contains all of the nutrients that a child requires during the first six months of life. Early introduction of supplementary food, or plain water, increases the risk of diarrhoea and other sickness in young children. Infants who are not exclusively breastfed for the first six months of life have a 10 to 15 times greater chance of dying. Breastmilk contains antibodies that protect infants from illness. Breastfeeding also delays conception which improves child spacing.

- Breastfeeding is universal in Zambia (98%), and extends for over a year. Currently, the national mean duration of breastfeeding is 18 months and has not changed since 1992. Rural children are breastfed for a longer period (19 months) than urban children (17 months). A worrying trend is the decline in the mean duration of breastfeeding of urban children from 18 to 17 months between 1992 and 1995.

Only 13% of infants under two months were exclusively breastfed in 1995 compared to 16% in 1992.

- Exclusive breastfeeding in Zambia is uncommon and is not maintained for long enough. Only 13% of infants under two months were exclusively breastfed in 1995 compared to 16% in 1992. Bottle feeding is rare. Only 3% of infants under two months were bottle fed in 1995.

- FHANIS data indicates that by six months, 12% of infants are exclusively breastfed compared to 3% in 1992 and the incidence of exclusive breastfeeding is greater in rural areas (14%) than in urban areas (10%). However, while this may suggest an increase in the duration of exclusive breastfeeding, the survey was not able to capture the number of infants that are being given plain water in addition to breast milk. In 1992, this was as high as 68% of all children under the age of two months.

- The 'baby friendly' hospital initiative is a strategy aimed at improving exclusive breastfeeding during the first six months of life for all infants. By end of February 1996, 40 targetted hospitals were designated as Baby Friendly, including the University Teaching Hospital.

There is a need to promote awareness and a conducive environment to support exclusive breastfeeding during the first six months of life.
Most of the major causes of morbidity and mortality among children in Zambia are preventable. Without immunisation, three out of every 100 children will die of measles, and one out of every 200 children will be disabled by polio. Immunisation reduces the burden of illness, risk of death, and an inevitable drain on health service and family budgets.

A full 85% of children aged 12-23 months have received all of the major vaccinations compared to 67% in 1992.

- In 1995, 99% of children aged 12-23 months have been vaccinated against tuberculosis (BCG), 90% have received all three doses of DPT and polio vaccines, and 96% have been vaccinated against measles. Compared to 1992, immunisation has increased by 4% for BCG, 13% for three doses of DPT, 14% for polio and 19% for measles. Currently, 85% of children age 12-23 months have received all vaccinations compared to 67% in 1992.

Nationally, 44% of women aged 15-49 years received at least two doses of tetanus toxoid during pregnancy in 1995 compared to 39% in 1992.

- Nationally, 44% of women aged 15-49 years received at least two doses of tetanus toxoid during pregnancy in 1995 compared to 39% in 1992. Unlike in 1992, more rural women (74%) received at least two doses of tetanus toxoid than urban women (40%) in 1995.
Iodine and Vitamin A are nutrients required by the body in minute quantities to ensure health. Both can be derived from a well-balanced diet. Iodine deficiency results in high pregnancy wastage through stillbirths, mental and growth retardation of unborn babies. Young children suffer from mental retardation and growth failure as a result of the deficiency. Iodine deficiency can account for the loss of 10-15 IQ points, and globally it is the largest cause of preventable mental retardation. Similarly, Vitamin A deficiency causes impairment of vision and blindness, and increased susceptibility to diseases and mortality in young children. It is a leading cause of preventable blindness.

Improvement in iodine nutrition improves learning ability and school performance of children, as well as helping them achieve their mental and growth potential. Improvement in Vitamin A nutrition improves vision and reduces susceptibility to childhood illnesses and deaths.

**Currently, 90% of households in Zambia use iodised salt.**

- Currently, 90% of households in Zambia use iodised salt. More urban households (93%) use iodised salt than rural households (87%). There is no baseline with which to compare the 1995 findings. A 1994 Act of Parliament stipulates that all imported salt should be adequately iodised.

**Nationally, 94% of children under two years of age received a Vitamin A capsule in 1995.**

- Nationally, 94% of children under two years of age received a Vitamin A capsule in 1995. Virtually all urban children (99%) and 92% of rural children received Vitamin A supplementation. Sixty-three per cent of the children in this age cohort received a Vitamin A capsule within six months of the survey.

