

ZAMBIA HUMAN DEVELOPMENT REPORT 2003

**Eradication of Extreme Poverty and Hunger in Zambia: An Agenda for
Enhancing the Achievement of the Millennium Development Goals**



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Foreword

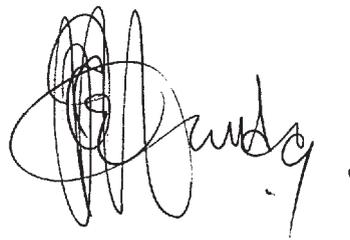
The fight against poverty and hunger will determine whether Zambia joins modern and progressive nations of the 21st Century or she is relegated to the dark ages, her people continuing to suffer deprivations that should long have been consigned to the pages of history. The Zambian Government, under its New Deal leadership, is determined that poverty and hunger in their extreme form are completely eradicated. Zambians deserve to enjoy a decent standard of living reflective of the great natural resource endowment of their country. They also deserve to enjoy other human choices, particularly the choices of a long and healthy life and to be knowledgeable and join the information explosion of the 21st Century.

I therefore wish to welcome the Zambia Human Development Report (ZHDR) 2003 and its focus on the reduction of poverty and hunger as the first step to fulfil the Millennium Development Goals. The report has come at the time when Zambia is implementing the Poverty Reduction Strategy Paper (PRSP), to run for three years until 2004. For the Zambian Government, fighting poverty and hunger is top on the development agenda. Therefore, the Transitional National Development Plan is built around the Poverty Reduction Strategies. The message is that, from now onwards, all the actions that the Zambian Government will take are to be measured by their impact on poverty and hunger.

This report brings renewed hope that extreme poverty and hunger can be eliminated. By giving examples of where poverty and hunger are being fought successfully and pointing out the

necessary pre-conditions that account for these successes improved accessibility, provision of integrated technologies and decentralisation and empowerment the ZHDR 2003 provides a simple and yet compelling message: we need to learn from what is already working on the ground. Although we can learn from outside, we already have within the country the needed answers. The challenge is to make localised successes even more wide-spread. There is no innovation required except to bring our institutions closer to the people and expand opportunities for people's participation as well as make all of us that govern at all levels more accountable to the people we serve.

I wish to acknowledge the partnership between Zambia and the United Nations Development Programme, as shown in the collaborative effort to produce this report. I express gratitude to all who played a role. I congratulate the Advisory Committee, comprising a wide representation from the Government, traditional rulers, civil society, UN institutions and academia. I also congratulate the Review Team and the consultants who worked on the report.



Hon. George Kunda, SC, MP
Acting Minister of Finance and National
Planning

Preface

Eradication of Extreme Poverty and Hunger is the theme of the Zambia Human Development Report (ZHDR) 2003. The selection of this theme recognizes that this is one of the greatest challenges facing Zambia today. The Zambian Government, with the participation of different stakeholders, has formulated the Poverty Reduction Strategy Paper (PRSP) to provide a co-ordinated and holistic framework for combating the problem in the period 2002 to 2004. Under the PRSP, Zambia has committed herself to reducing the proportion of the population that live in poverty to 65% by 2004.

Poverty and hunger have been recognized as a global problem. With the leadership of the United Nations, world leaders adopted, in September 2000, a set of inter-related goals contained in the Millennium Declaration to help forge global will to uplift the quality of life in developing countries such as Zambia.

The eradication of extreme poverty and hunger is one of the eight Millennium Development Goals (MDGs). The other MDGs are: achievement of universal primary education; promotion of gender equality and empowerment of women; reduction of child mortality; improvement of maternal health; combating HIV/AIDS, malaria and other major diseases; ensuring environmental sustainability; and, developing global partnerships for development.

By signing the Millennium Declaration, Zambia committed herself to halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day and the proportion of people who suffer from hunger. The ZHDR 2003 confirms that the levels of poverty and hunger in Zambia are very high and widespread, with no area left untouched. In

1998, 73% of Zambia's population were classified as poor, of whom 58% were extremely poor. In the same year, nearly 60%, or 1.1 million households, suffered from food insecurity. This resulted in very high malnutrition levels, with 56% of children aged below 5 found stunted. With such high figures for both poverty and hunger, considerable effort is required to meet both the domestically set targets and the MDG on reducing poverty and hunger. The fight against poverty and hunger should be the business of all stakeholders.

The ZHDR 2003 also demonstrates how these high levels of poverty and hunger are reinforced by the long-term deterioration in human development index in Zambia. Although the Human Development Index (HDI), which measures progress in the three commonly acknowledged essential human choices to live a long and healthy life, to be knowledgeable, and to have a decent standard of living sharply fell between 1984 to 1994, it has maintained an upward trend ever since. This indicates that the long-term fall in HDI pointed out above may have bottomed out. Furthermore, the ZHDR 2003 provides a number of examples of successful cases of what is working on the ground, indicating that poverty and hunger in Zambia are neither inevitable nor irreversible.

This report has proved particularly timely, given the depth of the humanitarian crisis Zambia went through in 2002. Nearly three quarters of Zambia's population live in poverty and almost two thirds of households are deemed food insecure. It is hoped that this report will play an advocacy role in exposing the extent of the crisis, and will help bring about a better appreciation of the underlying factors of the problem and how these should be addressed.

The ZHDR 2003 suggests that poverty and hunger can be tackled by creating an environment that helps to scale up localized successes and make them more widespread. This requires correct government policies that address the macro-economy and put in place incentives to stimulate production in all areas, adequate infrastructure development, access to markets by the poor and governance structures that allow the participation of the poor people. Proceeding from this premise, the ZHDR 2003 proposes actions that will achieve the following:

- Respond to a food shortage, using effective interventions;
- Improve the domestic environment to support the growth and recovery of agriculture to prevent recurrence of famines in the future;
- Increase resource mobilization for the reduction of poverty and hunger;
- Contain the spread of HIV/AIDS and reduce its adverse impact;
- Promote appropriate resource conserving technologies;
- Reduce vulnerability to risk and provide safety nets for the poor and hungry;
- Put in place an institutional framework for the reduction of poverty and hunger; and,
- Raise advocacy for the eradication of poverty and hunger.

As in the past, the preparation of this National Human Development Report has been a collaborative effort between UNDP and the Government of the Republic of Zambia. A review mechanism has existed that integrated other line Ministries and Departments, the UN System, and civil society (including academia) to review draft documents prepared by a team of consultants. With a view to broaden and strengthen understanding and support for the human development framework and concepts, the process was formalized at the begin-

ning of the preparatory process of the ZHDR 2003.

This began with a broad-based stakeholders meeting in June 2002, called to discuss the preparatory process and to agree on the theme of the report. An institutional framework to oversee the preparation of the ZHDR 2003 was agreed upon and this was made effective as the preparation of the report started. There is now an Advisory Committee, acting as a panel of experts to provide intellectual advice and guidance on the process. It consists of well respected Zambian individuals and representatives of key development institutions including civil society, traditional rulers, members of parliament from both ruling and opposition parties and government officials.

There is also a Review Team, operating at the technical level, with membership drawn from the technical staff within the relevant line Ministries and the UN System in Zambia as well as representatives of civil society. Its main task has been to review and comment on the draft documents and assist in advocating on the recommendations of the reports.

The ZHDR 2003 is therefore an outcome of an extensive consultative process. Four workshops were convened to review drafts of the ZHDR 2003. I wish to thank all the stakeholders who have participated in this process and helped to enrich the document. In particular, I wish to acknowledge the special role played by Mr. James Mulungushi, and his staff at the Department of Planning, Dr. Buleti Nsemukila and his staff at the Central Statistical Office all of the Ministry of Finance and National Planning. So too is the role played by Mr. Eliko J. Kalaba of the Ministry of Agriculture and Cooperatives. We remain grateful for the role played by the UN Country Team, especially Mr. Richard Fuller, Food and Agriculture Organisation Representative

in inspiring the selection of the theme and participating in the process as it unfolded and Dr. Stella Goings, UNICEF Representative for providing access to the UNICEF database that was found very useful.

Within the UN system, I wish to acknowledge the extremely useful comments from Mr. Jean Barut and Mr. Lamin Manneh of the Regional Bureau for Africa, UNDP and Barbara Barungi from the SURF Southern Africa of BDP as well as Dr. Kenneth Ofusu-Barko of UNAIDS, Dr. Edward Maganu WHO Representative, Dr. Kojo Asiedu Senior Advisor of the Zambia-Malawi-Mozambique Growth Triangle Coordinating Secretariat at the Zambia Investment Centre as well as the NHDR network members. I also acknowledge the significant contributions from the programme section staff of the UNDP Country Office, in particular the effective participation of Lebogang Motlana, Deputy Resident Representative (programmes) and Michael Soko Governance Advisor at various stages of the report's preparation, as well as the useful comments from Winnie Musonda Environment Advisor, and Dr. Rosemary Kumwenda HIV/AIDS Advisor. The Report also benefited from the inputs of David Stewart from the Human Development Report Office in New York and Professor Hernando Gomez Buendia from Colombia, who through their role as resource persons at the Human Development Concept Training Workshop were able to impart knowledge on the six guiding principles of the NHDR process, to members of the Review Team and Advisory Committee who were thus able to use these to evaluate the zero draft ZHDR 2003.

To the team of consultants, consisting of Dr. Dennis Chiwele (lead consultant), Dr.

Anthony Mwanaumo (food security specialist) and Dr. Augustine Kapungwe (poverty analyst), who prepared the drafts presented to stakeholders we remain grateful. The Strategic and Policy Unit comprising Abdoulie Sireh-Jallow, Senior Field Economist, Elda Chirwa, National Economist and Gijs Koop, Economist deserve special mention for successfully coordinating the final stages of the production and editing of the report. Particular acknowledgement is due to the former Economic Advisor, Vinetta Robinson who provided the intellectual leadership that initiated, guided and contributed significantly to the conceptualization and overall management of the process and preparation of the report, over the period May to November 2002 when she was reassigned to UNDP Ethiopia.

Finally, it is my hope that the findings and prescriptions of this report will go a long way in helping Zambia fight poverty and hunger and improve the general well-being of her population. UNDP has agreed to use existing fora to discuss and debate findings and recommendations of the National Human Development Reports in Zambia and, where necessary, those of the global Human Development Reports. Given the theme of this report, I hope that all will take time to read it and contribute to the debate on the actions and steps required for Zambia to win this crucial battle that she cannot afford to lose.



Olubanke King-Akerele
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ACRONYMS

ABF	Agri-Business Forum
ACC	Anti Corruption Commission
ACF	Agricultural Consultative Forum
ACMP	Agricultural Credit Management Programme
ACP	Agricultural Commercialisation Programme
ADB	African Development Bank
AGOA	Africa Growth and Opportunity Act
AIDS	Acquired Immuno-deficiency Syndrome
ASIP	Agricultural Sector Investment Programme
ATIA	Africa Trade Insurance Agency
AU	African Union
BoZ	Bank of Zambia
CBGG	Capacity Building for Good Governance
CBO	Community Based Organisation
CBoH	Central Board of Health
CBU	Copperbelt University
CCF	Country Cooperation Framework
CF	Conservation Farming
CFU	Conservation Farming Unit
COMESA	Common Market for Eastern and Southern Africa
CRC	Convention on the Rights of the Child
CUSA	Credit Union and Savings Association
CSO	Central Statistical Office
DAC	Development Assistance Committee
DAC	District Agricultural Committee
DEC	Drug Enforcement Commission
DFID	Department for International Development
DOTS	Directly Observed Treatment Short Course
DRC	Democratic Republic of Congo
EAZ	Economic Association of Zambia
EBZ	Export Board of Zambia
ECZ	Environmental Council of Zambia
FAO	Food and Agriculture Organisation
FDI	Foreign Direct Investment
FfD	Financing for Development
FSRP	Food Security Research Project
FRA	Food Reserve Agency
FTA	Free Trade Area
GDI	Gender Development Index
GDP	Gross Domestic Product
GEM	Gender Empowerment Measure
GMO	Genetically Modified Organism
GNI	Gross National Income
GNP	Gross National Product
GRZ	Government of the Republic of Zambia
GTZ	German Technical Assistance
HDI	Human Development Index
HDR	Human Development Report
HIPC	Highly Indebted Poor Countries
HIV	Human Immuno-deficiency Virus
HPI	Human Poverty Index
IAHDI	Inequality Adjusted Human Development Index
IBRD	International Bank for Reconstruction and Development

IDA	International Development Association
IDG	Index of Democratic Governance
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
IRD	Integrated Rural Development Project
ITN	Insecticide Treated Mosquito Net
JCTR	Jesuit Centre for Theological Reflection
JICA	Japanese International Cooperation Agency
KCM	Konkola Copper Mines
LBW	Low Birth Weight
LCMS	Living Conditions Monitoring Survey
LDC	Least Developed Countries
LIRDP	Luapula Integrated Rural Development Project
MACO	Ministry of Agriculture and Cooperatives
MCDSS	Ministry of Community Development and Social Services
MCTI	Ministry of Commerce, Trade and Industry
MBT	Micro Bankers Trust
MDGs	Millennium Development Goals
MLGH	Ministry of Local Government and Housing
MMD	Movement for Multiparty Democracy
MoFNP	Ministry of Finance and National Planning
MOH	Ministry of Health
MOLA	Ministry of Legal Affairs
MP	Member of Parliament
MPU	Micro Project Unit
MTENR	Ministry of Tourism, Environment and Natural Resources
MWS	Ministry of Works and Supply
NCBFGG	National Capacity Building For Good Governance
NEAP	National Environmental Action Plan
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organisation
NHDR	National Human Development Report
NTE	Non-Traditional Exports
OAU	Organisation of African Unity
ODA	Overseas Development Assistance
OECD	Organisation for Economic Cooperation and Development
OP	Office of the President
PAM	Programme Against Malnutrition
PEM	Public Expenditure Management
PPA	Participatory Poverty Assessment
PPP	Purchasing Power Parity
PRSP	Poverty Reduction Strategy Paper
PSI	Priority Survey I
PSII	Priority Survey II
RIF	Rural Integrated Fund
RSA	Republic of South Africa
REC	Regional Economic Communities
SADC	Southern African Development Community
SAP	Structural Adjustment Programme
SEDB	Small Enterprises Development Board
SI	Statutory Instrument
SSA	Sub-Saharan Africa
SWAp	Sector-Wide Approach
SWAP	Social Welfare Assistance Programme
TA	Technical Assistance
TB	Tuberculosis

TBA	Traditional Birth Attendant
THPAZ	Traditional Health Practitioners Association of Zambia
TNSP	Transitional National Development Plan
TR	Traditional Ruler
UCI	Universal Child Immunisation
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNDG	United Nations Development Group
UNDP	United Nations Development Programme
UNICEF	United Nations Children Fund
UNZA	University of Zambia
VP	Vice President
WSSD	World Summit on Sustainable Development
WHO	World Health Organisation
WTO	World Trade Organisation
YFZ	Youth Forum Zambia
ZAMSIF	Zambia Social Investment Fund
ZACCI	Zambian Association of Chambers of Commerce and Industry
ZCCM	Zambia Consolidated Copper Mines
ZCF	Zambia Cooperative Federation
ZCTU	Zambia Congress of Trade Unions
ZFAP	Zambia Forestry Action Programme
ZFE	Zambia Federation of Employers
ZHDR	Zambia Human Development Report
ZIC	Zambian Investment Centre
ZICA	Zambia Institute of Chartered Accountants
ZIMCO	Zambia Industrial and Mining Corporation
ZLDC	Zambia Law Development Commission
ZMM-GT	Zambia-Malawi-Mozambique Growth Triangle
ZNFU	Zambia National Farmers Union
ZNWLG	Zambia National Women's Lobby Group
ZRA	Zambia Revenue Authority

BALANCE SHEET OF HUMAN DEVELOPMENT AND MDGs IN ZAMBIA

TARGETS		PROGRESS	DEPRIVATION AND PROSPECTS FOR ACHIEVING MDG
Goal 1: Eradication of Extreme Poverty and Hunger			
Target 1	Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.	<ul style="list-style-type: none"> Overall poverty in rural areas dropped from 88% in 1969 to 83% in 1998. Extreme poverty dropped from 58.2% in 1991 to 57.9% in 1998 The Poverty Reduction Strategy Paper (PRSP), formulated through a consultative process, adopted by Cabinet in April 2002 and endorsed by the World Bank and IMF in May 2002, provides an integrated framework for fighting poverty and hunger. The Transitional National Development Plan (TNDP) launched in 2003 built around Poverty Reduction Strategies and gives high priority to poverty and hunger. 	<ul style="list-style-type: none"> In urban areas, extreme poverty increased from 32% in 1991 to 36% in 1998. <p>Prospects: Improving considerable room for improvement</p> <ul style="list-style-type: none"> The modest decline in the proportion of people in extreme poverty imply that much still needs to be done to achieve the MDG target of halving the 1990-proportion by 2015.
Target 2	Halve, between 1990 and 2015, the proportion of people who suffer from hunger.	<ul style="list-style-type: none"> Poverty Reduction Strategies provides an integrated framework for fighting poverty and hunger. 	<ul style="list-style-type: none"> In 1998, nearly 60% or 1.1 million of the households suffered from food insecurity, while 56% of children aged below 5 were stunted, 25% underweight and 5% wasted. <p>Prospects: Lagging</p> <ul style="list-style-type: none"> However with good policy strategies and implementation, progress towards halving those in extreme hunger can be accelerated.
Goal 2: Achieve Universal Primary Education			
Target 3	Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.	<ul style="list-style-type: none"> Primary school net enrolment ratio dropped from 80% in 1990 to 66.5% in 2000 but increased to 67.9% in 2002. The percentage of population aged 10-14 which is a proxy for children finishing at least five years of education has increased from 66.3% in 1990 to 71.7% in 2000. The rate of children who go up to Grade 5 rose for pupils in rural areas from 77.5% in 1991 to 83.5% in 1999. Adoption of the Basic Education Sector Investment Programme (BESSIP) in 1997 has provided a good framework for increasing and improving learning in basic education. There has been some noticeable change in the education of girls attributable to gender sensitisation, such as by the Programme for the Advancement of Girls' Education (PAGE). The President announced free primary education at the opening of Parliament in March 2002. 	<ul style="list-style-type: none"> Literacy among 15-24 year olds dropped from 74.8% in 1990 to 70.1% in 2000. <p>Prospects: Mixed</p> <p>Although progress is being made with respect to pupils finishing at least five years of primary schooling, there are slippages in other indicators, implying that much more needs to be done.</p>
Goal 3: Promote Gender Equality and Women Empowerment			
Target 4	Eliminate gender disparity in primary and secondary education, preferably by 2005 and to all levels of education no later than 2015.	<ul style="list-style-type: none"> The National Gender Policy adopted in June 2001 provides a good framework for eliminating gender discrimination. An action plan is now being drafted. Share of seats held by women parliamentarians increased from 6.7% in 1991 to 11.9% in 2001. Number of women councillors trebled after the 2001 elections. Number of women vying for political leadership is on the increase. Increased effort in gender sensitisation by both GRZ and NGOs. 	<ul style="list-style-type: none"> The difference in primary school enrolment widened, from 2% in 1990 to 6.7% in 2002. The share of women in wage employment dropped from 25% in 1991 to 22% in 1998. <p>Prospects: Slipping Back</p> <ul style="list-style-type: none"> The difference in the gender gap widening from 2% in 1990 to 6.7% in 2002 is cause for concern and has to be reversed.

TARGETS		PROGRESS	DEPRIVATION AND PROSPECTS FOR ACHIEVING MDG
Goal 4: Reduce Child Mortality			
Target 5	Reduce by two-thirds, between 1990 and 2015, the Under-Five Mortality Rate (U5MR).	<ul style="list-style-type: none"> Polio immunisation has been highly successful and the disease is near total eradication. Measles immunisation has also been successful with relatively high coverage. U5MR increased from 191 per 1,000 live births in 1992 to 197 in 2000 but decreased to 168 per 100 in 2001/02. Infant Mortality Rate rose from 107 per 1,000 live births in 1992 to 109 per 1,000 live births in 1996 but decreased to 95 per 1000 in 2001/02.. Immunisation for measles in infants (1 year and younger) rose from 84.9% in 1992 to 93% in 1996 but fell to 88.6% in 2001. 	<p>Prospects: Improving but more needs to be done.</p> <p>The decreasing trends for U5MR and IMR and the increasing trends for measles immunisation coverage should continue..</p>
Goal 5: Improve Maternal Health			
Target 6	Reduce by three quarters, between 1990 and 2015, the Maternal Mortality Ratio (MMR).	<ul style="list-style-type: none"> Reproductive health received more attention in the past 12 years. Training of traditional birth attendants continued but now adapted to deal with new risks, such as the high incidence of HIV/AIDS. 	<ul style="list-style-type: none"> MMR rose from 649 per 100,000 live births in 1996 to 729 in 2001/02. Proportion of births attended by skilled health personnel (excluding TBAs) is decreasing from 51% in 1992 to 47% in 1996 to 45.4% in 2001/02. <p>Prospects: Far Behind</p> <p>The increasing trend of MMR must be reversed and the number of births attended by skilled personnel should be increased.</p>
Goal 6: Combat HIV/AIDS, Malaria and Other Diseases			
Target 7	Have halted by 2015, and began to reverse, the spread of HIV/AIDS.	<ul style="list-style-type: none"> According to the recently released Zambia Demographic and Household Survey 2001/02, the HIV/AIDS prevalence rate for the 15-49 year olds is 16%. Introduction of anti-retroviral drugs in 2002 to help HIV/AIDS victims will help many victims lead a reasonably productive life. An Act to establish the AIDS Council passed in 2002. The Council will enhance Government focus on fighting HIV/AIDS. 	<ul style="list-style-type: none"> HIV/AIDS prevalence rate remains high and consequences - such as increased death burden, high number of orphans and productivity losses - to continue for sometime. High HIV/AIDS incidence increased the workload of women who traditionally care for the sick. <p>Prospects: Within Reach</p> <p>Zambia of HIV/AIDS. Increased commitment to fighting HIV/AIDS can lead to a reversal in the trends by 2015.</p>
Target 8	Have halted by 2015, and begun to reverse the incidence of malaria and other major diseases.	<ul style="list-style-type: none"> Evidence from pilot areas promoting Insecticide Treated Nets (ITN) use indicate good prospects for increased usage with the right strategies. The National Malaria Control Programme, implemented in the context of the Roll Back Malaria partnership, provides a good framework for combating malaria. HIV/AIDS prevalence is likely to have positive impact on TB as 60% of the TB cases is associated with HIV/AIDS. 	<ul style="list-style-type: none"> Number of new malaria cases rose from 121.5 per 1,000 in 1976 to 255 in 1990 and 321 in 1999. Malaria fatality has risen from 10.6 for every 1,000 persons admitted in 1976 to 51.3 in 2000. At University Teaching Hospital, the maternal deaths due to malaria rose from 13% in 1989 to 20% in 1998. Based on information from 12 districts, ITN usage was only 5.6% among households. The notified incidence rate of TB rose from 100 per 100,000 in the mid-1980s to 500 per 100,000 in 1996. There are now in excess of 40,000 new cases of TB reported each year. <p>Prospects: Far Behind</p> <p>However, new TB cases might decrease with the fall in HIV/AIDS figures.</p>
Goal 7: Ensure Environmental Sustainability			
Target 9	<ul style="list-style-type: none"> Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources. 	<ul style="list-style-type: none"> Enabling policies and institutions in critical areas of environmental management have been put in place. The Environmental Council of Zambia has started to enforce the requirement for environmental impact assessments before major investments are made. Adaptation of indigenous practices that worked well in the past to modern situations, such as conservation farming are showing positive results. 	<ul style="list-style-type: none"> Poor management of forests resulting in increased deforestation. Serious depletion in fish stock in many rivers and lakes while the viability of the wildlife and tourism industries remains at risk from poaching. <p>Prospects: Lagging Behind</p> <p>But the possibility of reversing the loss of forestry resources by 2015 remains, with a broad participation from all key stakeholder groups.</p>

TARGETS		PROGRESS	DEPRIVATION AND PROSPECTS FOR ACHIEVING MDG
Target 10	Halve, by 2015, the proportion of people without sustainable access to safe drinking water.	<ul style="list-style-type: none"> The National Water Policy adopted in 1994, leading to adoption of sub-sector strategies to reform water supply and sanitation. 	<ul style="list-style-type: none"> In 2000, 49.1% of households nationally, 29.5% of rural households, and 86.1% of urban households had access to safe drinking water. Water contamination from industrial activities continues to be a problem. Solid waste management remains poor. <p>Prospects: Far Behind Funding of reforms of water and sanitation supply has been below expectation.</p>
Target 11	By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers.	<ul style="list-style-type: none"> The National Water Policy adopted in 1994 leading to adoption of sub-sector strategies to reform water supply and sanitation. 	<ul style="list-style-type: none"> In 2000, 14.95 of all household nationally, 2.1% or rural households, and 39.2% of urban households had access to proper toilet facilities. <p>Prospects: Far Behind With the low funding for water supply and sanitation, very little is proportionately going towards sanitation.</p>
Goal 8: Develop A Global Partnership for Development			
Target 12	Develop further an open, rule-based, predictable, non-discriminatory trading and financial system [includes a commitment to good governance, development and poverty reduction-both nationally and internationally].	<ul style="list-style-type: none"> Recent international conferences, including the ones on the Least Developed Countries and Financing for Development, have laid a good basis for global partnerships. Trade liberalisation and other economic restructuring measures paid dividends with rise in non-traditional exports from US\$102 million in 1990 to US\$279 million in 2001. 	<ul style="list-style-type: none"> A number of initiatives favouring developing countries such as Zambia have been put in place in recent years. Examples include the Africa Growth and Opportunity Act (AGOA), HIPC Initiative, New Economic Partnerships for Africa's Development (NEPAD) and various conventions, such as the Cotonou Agreement. Zambia's share in world-wide flows in FDI remains insignificant, having declined from US\$207 million in 1997 to US\$126 million in 2000. In nominal terms, Zambia's earnings from the exports of goods and services dropped from US\$1.63 billion in 1980 to US\$1.02 billion in 2001. Trade barriers, trade-distorting subsidies and other trade-distorting measures, particularly in sectors of special export interest to developing countries, remain high and are reducing Zambia's prospects of financing development largely from trade. ODA flows varied substantially from year to year. Zambia's external debt stock increased from US\$6.3 billion in 2000 to US\$7.3 billion in 2001, escalating further the debt burden. Broadened conditionality in new initiatives, such as HIPC, creating a sense of surrender of domestic policy formulation processes to external agencies The international architecture remains loaded against Zambia and other developing countries, preventing them from having a meaningful voice in important world bodies which greatly impact on domestic policy and people's well-being. Even with the reduction in prices of anti-retroviral drugs, these remain too expensive for most victims of HIV/AIDS in the context of high poverty levels. Government's capacity to supply anti-retroviral drugs to most victims is limited, given the high cost. Only 10,000 victims out of over 1.3 million that live with HIV/AIDS in Zambia has access to ARVs. <p>Prospects: Mixed A lot of progress for global partnerships has been made but strong resistance persists in developed countries to take measures that will make the international environment more supportive to development and reduction of poverty in developing countries.</p>
Target 13	Address the special needs of least developed countries [includes tariff and quota free access for LDC export; enhanced programme of debt relief for HIPC and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction]	<ul style="list-style-type: none"> The share of grants in total aid has been on the increase as many bilateral lenders convert assistance from loans to grants. The PRSP is the first step to qualify for debt relief under the Enhanced Highly Indebted Poor Countries Initiative (HIPC). Zambia has taken innovative steps to open up the country's discussions on aid to the civil society who have participated in the two Consultative Group Meetings held in Lusaka. The aggressive steps taken to fight corruption and proposed steps to change the constitution are likely to improve the investment climate in the country. 	
Target 14	Address the special needs of land-locked countries and small island developing states [through Barbados Programme and 2 nd General Assembly provisions].	<ul style="list-style-type: none"> Increased recognition within developed countries that their heavy agricultural subsidies are constraining the prospects for development in developing countries. 	
Target 15	Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term.	<ul style="list-style-type: none"> Many pharmaceutical companies began to significantly reduce the prices of anti-retroviral drugs supplied to developing countries. Zambia is beginning to take advantage of reduced prices. Steps to help victims access anti-retroviral drugs taken in 2002. 	
Target 16	In conjunction with developing countries, develop and implement strategies for decent and productive work for youth.		
Target 17	In cooperation with pharmaceutical companies, provide access to affordable and essential drugs in developing countries.		
Target 18	In cooperation with the private sector, make available the benefits of new technologies, especially information and communications.		

OVERVIEW

TOWARDS A POVERTY AND HUNGER-FREE SOCIETY

The theme of the Zambia Human Development Report (ZHDR) 2003 is *the eradication of extreme poverty and hunger*. The theme recognises that Zambia recently faced a food shortage. Nearly three quarters of the population live in poverty while about two thirds are food insecure.

The food shortage Zambia experienced undermines progress in human development which is understood as the process of expanding choices that people value. Three of these choices are generally accepted as essential to human development: a long and healthy life; to be knowledgeable; and to enjoy a decent standard of living.

Given this framework, poverty and hunger constitute a denial of some of the most basic of human choices. The deprivations that people in Zambia suffer which are strongly linked to poverty and hunger a short and unfulfilled life, infant and child mortality, maternal mortality and illiteracy undermine human development.

The poor are also the hungry as they are likely to suffer long-term malnutrition or chronic hunger. In turn, chronic hunger undermines the poor people's human capabilities to fight poverty. Unless there are deliberate interventions to mitigate the factors causing poverty and hunger, the extremely poor and hungry people on their own have little hope to live a life free of these deprivations.

Zambia has been moving in step with the rest of the world in attempting to eradicate extreme poverty and hunger and has placed this fight at the top of her development agenda. Therefore, in April 2002, the Zambian Government adopted a

Poverty Reduction Strategy Paper which offers a renewed framework for fighting poverty and hunger.

Eradication of extreme poverty and hunger is part of the eight Millennium Development Goals (MDGs) adopted by world leaders at the United Nations Millennium Summit in September 2000. This means that the renewed effort to combat poverty and hunger at national level coincides with concerted effort being made at the global level with the issue having been placed high on the agenda.

Addressing poverty and hunger will have a positive impact on the achievement of the other Millennium Development Goals. However, to adequately address poverty and hunger requires a very clear understanding of who the poor and hungry are, where they live, and why they are in this situation. The ZHDR 2003 attempts to provide a portrait of the poor and hungry before setting out an agenda for the eradication of poverty and hunger.

Whereas 69% of the Zambian population was classified as poor in 1991, this rose to 73% in 1998. Of the poor in 1998, 58% were classified as extremely poor.

The levels, patterns and trends of malnutrition among the poor have been deteriorating since the beginning of the 1990s, highlighting the fact that poverty and hunger are mutually reinforcing.

Poor households also experience difficulties in accessing social amenities that are critical for enhancing human development. Between 61% and 69% of poor households have difficulties in accessing important socio-economic facilities such as education, health and input and output markets. Only between 19% and 27% of the non-poor face such difficulties.

Both poverty and hunger deepened in the 1990s such that greater effort is now required to meet the MDG on halving poverty and hunger more than was the case in 1990.

If poverty and hunger is about people being denied their most fundamental human needs and expectations, then to understand and tackle this problem the people must be at the centre of everything that is done.

Poverty in Zambia is wide-spread. However, it is predominantly rural although it has been rising faster in urban areas where a category of the new poor has emerged as policies of economic liberalisation pursued in the 1990s failed to create jobs. A number of those once in formal sector employment found themselves among the unemployed. New entrants into the labour markets, especially the youth, faced unprecedented difficulties to get jobs in the 1990s.

Poverty and hunger have persisted due to many interrelated factors. These have included the erosion of people's asset base, particularly in rural areas in the face of persistent drought and outbreaks of animal diseases, failed livelihoods, poor access to infrastructure, an unsupportive global and domestic economic environment and failing health, especially due to HIV/AIDS and other major diseases such as malaria and tuberculosis.

The human development concept, together with its associated concepts such as human poverty (defined as a denial of opportunities and choices that are most basic to human development), places the well-being and deprivation of people in their various dimensions at the centre. This concept provides a comprehensive framework in which poverty and hunger can be understood and interventions evaluated.

Zambia's Human Development Index, a measure of well-being with respect to the longevity of life, knowledge and decent standard of living, has declined over time. Between 1975 and 1985, the HDI increased despite the onset of economic problems, given the cushion that subsidies and free services provided to the population. A sharp reversal occurred after 1985 such that by 1995, the HDI was lower than it was in 1975. Zambia is the only country to have suffered such a reversal among the 79 countries for which data going back to 1975 is available.

There are good reasons to believe that Zambia can successfully eradicate extreme poverty and hunger.

This long-term decline in Zambia's HDI is due to the many factors which influence the three components of the HDI that enter its calculation, i.e., declines in life expectancy at birth, enrolment and literacy achievements and, per capita income. These reductions in the country's human development status are cause for great concern as they undermine people's capabilities to deal with hunger and poverty.

Zambia is in a very difficult position regarding the extent to which she can achieve the Millennium Development Goals, which at the same time explains the declines in the country's human development status. Compared to their 1990 base year, nearly all the indicators had deteriorated by 2000 such that the effort now required to achieve the MDGs is much greater than may have been anticipated at the time of the Millennium Declaration.

However, there is cause for optimism. The modest rise in HDI between 1994 and 2000 could suggest that the decline has now bottomed up. The high HIV/AIDS prevalence rates, which have had a very high negative impact on life expectancy at birth, appear to be stabilising.

The adverse impact of HIV/AIDS on life expectancy in general and outcomes in maternal and child mortality and the incidence of other diseases, such as tuberculosis, has been devastating. If Zambia moves from halting to reversing the spread of HIV/AIDS, it is very likely that Zambia's HDI will begin to assume a definite upward trend.

Despite the slight improvement in the HDI, Zambia needs to double her effort as the forces that drove down the country's HDI still loom large.

Four main reasons can be advanced for this assertion:

First, the country's natural resource endowments are able to support the poor people's livelihoods and enhance their well-being. As the ZHDR 1999/2000 puts it, "vast amounts of land, abundant surface and underground water, good climatic conditions and fertile soils all make Zambia's physical conditions strongly supportive to efforts to eradicate human poverty, build sustainable livelihoods and thus create a sound basis for human development". Actions and strategies that help to regenerate the productive assets while at the same time raising the productivity of producers will help Zambia put to effective use its natural resources for the eradication of poverty and hunger.

Second, agriculture, which combines the virtues of growth and equity and where the majority of Zambians earn their living, is the key instrument for reducing poverty and hunger. Agriculture's full potential has not been exploited. Current policies have renewed their focus on the role of agriculture in the reduction of poverty and hunger such that agriculture is a central theme of the poverty reduction strategies.

Third, current economic policies -centred around reform of industry, commerce and the public sector; privatisation; improvement of rural infrastructure and development of the social sectors, if combined with appropriate institutional reforms and social safety nets for the poor, are appropriate and can provide a base for human development.

Fourth, on the ground, there are examples of what is already successful in enhancing people's livelihoods and reducing poverty and hunger. By extracting lessons as to why these have been successful and seeking to scale up the successes, greater impact on the eradication of poverty and hunger could be made. Six examples can be identified.

1. Schemes such as by the Zambia Social Investment Fund (ZAMSIF)

And the Rural Investment Fund (RIF) have helped to galvanise community efforts in planning and implementing community level social infrastructure projects such as schools, health centres, bridges and roads. This has shown that communities are ready to do something about their own situation.

2. Families in poor areas have adopted coping strategies that indicate potential for widening livelihood strategies. For example, farming systems that depend on roots and tubers, such as cassava, and other traditional staples have been less prone to hunger and food insecurity in the last two years than those that did not. The challenge is identifying what works in these coping mechanisms and how the strategies can be built and help integrate the poor into the wider economy.
3. The promotion of conservation farming among small farmers, combining very simple and at times improved indigenous technologies, has helped to significantly increase yields and help farmers protect themselves against rainfall failure at the critical times of the farming season. Thus, in Southern Province, farmers who used conservation farming in the 2001/2002 season were less significantly affected by drought.
4. Small-scale farmers do respond to price and market incentives to alter their production and improve livelihood outcomes. The rise in production of what were strictly food crops during the last decade (e.g. cassava, sweet potatoes and beans) is indicative of this point. In seeking to tackle poverty and hunger, policy should seek to promote these emerging crops as much as has been the case with maize in the past.

5. The phenomenal rise in agriculture exports in the 1990s give ample evidence of the agricultural sector adapting to a changed structure of incentives and environment. This occurrence has shown that by utilising models that make small scale farmers partner with the private sector through out-grower schemes, poor people can also participate in world markets and make the positive forces of globalisation work for them.
6. A number of models have been successful in raising the business entrepreneurship of rural communities and enable them to participate in the markets successfully. These include interventions by the ZERO entropy approach utilizing organic farming and waste being promoted by the UNDP/AFRICARE, Elias Mutale Songhai Model Centre for sustainable development in Kasama in the Northern Province.

With such evidence of successes on the ground, the challenge for policy is to create an environment that will help to scale up the localised successes so lessons are learnt more widely.

Examining these cases we learn that the current liberal economic environment can work for the poor where three pre-conditions are present. *First, accessibility must be improved.* Success has been mostly confined to accessible areas. Without improved infrastructure, liberalisation will only have a marginalising effect on the market participation of the poor people. *Second, integrated technological packages* reinforce poor people's capacity to adapt to the new liberal environment. For example, the combination of conservation farming, good breeds and varieties, finance, marketing and extension have worked to produce the good results. Intervening only in one aspect has been shown not to work well. *Third, decentralisation and empowerment* have helped to produce success in some local interventions. Involving people in decisions in the design and implementation of interven-

tions while learning from people-level institutions and technology has created an appropriate environment for sustainability and eventual success.

For success to be more broad based and contribute to solve poverty and hunger, actions are required in seven areas.

1. Promote sustainable agriculture development to prevent the recurrence of famines in the future

As sustainable agricultural development would not be achieved overnight, stakeholders have a responsibility to act to prevent a human catastrophe occurring from the recent current food crisis. The *first* step therefore is to provide food to those affected by famine through viable relief food programmes. Zambia already has a viable mechanism for distributing food relief with the civil society in the forefront. This will need to be enhanced. Zambia should also very quickly put in place a regulatory framework to regulate the importation of genetically modified organisms (GMOs).

The *second* step is to promote recovery of the vulnerable farmers from the current crisis by helping them rebuild their asset base. Farming communities over time have lost their assets, such as farm implements, on-farm improvements and oxen, all of which are necessary for raising productivity and helping farmers to deal with shocks. Strategies to help farmers recapitalise are therefore a key component of dealing with the current crisis.

The *third* step is to take actions that will "jump-start" agricultural development through the promotion of appropriate technology. This has three key components: (i) improved service delivery, including input distribution and extension services; (ii) better access to markets; and, (iii) availability of agriculture finance.

2. Improve the international and domestic environment that supports the growth and recovery of agriculture

There are a number of actions that must be taken by different players. The international community must help to create an environment that will help agriculture production in developing countries like Zambia become competitive in international markets. As has been demanded by a number of UN conferences held in recent years, this calls for the creation of an open, rule-based, predictable and non-discriminatory financial and trading system in global partnerships. Developing countries, including Zambia, are losing more than US\$100 billion a year due to inadequate access to markets as a result of subsidies and other barriers imposed on their products by developed countries. These must be removed urgently because they are adversely affecting the well-being of people in developing countries.

However, even if the international economic environment improves, access to markets will not happen automatically for Zambia if the domestic policy is not supportive to growth in general and agriculture in particular. A stable macro-economic environment, increased and timely flow of resources to growth sectors, pro-poor budgeting, targeted tax exemptions and targeted support can help to stimulate the economy and agriculture. Other strategies -like strong export incentives and reduction in factor prices, such as energy, and investments in key infrastructure may help to create entry into global markets in a way that benefits the poor and hungry.

Budget reforms, as part of domestic policy that help to improve allocations to the rural sector and make the formulation of the budget people-centred, are important for the reduction of poverty and hunger. Linking the budget to the PRSP, which was formulated through a participatory process, should help to refocus the budget on the poor. There is also need to integrate

a poverty focus in rural finance in a way that institutions playing this role remain viable while increasing their outreach.

3. Increase resource mobilisation

Given the high levels of poverty and hunger, the resources to fund interventions aimed at reducing the human crisis associated with the problem are substantial. Using the PRSP as the basis for estimating the needed resources, Zambia will need around US\$ 6 billion specifically targeted at meeting the current MDG targets by 2015.

Steps are therefore required to ensure that there is a framework that supports an adequate mobilisation of resources to fund the MDGs from both local and external sources. This framework has been well elaborated in the Monterrey Consensus of the Financing for Development held in March 2002 to which Zambia has appended her signature. Zambia has already outlined a number of aspects that need to be undertaken in a number of areas to build capacity for resource mobilisation.

4. Promote appropriate resource conserving technology

Combining traditional and modern techniques has been shown to produce good results in part because small producers find it easy to adapt. The success of conservation farming pointed out above is partially as a result of this fact, besides its inherent characteristics which address a number of farmers' constraints at the same time. Conservation farming is helping farmers to address the labour constraints, allowing them to plant on time and increase the area cultivated as well as lower the need for expensive inputs, such as fertiliser, much more efficiently. The techniques also help in the conservation of moisture and can be critical when there is a rainfall failure at crucial times of the rain season.

efficiently. The techniques also help in the conservation of moisture and can be critical when there is a rainfall failure at crucial times of the rain season.

In general, emphasis must be on raising the productivity of the poor people's labour, land, livestock and other resources. There is thus need for policy focus on promoting services that help poor people raise their productivity, including research and extension, rural finance, input and output marketing.

A core function analysis to determine the roles to be played by different players is important. Where this is not done there is risk that Government actions to help the poor will undermine the developing role of other players, such as the private sector, in the supply of agriculture inputs.

5. Reducing the vulnerability to risk and providing safety nets for the poor and hungry

Strengthening the ability of the poor to withstand and overcome shocks depends on recognising the strength imbedded in their social networks while taking specific actions to help mitigate the impact of HIV/AIDS, rebuilding collapsed livelihoods and improving the early warning system.

It is important to recognise the adverse impacts of HIV/AIDS that make households vulnerable to risks and helpless to recover from shocks. Actions to fight the HIV/AIDS pandemic must be taken along the lines recommended in the ZHDR 1999/2000. These include a stronger political will to fight the pandemic and increased resources towards programmes and projects targeted at awareness creation, counselling and medical care.

The merits of the family support system, as the most viable support system for the poor, must be recognised and actions formulated to strengthen this institution.

Improving access to land without gender discrimination, promoting values of community services through community groups and service organisations, and improving the social security systems through better budgetary allocation are important action areas to enhance safety nets for the poor and hungry. There is also a clear need for enhanced linkages between the Government, the private commercial sector, donors and NGOs so that interventions meant to help disadvantaged groups are increased and properly coordinated.

Experience over the past decade has shown that the poor can not be left to the vagaries of the markets, as they have neither the means to protect themselves nor take advantage of the opportunities that markets offer. Therefore, it is imperative that deliberate efforts are made by the Government to continue to support initiatives targeted at the very poor farmers through measures like the *Food Security Pack*. The support system should be diverse enough, e.g. by recognising the importance of the non-farm sector to poverty alleviation, to encompass all livelihoods to reduce risk. Actions should adhere to a building and phase out regime to avoid encouraging the dependency syndrome.

6. Make the governance and institutional framework support the poor and hungry

There are a number of key issues affecting the different institutions that play a key role in providing the enabling environment for adopting actions that favour the poor. An improved institutional environment for the implementation of the actions specified above is required. This could be done through increased moves towards decentralisation, stakeholder participation, private/public sector partnerships, civil society roles and community empowerment.

Actions in this area should begin at

reforming the governance system so that leaders are made more accountable to the people. This is so as to ensure that the eradication of extreme poverty and hunger remains high on the agenda. This should focus on three main areas:

- Strengthen the critical institutions of governance so that they carry out their mandate effectively. A constitution that brings about more accountability of the executive to parliament will help in the articulation of issues affecting the poor and keep their concerns high on the agenda. The public sector should be strengthened so that it can conceive the right policies and implement them effectively.
- Adopt democratic decentralisation to devolve decision-making to local governments. This will expand opportunities for people's participation, produce decisions that match with local priorities and make development agents more accountable to local communities. Democratic decentralisation will also provide a strong framework for inter-sectoral coordination and for scaling up localised successes to the entire district.
- Create effective participation frameworks for the people at both national and lower levels. The fight against poverty and hunger and the achievement of other MDGs will not be successful without a full participation of all players in their diversity, including the communities themselves.

The voice and input of each sector stakeholder needs to be strengthened, e.g. at the national level, the creation of the Civil Society for Poverty Reduction is an important milestone in sustaining the well coordinated role that the civil society played in the design of the PRSP. Similar moves should be extended to lower levels, district and sub-district levels, because this is where fighting poverty and hunger will be effective.

7. Improve advocacy for the eradication of extreme poverty and hunger

The frameworks proposed above to give the poor a voice by making leaders more accountable will take some time to realise although it is important to take the first step. In the meantime, advocacy for poverty reduction to galvanise the nation and let it focus on this fight is required.

All stakeholders must mobilise and make the elimination of extreme poverty and hunger within the next two decades their number one priority. The civil society, political leaders from both the ruling and opposition parties, including elected representatives in Parliament and Councils, traditional leaders, the academic community, and the private sector all have a vital role to play in advocating the reduction of poverty and hunger. With nearly three quarters of Zambia's population facing a dismal standard of living, fighting poverty and hunger is everyone's business.

Human Development for the Eradication of Extreme Poverty And Hunger

Eradicating extreme poverty and hunger is central to making progress in human development because they are fundamental deprivations strongly linked to other human deprivations. A short and unfulfilled life, infant and child mortality, maternal mortality and illiteracy, for example, are results of, and at the same time, reinforce poverty and hunger. Viewed comprehensively, poverty and hunger expose people to misery and deprive them of a healthy life, undermine their ability to be educated and be part of a world of information, which, in turn, leads to the erosion of their dignity and the ability to be part of society without being ashamed. There can be no human development where people are hungry and poor, unable to meet even the minimal requirements of life.

The severity of poverty and hunger in Zambia is widely acknowledged and there is consensus that urgent measures are required to deal with it. As shown in **Chapter 3**, poverty and hunger afflict a large proportion of Zambia's population, are wide-spread, and have deepened in the past decade. Overall, poverty increased from 69.7% in 1991 to 72.9% in 1998, the last year when a national survey to ascertain living conditions in Zambia was carried out by the Central Statistical Office. Conditions in rural areas are generally even worse, where 83.1% of the population were classified as poor in 1998. Of Zambia's nine provinces, Western Province has the highest overall poverty, with 89% of the population there classified as poor. Poverty is also generally higher for female-headed households. In addition, Zambia has serious manifestations of hunger, as indicated by the high levels of malnutrition.

The Zambian Government, in seeking to address poverty and hunger, adopted the

Poverty Reduction Strategy Paper (PRSP) in April 2002 to provide a needed framework to address the problem, thereby placing the issue at the top of the country's development agenda for the period 2002 to 2004. This effort of the Zambian Government is in line with that undertaken by the international community to accelerate efforts to eradicate extreme poverty and hunger.