There is a high use of iodised salt and a high supplementation of Vitamin A in Zambia which, if sustained, can lead to the eradication of iodine and Vitamin A deficiencies.
**DIARRHOEA**

Diarrhoea is a major cause of morbidity, malnutrition and mortality among children in Zambia. Severe diarrhoea causes dehydration, which increases the risk of circulatory failure and death. Dehydration and death can be prevented by adequate rehydration and feeding.

The proportion of diarrhoea treated with fluids, ORS or recommended home fluids increased from 76% to 99% between 1992 and 1995.¹

- Mothers commonly give their children fluids during diarrhoea episodes. The proportion of diarrhoea episodes treated with fluids (ORS or recommended home fluids) increased from 76% in 1992 to 99% in 1995. Use of ORS has remained about the same between 1992 (53%) and 1995 (54%). However, the use of home fluids during diarrhoea has increased from 23% in 1992 to 45% in 1995.

- Twelve per cent of children under five years of age suffered from diarrhoea during the two weeks prior to the survey in 1995, compared to 23% in 1992. Prevalence is higher in rural areas (14%) than in urban areas (9%). However, data in 1995 was collected when diarrhoea incidence is low (July-August), whilst in 1992 it was collected when incidence is high (January-May) therefore, the two are not directly comparable.

Currently, only 28% of children with diarrhoea receive increased fluids and continued feeding.

- The need to increase fluid intake during diarrhoea is not well appreciated. The proportion of diarrhoea episodes which received increased fluids declined from 46% in 1992 to 29% in 1995. The decline was greater in urban areas (by 20%) than in rural areas (15%). Currently, only 28% of children with diarrhoea receive increased fluids and continued feeding.

There is a need to increase awareness among mothers to give more fluids and to continue feeding during diarrhoea.

¹Recommended home fluids include: sugar and salt solution, soups, yougurt, soft drinks, rice water, munkoyo/chibwantu, stock and fruit juice.
In Zambia, the education sector received heavy investment after independence, and schools were constructed throughout the country. In recent years, however, recurrent costs for the sector have escalated beyond available resources, and the quality of education has fallen. The growing population has meant that an initially large number of school places are now no longer sufficient to take in all children.

Throughout the world, education is critical for future development. It builds self-esteem and the skills needed to improve individuals, families and the nation. Educated individuals tend to earn higher incomes and integrate health, nutrition and family planning information into their lifestyles. Consequently, better educated people make better health choices and enjoy healthier lives than non-educated individuals. Education for girls is particularly important. Prioritising the enrolment and retention of girls in school is critical as the first step in promoting equal opportunities for women in Zambia. It has been proven that increased education for girls has a dramatic impact on their subsequent achievements and on the status of their families - socially, economically and health-wise.

A girl who completes her basic education is more likely to get married at a later age, have fewer, healthier and better-educated children and take more advantage of basic social and health services. Educated women make ante-natal care visits earlier in pregnancy compared to non-educated women. They also tend to be more knowledgeable about the importance of child care and nutrition and therefore are able to maintain a healthier environment for their children. An educated girl will gain the skills and self-confidence to make her a better parent, worker and citizen which is important for the family, and also the nation.
Education is the first step towards empowerment and is fundamental to development. Households with more education tend to have more income, have more access to and utilise health and nutrition information and therefore enjoy healthier lives.

School attendance in rural areas continues to be lower than in urban areas with only 67% of rural primary aged children in school compared to 84% of urban primary aged children.

- In 1991, 70% of children aged seven to thirteen attended school. This rose to 74% in 1993 and has remained at that level in 1995.
- In urban areas, school attendance for primary aged children increased from 82% in 1991 to 84% in 1993, and has remained at that level in 1995. In rural areas, although school attendance improved between 1991 and 1993 from 60% to 67%, one third of primary aged school children are still not in school in 1995.

Forty-nine per cent of children start grade one at age eight or more, reducing their chances of finishing primary school.