The eradication of extreme poverty and hunger is one of the eight Millennium Development Goals (MDGs) contained in the Millennium Declaration of the United Nations Millennium Summit, held in September 2000, and other international agreements. The Millennium Summit itself was a culmination of a series of international summits that highlighted a variety of guidelines and principles reflecting the new thinking about development and increasingly pointed to the need for development to be people-centred.

The MDG on the eradication of extreme poverty and hunger specifically calls for halving the proportion of the population who suffer from poverty and hunger between 1990 and 2015. Eradication of extreme poverty and hunger is linked to the other MDGs such that achieving the MDG will also help make progress on the other MDGs: universal primary education; gender equality and women empowerment; child mortality; maternal health; HIV/AIDS, malaria and other diseases; environmental sustainability; and, global partnerships for development.

THE HUMAN DEVELOPMENT PARADIGM

Understanding poverty and hunger has always required a framework that offers a

The reduction of poverty and hunger will lead to relief in the other deprivations of life. However, the converse is also true. Unless the other human deprivations are tackled, making progress in the fight against poverty and hunger will remain elusive.

comprehensive view of human well-being and the deprivations that people suffer. This is with a view to knowing how poverty and hunger undermine well-being and may help to accentuate these deprivations.

The concept of human development meets this demand. As successive **Human Development Reports (HDRs)** have shown, the human development concept assumes a holistic view of both human well-being and deprivation. Since its first publication in 1990, the HDR has viewed human well-being as consisting of the extent to which people enjoy the liberty to make choices of life. Human development is, therefore, viewed as the process of expanding the choices that people highly value. There is a good degree of consensus that there are three essential choices of life listed below.

A long and healthy life. Elements of this include adequate access to health facilities and services, including preventing maternal, infant and child mortality. Access to adequate and balanced food, housing, safe water and a clean environment are the other necessary ingredients.

To be knowledgeable. This choice constitutes learning, becoming literate and attaining the capacity to access and process information for making other individual choices. Access to formal education is the fundamental way through which knowledge is imparted and acquired. Informal ways, including the acquisition of indigenous knowledge and the accessing of information through the media, are also recognised.

Enjoy a decent standard of living. This entails freedom from want; the ability to acquire the material necessities of life to support an acceptable life-style. One's level of income is the most important pointer to this. The livelihood that one chooses to pursue is a fundamental basis for income acquisition.

Although income is an essential part of human development, it is not the only aspect. People must enjoy other choices as well to find fulfilment. Income plays a critical role in helping to expand these choices. At the minimum, people should have enough income for a specified amount of food. Beyond this, people should have enough to access capability-enhancing facilities or services such as health and education.

Full human development goes beyond the three essential choices described above. There are other choices, ranging from “political, economic and social freedom to opportunities for being creative and productive and enjoying self-respect and guaranteed human rights” (HDR, 1997, p.14).

The freedom to make choices of life presumes people's **capabilities** that enable them to function. Skills, level of education and the health status of people play an important role in building the necessary capabilities. With these, people are better able to make and pursue the choices of life. These capabilities are necessary if people have to get out of the trap of poverty and hunger. And yet poverty and hunger at the same time undermine people's capabilities.

The availability of **opportunities** over which the choices are made is also a necessary ingredient. For example, choices with respect to education, health and jobs are achievable only if they are available. A principal objective of policy is therefore to build an environment in which these opportunities could be created and meaningfully pursued.

For human development to have meaning, the process of expanding people's choices must be sustainable. They must be expanded both for the present generation as well as for future generations. **Inter-generational equity** requires that choices for the present generation should not be expanded at the expense of choices for

future generations. It is a holistic concept and encompasses environmental, institutional, cultural, social and political aspects.

THE HUMAN DEVELOPMENT INDEX

The diversity of elements that constitute human well-being makes the concept of human development too complex to be captured by a simple measure. However, there is always need to simplify reality this way to practically assess performance and make comparisons. The overall concept of human development is measured by the Human Development Index. First inaugurated in the *Human Development Report 1990*, it seeks to provide a quantitative representation of the three essential choices of life noted above.

Each of these choices has been assigned

corresponding quantitative indicators: a long and healthy life is measured by life expectancy at birth; educational attainment (representing knowledge) by a weighted average of the adult literacy rate and combined primary, secondary and tertiary enrolment ratios; and a decent standard of living by real GDP per capita (PPPS). Therefore, the HDI is a composite index of three indices: the life expectancy index, the educational attainment index and the adjusted real GDP per capita (PPPS) index. It is a simple average of the three indices derived by dividing their sum by 3.

The HDI thus puts all the three basic indicators on a common measuring rod. The minimum and maximum value of each variable range between 0 and 1. The range corresponds to established actual values that depict the defined goal that needs to be attained in each variable.

BOX 1.1

**NATIONAL HUMAN DEVELOPMENT REPORTS:
TOOLS FOR NATIONAL POLICY DEBATE**

Human development recognises that people are the real wealth of any nation. It emphasises expanding people's choices so they can develop their full potential and lead productive and creative lives according to their needs and interests.

- NHDRs:**
- Offer solid research from national institutions
 - Present alternative people-centred recommendations
 - Link analysis to the global human development framework
 - Inform UNDP's policy work
 - Tackle critical and controversial issues
 - Provide analysis on inequalities

For more than a decade, the concept of human development has been discussed and refined by the global *Human Development Report*. This annual report is an independent publication commissioned by the United Nations Development Programme (UNDP). By broaching unconventional viewpoints on critical development issues, the *Human Development Report* has helped to inspire a growing movement in every region committed to embracing the human development approach. Since 1992, one important outcome of this movement has

been the production of more than 400 Regional and National Human Development Reports (NHDRs) in over 135 countries. Issued every one to two years, the NHDRs are built on the analytical framework of the global *Human Development Report*, including its Human Development Index. They examine a nation's most pressing development issues and explore ways to place human development at the forefront of the national political agenda. Past reports have addressed human development approaches to human rights, poverty, education, economic reform, HIV/AIDS, globalisation and many other themes.

NHDRs are a unique, nationally owned product, written by leading national experts and intellectuals. Through a country-led process of consultation, research and writing, they bring together diverse voices, put difficult issues on the table and contribute to mobilising action for human development policy-making on these issues. The reports are also a tool for policy analysis and planning that contribute to progress towards the Millennium Development Goals.

Six Principles
Six fundamental principles underpin the creation of every report and comprise UNDP's Corporate Policy on NHDRs:

- National/regional ownership
- Independence of analysis
- Quality of analysis
- Participatory and inclusive preparation
- Flexibility and creativity in presentation
- Sustained follow-up

Source: National Human Development Report Unit, UNDP, New York

THE HUMAN POVERTY CONCEPT

Poverty is a denial of opportunities and choices most basic to human development. It is a condition that reflects physical, social and political deprivation, as well as lack of assets and income.

The complex and multi-dimensional nature of poverty leads to differences in the conceptualisation of poverty. Poverty is dynamic and its perception changes from one scenario to another. It is caused by various forms of disadvantage, such as social inferiority, physical weakness, isolation and vulnerability. It is a state of deprivation of basic human needs and expectations and manifests itself as:

- Low income or consumption
- Lack of access to basic social services and infrastructure
- Inability to exercise human rights
- Absence of dignity, confidence and self-respect
- Environmental impoverishment

The *Human Development Report (HDR) 1997* inaugurated the concept of *human poverty* also called the poverty of lives and opportunities in an attempt to portray the many faces of poverty. Being analogous to human development, human poverty focuses on deprivations in the three essential choices of human development: longevity, knowledge and standard of living.

The human poverty concept also recognises many other deprivations undermining the quality of life that people live. Some of these deprivations are lack of human rights and political freedom, inability to participate in decision-making, lack of personal security, inability to participate in the life of a community, and threats to sustainability and intergenerational equity (HDR, 1997).

THE HUMAN POVERTY INDEX

In order to link poverty to human development, the *HDR 1997* also inaugurated the Human Poverty Index (HPI). This is a composite index based on indices that represent deprivation in the three choices depicted in the human

development concept.

The *first* is deprivation in a long and healthy life and thus relates to *survival* or the vulnerability to die at an early age. It is captured by the percentage of people expected to die before the age of 40. The *second* is deprivation of knowledge defined as “being excluded from the world of learning and communication” (HDR 1997, p.18). This is captured by the variable of the percentage of illiterate adults. The *third* deprivation relates to standard of living. It is, however, not based on the measurement of income as in the HDI. Income is found to be an inadequate measure of an individual's economic well-being that should also include access to crucial public services besides private income. The focus is therefore on *economic provisioning* and is captured by a composite of three variables.

To depict private income, the percentage of malnourished children under five is used as the indicator. Besides the ease of measurement and availability of data, the HDR 1997, rationalised that a very high proportion of private income is spent on food and nourishment. In this way, both income poverty and hunger are well represented in the HPI. Public services provisioning is represented by the percentage of people with access to health services and to safe water.

In *1998* the need to have different HPI measures for developing and industrial countries was advanced. The idea is that although deprivation exists in both, different indicators are needed to reflect the way it is manifested in the two country categories. Accordingly, the HPI introduced in the HDR 1997 was designated as presenting deprivation in developing countries and now termed HPI-1. The HPI for the industrial countries was formulated as HPI-2. See **Table 1.1**

GENDER-RELATED DEVELOPMENT INDEX AND GENDER EMPOWERMENT MEASURE

The Human Development Report 1995 introduced two indices: the *Gender Development Index (GDI)* and the *Gender Empowerment Measure (GEM)*. These recognised that disparities between men and women are a significant manifestation of the deprivations that the world faces. As all the Human Development Reports have shown, “gender inequality is strongly associated with human poverty” (HDR 1997, p.39). Therefore, a treatment of human development or human poverty will not be complete without bringing out this inequality.

The GDI tries to capture progress in the same essential variables encapsulated in the HDI, i.e., longevity, educational attainment and income. These variables are nevertheless adjusted for gender inequality. It is thus an indicator of gender inequality in basic human capabilities.

The GEM, on the other hand, measures gender inequality in key areas of

economic and political participation. It covers four variables: earned income share of women, percentage of professional and technical female workers, percentage of women administrators and managers, and share of parliamentary seats held by women.

HUMAN DEVELOPMENT INDICES - SAME DIMENSIONS, DIFFERENT MEASUREMENTS

The diversity of human development indices enriches our understanding of trends in human development. The HDI measures progress in the dimensions of longevity, knowledge, and overall economic provisioning for a decent standard of living. The GDI measures progress in the same dimensions after adjusting for gender differences. The HPI-1 and HPI-2 measure deprivation in respect of those dimensions that exist in developing and industrial countries, respectively. Therefore, the HDI, GDI, HPI-1 and HPI-2 involve the same dimensions but provide different perspectives through different measurements.

A synoptic picture of these similarities

Poverty is a denial of opportunities and choices most basic to human development. It is a condition that reflects physical, social and political deprivation, as well as lack of assets and income.

Table 1.1: HDI, GDI, HPI-1 & HPI-2 - Same Dimensions, Different Measurements

Index	Longevity	Knowledge	Decent Standard of Living	Participation or Exclusion
HDI	Life expectancy at birth	1. Adult literacy rate 2. Enrolment ratio	Per capita income in PPP\$	
GDI	Female and male life expectancy at birth	1. Female and male adult literacy rate 2. Female and male enrolment ratio	Adjusted per capita income in PPP\$ based on female and male income shares	-
HPI-1	% population not expected to survive to age 40	Adult illiteracy rate	1. % people without access to safe water 2. % people without access to health services 3. % under-weight children under 5	-
HPI-2	% population not expected to survive to age 60	Adult functional illiteracy	% people living below poverty line (50% of median personal disposable income)	Long-term unemployment rate (12 months or more)

Source: UNDP: Human Development Report 1999, p127. Table 1

IMPACT OF THE HUMAN DEVELOPMENT PARADIGM IN ZAMBIA

The annual publication of the Human Development Report since 1990, together with the major United Nations summits and conferences, have helped to check the world's pre-occupation with income-based or consumption-based definitions of poverty. Poverty is now much more widely viewed as a complex phenomenon that escapes a mono-dimensional treatment. Zambia has not been left behind in this paradigm shift.

The *Zambia Human Development Report 1999/2000* observed that there has been a growing consensus in recent years in global thinking on development. People are increasingly recognised as the centre of all development. The report noted that more than ever before, a conducive environment now exists for the country to take actions that would address the serious deprivations that Zambia's population faces in the knowledge that it has the support of the international community.

In Zambia, three NHDRs have been produced so far. The NHDR 1997 had the same theme as the global HDR, *human poverty*. As the first NHDR, it presented the state and trends in Zambia's human development and poverty since the mid-1970s. It also discussed trends in factors with a close bearing on human development: health, education, employment, security, equity, environment and participation.

The second NHDR produced in 1998 focused on the provision of basic social services. This came as a follow-up to the 1997 theme. It advanced the thesis that poverty reduction entails empowerment of the people, especially of those who suffer deep deprivation. The provision of, and ready access to, basic social services constitutes one of the major sources of such empowerment.

The ZHDR 1999/2000 tackled the theme of employment and sustainable livelihoods within the framework of human development. Analysing issues from a *Sustainable Livelihoods Approach* viewpoint, the report concluded that the negative trends in the country's human development were neither inevitable nor irreversible. Various resources (human, physical, social and natural) were available within Zambia which, with improved strategies, could be used to build people's livelihoods and help promote human development.

The global HDR and the ZHDR have contributed to the conceptualisation of development initiatives in Zambia. Three areas are illustrative of this influence:

1. A greater appreciation of the multi-dimensional nature of human deprivation Moving away from the traditional characterisation of poverty as mostly income-based, Zambia's PRSP recognises the multi-dimensional nature of poverty and is in accord with the human development concept discussed above. Highlighting the deprivations that people suffer, the PRSP calls for investments to improve people's livelihoods (tourism, agriculture, industry and mining) as well as adequate access to social services (education and training, health and nutrition) and infrastructure (transport and communication, roads, energy, water and sanitation).

Cross-cutting issues accentuating deprivations of life, i.e., environment, HIV/AIDS and gender, are also targeted for poverty-focused investment. And rather than a tilted view of the required environment to reduce poverty focused on macro-economic stability only, the PRSP also includes good governance as an important prerequisite.

Such a broad view of poverty is not

surprising when it is considered that the PRSP itself in its background chapter on poverty calls for a more holistic approach to poverty analysis, specifically basing this on the human poverty concept as proposed by the HDR 1997. The National Human Development Reports mentioned above are used as sources of data on the various indicators of poverty.

Therefore, by pointing out the importance of the human development concept, the PRSP also illustrates the growing acceptance of the concept in Zambia because different groups, i.e., civil servants, the civil society, academia etc, were involved in its preparation. National Human Development Reports have also been used in parliamentary debates as evidence "laid on the table".

2. A greater focus on the people in national priority setting

Policy formulation in Zambia is now much more human-centred. Subsequently, the Ministry of Finance and National Planning (MoFNP) has adopted the PRSP as the basis of future plans. This move is likely to integrate many themes promoted by the HDR and the ZHDR in Zambia's policy actions. In addition, the national budget for 2002 used the PRSP as the basis for expenditure allocation and there are moves to make the budget more poverty-focused. This is expected to increase expenditure targeted at areas of human priority concern, a theme promulgated by the HDR 1991.

3. A greater acceptance of the need for broad-based participation

The process of preparing the PRSP itself is indicative of the influence of the HDR and ZHDR which have advocated greater participation of the people in the identification of key issues and the necessary interventions to address them. Preparation adopted a wide-ranging consultative mechanism, with a very significant input coming from civil society.

What has come to exist at national level also manifests somewhat on the ground. In recent years, development initiatives have taken a more participatory process. There are now a number of stakeholder committees over-seeing the implementation of development initiatives at local level. Within Government, the sector ministries that have adopted a sector-wide approach (agriculture, environment, health and education) have set up stakeholder committees to give people a voice to influence decisions at district and local levels. NGOs have also set up similar stakeholder committees in the projects that they implement.

It is clear from what has been pointed out above that the human development paradigm is playing an important role in shaping thinking on development in Zambia as it is at global level. The global Human Development Report and the National Human Development Report are indeed important advocacy tools on development in Zambia. However, they suffer one major weakness: they have restricted accessibility in the country. To maximise their potential as communication tools on development, greater and more innovative ways of disseminating the contents of the reports must be found.

HUNGER, POVERTY AND HUMAN DEVELOPMENT

Hunger and poverty are multi-faceted in their causal factors, but can both be measured using malnutrition indicators. There is a strong link between poverty, nutritional status and food insecurity. Most of the poor are either under-nourished or vulnerable to hunger. This is so because availability of and access to food are functions of structural conditions and changes in income, agriculture and trade, and interact with the health and sanitation, affecting the nutritional status of households. Improved nutrition leads to higher physical and labour productivity

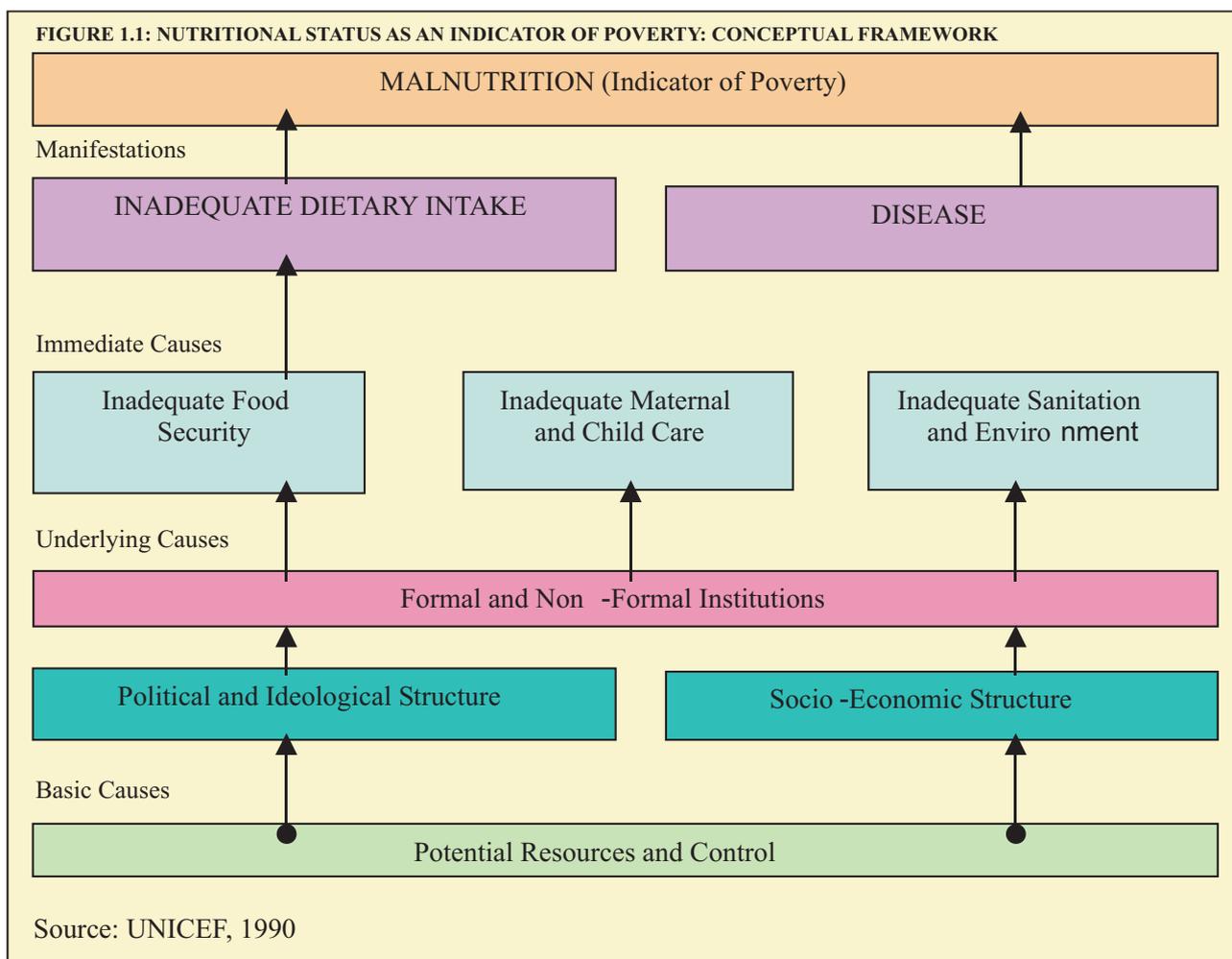
in the market. Reduced food intake increases susceptibility to infection, while illness can lead to anorexia and lowered food intake. Hunger and malnutrition affect progress in human development in all its essential components.

First, hunger and malnutrition affect the ability of humans to enjoy a decent standard of living. People's freedom to acquire food as a necessity of life to support an acceptable life-style is affected at the same time. In this way, hunger and poverty are explicitly linked.

Second, hunger and malnutrition also affect longevity by shortening human lives. Life expectancy is lowest in areas ,

with the highest prevalence of under-nourishment and hunger. Mortality rates for new-born infants provide a good indicator of the nutritional status of the mothers, while those for children under 5 are suggestive of the nutritional status of the children themselves. Therefore, hunger and malnutrition affect the human ability to enjoy a long and healthy life, including for women and children.

Third, hunger and malnutrition affect the ability of humans to acquire knowledge by lowering brain development, school attendance and the capacity to access and process information for making other individual choices.



BOX 1.2

HUNGER, FAMINE AND UNDER-NUTRITION

Hunger literally refers to the pain and discomfort caused by a lack of food, and whilst under-nutrition can also be defined as a lack of food, it is not always associated with pain and discomfort. Whilst in many contexts hunger and under-nutrition are used interchangeably, under-nutrition is more explicitly associated with the clinical outcomes of under-nourishment (i.e. lack of energy, risk of disease and mortality), whilst hunger is more usually associated with discomfort and pain.

Famine and chronic hunger need to be distinguished from each other. Famine refers to acute starvation and to a rapid increase in mortality, whilst chronic hunger refers to persistent and sustained nutritional deprivation.

It should be noted that under-nutrition is used by nutritionists in two different ways. Under-nutrition can be used to refer to insufficient consumption of food, calories and energy. In this context, under-nutrition is juxtaposed with over-nutrition, that is, the over-consumption of calories. Similarly, under-nutrition can refer to a specific anthropometric observation e.g. a child is said to be under-nourished when its weight is below that which would be expected for its age.

Source: Priority Survey I, 1994

Hunger and malnutrition are significant elements in understanding the deprivations in human development and more specifically poverty. A conceptual framework for the analysis and understanding of the relationships between these concepts, using malnutrition as the entry or end point, is given in **Figure 1.1**. It also shows the interplay of factors leading to malnutrition, a direct measure of poverty. This involves many factors that also encompass the human development matrix, especially so when the biological determinants of malnutrition are closely examined together with those that are correlated to socio-economic factors that touch on the three components of human development, i.e., decent standard of living, longevity, and knowledge.

Malnutrition arises from immediate causes related to inadequate dietary intake or hunger and various conditions of human health or disease. Together with disease, food insecurity is a prime cause of under-nutrition and hunger, which are

direct measures of poverty. Either one or a combination of food insecurity, inadequate care and poor sanitation and environment form the underlying causes for disease and inadequate dietary intake.

Four conditions must exist for food security to be achieved: availability, accessibility, sustainability and equity. *Availability* means adequacy in the supply of all food types, which are safe and meet cultural preferences. *Accessibility* means the ability to procure food supplies in all seasons through the transformation of assets (land, labour, capital and other resources) into food entitlements through own production, purchase, hunting, gathering, barter and gift. *Sustainability* of food supplies is assured by conserving and enhancing the initial endowment base and the ability to adapt to changing circumstances. *Equity* of access means no social differentiation.

Household food security is intricately tied to livelihoods security and is more likely to be achieved when livelihoods are

“Food security is assured when all people have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life at all times” (DFID, 2002).

sustainable. In this way, food security is linked to sustainable livelihoods, the theme of the ZHDR 1999/2000. Livelihoods are vulnerable if the chances of exposure to shocks, stresses and risk that cause food insecurity are high. It also reflects a person's, household's or community's ability to cope with shocks.

CONCLUSION

Chapter 1 has provided a framework for understanding the inter-relationships between human development and poverty and hunger. In Zambia, where the levels of poverty and institutions in

hunger are unacceptably high, the human development perspective offers a comprehensive way of looking at the problem. It states very emphatically that poverty is not only an outcome of low incomes but a result of a diversity of many other human deprivations. Inadequate access to education, health, and physical facilities such as roads and market centres, creates conditions for poverty and hunger and at the same time undermines progress in human development. Where there are failed policies and weak institutions in all these areas it will be difficult to realistically fight poverty and hunger.

POLICY ENVIRONMENT AND PERFORMANCE

POST-INDEPENDENCE HISTORICAL BACKGROUND: SOCIO-ECONOMIC CHALLENGES

At independence, Zambia inherited a prosperous mining-based mono-economy. With her abundant natural resources, prospects for human development looked very bright. However, the Government was faced with the challenge of diversifying the economy in order to redress the inherent inequalities that existed due to the rural-urban divide, geographically isolated rural labour reserves, high unemployment among indigenous Zambians, and discriminatory channels for the provision of socio-economic services, such as health and education. This was compounded by the Unilateral Declaration of Independence (UDI) by the rebel government in Rhodesia that unexpectedly cut off communication and trade with Zambia's southern neighbours in 1965.

The new Government attempted to redress these imbalances through a number of initiatives. One of the measures was nationalisation. Thus, the Mulungushi Declaration of 1968 led to radical changes from liberal policies to a more restrictive policy environment that entailed increased Government involvement in national development. Further, policies to diversify the economy away from mining through industrialization and import substitution were introduced. The main strategy for import substitution was the introduction of various shades of parastatal companies, through which the local manufacturing sector was protected by high tariffs and an over-valued exchange rate. Price controls for major commodities were also introduced.

The Government embarked on massive investments in physical and social infrastructure, such as the Tanzania Zambia Railway Authority (TAZARA) and Tanzania Zambia Malawi (TAZAMA) oil pipeline, to open up the northern links to the Indian Ocean. Locally, the Government invested heavily in education and health infrastructure - such as the University of Zambia (UNZA), the University Teaching Hospital (UTH), and thousands of primary and secondary schools, colleges, clinics and district hospitals. These facilities opened up socio-economic opportunities for thousands of previously sidelined Zambians.

The above policies, however, also introduced distortions and imbalances in the economy. The over-valued exchange rate encouraged inefficient capital-intensive development for the domestic market. While parastatals were encouraged to produce for the domestic market, this did not enhance their capacity to produce for export. Foreign exchange earnings reduced. Consequently, both the import substitution industrialisation strategy and economic diversification performed below expectation. The weaknesses in the centralised welfare state, a one-sided industrialisation policy based on copper mining with declining commodity prices, and the neglect of the agricultural sector and infrastructure - i.e., transport, water, energy and health - transformed Zambia into one of the poorest countries in Africa.

Although a modest GDP growth was registered during the first ten years of independence, largely as a product of the sizeable expansion of import substitution and infrastructure development, the period after that witnessed a decline in GNP growth per capita to a fraction of

what it was at independence (See **Figure 2.1**). This was exacerbated by external shocks, such as the 1974 oil crisis prices and decline in copper prices, affecting the long-term economic trends during the 1990s and beyond.

POLICY CHALLENGES OF THE 1990s

The reversal of policies and measures discussed above created a fertile ground for poverty and hunger of the 1990s. As a result, Zambia now faces many challenges to reduce poverty and hunger. Seven of these major challenges are highlighted below.

A higher population growth rate against declining GDP growth rate. Over the period 1990 to 1999, Zambia's annual GDP growth rate averaged 1.0% which is lower than that of any other country in South African Development Community (SADC) and also lower than the Sub-Saharan average of 2.4%. During the same period, population growth rate averaged 3.2% per annum. As a result, per capita GNP has had a downward trend to a fraction of what it was at independence, as illustrated in **Figure 2.1**.

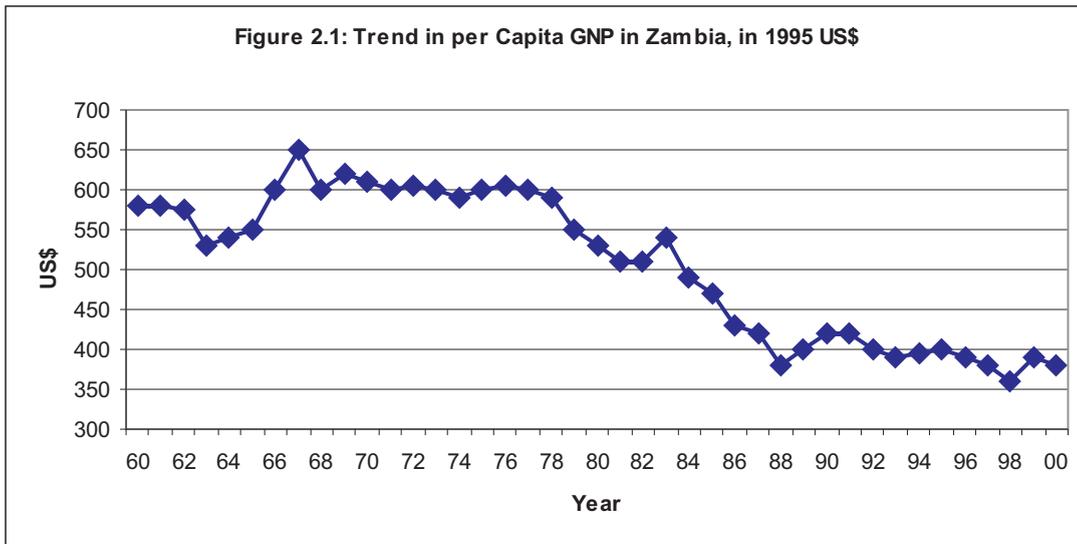
The impact of HIV/AIDS. High prevalence of HIV/AIDS continues to undermine the national health and economic status. The prevalence rate for the 15-49 year age group is now 16%, according to the Demographic and Household Survey 2001/02, and so HIV/AIDS remains a threat to the country's development efforts because of its adverse impact on the country's human capital, the greatest resource that Zambia has. By shortening human productivity and life expectancy, this pandemic constrains the country's potential productive capacity. Valuable human

resources are lost, with prolonged illness of the skilled leading to reduced economic productivity through lost person-hours.

Reduced access to social services. By the early 1990s real per capita consumption fell by two-thirds over a 15-year period. Even more disturbing was the decline in social indicators. In **Chapter 3**, it is shown that people's access to socio-economic facilities, an important component of human development, has declined in many poor areas. Many in these areas have difficulties in accessing major socio-economic amenities such as markets, health facilities, hammer mills, post offices, primary schools and transport services.

Rural-urban divide and social problems. In Zambia, the pervasive rural-urban divide that motivated interventionist policies of the 1970s, still looms large. Investment policies and practices have favoured urban areas, with most rural facilities having deteriorated beyond repair. The quality of socio-economic infrastructure in rural Zambia is not conducive for human development and the fall in the livelihood security in rural areas is attributed to this. The rapid rise in urbanisation is also attributed to this rural-urban divide.

Copper crisis. Zambia's economy deteriorated from the mid-seventies due to the decline in copper prices. This was worsened by the rapid increases in oil prices and huge expenditure outlays that the conflicts associated with independence struggles in neighbouring countries entailed. The collapse in copper prices in the 1970s on the international metal market was initially seen as a temporary and passing phase. The Government thus borrowed to minimise the impact on living standards, giving rise



Source: PRSP, 2001

to the debt problems of the 1990s.

Unstable macroeconomic environment.

Zambia's macroeconomic situation steadily deteriorated after the mineral boom that took place in the first ten years of independence (1965–1975). This was manifested in high and variable rates of inflation, chronic budget deficits and deterioration in balance of trade with its trading partners. Zambia never fully recovered and macroeconomic instability continued to haunt economic planners during the 1990s and beyond, posing serious constraints to sustainable economic growth.

While the inflation rate had a downward trend to below 20% over the last decade, it has remained at a high level due to increases in money supply, and sharp price rises of key imports such as petroleum and maize during droughts. There has been an increasing rate of government borrowing, mainly driven by the external debt burden and declining donor budgetary support. Real interest rates have remained unacceptably high, undermining private sector investments and growth.

High and unsustainable debt. Zambia's external debt of US\$7.30 billion as at December 2001 remains high and unsustainable. At about US\$730, Zambia has one of the highest per capita debt and is one of the most highly indebted countries in the world. Zambia's debt stock increased rapidly in the 1980s, rising from US\$3.3 billion in 1980 to US\$6.9 billion in 1990. Increase in grants and debt forgiveness helped to keep the debt stock at this level in the 1990s. However, there was a significant deterioration in 2001, when the debt stock rose from US\$6.3 billion in 2000 to US\$7.2 billion. The external debt stock in 2002 reduced to US\$6.5 billion due mainly to debt relief and repayments. The high debt level can be attributed to increased borrowing and failure by Zambia to attain total debt cancellation. Total debt service as a percentage of exports between 1995 and 2001 averaged 19.0%. This was a drop from the 1980s average of 27.8%, which had reached a maximum of 49.0% in 1986.

Zambia's external debt situation is unsustainable and is a heavy burden on present and future generations. Moves to

have Zambia attain debt sustainability are being taken. Creditors have committed themselves to the cancellation of debt if Zambia shows progress in the implementation of the PRSP and meeting Highly Indebted Poor Countries (HIPC) completion point conditions by the end of 2005. However, despite the relief Zambia will obtain under the HIPC Initiative, her debt, which will reduce to US\$3.3 billion in 2005, will still remain quite high and will require the diversion of resources from social and investment expenditure to repay the remaining stock. The high external debt is worsened by high domestic debt that increased by 2.7%, from K 4,139.3 billion in 2001 to K 4,249.2 billion in 2002.

Moral and economic imperatives on the part of creditors, given that policies of developed countries in the 1970s played a role in the escalation of the external debt of developing countries, require that this debt be cancelled altogether while taking measures to help Zambia avoid imprudent and unsustainable borrowing in the future. A Zambia not choking under the heavy burden of debt is good for the world economy.

POLICY RESPONSES AND PERFORMANCE

Given the enormity of the challenges that faced Zambia in the 1990s, the country's economic planners tried to come up with innovative responses to reverse the negative trends in human development. Against a background of a socialist legacy, a fresh start was made by the new Government in 1991, in the form of an economic and social policy package that emphasised the revitalisation of the economy through productive sectors - such as mining, manufacturing and agriculture - to reduce poverty. This entailed a multi-pronged approach comprising macroeconomic structural

reforms, privatisation, liberalisation of markets and prices, selected sector reforms, targeted infrastructure development and poverty-oriented programmes.

Moves towards the World Bank and IMF-inspired reforms were reluctantly initiated by the UNIP Government during the late 1980s and were later accelerated by the new MMD Government which assumed power in October 1991. After 1991, these reforms were given new impetus with far-reaching changes in interest and exchange rate policies, banking sector reforms, foreign trade, privatisation of state and parastatal enterprises and stabilisation measures in the financial markets.

The main objectives of the new reforms were to:

- restore macroeconomic stability and create a conducive environment for the development of key markets;
- increase private sector participation as the Government withdrew from its involvement in direct economic participation;
- promote efficient production systems and enhance the country's comparative advantage in regional and international trade through a changed structure of incentives that raised the production of tradable relative to non-tradable goods;
- eradicate poverty through economic growth.

The pursuit of all these objectives was to have far reaching implications for economic sectors such as agriculture. A summary of the policy reforms and major external events that characterised the 1989 to 2002 period are summarised in **Table 2.1.**

SPECIFIC POLICY CHANGES AND EFFECTS ON ECONOMIC PERFORMANCE

CHANGES IN FISCAL POLICIES

As part of a tight fiscal policy, maize subsidies, which in some years accounted for more than 10% of the total Government budget were discontinued. Though primarily a fiscal measure, the withdrawal of maize meal and fertilizer subsidies in 1992 by the MMD Government facilitated the introduction of the policy of liberalisation of agricultural markets, discontinuation of the pan-territorial pricing system and the coming in of regionally differentiated pricing.

A cash budget system was introduced in 1993. Under this system, Government expenditure could only be made if supported by actual available revenue. This move signalled the Government's determination and commitment to maintain fiscal discipline and do away with unplanned expenditure over-runs of the past. The measure was augmented by steps to depoliticise and ensure accountability within Government departments. On the revenue side, important steps were also taken to strengthen the country's capacity to collect tax and ensure compliance.

Table 2.1: Major Policy Reforms and External Events 1989 to 2002

Year	Stabilisation Policy and Key Event	Agricultural Price and Marketing Reforms	Trade Reforms	Parastatal Reforms
1989	Decontrol of all consumer prices (except maize)	Abolition of NAMBOARD		
1990	Policy Framework Paper agreed with IMF	De-monopolisation of agricultural marketing Maize meal subsidy withdrawn and restored after food riots		
1991	Normal relations resumed with the IMF Rights Accumulation Programme started IMF suspends disbursements in June, inflation soars Election of MMD Government on a platform of major reforms		Removal of most export controls Removal of the ban on maize exports	
1992	Introduction of Treasury Bills financing Decontrol of borrowing and lending rates Introduction of 'Bureau de change' for exchange rate determination	Severe drought Removal of maize meal subsidy Removal of fertilizer subsidy	Simplification and compression of tariff rates Increase in tariff preference for goods from COMESA	
1993	Introduction of Cash Budgeting	Failed attempt to reform agricultural marketing		Privatisation Act passed, Zambia Privatisation Agency born
1994	Liberalisation of capital account	GRZ fails to pay cash for maize. Issues promissory notes Launch of the Agricultural Credit Management Program		Dissolution of ZIMCO
1995		Privatisation of Milling industry Launch of the World Bank-supported Agricultural Sector Investment Programme (ASIP)	Removal of 20 percent uplift factor applied on import values	Acceleration of privatisation
1996	MMD wins elections: UNIP boycotts elections	Beginning of ASIP Implementation		
1997	Donors withdraw balance of payments support			Negotiations for the sale of ZCCM Commenced
1998	Copper price adversely affected by East Asian Crisis	Drought in the South and excessive rain in the North caused by El Nino		
2000	PRSP designed	ASIP Extended for two years		Sale of ZCCM core assets completed
2001		ASIP ends in December Agricultural Commercialisation Programme designed Poor weather conditions lead to poor harvest		
2002	New Deal Government sworn in with renewed commitment to agriculture PRSP launched		GRZ imposed and later revoked ban on 14 Zimbabwean products Malawi bans import of Zambian milk Control of Goods Act and Customs and Excise Acts amended to introduce safeguard measures to protect Zambian products	Withdrawal of Anglo-American Corporation from KCM Crop Marketing Authority proposed but Bill rejected by Parliament

Source: Updated from McCulloch, 2001

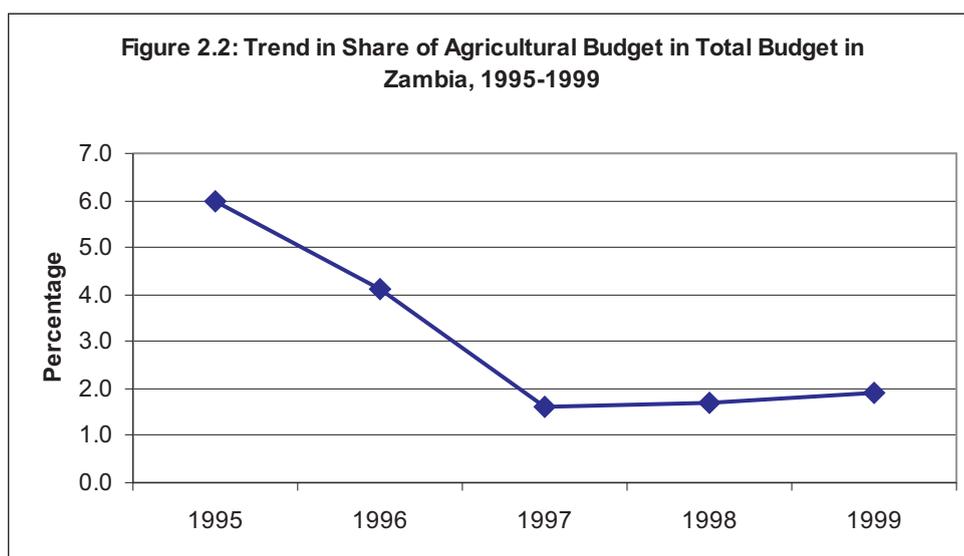
Improved Government fiscal discipline yielded some good results. Domestic balance became positive in 1993 and was sustained through the second quarter of 1999. The overall domestic balance as a percentage of GDP increased steadily from 0.01 in 1995 reaching a peak of 1.5 percent in 1997 before dropping to minus 0.01 in 1998 and subsequently increased in 1999. Tax revenue, as a percentage of GDP, increased from 13.9% in 1993 to 18% in 1998.

On the negative side, Government achievements in the reduction of expenditure through the cash budget system have been artificial. Suppliers of goods and services were not paid in the

the cash budget system led to a breakdown in the process of priority setting through erratic and declining disbursements well below budgetary allocations. Whereas agricultural expenditure, as a percentage of total domestic expenditure, stood at 6.0% in 1995, it dropped to 4.1% in 1996, before drastically declining to 1.6% and 1.7% in 1997 and 1998, respectively, and then increasing slightly to 1.9% in 1999, but still remaining far below the budget projections for the year (see **Figure 2.2**).

CHANGES IN MONETARY POLICIES

The policy reforms were also characterised by tight monetary policies



Source MoFNP, 2001

process. This constrained the viability of industries, such as food manufacturing, that supplied Government institutions. This, in turn, negatively affected other economic sectors, such as agriculture, through reduced demand for agricultural produce. The cash budget measure also reduced allocations to the social sector services such as health and education, thereby negatively affecting the quality of livelihoods.

More specific to agricultural expenditure,

to obtain low and stable inflationary rates and to restore Zambia's competitiveness in export markets. The key instruments used were the liberalisation of interest rates in 1992, the introduction of the Treasury Bill Tender system in 1993, the complete liberalisation of the exchange rate system in 1994 and the elimination of import controls. The first two were aimed at allowing interest rates to rise and thereby mop up excess liquidity in the economy. However, because financial and foreign exchange liberalisation were done

simultaneously, it became difficult to substantially bring down money supply in the first three years of the reforms. Instead, money supply increased during this period. Between December 1995 and March 1999, however, there was a substantial reduction in money supply to 11% in 2001, ending at 16.1% in 2002. The outcome of this trend in money supply on the rate of inflation was to first push it to over 100% in the first three years of the reforms before it began to come down, dropping first to 46% in 1995 and to a low of 18.6% in December 1997. However, inflation started to rise again, reaching 30.6% in December 1998. In 2001 annual inflation, at 18.7%, was lower than the 30.1% level recorded in 2000. Inflation closed at 17.9% in 2002 substantially.

OUTCOMES OF MACROECONOMIC POLICIES

Exchange rates and trade: The objective of maintaining real exchange rate depreciation has been a success, given the phenomenal rise in non-traditional exports (NTEs). NTEs include all products exported except copper and cobalt. The NTEs increased from a mere

US \$77.4million in 1987, to their highest in 1997 of US\$328.6 million, a rise of 320%. This rise was, however, halted when NTEs dropped by 5.4% to US\$310.9 million in 1998. The 1997 growth was due to the opening up of the market in the Democratic Republic of Congo (DRC) following the change of government in May 1997 that improved trade with Zambia. The outbreak of war in the DRC in 1998 made this market less accessible and had a negative impact on the growth of NTEs.

The impressive increase in NTEs has been driven by the rise in agricultural exports, especially those of primary agricultural products (see **Table 2.2**). This rise could be partly attributed to inflationary trends within the economy, which gave huge incentives to exporters seeking dollar-based revenues to insulate themselves from inflation. The role and contribution of agriculture to NTEs has steadily risen. Positive growth has been recorded in animal products (fresh eggs, day-old chicks, crocodile meat, dressed chickens, milk, cheese and sausages). Other agricultural exports are horticultural products consisting entirely of pre-packed specialty vegetable and floricultural products mostly flowers (95% roses), cotton, textiles, sugar, coffee and tubers.

Table 2.2: Earnings from Non-Traditional Agricultural Exports, 1990-2000

Year	Animal products	Flori-culture products	Horti-culture products	Leather products	Primary agri-culture Products	Total agri-products	Total NTEs	Share
1990	2,291	1,050	4,544	1,039	14,542	23,466	102,202	23%
1991	1,185	1,902	5,807	675	22,761	32,330	121,322	27%
1992	456	2,987	2,934	375	19,968	26,720	101,970	26%
1993	740	5,506	2,391	1,259	25,072	34,968	124,091	28%
1994	355	9,110	2,421	1,235	10,008	23,129	138,859	17%
1995	654	18,000	2,589	1,211	24,000	46,454	202,498	23%
1996	1,972	4,784	3,286	2,131	44,527	56,700	240,824	24%
1997	3,412	7,385	5,637	2,220	90,959	109,613	328,557	33%
1998	4,116	32,355	19,002	3,134	57,642	116,249	301,792	38%
1999	4,374	42,607	23,128	1,859	61,973	133,941	284,946	47%
2000	3,374	33,863	27,355	4,331	37,103	106,026	256,236	41%

Source: MoFNP, 2001

The overall direction of Zambia's external trade by major regional blocks is shown in **Table 2.3**. Much of the intra-African trade consists of agricultural products. Zambia has been quite successful at penetrating the COMESA market. The trade balance with the COMESA members and the EU was positive in 1998. However, the trade balance with Republic of South Africa (RSA) was negative. The 21 members of COMESA together accounted for around 33% of Zambia's agricultural exports by value. Most agricultural exports to neighbouring COMESA states are of basic commodities, such as sugar, mealie meal, beans and stock-feed, plus tobacco which is sent to auction floors in Zimbabwe and Malawi.

duty on tyres and tubes has been completely removed and some taxes on fuel have been reduced in an attempt to reduce operating costs for road transport. The Government has also re-categorised more than 120 items considered vital for agriculture. These measures have enhanced export and investment chances in the agricultural sector.

The above measures are not adequate and taxes in Zambia are still too high and are constraining development. In agriculture, high taxes have contributed to the erosion of the asset base of farmers, thus reducing their competitiveness.

Table 2.3: Value Shares of Zambia's Trade with Key Partners, 1998

	Imports %	Exports %
COMESA	15	22
European Union	28	53
Republic of South Africa (RSA)	46	12
Other Markets	11	13
Total	100	100

Source: Shawa, 2001

There is a sizeable market for agricultural exports in the region which Zambia has exploited. There is demand for maize, maize meal, edible oil, sugar, livestock products (meat, milk, poultry) in countries such as the DRC and Angola, where instability has led to scarcities in these commodities. The DRC ranked among the top five countries of Zambia's export destinations. However, this trend was unfortunately reversed when war broke-out in that country in 1998. In addition, large quantities of agricultural produce have been traded informally in cross-border transactions with neighbouring countries.