- If a child starts school late, they are at greater risk of not completing the targeted seven grades. Although school attendance rises from 50% for seven year olds, to 80% by 10 years of age and 83% at 12 years of age, the increase in attendance for each successive age is achieved by enrolling older children in grade one. At present, 50% of children in grade one are older than seven years of age. Delays in starting school are often due to a lack of places. In rural areas, parents may also be reluctant to allow small children to walk long distances to school, and opt to delay registration.
- If children start school at seven years of age and continue through the grades, they should have reached grade seven or eight by the age of 14. In 1995, 40% of urban 14 year-olds and 72% of rural 14 year-olds attending primary school were in grade six or below, and thus behind in the primary education cycle.
- Progression rates reveal whether pupils are managing to move up through the grades. In urban areas, 8% of children are currently repeating grades, or have previously been in a higher grade. In rural areas, this is only 5%.
Improving girls' education not only has an intrinsic value, but ultimately promotes improved family welfare and child health (including family planning). Educated women make better choices for themselves and their families, particularly regarding health and nutrition. Several studies have shown that an investment in girls' education is an investment in the family, community and nation. Educating girls enables them with the skills and self-confidence to become better parents, workers and citizens and is the first step toward achieving equal opportunities for women and men in Zambia. Moral and practical reasons combine to make it imperative to overcome barriers to girls' education in the community and in the classroom.

By the age of 14, 22% of urban girls and 32% of rural girls are out of school compared to 15% of urban boys and 23% of rural boys in the same age group.

- Nationally, the same proportion of girls and boys of primary school age are currently enrolled - 74% of seven to 13 year-olds attend school, whilst 26% do not. In both urban and rural areas there is no difference in attendance of this age group between boys and girls. Of pupils in grade one, exactly half are girls. This suggests that there is little difference in access to education between boys and girls.

- In both urban and rural areas, the attendance rates of boys and girls remain similar up to the age of 13. However, by 14 years of age, more girls are out of school than boys of the same age group. At age 14, 22% of urban girls are out of school compared to 15% of urban boys. In rural areas, 32% of girls are out of school at the age of 14 compared to 23% of boys. By age 15, the gap in school attendance between boys and girls widens even further, especially in urban areas. There is an 11% difference in attendance between 15 year-old girls and boys in urban areas and a 9% difference for their rural peers.

- Girls begin school at an earlier age and do better than boys at maintaining the correct grade for their age. However, once in their early teens, the tendency for girls to drop out is greater than for boys. By age 14, 10% of boys are in grade seven compared to 19% of girls. The trend is the same in both rural and urban areas.
There is a high health risk associated with poor access to safe drinking water and sanitation. It is estimated that worldwide, inadequate water supply and poor sanitation accounts for nearly 30% of the total burden of disease in poor countries. Improvements in water supply and sanitation may reduce this burden by almost a quarter. Safe water is free from disease-causing germs. Equally, safe sanitation carries minimum risks of disease transmission through human waste.

In this report, safe water is taken to mean clean water which is defined as being from a source with the least chances of contamination. Piped water, protected wells and bore holes are considered to be clean sources. Likewise, safe sanitation refers to the use of sanitary facilities with a minimum risk of disease transmission. This includes pit latrines, flush toilets and aqua privies. These definitions of safe water and sanitation have been used to enable comparisons with past surveys, e.g. PSI and PSII.

A further definition was used in the report which incorporates time taken to obtain water and distance to sanitary facilities. The value of safe water and sanitation may be compromised by the time taken to fetch water and the distance to the sanitary facility. In this report, a water source is convenient if it takes 45 minutes or less to obtain water (in a round trip) and a sanitary facility is convenient if it is situated within 10 metres of the home.

There are other factors, however, that affect convenience. Water disruption is an aspect which often forces households to turn to unsafe and inconvenient alternative sources of water, especially in urban areas. Likewise, the sharing of sanitary facilities by more than one household increases the risk of disease transmission.
Poor access to clean water is associated with a high risk of disease. Inadequate water supply combined with poor sanitation accounts for nearly 30% of the total burden of disease in poor countries. Improvements in water supply and sanitation can reduce death from diarrhoea by 65% and overall child mortality by 55%.

Currently, 53% of households in Zambia have access to clean water compared to 50% in 1991.

- Currently, 53% of households in Zambia have access to clean water compared to 50% in 1991. There is a large disparity in access to clean water between urban and rural areas. Eighty-five per cent of urban households have access to clean water compared to only 27% in rural areas. Access to clean water has declined in urban areas from 90% to 85%, while in rural areas it has increased from 20% to 27% between 1991 and 1995.

- Nationally, only 27% of households have access to a clean and convenient source of water in 1995. Using this definition, 50% of urban households have access to a clean and convenient source of water compared to 17% in rural areas.

- Although a high proportion of urban households have access to clean water, many face water disruptions of varying duration. A quarter of all urban households with safe water reported a disruption within the week prior to the survey. This disruption was for more than half a day for a fifth of the households. Seventy-nine per cent of the urban households who suffered a water disruption lost access to a clean and convenient source of water.