Taxes: Taxation can be a viable instrument to stimulate growth. Producers of NTEs have been granted preferential corporate taxes, lower corporate income tax rate on foreign earnings and can benefit from other fiscal incentives, such as the duty draw-back scheme. Excise

Interest rates: The benefits of the improvements in interest rates have not been passed on to the private sector because of poor access to credit. The weighted lending base rate dropped from 139.5% in June 1993 to 39.7% in April, 1999. In real terms, growth in domestic lending to the private sector declined on average by 0.9% per month in 1997, compared to slight increases of 1.8% and 0.5% in 1995 and 1996, respectively. The Bank of Zambia responded by reducing the core liquid asset ratio for banks from 38.1% to 33.0% in November 1997 and further to 25% at the end of January 1998. Consequently, monthly growth in domestic lending to the private sector averaged 0.4% in 1998 and 6.9% in the first three months of 1999. Despite this improvement, recovery from the credit squeeze of the 1990s is yet to be achieved. This credit squeeze continues to make the transition to private-sector driven development much more difficult.

Inflation: Though the current level of inflation, at 22.6%, is far much lower than that which prevailed during the first few years of the reforms, it has nevertheless remained persistently high, and there is still need to bring it down to a single digit in order to encourage long-term investments in the economy and the agricultural sector in particular. Until inflation is brought under control, other areas of investment will always be more attractive while the medium to long-term growth-enhancing sectors, such as agriculture, will continue to be less attractive investment destinations. Inflation induces high nominal exchange rate depreciation, which helps to explain the recent rapid growth in non-traditional and dollar-based activities such as the production and export of horticultural and floricultural crops.

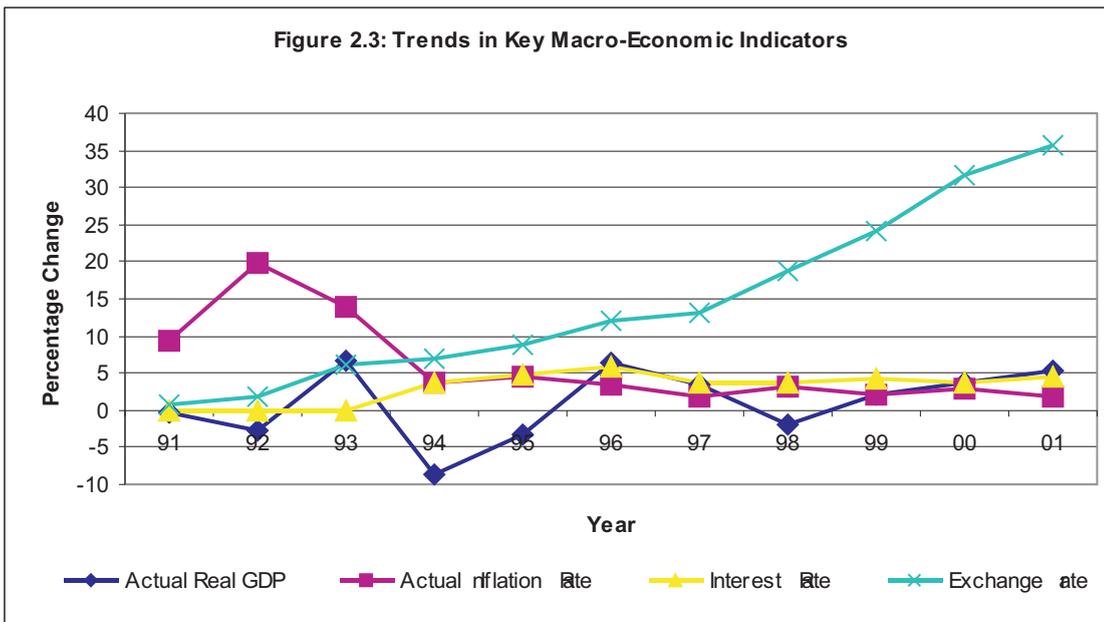
Overall impact of macro-economic policy reforms. Overall, macro-economic policy reforms have had a less than *apriori* expected impact. Inflation, interest rates and foreign exchange rates were unstable throughout 1990 to 2001. Targets could not be met. Growth was only experienced

in five of the ten years (see **Figure 2.3**). The unpredictable government operations, together with the mismatch between demand and supply of funds in the money market and in-built structural problems, are responsible for this less than expected performance of the economy.

The outcomes presented above indicate that reforms have not resulted in economic progress, thereby failing to contain the deepening human crisis in Zambia. This has translated into poor provision of services required for the achievement of human development and the reduction of hunger and poverty.

This begs the question whether Structural Adjustment Programmes (SAPS) are appropriate for resolving the economic problems of Zambia and those of other developing countries. The issue has been fiercely debated with no clear answers, although some common ground appears to have emerged.

SAPs induce price rises, especially food prices as subsidies are eliminated, and they affect the expenditure and advocating



consumption patterns of the poor, increasing their share of income spent on food in relation to other non-food items. By advocating cost recovery in vital services, SAPs also lead to reductions in the accessibility of social and economic services such as education and health, both critical components in the higher attainment for human development. Liberalisation of financial markets in an environment of high interest rates, as was the case in Zambia, raises interest rates beyond access of financial services for the poor. The demand-reducing measures contained in SAPs result in unemployment and a decline in real wages.

The World Bank and IMF and other advocates of market-based liberal policies counter that the above outcomes have been wrongly associated with SAPs as Zambia's economy, just as in many other developing countries, was in serious decline anyway when a move to adopt SAPs was made. Therefore, the question is: *what would have been the case if economic reforms had not been adopted?*

There are no conclusive answers to this question and there is new recognition that both arguments have some merit. It is not possible to prevent a deepening human crisis on the premise of policies that do not provide an enabling environment for growth and sustainable development. Whether through the adoption of SAP or by sheer economic mismanagement, the poor and vulnerable have been adversely affected by failed policies. **Chapters 3 and 4** demonstrate this with respect to the falling per capita calories intake, rising incidence of infant mortality, malnutrition, and other survival indicators. Traditional and time-tested

community-based social safety net mechanisms, such as the extended family, have been seriously weakened in the process.

These observations have made the IMF, the World Bank and other proponents of SAPs appreciate the need to reduce the social cost of adjustment by adding a human face to structural adjustment through increasing expenditure on health, education and social safety nets. Key policy measures have included introduction of the social action programmes, social welfare schemes and food assistance programmes. But social welfare schemes reach only 10% of the targeted population of vulnerable groups (street children, disabled, widowed, orphans, aged, etc) in Zambia. The extended family, as the traditional safety net, is thus over-stretched. So are the efforts of Churches and NGOs. All these point to the need for a more comprehensive social security and safety net system to protect the vulnerable in society.

SHIFT TO SECTOR-WIDE APPROACHES

Zambia has been in the forefront in the implementation of agricultural sector-wide programmes through the Agricultural Sector Investment Programme (ASIP). Sector-Wide Approaches (SWAs) have also been used in Zambia as promising tools for financing and managing development initiatives in health, education and transport. This was a relevant response to address the challenge of rising hunger. Considerable experience has been gained in their preparation and gradual implementation.

BOX 2.1**Key Features Of ASIP**

- Integrated investment
- Growth-enhancing
- Covering the whole country
- Zambian owned.
- Harmonised donor and government procedures
- Demand-driven use of Technical Assistance (TA)
- Built-in flexibility
- Decentralisation and beneficiary participation.
- Objectives consistent with macro-economic stabilisation and growth.

(Source: MACO, 1995)

resources. The design of ASIP, as an interventionist strategy in agriculture, was justified by the unique feature of agriculture that combines poverty reduction through growth and equity. It was also seen as a tool for reducing the proliferation of projects and minimise duplication of efforts. The key features of ASIP are summarised in Box 2.1.

Although ASIP had some positive impacts, its overall impact, according to its mid-year review, is poor. The key positive impacts include a rising trend in average and total area cultivated and increased use of conservation farming (MACO, 2001). See Box 2.2. Diversification away from maize has been accelerated by out-growers, especially in the low rainfall agro-ecological Zone I and high rainfall agro-ecological Zone III. Due to the diversification process, the amount of land used for the production of maize decreased by 22% between 1996 and 2001 while the amount of land used for the production of groundnuts, cassava and sweet potatoes increased by 23%, 76% and 54%, respectively. Land under

ZAMBIA'S AGRICULTURAL SECTOR INVESTMENT PROGRAMME: IMPACT AND LESSONS LEARNT

ASIP was launched in 1996 as a joint public-private investment facility to consolidate the Government's policy of liberalisation and market reform. ASIP was designed as a programme to harmonise agricultural development initiatives and to optimise the use of 1.

Box 2.2**CONSERVATION FARMING (CF) IN ZAMBIA**

CF is a package of agricultural practices that, if adhered to, ensure sustainable use of resources (soil, water, nutrients, etc) while raising and stabilising productivity at a higher level on a sustained basis. Conservation farming is an integrated management of soil, water and biological resources. The use of conservation farming is necessary in view of soil degradation, water shortage, labour shortage and limited farm power/implement. Conservation farming has allowed farmers to prepare their fields and plant their crops with the earliest rainfall. It also enables farmers to efficiently apply fertilizers, manures and other inputs.

Conservation farming is not a new technology, but a reconstituted, amalgamated and tested package of existing technological practices. It adopts a more focused strict regime of good management practices to conserve resources and stabilise yield at a higher level. Conservation tillage, a key component of CF, has been taught in training institutions for decades.

Development partners in Zambia have promoted CF through radio, publications, study tours, demonstrations, field days and videos. Over one in two extension workers have been formally trained in the basics of CF. Adoption has been increasing steadily with about 15,000 farmers regularly using CF on their farms. CF has been promoted among outgrower farmers as one of the conditions for accessing outgrower assistance. Despite this publicity, the adoption of CF has been confined to only some areas along the line of rail. The majority of farmers in other areas still depend on conventional farming.

The occurrence of the drought in 2001/2002 season has offered an opportunity to evaluate the impact of conservation farming on household food security. Farmers who had used CF practices were significantly less affected by drought than those who used conventional farming practices. Up to 60% increment in cotton and 100% in maize yield attributable to conservation tillage alone have been recorded. CF has reduced the fuel requirements of commercial farmers from 150 litres to 50 litres per hectare.

Conservation farming methods are therefore being fine-tuned and continuously modified to suit the needs of smallholder farmers in diverse farming systems and ecological environments. There are continuous efforts to implement an accelerated transfer of the technology to achieve increased adoption and ensure food security in future.

Agriculture's share of non-traditional exports rose between 1990 and 2000, showing improved prospects for agriculture as the engine for economic growth. Also, major outbreaks of cattle diseases that decimated cattle populations were contained, thus reversing the pre-ASIP downward trend in cattle ownership among small-scale farmers from 18- 14% in the 1990-1993 period to 16% by 2000. Community- based infrastructure has improved through the Rural Investment Fund (RIF), and there is increased stakeholder participation through institutionalised consultative bodies, such as the District Agricultural Committees (DACs) and the Agricultural Consultative Forum (ACF).

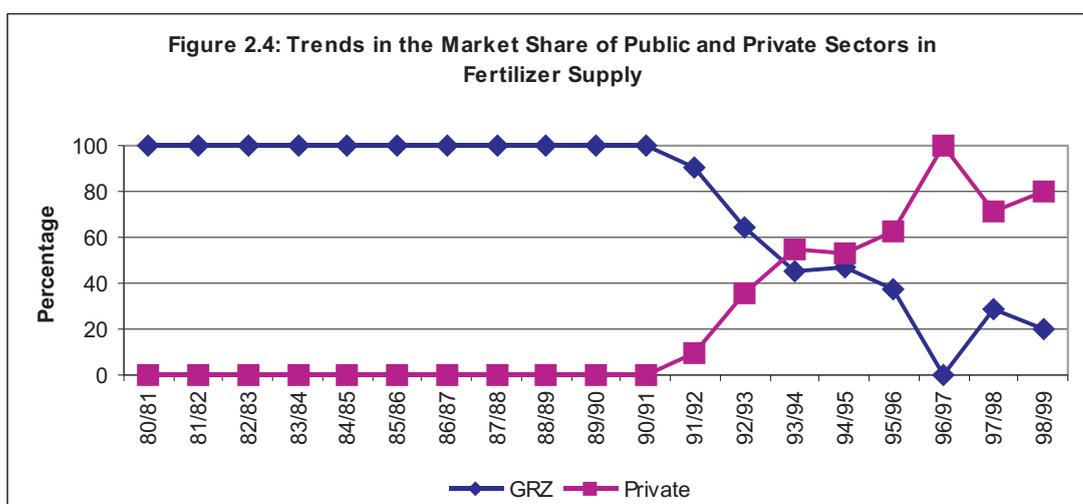
On the negative side, most pre-ASIP constraints persist. These include poor crop and animal husbandry; low access to farm power and mechanisation; declining access to modern farm inputs; decreasing soil fertility, especially in traditional farming areas, and low average yields; and reduced cash incomes and rising poverty in rural areas (see **Chapter 3**). Even though there have been some positive impacts and successes from exports, these have been localised to a few accessible areas.

The decrease in the dominance of maize as a food and cash crop, coupled with

institutional deficiencies, has led to a steady decline in the use of fertiliser over the ASIP period. Less than 20% of the farmers use fertiliser. Consumption of fertiliser fell from 234,000 metric tonnes in 1988 to a mere 89,000 metric tonnes in 2001. In the same period, maize cultivation declined from 1.02 million hectares to 575,000 hectares. This translated into a decline in fertiliser use per hectare from 229 kilogram per hectare to 174 kilogram per hectare, or 43% of the official recommendation.

Fertilizer marketing has been a controversial issue from the perspectives of the public and private sectors. While the Government has been concerned about food security issues and has therefore been unable to let go of fertilizer marketing, though inconsistent with its stated policy position, the private sector has been less than impressed with the unpredictable behaviour of the Government, thereby removing major incentives for private sector participation.

Therefore, although private sector participation and share in the fertilizer market have increased since 1992 (**Figure 2.4**), the rate of their entry and conditions of their operation have limited their coverage, forcing the Government to retain its presence in fertilizer marketing to reduce the decline in maize production. The main initiatives used by the Government to ensure supply of fertilizer are shown in **Box 2.3**.



Source: Fertilizer study: Food security research project 2002
 Note: GRZ includes Food Reserve Agency, Donor and Nitrogen Chemicals of Zambia Production

Despite the huge financial outlay in all these initiatives, the performance of ASIP interventions has remained poor, with less than 20% of farmers being reached and low loan repayment rates, averaging less than 20%. Unsustainable institutional delivery mechanisms, lack of indigenous players in the fertilizer market, low effective demand for fertilizer and the unfavourable environment for agri-business remain challenges in the fertilizer market.

institutional restructuring; actor participation in implementation; democratic decentralisation; a core function analysis; enabling macro-economic framework; and a public expenditure review. But it was assumed that these would fall in place once implementation started. This assumption proved to be unrealistic as almost all known pre-conditions failed to materialise.

Specifically, institutional restructuring

Box 2.3
MAIN GRZ INITIATIVES TO SUPPLY FERTILIZER

- ZCF/LIMABANK/ CUSA system of 1992/93 to 1993/94 period
- Agricultural Credit Management Programme (ACMP) of 1994/95 to 1996/97
- Direct FRA and Credit Management Transition in 1997/98 season
- Agro-Support Programme of FRA from 1998/99 to 2001
- Food Security Pack through Programme Against Malnutrition (PAM) from 2001 to 2003
- Fertilizer Support Programme (2002-2004)
- Revival of Nitrogen Chemicals of Zambia (2002)

Overall, both the ASIP mid-term review of 1998 and the 1999/2000 Sector Performance Analysis (SPA) show that ASIP performed poorly and has had no confidence of the stakeholders. It failed to improve agricultural performance from 1996 to 2001 and failed to make an impact on the reduction of poverty and hunger. While designed to ensure food security, statistics show an increase in both poverty and food insecurity in rural areas. Nevertheless the programme yielded useful lessons for the formulation of similar programmes in future. ASIP ended on 31st December 2001, after extension by two years.

Based on ASIP successes and failures, some key lessons can be drawn:

A programme's pre-conditions for success must be in place and should not be assumed to fall in place after implementation has started. The pre-conditions for success were known:

should be finalised prior to the start of implementation as it is difficult to accomplish within a very short time. There should be adequate actor participation especially at the frontline of implementation. Democratic decentralisation should be an integral part of the pre-requisites to implementation. A core function analysis should be conducted to determine the required functions of the Government vis-à-vis those of other players. The macro-economic framework should remain favourable and a coherent policy framework, with a clear vision and focus, put in place prior to programme implementation. A public expenditure review should also be undertaken to help prioritise resource allocation to pro-poor interventions.

Success of ASIP needs to be understood and built upon. There is need to consolidate the successes in the agricultural exports, expansion of out-growers and the changing structure of the agricultural

sector. Also the successes of the seed multiplication programme, the public/private sector partnerships, such as the Golden Valley Agricultural Research Trust (GART), and the adoption of the Participatory Extension Approach are developments that require consolidation in future interventions

Poverty alleviation should be the main thrust of policies and strategies.

Programme formulation must be more participatory and district-focussed and driven to ensure that the key stakeholder priorities are respected. The programme implementers should be accountable to the stakeholders. However, this is difficult in the absence of democratic decentralisation; hence the need for decentralisation to be part of the pre-conditions of a SWAp.

Poor policies make the Zambian econ-

Box 2.4

PARTICIPATORY EXTENSION APPROACH IN ZAMBIA

The Participatory Extension Approach (PEA) is a bottom-up planning process in which all the major social interest groups – men, women and youth – participate in identifying their problems and developing broad-based action plans aimed at achieving sustainable rural development. It has been adopted in Zambia as one of the key approaches to rural development and has been popularised with the support of the World Bank and German Technical Assistance to Zambia (GTZ).

The PEA is an extension methodology designed to strengthen the delivery of more responsive and relevant services to farmers and rural communities. It is a process that fully engages farmers and communities in partnership with external rural service providers including extension.

The fundamental principle is to listen and learn from farmers and to promote sustainable development based on the priorities of rural families as determined by them. It is a process that enhances community capacity to help themselves and to utilize their resources and those of external providers more effectively to improve their livelihood.

The overall objective of PEA is to mobilize and empower the rural population by involving them in every step of planning and implementation, and the monitoring and evaluation of activities. More specific objectives include:

- facilitating village families to identify and prioritise their main problems and opportunities;
- enabling communities to analyse their problems, their causes and effects and to propose solutions;
- involving communities in the formulation of Community Action Plans (CAP) that are geared to resolving problems and promoting sustainable development;
- promoting community and family ownership of the development planning process;
- facilitating the development of more relevant and responsive services from extension and other key rural service providers in the mobilisation of both community and external resources for implementing the action;
- facilitating farm families to monitor and evaluate the implementation of the plans to assess the resulting

The main features of the PEA process include: CAPS that are broad based and address the community priority concerns for rural development; involvement of all the community leaders, men, women, youth are involved thus creating a real sense of ownership and confidence in their own capacity; a more comprehensive and systematic approach to agricultural and rural development planning; establishment of community committees to oversee and monitor CAP implementation; and extension workers listen, learn and facilitate rather than teach and “guide”.

The PEA implementation process has four major phases that include: Phase I - Social mobilization facilitating the community analysis of their situation, problems and solutions; Phase II - Community level action planning; Phase III - Action plan implementation; and Phase IV - Monitoring the process through a participatory sharing of experiences and assessing the impact.

In each phase there is continual interaction within the community in order to achieve the desired output. The emphasis in PEA is on shifting the focus from teaching to learning and participation with farm families, from hierarchical top-down to participatory bottom-up approaches, from centralized to decentralized decision-making. Learning together involves all the actors, the community and both government and non-government service providers.

Source: MACO 2001

omy more vulnerable to external shocks.

External factors, such as drought and floods, have a significant impact on systems that are weak. The current impact of the drought in Zambia is in part due to the fact that policies are not adequate and pro-active enough to mitigate such calamities.

Interventions should focus on making the markets work for the poor.

Current market linkages need to be addressed. In the transition, the private sector must be supported and challenged to take up their complementary role while markets should be fully developed to provide opportunities to farmers.

From the above lessons it is clear that ASIP had a limited relevance to rural poverty reduction. This is because as a sector-based and focussed programme, it had a limited scope for addressing cross-cutting concerns, such as gender, environment and HIV/AIDS. The ASIP, as an approach, did not provide incentives for cross-sector behaviour as it was dependent on fund-flows *between* and *within* sectors and therefore failed to bring service management closer to end-users.

ASIP also did not possess a variable poverty orientation, leading to limited poverty impact. In addition, market liberalisation and privatisation, as policies within which ASIP was implemented, had increased regional gaps, further constraining ASIP's impact on poverty reduction.

Several policy issues come out of the experience of ASIP. The rural poor should be the core beneficiaries of SWAps for the approach to have a poverty focus. This should be enhanced by ensuring that the sub-projects are identified by local

communities. In addition, the capacity of local government should be improved for them to have a sustainable ability to plan and execute small community projects. The ongoing Public Service Reform Programme (PSRP) should be accelerated to ensure that the provision of services is streamlined. In this regard, private sector responsibilities for production and trade should be transferred to the private sector. In addition, fiscal decentralisation should be promoted by ensuring that appropriate levels of resources are made available at lower levels, and regional flexibility, that emphasises region-specific solutions, should be furthered. Cross-sectoral issues that promote linkages across sectors should also be addressed during the planning phase.

The experience of ASIP shows that agricultural SWAps pose a major challenge to sectoral development and co-operation, especially in the context of poverty reduction initiatives. Institutional reforms and capacity building are key implementation constraints that require re-orientation of approach. While agricultural SWAps induce a de-concentration of sectoral line ministries, they may actually provide obstacles to more comprehensive decentralisation. The challenge for Zambia now is to build on the experience of ASIP as a basis for accelerating the development of the agricultural sector to reduce poverty and hunger.

TAPPING INTO GLOBAL OPPORTUNITIES

Zambia's strategic positioning in the global economy is key to utilising her growth potential through trade to reduce

poverty and hunger. The performance in global economic parameters has a direct impact on the Zambian economy and its ability to fully utilise her growth potential to reduce poverty and hunger. This is because Zambia is an exporter of raw materials and an importer of finished products. In taking advantage of emerging global opportunities, four aspects should be taken into account.

The risks and benefits from the global policy environment. These are especially generated through trade that can have a direct bearing on hunger and poverty. As part of the global village, the integration of Zambia's rural areas into global markets broadens opportunities for growth. For example, the production of one of Zambia's key smallholder export crops, cotton, rose from 61,000 metric tonnes in 1996 to 84,000 metric tonnes in 1999, showing a substantial growth in Zambia's cotton production since the mid-1990s (FSRP Working Paper 1). This was not only due to structural changes in production and marketing arrangements but also due to relatively high world market prices. However, this exposure to world markets has led to price volatility and high risks, especially for the poor. This, coupled with the absence of mechanisms to assuage price volatility to manage supply and the low value-added in the market chain, leaves producers vulnerable to fluctuating income.

Appropriateness of policies key to optimising benefits of trade. The ability of Zambia's poor households to deal with these shocks is not only a function of productivity and efficiency gains at local level but also of the appropriateness of trade and other relevant policies pursued by Zambia vis-à-vis those of other players in the global market. An enabling policy environment can help these poor households respond more favourably to opportunities from trade. The reform of the trade regime embarked upon in

Zambia in the last decade - that entails lowering trade taxes, narrowing their dispersion, collapsing the trade tax bands, removing most non-tariff barriers and abolishing of import licences - together with Zambia's membership of COMESA and her signing of the SADC Trade Protocol, have increased market opportunities for Zambian producers. But in the light of high interest rates and the high cost of inputs relative to those of Zambia's competitors, this opening up of markets has so far resulted in reducing the competitiveness of local producers (ACF, 2001).

The need to keep adjusting to changing goal posts and trade dynamics. The rules of the game for international trade do not, by and large, favour developing countries such as Zambia, especially for primary products, such as those from agriculture. The developed countries heavily subsidise their producers. This has the effect of reducing production costs or artificially lowering the producer prices in those countries with over-production. This, given their production volumes, leads to depressed world markets. While this may benefit some consumers, it also has an adverse effect on Zambia's efforts to reduce poverty and hunger. In addition, the trade barriers in the global market tend to entail complex tariffs and stringent performance and quality assurance indicators which most developing countries cannot meet. This limits access to markets, discouraging diversification into higher value products and retarding the required emergence of the domestic agro-processing industry.

Weak surveillance capacity further retards trade. Cases of illegal trade practices in Zambia can be attributed to this limited monitoring capacity at entry or border points. Reduction of subsidies and trade-constraining barriers should form a key part of the non-negotiable agenda for Zambia and other developing countries at World Trade Organization

(WTO) sessions as they endeavour to reduce poverty and hunger.

Zambia's strategy should be to position herself to tap or mitigate against negative exogenous global economic factors. Export subsidies, domestic support, special and differential treatment and trade preferences are issues that need to be addressed in this context. Zambia should thus endeavour to be an active partner through participation in global norm-setting institutions. These global norm-setting institutions have a bearing on changes in production, market integration and consumer changes which, in turn, determine the opportunities from the global market.

The recent transformation of the Organization of African Unity (OAU) into the African Union (AU) provides scope for improved co-ordination and harmonisation of policies and programmes for current and future regional economic communities (RECs), which is key for improved regional integration.

The Zambian leadership should be an active force with other African leaders in facing the challenge under NEPAD to own development, promote partnerships and good governance to facilitate a stable long-term flow of resources to Africa. Such strong leadership and strengthened partnerships could positively influence GDP growth rates to a level that could reverse the economic decline. The opportunity to access the envisioned US\$64 billion annually, to be provided by donors under this programme, should not be lost but should, rather, be made an integral part of reviving Zambia's economy and help reduce poverty.

Clearly, NEPAD does not exist in a vacuum. There are many initiatives on the ground already, such as the UN Millennium Declaration, the Cotonou Agreement, AGOA and TICAD. NEPAD

Agreement, AGOA and TICAD. NEPAD does not seek to replace or compete with these. Rather, NEPAD provides the focal point and the overall strategic framework for engagement as Africa's chosen agenda for development. Such engagement necessarily also includes aligning the NEPAD with work being done within the individual countries themselves or among countries within a specific sub-region.

The progress registered under COMESA in eliminating non-tariff barriers (NTBs) - through liberalising import licensing; removal of foreign exchange restrictions, taxes on foreign exchange, import and export quota and road blocks; easing of customs formalities; and extending border posts opening hours - should be sustained to have a meaningful positive impact on poverty.

The SADC Protocols for Enhancing Inter-regional Cooperation and Trade, which Zambia is party to, will provide a more effective and efficient response framework that will enable Zambia deal more effectively and proactively with developmental challenges, such as poverty, HIV/AIDS and globalisation.

By signing the Statutory Instrument (SI) for visa approval, Zambia has paved the way for facilitating the export of textiles and apparel to the USA under the AGOA facility. This should have a positive effect on the growth of the cotton sub-sector. Further opportunities exist under the proposed Zambia-Mozambique-Malawi Growth Triangle (ZMM-GT) as a potential transitional economic zone for integration. As a grassroot, ground-up, market-oriented approach, the ZMM-GT can be used as one among other tools for poverty reduction in the Eastern and Northern Provinces. In this context, ZMM-GT aligns well with NEPAD as an effective tool for poverty reduction in the country.

More specifically, as emphasised in the Study Report of the Foreign Investment Advisory Services (FIAS) of the World Bank and International Finance Corporation, the “ZMM-GT space” can be seen as an opportunity for the emergence of supply chain synergies in agriculture and agro-industry via the development of bi- and tri-national commodity clusters in relation to food and industrial crops, livestock, and value added products. Such cross-border linkages could build economies of scale, enable the spreading of production risks, and otherwise provide bases for improved competitiveness within regional and international markets.

Through improving product quality and supply reliability, there is also scope for replacing regional imports with the “Growth Triangle” primary and processed food products on the shelves of the grocers' retail system. These developments could provide benefits to a large number of smallholder and other farmers, generating further multiplier effects.

Zambia should thus use the global norm-setting institutions and arrangements as a window for advocating fair trade and improved access to the global markets as integral for sustainable growth and development for poverty reduction. Innovativeness and pro-activeness are needed to consolidate these potential benefits.

FILLING POLICY GAPS TO DEAL WITH HUNGER AND POVERTY

From the above discussion, the general macroeconomic and social development indicators all point to a declining pattern in socio-economic trends in Zambia. Zambia is increasingly finding it difficult to meet the basic expectations of its citizenry, and poverty continues to ravage the majority of the population.

It is thus increasingly being accepted that what has been missing in previous policy interventions, and is urgently needed as the first key step, is Government commitment and re-dedication to the establishment of a *pro-poor economic policy* framework. Previous initiatives have lacked a pro-poor focus in design and implementation. They have not sufficiently focussed on anti-poverty measures and have treated poverty reduction somewhat as a mere and inevitable consequence of economic growth.

THE POVERTY REDUCTION STRATEGY PAPER (PRSP)

The Poverty Reduction Strategy Paper (PRSP) has been designed with the objective of poverty reduction and economic growth with a target to reduce poverty from the current 73% to 65% of the population by 2004. Zambia needs to make poverty eradication an explicit objective of economic policy. Poverty reduction should thus be main-streamed into economic policies. It is for this reason that the PRSP has been developed. The Paper has been prepared through a very consultative process to enhance ownership and sustainability. This entailed broad-based consultations across the country, involving diverse stakeholders - civil society, academia, NGOs, donors and traditional leaders.

The thrust of the paper is to achieve sustained annual economic growth of 5% to 8% in the medium term that would allow for increased real spending on poverty reduction programmes. Agriculture, tourism, manufacturing and mining have been identified as key potential growth sectors to raise income for poverty reduction on a sustainable and equitable basis.

The PRSP is a conditionality under the Highly Indebted Poor Country (HIPC)

Initiative. By meeting this condition, Zambia is likely to receive additional support to be applied to hunger and poverty reduction activities. The donors have already indicated their willingness to help by pledging over US\$1.3 billion in grants and budget support for the 2002/2003 budget years. They have promised to improve the follow-up on their pledges.

The PRSP and human development. The PRSP is a tool for achieving the MDGs in general and hunger and poverty in particular, through its focus on improving macroeconomic management and promotion of growth through investments in the agriculture, manufacturing, mining and tourism sectors to create employment. The PRSP will also enhance support to social sectors in education, primary health and sanitation. It will strive to integrate cross-cutting issues of HIV/AIDS, gender and environmental management in development.

The PRSP provided the basis for the UN Development Assistance Framework (UNDAF) and the UNDP Second Country Cooperation Framework (CCF) that emphasise input into the MDGs through focusing on governance issues, HIV/AIDS, environmental sustainability, gender, and information and communication technology.

Recognizing sectoral linkages. Even though the PRSP's emphasis is on agriculture, the recognition of the linkages with other complementary sectors requires that this engine for growth be driven within the overall framework of poverty reduction and achievement of sustainable development. In this regard, the PRSP provides an operational scope for moving all key factors together to reduce hunger and poverty. ASIP evaluations showed that some of the key constraints the programme faced arose outside the sector itself, pointing to the necessity of a

framework for better inter-sectoral co-ordination.

Poverty focus support. The PRSP will ensure focused support to components that enhance growth and reduce poverty and hunger. This calls for improved accountability and transparency in the use of public funds. There is, however, need for more efficient public expenditure management, participatory budgeting, and greater transparency in public procurement and contracting procedures. This should include enhancement of government finance, accounting and internal audit systems and procedures, and improved financial management and expenditure tracking measures.

Implementation guidelines. The PRSP should, however, recognize the importance of realistic goals and targets and managing expectations both domestically and internationally. The importance of improving the understanding of linkages between policies and poverty outcomes remains. There is thus need to improve prioritisation of policies and programmes to ensure realism and facilitate implementation.

Within this context, the importance of flexibility to allow for effective responsiveness cannot be over-emphasised. The process of implementation should also remain transparent and open to debate on alternative policies. It is also worth emphasising that reducing the current levels of poverty cannot be done overnight. Instead, success in reducing poverty will depend on sustained and long term efforts by all involved.

Areas of adjustment. For the PRSP to contribute to human development, there is need for strengthening the following areas: (a) improve public expenditure management systems; (b) increase emphasis on, and build capacity for, monitoring and evaluation; (c) strengthen

and institutionalise participatory processes; and, (d) ensure that development partners align their support around the national strategies through both improved co-ordination with the Government and through internal changes.

Pillars of implementation. The PRSP should also have pillars for implementation. Sectors need to formulate programmes that implement PRSP components. This aspect has been consolidated with the Transitional National Development Plan (TNDP), launched in December 2002, which has taken the PRSP as the core aspect of the plan and includes other sectors that have not been included in the former. These include: Judiciary; Law and Order; Foreign Relations; Defence and Security; Policy Making; Science and Technology; Information Services; Population and Development; and Local Government, Housing and Urban Development. For the

agriculture sector, the Agricultural Commercialisation Programme (ACP) has been developed as the agricultural component of the PRSP (see Box 2.3). Donors have welcomed the ACP in that it provides scope for respective donor support to the sector. Consequently, a number of donors are formulating programmes to buy into the ACP, such as the Swedish Support to Agriculture expected to run from 2003 to 2007..

The ACP was, however, formulated ahead of the 1999/2000 Sector Performance Analysis. Thus, it did not adequately build on the lessons from ASIP. It is important that lessons are factored into the ACP, failure to which the ACP will meet the same fate as ASIP. One such outstanding issue is the National Agricultural Policy (NAP), which is yet to be officially adopted. Assumptions about policy falling in place during implementation have tended to be unrealistic, as has been

BOX 2.5

AGRICULTURAL COMMERCIALIZATION PROGRAMME (ACP)

The ACP has been formulated as an Agricultural component of the PRSP to guide the sector vision as set out in the National Agricultural Policy (NAP) which is “*to promote development of an efficient, competitive and sustainable agricultural sector, which ensures food security and increased income*”.

The overall goal of ACP is to achieve “*sustainable and broad-based agricultural growth*” as a basis for poverty reduction while the broad objectives of the ACP are: (i) to promote development of a competitive private sector driven agricultural marketing system, (ii) to facilitate the establishment of an effective, efficient, and sustainable private sector driven agriculture finance system, (iii) to facilitate the development, rehabilitation and maintenance of agricultural infrastructure and promote land development and settlement in potentially productive areas, (iv) to promote demand-driven technology development and dissemination, (v) to facilitate efficient utilization of financial, human, and physical resources.

The five priority components and their percentage share of the US\$280 million four-year budget: (i) Marketing, Trade and Agri-business Promotion (20%); (ii) Agricultural Finance and Investment (35%); (iii) Agricultural Infrastructure and Land Development (15%); (iv) Technology Development and Dissemination (20%); (v) Agricultural Sector Management and Coordination (10%).

(Source: MACO, 2001)

seen from ASIP. There is thus need for caution as activities to implement ACP as part of PRSP are developed.

REMAINING POLICY CHALLENGES

Zambia is now probably one of the most liberal economies in the region. Extensive economic reforms in the last decade, supported by multi-lateral and bilateral partners, have seen Zambia implement comprehensive reforms. Despite Zambia having implemented such significant shifts in policy, the economic performance has been mixed, with decline in GDP per capita to only a fraction of the 1964 level. In the past decade, the situation has not improved as indicated by key macroeconomic indicators in **Figure 2.3**. This has had a negative effect on human development, hunger and poverty. The key policy challenges remain in six main areas:

- Reviving the economy to generate equitable growth;
- Establishing an optimal combination of macro-economic policy environment;
- Ensuring that policies remain a real promise and not a mere premise;
- Implementing the PRSP successfully;
- Design and implementing policies that would thwart future crisis;
- Enhancing accelerated policy implementation.

Reviving the economy to generate equitable growth. This entails increasing employment and income-generation, improved tax revenue base and increasing overall broad-based promotion of linkages and equity. There is also need to recognise the structural change in the sectoral composition of the economy in which agriculture is more dominant. In the immediate, revival of the economy should entail the revival of agriculture and the related value-added industries.

Establishing an optimal combination of macro-economic policy environment. An appropriate combination of a stable macro-economic environment and a policy framework that enhances economic growth and equity in order to reduce hunger and poverty still remains a big challenge for policy formulation and implementation. Future policies will thus need to promote sustainable economic growth that reduces hunger and poverty in the long term. In this regard, particular attention will need to be focused on reducing risk and vulnerability as well as the short-term symptoms of hunger and poverty.

The macro-economic policies should thus endeavour to develop the private sector, achieve positive economic growth, consolidate macro-economic stability and create a solid base for poverty reduction. However, the withdrawal of Anglo-American Corporation from Konkola Copper Mines, the poor performance of the agricultural sector and the impact of HIV/AIDS threaten this agenda. The policy emphasis in the 2002 budget on Food Security through Production and Job Creation was apposite. The budget failed to meet its targets but realised a real GDP growth of 3%, lowered annual inflation to 17.9%, limited budget deficit to 3.3 % of GDP and increased the gross international reserves to US\$149 million. It also focussed on revitalising economic sectors, such as agriculture, and maintaining a positive trend in real per capita incomes, which has been achieved in the last two years. These measures need to be consolidated, as they provide hope for reducing poverty and hunger.

Ensuring that policies remain a real promise and not a mere premise. Whilst the policy thrust is on hunger and poverty, the challenge of maintaining budgetary allocations to poverty reduction while also reducing the budget deficit remains. To achieve a lower budget deficit,

government should be committed to limit its borrowing from the banking system in order to support a reduction in the current high levels of interest rates and avoid crowding out private sector investment whilst channelling the vital resources to programmes that reduce hunger and poverty.

To ensure a greater focus of public resources on poverty, there is need for policies that accelerate growth and reduce poverty in a sustainable manner over the long term. Such sound growth requires investment in human capital and infrastructure and favourable macro-economic and structural policies, political stability, good governance and strong institutions. Zambia should thus seek to build an improved investment climate, and the capacity to compete in world markets. This will require co-operating partners to increase levels of aid, open markets and phase out trade distortions.

Implementing the PRSP successfully.
The preparation of the PRSP should not be

an end in itself. While it is an essential step, the challenge now is to implement the various components of the PRSP. Implementation should continue to involve not only the Government but civil society and cooperating partners as well. It is important to take this process forward jointly if the ownership initiated during formulation is to be sustained. This poses a challenge to development partners in the way they do business to work together through improved collaboration and joint-working around country-owned and driven processes. For the PRSP, the World Bank has set up guidelines on good practices to ensure a pro-poor focus (Box 2.6).

The PRSP should become the overall development frame for SWAps without distorting the approach. To facilitate this consolidation, there is need to: (a) strengthen local government to play a strong coordinating role at district level; (b) involve the private sector to gradually take over functions from Central Government which can be better provided

Box 2.6

Good Practices for Development Partners in Support of the PRSP Processes

Participatory Processes: Provide timely and constructive feedback to the national PRSP teams; Support capacity building of civil society to engage in the processes.

Poverty Diagnosis, Targets and Indicators and M&E: Contribute to coordinated assistance to support poverty diagnosis.

Social Impact Analysis: Provide timely and appropriate analytical work for key areas of the PRSP.

Clarify Priority Public Actions: Foster civil society capabilities for establishing priorities, benchmarking and monitoring; Invest in tasks to support sectoral-poverty linkages and disseminate good practice; Support line agencies in the preparation of sectoral or spatial strategies; Deepening efforts to understand the linkages between policy actions and pro-poor growth.

Public Expenditure Management (PEM): Provide sufficient resources for technical assistance in support of PEM; Improve the integration of PRSPs into other national decision making processes; Respect and align assistance with national cycles particularly budget cycles.

Donor Participation, Alignment and Harmonisation: Foster transparency of processes and seek creative ways to engage those donors not represented in country.

Enhance use of Consultative Groups for alignment of business planning process; Reduce the burden on countries of accessing aid – harmonisation, reduction of duplication etc; Explore further the use of programmatic lending; Improve predictability and timing of aid flows.

Based on: World Bank and IMF, 2002

by private business; and, (c) integrate sectoral sub-programmes of SIPs into the PRSP. For poverty reduction strategies to be effectively linked to sector strategies, there is also need for a more integrated regional (or 'horizontal') approach to national agricultural SWAp strategies.

Policies for overcoming a food crisis. To prevent future famines, government needs to formulate policies such as those that put the well-being of the people at the centre. The necessary steps for coming out of a food crisis range from immediate relief to initiating and sustaining development. The challenge for Zambian decision makers is to come up with the appropriate interventions and when and how to implement them. The suggested guidelines on this forms part of the agenda for reducing poverty and hunger in Zambia elaborated in **Chapter 5**.

Enhancing accelerated policy implementation. Most of the above-stated policy challenges should have been addressed already. The startling poverty statistics on hunger and poverty in **Chapter 3** clearly underline the urgency

of the matter. There is thus need to move quickly and yet firmly in not only policy formulation but also implementation to reverse the unwarranted trends in hunger and poverty.

CONCLUSION

The analysis in this chapter shows that the socio-economic challenges of the post - independence era and the distortionary measures introduced to address them explain the poverty and hunger trends of the 1990s. While domestic and international responses have attempted to address these challenges through policy, poverty and hunger are still unacceptably high because policy gaps still remain. The PRSP is a useful first step in redressing this matter. However, the PRSP also needs strengthening in terms of linkage to human development. Specifically, the PRSP needs to have a sectoral linkage, support, and clear and flexible implementation guidelines. The six remaining policy areas outlined in this chapter should form the core policy interventions to reverse the disturbing poverty and hunger trends presented in **Chapter 3**.

Poverty and hunger are closely linked to each other and to other MDGs that have an influence on human development. Poverty is a deprivation of choices of life that are fundamental to human development. It is manifested through human conditions, such as malnutrition.

LINKING POVERTY, HUNGER AND NUTRITIONAL STATUS

The causes of poverty and hunger in Zambia are many and include ill-health, social and economic deprivations, and exclusion. Both poverty and hunger reinforce each other such that reduction in one will result in reduction in the other.

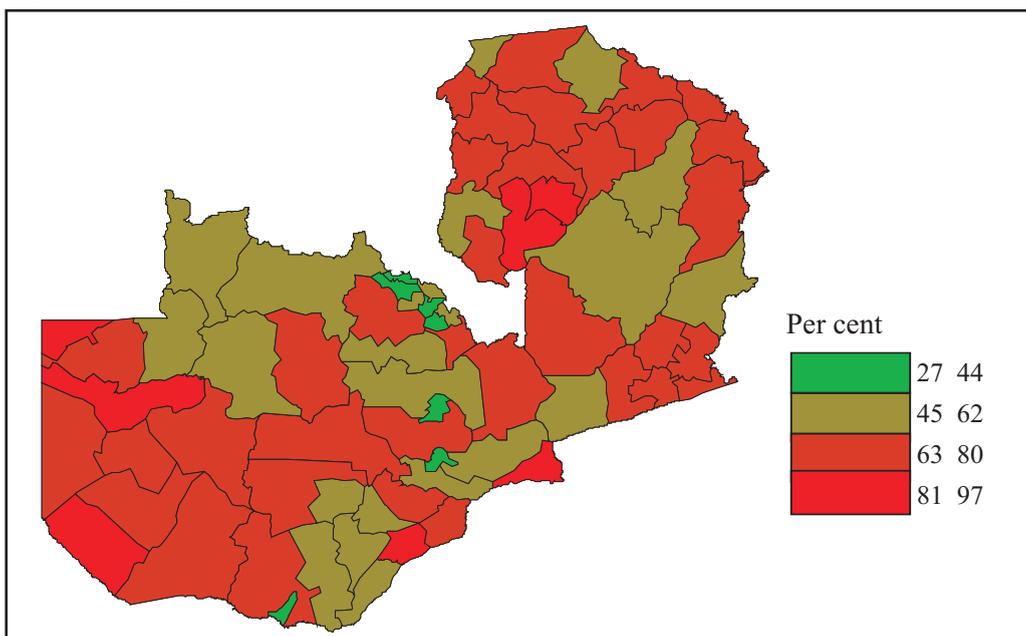
Northern and Eastern Provinces. Lusaka Province had the lowest, followed by Copperbelt Province. **Figure 3.1** presents the proportion of households by districts classified as extremely poor.

The food security situation has not been any better. In some provinces, over 79% of rural farm households were food insecure in the 2000/2001 season and subsisted on an average of 1,000 kilo calories (kcal) of energy supply per capita, compared to the internationally acceptable intake of 2,300kcal per capita per day (PAM, 2002).

Poverty is closely related to nutritional status (see **Table 3.1**). Considering any of

Interventions to reduce poverty and hunger should be based on a clear understanding of who is poor and hungry, where they are and why they are in this situation.

Figure 3.1: Proportion of Households Classified as Extremely Poor



Source: Central Statistical Office, 1999

Overall, poverty and hunger in Zambia are unacceptably high. In 1998, about 73% of households were poor, and the incidence of poverty was higher in rural than in urban areas. Of the rural provinces, Western Province had the highest incidence of poverty, followed by

the three common nutritional indicators, it is clear that the level of poverty influences nutritional status. Extremely poor households are more likely to suffer chronic and acute malnutrition due to constant exposure to hunger and food

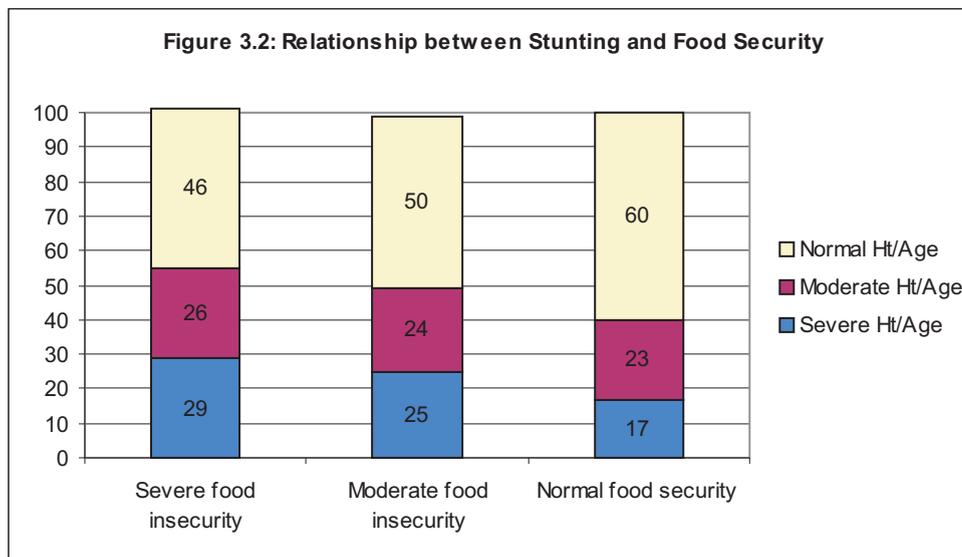
Table 3.1: Poverty and Nutritional Status, Zambia 1998

Nutrition Status	Poverty Status		
	% Extremely Poor	% Moderately Poor	% Non Poor
Stunted	56	52	47
Underweight	27	20	19
Wasted	6	5	4

Source: CSO, 1999

insecurity. In 1998, 56% of children from extremely poor households were stunted, while 27% were under-weight and 6% wasted.

this regard, people living under extreme poverty are defined as people living at or below K32,861 per adult equivalent unit per month using the 1998 living condi-



Source: Kanvangwa-Luma et. al 1999

PATTERNS AND TRENDS OF POVERTY AND HUNGER IN ZAMBIA

The trends in both poverty and hunger have shown a gradual but consistent deterioration across socio-economic groups and geographical locations. Southern, Western and North-Western Provinces merit emergency attention to address food insecurity and malnutrition.