It is clear that more work is needed, especially in rural areas, if the goal set for the year 2000 is to be achieved. Constraints that hinder expansion of access to clean water include issues of convenience and disruption.
Unsafe disposal of human waste poses a threat to health. Poor sanitation promotes faecal-oral transmission of disease. Improvements in sanitation have the potential to reduce the burden of disease, especially in poor communities. The benefits are even greater if improvements in sanitation are accompanied by improvements in water supply.

Sixty-four per cent of households have access to a safe and convenient sanitary facility but 31% of them share it with other households. More households share sanitary facilities in urban areas (36%) than in rural areas (26%).

- Nationally, access to a safe sanitary facility has increased from 74% to 80% between 1991 and 1995. Although urban households have better access to safe sanitation, rural households have experienced a larger improvement of 8% (56 to 64%) compared to 2% (96 to 98%) shown by urban households between 1991 and 1995.

- Only 64% of the households nationally have access to a safe and convenient sanitary facility in 1995 with 88% access in urban areas and 43% access in rural areas.

- Of the households who used a safe sanitary facility nationally in 1995, 31% of them shared it with other households. More households share sanitary facilities in urban areas (36%) than in rural areas (26%).
The family is the basic unit of social organisation. It comprises persons related by blood or marriage living within a household unit. Families make up communities and the nation. The family provides social security to members who are unable to work and provide for themselves. These include young children, the sick, the disabled and those that are too old to work - people who make their contribution to the welfare of the family during their working years.

A stable and secure family environment is one of the most important aspects of a young child's development. It is the main source of information, knowledge, attitudes and skills for children, especially during their formative stage of development.

In recent years, economic uncertainty and financial difficulties have increased as a result of economic restructuring and the impact of HIV/AIDS. Households have come under increasing stress to cope with changing realities which often means providing for more people (relatives, orphans, etc.) with fewer means. The number of households headed by women or children is increasing in both urban and rural areas and these households consistently tend to be poorer, with less access to productive employment, services and opportunities.

The survival of the nation depends on the ability of the family to produce and reproduce a constant supply of healthy, productive and creative individuals to build and support the economic, political and social development of the country.
The family is the most important social unit and provides social and economic security to members of society who find it difficult to meet their basic needs. This includes elderly people and the disabled as well as very young children who are dependent on others in the first five years of life to provide them with a healthy and nurturing environment in which to grow and develop. The ability of families to provide this environment in Zambia is becoming increasingly dependent on their ability to cope with escalating poverty and increasing illness.

- Zambia has a young population, with few workers supporting many non-workers. The 1990 Census found that 20% of the Zambian population comprised of children under the age of five years and nearly 50% of the total population under 15 years of age.

- Most children live in large families. The average household size in Zambia is 5.6 people. Urban households tend to be larger than rural households. Although, 8% of urban households received a new 'permanent member' within six months of the survey in 1995, the average household size reduced from 6.0 in 1992 to 5.7 in 1995. In rural areas, household size increased from 5.3 in 1992 to 5.5 in 1995. Overall, households headed by women are smaller, with an average of 4.5 members compared to 5.9 for those headed by men.

Eight per cent of urban households received a new 'permanent member' within six months of the survey in 1995.

- Nationally, the proportion of female-headed households has increased from 16% in 1992 to 20% in 1995. Female-headed households are more common in rural areas, where the proportion has increased from 19% to 22% between 1992 and 1995. In urban areas female-headed households increased from 13% to 17% over the same period of time.

- Eight per cent of all households in Zambia reported a death within six months of the survey in 1995. Nine per cent of rural households reported at least one death in the household within six months of the survey compared to 7% for urban households. Nineteen per cent of all households who reported a death had two or more deaths during the six months of reporting. The average number of deaths was higher in rural areas (1.2) compared to urban areas (1.1).

- Two thirds of Zambian households are poor and 55% are so poor that they are unable to afford an adequate diet even if they spent their total income on food. Yet in 1995, only 3% of urban households received some kind of support from either public welfare assistance scheme, food for work, NGOs or churches. In rural areas, the largest source of assistance was in the form of remittances from other family members. About 8% of rural households received some kind of support from relatives compared to less than 2% who reported assistance through public welfare assistance, food for work, NGOs or churches.
Zambia was not able to reach all of the goals that it set for itself by the end of 1995, however, many important achievements have been made. In the area of immunisation, iodisation of salt, and Vitamin A supplementation, Mid-Decade Goal targets were reached, sustained and even surpassed in some cases, in a very short period of time. Clearly, where there is government interest, commitment and investment a great deal can be achieved.