In 1998 about 58% of the poor were classified as extremely poor. The Central Statistics Office determines the poverty as the amount of monthly requirements to purchase basic food to meet the minimum caloric requirement of a family of six. In

tions survey. Moderately poor live at or below K47, 185. The poverty gap ratio, which is the proportion by which the average consumption level of poor households falls below the poverty line, suggests a very high intensity of poverty. The average consumption among the poor in Zambia is 55% below the poverty line.

The poor have been spending much of their income on meeting household food requirements, thus further underlining the linkage between poverty and hunger. **Table 3.2** shows that the bottom 20% of the population spent almost 76% of total expenditure on food. The corresponding proportion for the top 20% of the population was 53.5%. This leaves many households with very little to spend on

Table 3.2: Quintile Expenditure in Zambia (1998) in Zambian Kwacha

	Per Adult Equivalent Expenditure	Per Adult Equivalent Food Expenditure	
	Mean	Mean	% of total expenditure
First Quintile	7,617.1	5,767.7	75.7
Second Quintile	16,711.6	12,066.9	72.2
Third Quintile	27,943.5	19,018.3	68.1
Fourth Quintile	45,256.3	28,592.4	63.2
Fifth Quintile	130,928.3	69,989.1	53.5
All	45,738.3	27,113.8	59.3

Source: LCMS, 1998

meeting other basic requirements of life such as health, housing, clothing, and education. This undermines human development by leading to other deprivations manifested in many different ways and reducing the human development potential.

for Theological Reflection (JCTR) who, through their food basket monitoring surveys, have established an even more worrying trend. The food basket measures the cost of basic necessities required for human survival and gives an indication of the degree to which the consumer is weakened in purchasing power by

Table 3.3: Trend Analysis by Women Market Traders, through scoring in Chongwe, Lusaka, 1993

	Scores		
	1970	1990	1993
Transport cost	5	7	80
Price of cloth	3	20	1800
Quantity of food	60	15	3

Source: World Bank (PPA), 1994

A trend analysis of the cost of living by the World Bank's Participatory Poverty Assessment (1994) among women in Lusaka found that as the cost of living was rising and prices of non-food items increased, the quantity of food consumed declined (see **Table 3.3**). This means that households had less to spend on food and so reduced on consumption. The seriousness of the food insecurity situation has also been highlighted by the Jesuit Centre for Theological Reflection (JCTR) who,

showing how far below the level of basic needs their income falls. It is clear from **Table 3.4** that the price of maize meal alone - which rose by 60% over the period January to December 2001 - accounted for much of the rise in the cost of the food basket from K320,000 in January to over K379,000 at the end of 2001, representing a 19% rise. **Appendix Table 2** shows the contents of the minimum food basket.

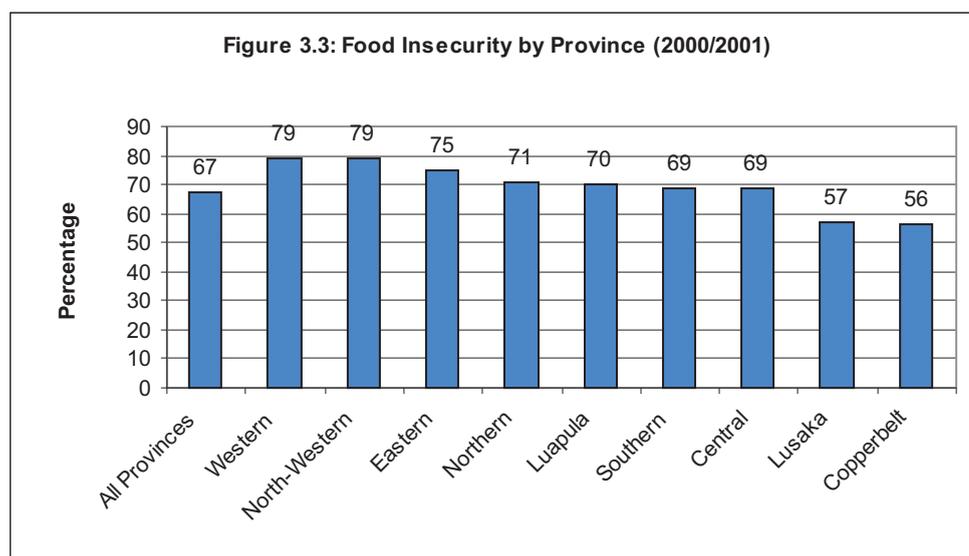
Table 3.4: Food Basket For a Family of Six in Lusaka, 2001

Year 2001	Food Basket Cost (ZMK)	Mealie Meal cost (ZMK)	Maximum net pay for public workers (ZMK)
January	319,870	53,850	210,000
February	328,080	54,000	210,000
March	335,300	53,700	210,000
April	340,720	54,000	210,000
May	329,400	51,900	210,000
June	328,570	52,350	210,000
July	332,520	61,050	210,000
August	348,500	72,300	210,000
September	357,300	72,900	210,000
October	358,400	75,000	210,000
November	377,300	87,300	210,000
December	379,390	86,190	210,000

Source: JCTR, 2002

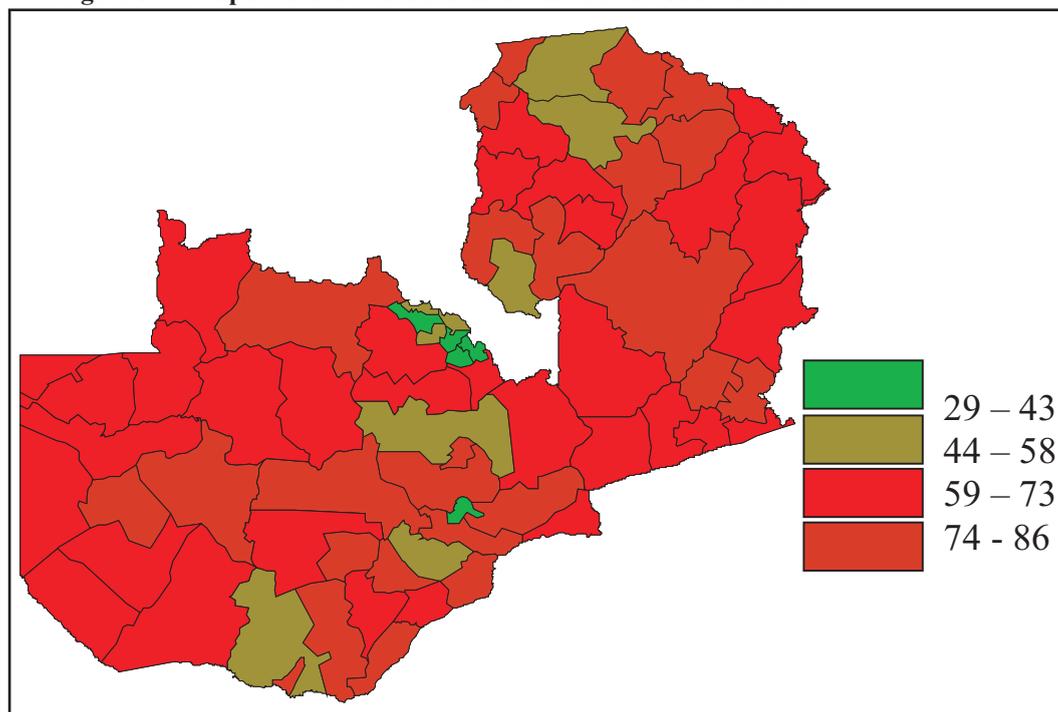
A survey by the Programme Against Malnutrition (2001) also indicates the levels of food insecurity by province (see **Figures 3.3** and **3.4**). About 67% of Zambian households were food insecure in 2001. The highest proportions were in

Western and North-Western Provinces, with 79% each. The lowest proportions were in the urbanised provinces of Lusaka and Copperbelt with 57% and 56%, respectively.



Source: PAM, 2001

Figure 3.4: Proportions of Households Classified as Food Insecure



INCOME DISTRIBUTION

There are various measures of income distribution and inequality. The two most commonly used ones are the Gini coefficient and adult equivalent average expenditure spent on food from total expenditure per quintile.

Using the Gini coefficient which measures inequality in a society, income distribution in Zambia became less

inequitable between 1991 and 1998. But this is more about sharing poverty than riches. The Gini coefficient declined from 0.559 in 1991 to 0.509 in 1998. However, the more equitable distribution of income is derived from developments in rural areas where the Gini coefficient declined from 0.563 to 0.519. It increased in the urban areas from 0.448 to 0.479, indicating rising inequality within urban areas.

Table 3.5: Trends in Gini Coefficients by Province from 1991 to 1998.

	1991	1996	1998
Central	0.446	0.447	0.533
Copperbelt	0.411	0.457	0.482
Eastern	0.599	0.518	0.503
Luapula	0.519	0.561	0.450
Lusaka	0.444	0.501	0.505
Northern	0.556	0.459	0.440
N-Western	0.586	0.446	0.523
Southern	0.602	0.492	0.566
Western	0.590	0.512	0.474
National	0.559	0.518	0.509
Rural	0.563	0.488	0.519
Urban	0.448	0.475	0.479

Source: Adapted from McCullon, Baulch and Cherel-Robson, 2001

Table 3.6: Quintile Expenditure Distribution in Zambia, 1998

Quintile	Per Adult Equivalent Expenditure		
	Mean (ZMK)	Total Expenditure (Million ZMK)	% share of Total
First Quintile	7,616	15,438	3.3
Second Quintile	16,712	34,010	7.3
Third Quintile	27,944	56,921	12.2
Fourth Quintile	45,256	92,147	19.8
Fifth Quintile	130,928	266,751	57.3
All	45,738	465,268	100

Source: LCMS, 1998

The trends indicate that the relatively urbanised provinces of Central, Copperbelt and Lusaka recorded increases in inequality over the period 1991 to 1998, while the rest of the provinces showed improvements in equality. Despite these developments, income distribution is still highly skewed. The bottom 20% of the population accounts for only 3% of the total expenditure as compared to more than 57% of the top 20% of the population (see **Table 3.6**). An examination of data for 1991 and 1996 shows that this phenomenon has hardly changed, suggesting that unequal distribution of income has persisted throughout the period, notwithstanding minor changes.

NON-INCOME DEPRIVATIONS

Human development requires that poverty is viewed as a multi-dimensional phenomenon, and that consumption-based monetary measures, that do not adequately bring out its full manifestations, are supplemented with other measures of human deprivations.

- **Nutritional Status:** As indicated before, the poor are more likely to suffer from malnutrition. A close relationship between nutritional status, food insecurity and poverty has already been established.

Table 3.7: Trends in Stunting by Province (1991-1998)

Province	Stunting				% Change 1991-98
	1991	1993	1996	1998	
Central	48	53	46	53	10
Copperbelt	38	48	46	50	32
Eastern	48	53	51	58	21
Luapula	46	54	55	60	30
Lusaka	37	40	44	48	30
Northern	54	53	62	58	7
North-Western	28	45	54	49	75
Southern	33	41	50	47	42
Western	37	48	50	56	51
National	40	48	50	53	33

Source: PSI, PSII, LCMS, 1996 and LCMS, 1998

Stunting: A time series comparison of the findings of various studies shows that the proportion of Zambian children that were too short for their age rose from 40% in 1991 to 53% in 1998 (see **Table 3.7**). This is indicative of long-term exposure to food insecurity that most households have had to endure. The trend shows a serious deterioration in the stunting rate at national level by 33%. All provinces showed deterioration in stunting rate.

The worst deterioration was in North-Western Province at 75% and Western Province at 52%. This may be explained by long-term exposure to a low quality and inadequate diet (chronic malnutrition) based on cassava and sorghum. Northern Province (8%) and Central Province (11%) had the lowest deterioration. This consistency in deterioration in spatial and time dimensions is a source of worry, as stunting indicates long-term exposure to food and health deprivations.

Under-weight: The proportion of children that are under-weight is indicative of either poor linear growth or poor growth in body mass. The trends in the proportion of under-weight children in Zambia are shown in **Table 3.8**. At national level, deterioration in the proportion of under-weight children of 9% was observed between 1991 and 1998. Higher deterioration occurred in Southern (38.9%), North-Western (31.6%) and Western (27.3%) Provinces. This may be

explained by acute food shortages induced by short-term food production gaps in these provinces, as well as poor health and access to sanitation.

The distribution of under-weight children by province is quite consistent and within the average range. However, there is hope for optimism as some provinces showed remarkable improvements over the period 1991 to 1998. The highest improvements were in Eastern, Northern, Luapula and Copperbelt Provinces. These are the provinces with good annual rainfall. The urban provinces of Lusaka and Copperbelt had the lowest cases of under-weight children in 1998.

Wasting: Low weight for height reflects wasting or thinness due to an acute and short-term severe infection or food deprivation. A child is said to be wasted if its weight is low in relation to its height. This is common in situations of severe food shortages and where famine has recently occurred.

At national level, trends in this indicator showed an improvement from 7% to 5% between 1991 and 1998 (see **Table 3.9**). However, Eastern, Southern and Western province showed a deterioration in wasting. This was due to short-term food shortages induced by production and consumption deficits explained by drought and poor access to production inputs.

Table 3.8: Trends in Under-weight Children by Province (1991-1998)

Province	Under-weight				% Change 1991/8
	1991	1993	1996	1998	
Central	22	26	21	23	5
Copperbelt	23	22	22	21	-9
Eastern	28	28	19	22	-21
Luapula	30	31	36	26	-13
Lusaka	21	17	19	21	0
Northern	34	31	33	28	-18
North-Western	19	16	32	25	32
Southern	18	22	25	25	39
Western	22	33	27	28	27
National	23	25	25	25	9

Source: PSI, PSII, LCMS, 1996 and LCMS, 1998

Table 3.9: Trends in Wasted Children by Province (1991-1998)

Province	Wasted				Change 1991/8
	1991	1993	1996	1998	
Central	5	3	5	3	Improved
Copperbelt	8	5	7	5	Improved
Eastern	5	7	3	7	Deteriorated
Luapula	9	6	5	5	Improved
Lusaka	10	8	4	5	Improved
Northern	8	4	6	6	Improved
North-Western	14	3	4	8	Improved
Southern	5	7	4	6	Deteriorated
Western	3	5	3	6	Deteriorated
National	7	6	4	5	Improved

Source: PSI, PSII, LCMS, 1996 and LCMS, 1998

The deteriorating food security and nutritional status of Zambian children translate into reduced longevity, fallen standard of living and reduced access to quality education. Infant and under-five mortality rates in Zambia are high (see **Chapter 4**). Malnourished children perform poorly and have poor brain development.

Access to socio-economic facilities: **Table 3.10** presents the distribution of poverty among the users of various socio-economic facilities. Overall, poor households experience difficulties in accessing social facilities, and the most affected are the extremely poor who have difficulties in accessing major socio-economic amenities such as markets, health facilities, hammer mills, post offices, schools and transport services.

The social facility that the extremely poor households find most difficult to access are food markets. Even when they have money to purchase required commodities or have goods/produce to sell, distance to markets is a major obstacle to about 69% of the extremely poor households. Access to transportation facilities compounds the problem faced by the poor in accessing social facilities.

The poor are also most likely to be dependent on firewood or charcoal for energy (see **Appendix Tables 3.9 and 3.10**). Use of electricity for either cooking or lighting is negatively associated with the incidence of poverty in such a way that households using electricity recorded the lowest incidence of poverty and the highest is recorded among households

3.10: Household Access to Social Amenities by Poverty Status, Zambia 1998

Facility and Distance	Poverty Status		
	% Extremely Poor	% Moderately Poor	% Not Poor
Bank:			
0-5 Km	31	18	52
6+ Km	64	13	23
Food Market:			
0-5 Km	43	16	41
6+ Km	69	12	19
Health clinic/hospital:			
0-5 Km	47	15	38
6+ Km	67	13	20
Input market:			
0-5 Km	40	17	44
6+ Km	62	13	25
Hammer mill:			
0-5 Km	52	15	33
6+ Km	61	12	27
Police station/ post:			
0-5 Km	37	17	46
6+ Km	68	13	20
Primary school:			
0-5 Km	38	16	45
6+ Km	64	13	23
Bus/boat/ taxi service:			
0-5 Km	52	15	23
6+ Km	67	13	20

Source: Derived from the 1998 LCMS

Poverty and hunger are strongly related to gender, age, geographical location, family size, education and employment status.

using other types of energy. Households using torch for lighting and those using collected firewood for cooking exhibit the highest percentage among the extremely poor households, indicating their financial inability to afford other types of energy.

CHARACTERISTICS OF THE POOR AND FOOD INSECURE

Both quantitative and participatory approaches have worked well, in combination or separately, to isolate and

characterise the poor and hungry in rural and urban areas. Qualitative approaches complement quantitative approaches and broaden the understanding of the levels, causes, trends and patterns of distribution of hunger and poverty. Community members cannot only identify but also characterise and estimate the composition or proportion of the poor on a time series basis (see **Tables 3.11** and **3.12**). This shows that whilst classifications may differ from those used in quantitative approaches, the poor themselves are able to determine the manifestation of poverty.

Table 3.11: Well-being Categories, and Proportion of Households in Six Rural Sites

Category	Criteria	Range of Percent of Households	
		'99	Before '99
Abakankaala (the rich)	Big farms, livestock, eat well, employ other people, educate children, use fertilizer, good health, good houses, travel easily, hammer mills.	0-30	10-90
Abakankaala panono (rich a bit)	Few cattle, fairly large fields, a bit of fertilizer, some hammer mills, educate children, two meals a day, harvest enough to eat.	2-40	14-50
Incushi, Bapina, Balanda (the poor)	No proper meals, cannot afford to educate children, no good clothes, cannot afford health cost, don't buy soap, hardly cultivate fields.	20-90	0-20
Balanda sana (the very poor)	Lack food, one to two meals per day, poor hygiene, flies, cannot afford school and health costs, miserable lives, dirty clothes, poor sanitation, poor access to water, look like mad people, live on vegetables and sweet potatoes.	3-85	2-25
Blind, widows, orphans, disabled, dumb, chronically ill, aged	Cannot cultivate fields, depend on social welfare (church and neighbours) for food, no children and dependants to work for them.	10-40	2-10

Source: Milimo, et. al., 2001

Table 3.12: Well-being Categories, and Proportion of Households in Six Urban Sites

Category	Criteria	Range of Percent of Households	
		'99	Before '99
Abakankaala (very rich)	Eat all the time, afford health and education, own and drive cars, individual boreholes, satellite dishes, big businesses, private medical care.	0-2	0-20
Abali bwino, olemela (the rich, well off)	Own and live in big houses, formal employment, lucrative private businesses, three meals a day, afford health and education.	0-15	0-10
Abaikala bwino panono (live a little bit well)	Three meals a day, formal employment, afford health and education costs, well dressed, some have own businesses, radios and television sets.	5-50	5-70
Abacula panono (suffer a little bit)	Formal/informal employment, no regular meals, difficulties with education and health costs, piecework, prostitution.	15-70	10-60
Bacula, Bapina (the poor)	Work for the rich, no shelter, do not bath, look like mad people, no respect in community, no health and education costs, no regular meals, no money, children street kids.	15-70	5-30
Otsaukilatu (suffer through and through)	Cannot do piecework, begging, no health and education, no house, one meal in a number of days, no blankets.	10-70	4-30

Source: Milimo, et. al., 2001

Qualitative classification of wealth groups depends to a large extent on personal characteristics that determine access to wealth and food, but also on resultant variables such as begging, employing other people, and eating well. People perceive farm size, livestock ownership, sending children to school, use of fertilizer, health and hygiene status, quality of shelter, number of meals per day, and asset ownership, as important indicators of poverty.

These perceptions indicate that people themselves understand that poverty and hunger have many dimensions and the two are intricately linked. People's understanding of poverty and hunger resonates very well with the human development concept.

Central Statistical Office (CSO) data and reports reveal that a number of personal characteristics accentuate poverty and are indicative of what determines who is likely to be food insecure or poor. Although these characteristics are distinct, they reinforce each other and cumulatively compound vulnerability to poverty. In relative terms, female-headed

households, those whose heads are above 50, households with a high dependency ratio, and those with lowly educated heads are more likely to be poor and food insecure.

Kanyangwa-Luma, et. al. (1999) performed a multivariate analysis to identify the key determinants of severe food insecurity and key underlying factors of nutritional status. The model isolated factors that are critical in determining severe food insecurity in Zambia based on the 1996 Living Conditions Monitoring Survey (see **Table 3.13**).

Using a combination of the approaches described above, key characteristics that tend to accentuate poverty and food insecurity in Zambia can be isolated. The following were identified by Kanyangwa-Luma, et. al., 1999 and the LCMS:

1. Sex of head of household;
2. Age of head of household;
3. Size of household;
4. Education level of head of household;
5. Employment of head of household;
6. Income levels and sources;
7. Residence and accessibility.

Table 3.13: Linking Vulnerability to Severe Food Insecurity: Key Determinants

Determinants	Zambia		Urban		Rural	
	Coef.	T-ratio	Coef.	T-ratio	Coef.	T-ratio
Household Characteristics						
Household size	0.23	15.23**	0.23	14.32**	0.23	8.70**
Education level of head of household	-0.16	-11.46**	-0.19	-11.54**	-0.140	-6.24**
Farming System						
Maize commercial	-4.04	-3.00**	-	-	-4.19	-3.10**
Maize semi-commercial	0.50	2.31**	-	-	0.37	1.61
Maize subsistence	0.49	2.33**	-	-	0.48	2.18**
Cassava systems	0.63	2.69**	-	-	0.55	2.30**
Sorghum/Millet system	0.42	1.79**	-	-	0.96	1.20
Growing sweet potatoes	0.10	0.76	0.61	3.19**	-0.05	-0.31
Growing vegetables	-0.07	-0.69	-1.15	-2.17**	-0.17	-0.12
Centrality/ Access to Infrastructure						
>30km of district/provincial centre	0.12	0.81	-0.51	-2.25**	0.13	0.83
District/Provincial centres	0.40	1.96**	0.49	-2.10**	0.42	1.71*
30km of Lusaka, Ndola and Kitwe	0.63	2.56**	0.56	0.99	0.79	2.55**
Cities of Lusaka, Ndola and Kitwe	-0.84	-0.41	-1.00	-4.23**	-0.02	-0.01
Diversity of Income						
Regular salary	-1.20	-12.77**	-0.66	-6.20**	-2.58	-7.07**
No. of income sources	-0.70	-12.05**	-1.05	-12.20**	-0.59	-8.00**
Remittances	-0.01	-0.07	0.39	2.64**	-0.56	-1.70*
Residence						
Low Cost	-0.48	-2.17**	0.33	1.97	-	-
Medium Cost	-0.77	-2.75**	-	-	-	-
High Cost	-0.82	-3.02**	-0.06	-0.31	-	-
Constant	1.56	5.46	-	-	-	-

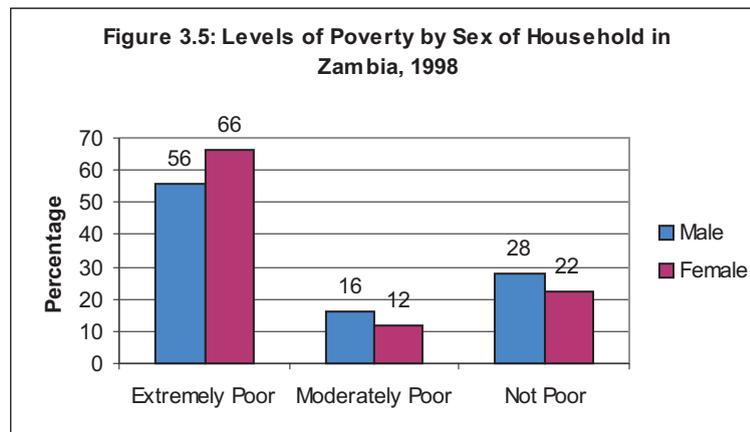
** Only significant variables have been included here;
Source: Kanyangwa-Luma, et al., 1999

1. **Sex of head of household.** There is a strong relationship between poverty and gender. In 1998, for example, 78% of female-headed households were classified as poor (66% extremely poor and 12% moderately poor), as compared to 72% (56% extremely poor and 16% moderately poor) for male-headed households.