The FHANIS surveys have also revealed that, at this time, there are several critical issues that need greater attention:

- Malnutrition, particularly severe malnutrition, is escalating in both rural and urban areas. The need to address this issue is urgent. The long term impact of malnutrition on children, and the population as a whole, can be debilitating to both the physical and economic health of the country.

- Improving the health and nutrition of Zambia’s children also requires stronger advocacy in the area of exclusive breastfeeding and proper diarrhoea management. These goals can be easily achieved in Zambia if everyone is empowered with practical knowledge to improve health care, nutrition, basic hygiene and their own immediate environment. Simple interventions such as these are crucial to the health of Zambia’s children.

- Primary school enrolment also remains well below Zambia’s stated Mid-Decade Goal and girls continue to drop out or be pushed-out of the formal education system before boys. Stagnating enrolment rates, also mask other important indicators pertaining to the quality and relevance of education in Zambia. Shortage of school places, late enrolment of children, and a shortage of teachers are some of the factors contributing to a rapid decline in the quality of education nationwide. These issues are becoming increasingly important in rural areas and must be monitored and remedied for the future.

- Finally, all of Zambia’s population urgently needs access to a safe, reliable, and convenient source of water to meet their basic, daily needs. The economic potential that is being consumed by the time taken for women to collect water, is a hindrance to national development. Furthermore, the health status of the population will continue to suffer until every household has access to a safe and convenient means of sanitation.

The Government can take steps to assist Zambia in reaching its targeted goals by the year 2000. Greater sharing of information is crucial to enable people to take action to improve their lives. Timely monitoring of key human development indicators and strong advocacy at the district and national level is urgently required to improve policy planning and implementation. Finally, a clear and practical poverty reduction strategy is of paramount importance at this crucial juncture in Zambia’s history - for the future of Zambia’s children.
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<tbody>
<tr>
<td>Population</td>
<td>9,098,600</td>
</tr>
<tr>
<td>Children under 5 years</td>
<td>1,802,300 (19.8%)</td>
</tr>
<tr>
<td>Women 15 to 49 years</td>
<td>2,217,400 (24.4%)</td>
</tr>
<tr>
<td>Sex ratio</td>
<td>84 males to 100 females</td>
</tr>
<tr>
<td>Rural / urban ratio 1990</td>
<td>62/38</td>
</tr>
<tr>
<td>Fertility rate 1992</td>
<td>6.7</td>
</tr>
<tr>
<td>Population growth rate (%)</td>
<td>3.1</td>
</tr>
<tr>
<td>Life expectancy (years)</td>
<td>46.9</td>
</tr>
</tbody>
</table>
The Questionnaire

Two questionnaires were used for the FHANIS survey, a rural household questionnaire and an urban household questionnaire. The rural household questionnaire was based on the urban questionnaire but was modified to include additional questions on agricultural production and livestock, poultry and crop production.

Both questionnaires were used to collect information on:
- Household structure and composition
- Education
- Water and sanitation
- Health status and diarrhoea management
- Child immunisation and Vitamin A supplementation
- Nutrition, child feeding practices, and salt iodisation
- Food Security, consumption and expenditure
- Income sources

The Sample

The Food Security, Health and Nutrition Information System (FHANIS) Survey covered both rural and urban areas of Zambia, sampling a total of 6,810 households.

In urban areas, a three stage sampling procedure was used when selecting the sample. First, urban districts were selected using probability proportional to size. Secondly, standard enumeration areas (SEA) were defined from low, medium, high density and peri-urban areas which had been stratified using population density as a measure. Probability proportional to size was used to define these SEAs. All households were listed within the selected SEA and finally, 20 households were selected from each using a linear systematic sampling procedure. Altogether 131 SEAs were covered and 2,620 urban households were interviewed in twenty-one districts of Zambia.\(^1\)

The sample for the rural component of the survey was based on the Crop Forecasting Survey (CFS) conducted during the 1994/95 agricultural season. This was to allow FHANIS to use agricultural related data collected by the CFS. The CFS drew from a sample of 407 rural SEAs (of a total of 13,000 SEAs) using probability proportional to size. The number of agricultural households was the measure of selection. After listing, households in each standard enumeration area were stratified into three categories: small, medium and largescale farmers. Twenty households from the small and medium scale farmers were selected in each SEA. No large scale farmers were selected.

The FHANIS survey randomly selected 215 of the 407 SEAs covered during the Crop Forecasting Survey and interviewed all 20 households in each sample SEA. If households had moved, they were replaced by households listed previously during the CFS. Altogether 214 SEAs were covered and 4,190 households were interviewed during the rural household survey. The rural survey was conducted in all districts of Zambia. Because the sampling procedure for the rural and urban areas was slightly different and the rural area was over sampled, weighting factors have been calculated to present the national figures.

Fieldwork

Before the field work began, a five day training of Master Trainers was conducted at the Central Statistical Office for each of the questionnaires, both urban and rural. Following this, training of the field enumerators and provincial based staff was conducted by the Master Trainers in the provinces. The field work was conducted by 132 field enumerators in the urban areas and 216 enumerators in the rural areas. Each province was supervised by one Master Trainer and the Provincial Statistical Officer. District Statistical Officers were responsible for supervision at the district level.

For the urban component, listing of households in the selected SEA was conducted between 17

\(^1\) The twenty-one districts covered were: Lusaka, Ndola, Kitwe, Chingola, Luambya, Chililabombwe, Kabwe, Mumbwa, Chipata, Petauke, Mansa, Nchelenge, Kasama, Luwingu, Mporokoso, Solwezi, Monga, Sesheke, Choma, Namwala and Livingstone.
June and 21 June 1995. Interviews began on 23 June and were completed on 7 July 1995. Field work for the rural household survey was delayed due to logistical constraints and was conducted between 13 August and 2 September 1995 (listing was not necessary as the sample was based on the Crop Forecasting Survey). Enumerators were given a list of households from the Crop Forecasting Survey to replace those households which may have moved.

Data Entry and Processing
Questionnaires from the rural household survey were keyed in at the provincial centers by provincial data entry clerks who attended the training for field enumerators. Four programmers from the Central Statistical Office visited the nine provincial capitals to install the data entry screen and the CONCOR programme that was used for cleaning and checking the data. Data entry clerks were also trained on how to use the software at this time. Except for Central Province and a few districts from Southern province, all the rural data was keyed in by provincial based data clerks.

IMPS (Integrated Microcomputer Processing System) was used for data entry. IMPS has three parts, CENTRY which is used for data entry and verification, CONCOR for range skip and consistency checks in the data and CENTS for tabulation. The CONCOR programme was run at the provincial level before sending the diskettes and the questionnaires to Headquarters in Lusaka. This was repeated in Lusaka before merging the provincial data.

The urban data was entered in Lusaka by the data entry clerks based at the Central Statistical Office Headquarters. Procedures which were applied during data entry for the rural household survey were also followed during entry of the urban household data. The Statistical Package for Social Sciences (SPSS) was used for tabulation and analysis.
ZAMBIA'S MID-DECADE GOALS FOR CHILDREN

To improve the status and promote the welfare of children, the Government pledged to achieve the following goals by the end of 1995:

- Ratify the Convention on the Rights of the Child. **ACHIEVED**
- Reduce 1990 levels of severe and moderate malnutrition by 20% or more. **NOT YET ACHIEVED**
- Assist 40 target hospitals and clinics to achieve baby-friendly status as a strategy to ensure that all children are exclusively breastfed for the first six months of life. **ACHIEVED**
- Expand immunisation coverage against diphtheria, pertussis, whooping cough, measles, poliomyelitis and tuberculosis to 80% or more of children. **ACHIEVED**
- Ensure that at least 80% of children under two are receiving adequate Vitamin A through a combination of breastfeeding, dietary improvement, fortification and supplementation. **ACHIEVED**
- Achieve iodisation of all salt for human and animal consumption. **ACHIEVED**
- Ensure that 85% of diarrhoeal cases are treated with oral rehydration therapy (increased fluids) and continued feeding. **ACHIEVED**
- Increase primary school enrollment and retention rates to at least 80% of school-age children. **NOT YET ACHIEVED**
- Improve enrollment and retention of girls in primary education to reduce the current disparities between girls and boys. **NOT YET ACHIEVED**
- Increase access to clean water for 50% of rural and 100% of urban households by the year 2000. **NOT YET ACHIEVED**
- Increase access to sanitary means of excreta disposal for 50% of rural and 100% of urban households by the year 2000. **NOT YET ACHIEVED**
- Reduce poverty and provide support to children, women and families living in especially difficult circumstances. **NOT YET ACHIEVED**