Female-headed households are more likely to be extremely poor relative to their male-headed counterparts (see **Figure 3.5**). In general, and except for North-Western Province, the predominance of female-headed households among the extremely poor cuts across all the provinces of Zambia (see **Appendix Table 5**). This indicates that sustainable human development in Zambia can only be achieved if gender imbalances are also addressed.

2. **Age of head of household.** Households with heads aged 50 and above are more likely to be poor than those with younger heads. These experience the highest poverty, contributing more than 30% to the proportion of the poor households in Zambia. Their consumption is 60% below the poverty datum line explained earlier. Of the core poor, this age group accounts for approximately 40%. This is because many have lost reliable sources of income.

3. **Size of household.** The bigger the size of the household, the higher the probability that it is severely food insecure, without regard to rural-urban differences. This may be attributed to the high dependence ratio of Zambian households. Though large families have more labour supply, the per capita food



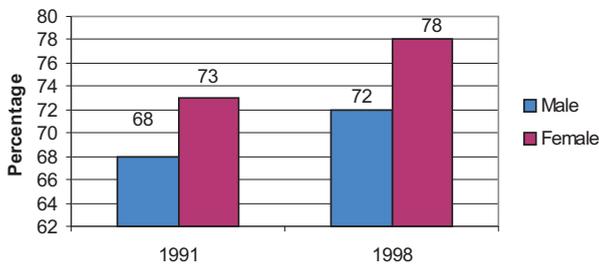
Source: LCMS, 1998

Both female and male-headed households experienced increases in the incidence of poverty between 1991 and 1998, but the increases were proportionately higher among female-headed households than among male-headed households (see **Figure 3.6**). This suggests persistence of gender-based inequality in terms of access to production resources, which should be addressed.

production is lowered in low productivity farming systems. The higher dependence ratio and inadequate resources may explain the disadvantaged position of households headed by those aged 50 years and above.

Poverty is closely associated with size of the household in such a manner that there is a tendency for poverty to rise with increase in household size, implying that these

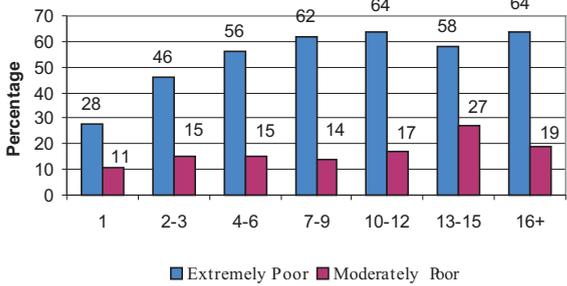
Figure 3.6: Trends in Poverty by Sex of Household in Zambia



Source: LCMS, 1998

households encounter tremendous difficulties in providing for the per capita basic needs of their members (see **Figure 3.7 and Appendix Table 6**).

Figure 3.7: Poverty by Household Size



Source: LCMS, 1998

The amount of food needed to ensure adequate consumption for a household is, to a large extent, determined by the size of the household. Thus, the larger the size of the household the more food is required to provide for the dietary requirements of the members of the household.

4. Education level of head. Education is important in determining the poverty status of individuals and indeed that of households, as it widens options for the acquisition of resources needed to provide for the basic needs of the family. When the head of the household is more

educated, the probability is high that his/her household will not be severely food insecure. With respect to the effect of the level of education of the head on poverty, the proportions of households living in extreme or moderate poverty decline with increased education (see **Appendix Table 16**).

The highest incidence of household poverty is evident among households headed by those without any formal education. Poverty decreases as the education of the head rises and is lowest (20% overall poor and 14% extremely) among households headed by those with a bachelors degree. Providing 12 years of formal education reduces the proportion of households in poverty from 89% among those without formal education to 56% among those households with between 10 and 12 years of schooling. This represents 33% reduction in households living in poverty. The reduction in the proportion of households living in extreme poverty is even higher, i.e., 41% (see **Appendix Table 16**).

An examination of the poverty gap ratios shows that as the level of education of household head increases there is a corresponding decrease in the average distance from the poverty datum line, implying that the lower the level of education the further below the poverty datum line a household is.

The close relationship between education and poverty and severe food insecurity can be explained by the fact that education exposes people to more opportunities and information with respect to livelihoods. The chances are high that educated people rely more on non-farm income.

5. Employment of head of household. Having a formal job is important in

escaping the poverty trap. Households headed by the unemployed and those in the informal sector demonstrate a very precarious existence. In 1998, 75% and 80% respectively of households with a head in either of the two were poor (see **Appendix Table 18**).

With regard to sector of employment, households headed by those employed in agriculture, forestry and fishing had the highest incidence of poverty, estimated at about 84% and 83%, respectively (see **Appendix Table 17**). This underscores the need to improve agriculture, especially in the rural areas, since this is the main source of livelihood for the majority of Zambians. The same goes for fishing, which is also predominantly a rural-based economic activity.

6. **Income levels and sources.** The higher the level and diversity of income, the less likely that both urban and rural households will be severely food insecure. Income diversification improves household food security. A regular salary also significantly reduces the chances of being severely food insecure (Kanyangwa-Luma, et al., 1999). This means that the formal sector is associated with food security. It is closely linked to employment status. The implication of this is that increasing food security requires broader interventions than merely improving agriculture. It includes improving general access to socio-economic services through availability and better incomes.

Households practising commercial agricultural production are significantly less likely to be severely food insecure than all urban households. But all small-scale farmers are more

vulnerable to severe food insecurity than urban households, while dependence on mono cash crops is associated with severe food insecurity.

With respect to income, the measurement of income poverty presumes a close relationship between income and poverty. Income is a direct measure of welfare because consumption of goods and services depends on the sum of income available. Average monthly income of rural people was found to be three times less than urban people in the LCMS (1998).

7. **Residence and accessibility.** **Table 3.14** shows that households in urban areas, regardless of residence, are less likely to be severely food insecure than their rural counterparts. This explains the rural-urban migration and the tendency for retirees to settle in urban areas. Within urban residences, households in low cost areas have a significantly higher probability of being severely food insecure than those in medium and high cost areas.

As a result of the above situation, the trends and patterns of distribution of severe stunting among socio-economic groups is similar to that of severe food insecurity (see **Table 3.14**). In rural areas, stunting increased in all farmer categories except among large scale farmer households. In urban areas, stunting increased among children living in low and medium cost areas. More worrisome is the finding that the rate of stunting in urban areas caught up with those in rural areas. This supports the view that a new set of urban poor has emerged, also partly blamed on urbanisation.

There are wide variations in the incidence of poverty and hunger among provinces. Western Province has the highest incidence of poverty with approximately 89% of the population being poor, of whom 78% were extremely poor. Although Western Province tops all other provinces in terms of density of

have now slid into poverty due to unemployment and lack of business opportunities. These include retrenched workers, lowly paid workers, peasant farmers and small-scale business people. In urban areas, the incidence of poverty, of 56% in 1998 (37% extremely poor and 18% moderately poor), is concentrated in

Table 3.14: Trends in Severe Chronic Malnutrition (Stunting) by Socio-Economic Group

Socio Economic Group	Severe Stunting		
	1991	1993	1996
Rural			
Small Scale farmers	26.2	30.2	29.1
Medium Scale Farmers	18.0	31.0	24.1
Large scale farmers	10.1	-	6.1
Non-Agricultural Households	21.1	-	26.3
Urban			
Low Cost	18.0	23.0	22.0
Medium Cost	13.0	23.0	24.0
High	15.0	26.0	13.0

Source: Kanyangwa-Luma ,et.al., 1999

poverty, it is one of the provinces with the least concentration of poverty. In recent years, there has been a marked increase in urban poverty. Among the factors accounting for this is the removal of food subsidies, which has resulted in pushing up food prices, and job losses due to retrenchments and liquidated companies. Urban poverty is visible through the expanding shanty townships, beggars, street children, street vendors, increased crime, prostitution and even riots.

Urban areas have shown a marked increase in the incidence of poverty between 1991 and 1998 (see **Figure 3.8**). This is attributable to redundancies, retrenchments and retirements, following a stagnant economy and failure by the economic policies pursued in the 1990s to create jobs. Studies (Nkandu, et.al., 1994) indicate that poverty has moved swiftly into urban areas, giving rise to the 'new poor', who were above the poverty line prior to adjustment, but

households located in low cost residential areas.

Within rural areas, income poverty is concentrated among small-scale farmers for whom the incidence was found to be 90% in 1998 (83% extremely poor and 7% moderately poor). Small-scale farmers account for 68% of overall poverty and 63% of extreme poverty.

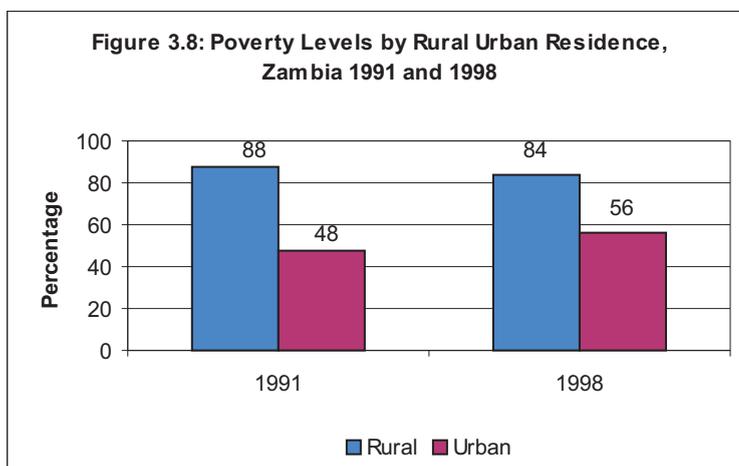
Of the rural poor, 60% live below the poverty line, compared to 43% in urban areas. Western Province had the highest intensity of poverty at 64.4%, followed by Northern and Southern Provinces, both at 56%. Central and Copperbelt Provinces recorded the lowest intensity of poverty, with the rest of the provinces falling in between the two extremes.

There is also wide variation of poverty across districts, showing that it is widespread all over the country (see **Appendix Table 3.2**). Four districts had overall poverty above 90%: Shangombo and e are

Poverty and food insecurity in Zambia are wide spread. No area is untouched. The intensity is, however, higher in rural areas compared to urban areas where it is mostly concentrated in low cost residential areas.

Lukulu in Western Province, Petauke in Eastern Province and Chilubi in Northern Province. Another six districts had extreme poverty of more than 80%: Chavuma in North-Western, Luangwa in

policy implication of this is that there is need to channel more resources to districts which contribute the most to the overall poverty in each province. Allocation of resources to provinces on the basis of



Source: LCMS, 1998

Lusaka, Chilubi in Northern, Gwembe in Southern, Senanga in Western, and Samfya in Luapula. What is important to note is that these are all rural districts located outside the line of rail.

The common feature of these districts and other disadvantaged locations that have higher incidences of poverty and food insecurity is that they are not easily accessible. Kanyangwa-Luma, et al., (1999) demonstrated that centrality, access to infrastructure and proximity to main urban centres were highly related to the severity of food insecurity. The further away a household was from major centres, the more likely they were to suffer from severe food insecurity. Improving the state of rural infrastructure may thus improve accessibility and reduce vulnerability of rural people.

There is uneven and wide inter-district variations in their contribution to poverty, ranging from as low as 4% for both overall and extreme poverty, to as high as 67% overall poverty and 96% extreme poverty (see Appendix Tables 3.3a to 3.3i). The

aggregate poverty figures is not likely to have meaningful impact on the reduction or elimination of extreme poverty within provinces.

VULNERABILITY TO HUNGER AND POVERTY

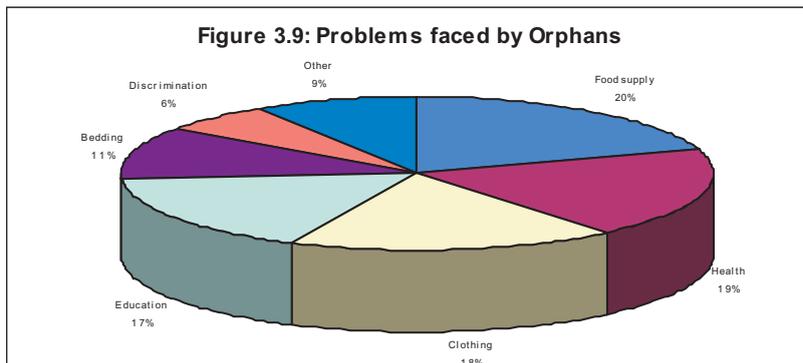
Based on the quantitative and qualitative characterisation of the food insecure and poor, the pattern of distribution established above indicates that the following socio-economic groups are the most likely to be affected by poverty, food insecurity and hunger.

Orphaned children and households headed by children. Orphanage has been part of Zambian society since time immemorial and the traditional extended family structure had coped with the situation quite well. However, the recent up-surge in the number of HIV/AIDS-related deaths and the deteriorating economic situation have led to an increased number of orphans in parallel to the weakening extended family system. There were 961,000 orphans aged below

20 years in 1998 (Milimo, 1999). Orphans often live a life of unpredictable and recurrent crises (see **Figure 3.9**). Three quarters of orphans live in households that are classified as very poor and only 5% live in rich households. This means that the responsibility for care is placed on those that are most unlikely to cope. In most cases, guardians are elderly grandparents, single parents and older children.

social security system in Zambia exacerbates the situation of the elderly. The elderly are themselves over-burdened by the high incidence of orphaned children due to HIV/AIDS, reducing further their own source of secure livelihoods.

Persons living with disabilities. Disability is the state of being unable to physically, mentally or emotionally function normally, such as situations of



Source: World Bank, 1994

A new phenomenon of child-headed households is a social reality which has recently emerged in Zambia, as have street children and child labour. Traditionally, such vulnerable children would be fused into the extended family system. However, these institutions are now extended beyond capacity, especially in urban areas.

blindness, physical impairment, deafness, speech impairment, mental retardation or illness, and emotional disturbance. In Zambia, this affected a substantial proportion of the population, affecting their abilities to establish food secure households, and many end up on the streets as beggars.

Neglected elderly. Traditionally, the elderly were held in high esteem in Zambia because of their perceived wisdom and experience. The proportion of the population above 65 years (elderly) stood at 2.9%, translating into about 300,000 elderly people, although those who are vulnerable due to neglect are less. As soon as aging sets in, around middle ages, their health starts getting affected by factors such as living conditions, reproductive history, work and home life demands, diet and exposure to infection and chemical agents. This weakens their capacity to work and, increasingly, they become dependent on others. The weak

Female-headed households. Culturally defined roles bind men and women to certain norms of behaviour, activities and benefits in society and thus shape the opportunities and constraints that women and men face in securing their livelihoods. In Zambia, gender inequality is mostly manifested in the unequal benefits and opportunities of women in relation to men.

Households affected by HIV/AIDS. Zambia, like many countries in Sub-Saharan Africa, is a nation gripped by HIV/AIDS, a veritable crisis that is seriously undermining its development. Although malaria is still the biggest killer

in Zambia, HIV/AIDS has spread rapidly and threatens to surpass malaria in death toll. There are indications, however, that the prevalence rate has begun to stabilise. There is a close relationship between HIV/AIDS and tuberculosis (TB). HIV/AIDS, together with malaria and TB, reduce the capacity and resources of households to produce food or raise income, thus reducing food security.

Unemployed youth. The level of youth unemployment in Zambia is high in both urban and rural areas. The youth have no access to the assets needed to eke out a decent livelihood. They are thus prone to food insecurity and insecure livelihoods.

Poverty and hunger are directly linked to unemployment, with the type of employment determining, to a large extent, the wealth and food security status of an individual. The number of people in formal employment reduced from 544,200 in 1990 to 465,000 in 1998 (CSO, 1998). Between 1995 and 1998, 13,577 workers were declared redundant in various sectors (Social Watch Report, 2002). In both urban and rural areas, the youth account for the bulk of the unemployed, self-employed and casual labourers, whose income is both low and erratic. Such job statuses are unable to guarantee livelihood security. Job security has gone down since market reforms started, with employers hiring and firing at will to avoid permanent commitments.

The development of the informal sector in Zambia provides a stop-gap coping strategy for many unemployed youth. However, its development is hindered by unfriendly laws and legal impediments, leading to daily harassment of informal sector players. Trading and vending have taken on more prominent roles such that many households use them to supplement their income. Moves towards artisanship and semi-skilled are evidently revealed through a wide range of enterprises like selling building materials, motor vehicle

repair, construction, sand mining, furniture manufacturing, hair-dressing, pottery, knitting, beer brewing and tailoring. Such initiatives, however, remain largely unsupported by official policies and programmes. There has been little or no effort to build on such initiatives to impart more life skills to the unemployed by allocating more resources for training, loans or market research.

The foregoing section shows that vulnerability to poverty and hunger is associated with certain socio-economic characteristics, especially education, age, gender, income source, employment status and size of household. It is also more associated with vulnerable groups, including the orphaned children, unemployed youth, the disabled, the elderly, women and households afflicted by disease. Interventions to reduce vulnerability to poverty and hunger should pay particular attention to these attributes and target relevant vulnerable groups by improving their life skills and access to livelihood assets. More on this is discussed in **Chapter 5**.

WHY HAVE POVERTY AND HUNGER PERSISTED?

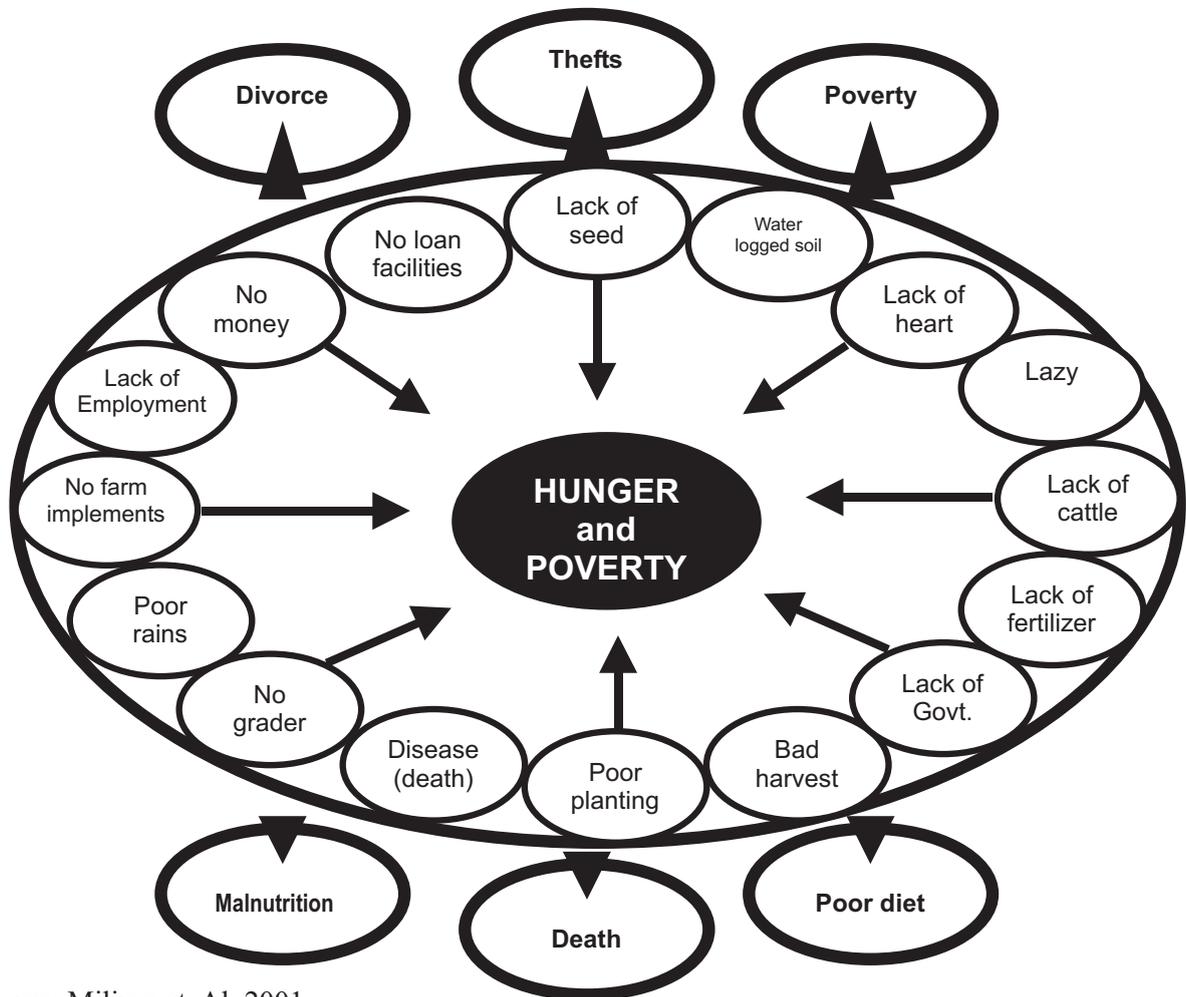
Consistent reduction in the production of the national staple maize, inadequate availability of alternative staple crops nation-wide, reduced access to yield-enhancing technology, and reduced access to markets have all combined to lead to rising poverty and food insecurity in Zambia.

There is an overwhelming coincidence between what the people perceive to be causes and trends in poverty and hunger with the statistical evidence gathered through empirical studies. Using both approaches of analysis, there is a general agreement that agricultural-based production systems have failed to secure livelihoods in all of Zambia's farming systems and provinces.

Figure 3.10 provides some insights into the causes and impacts of poverty and hunger, based on participatory interviews with some rural women in a village in Monze District (World Bank, 1994). In this analysis by the women in the community, hunger was effectively linked to poverty and malnutrition as well as other social vices, such as divorce and theft. The

wide range in the causes of hunger is indicative of the increasing vulnerability of livelihoods due to a combination of factors. This necessitates multi-pronged and participatory approaches to addressing poverty and hunger. Some of the implications of the causal factors in **Figure 3.10** are examined in more detail below.

Figure 3.10. People's Perceptions of Causes and Impacts of Hunger



Source: Milimo et. Al. 2001

Poverty and hunger are man-made and to the extent that they are man-made, they can be corrected through human effort.
Social Forum on Poverty, 2001

Increasing vulnerability and failing livelihoods. Much of the increase in poverty and food insecurity can be attributed to increased vulnerability and failing livelihoods. **Figure 3.10** illustrates a situation of reduced access to vital services and livelihood assets. The causal factors listed in this particular community cover deprivation of access to a range of five livelihood assets (natural, human, social, economic and infrastructure-institutional). This has increased their vulnerability to food insecurity and hunger.

The LCMS (1998) found that only 18% of Zambians in rural areas owned a plough, 36% a bicycle, 9% a crop sprayer, 1% a tractor and 6% a scotch cart. Rural people need such assets to enhance production and marketing. Further evidence of the failure of livelihoods in both rural and urban areas is provided in **Box 3.1**, which shows a trend of deterioration in human conditions over the past decade.

Coping strategies further undermining livelihoods. In the light of failing livelihoods, many households have adopted coping strategies that further undermine livelihoods and exacerbate poverty, hunger and human development conditions. The movement of people from rural areas, coupled with reduced opportunities

for employment, has led to the mushrooming of unplanned shanty townships without any basic social services. Coping strategies like charcoal burning, sand mining, street vending, domestic work, and illicit beer brewing further disturb the long-term capacity for livelihood security by reducing the long-term capacity to produce.

Most coping strategies are not working as viable sources of income and livelihoods due to pressure and intensity of food insecurity. The LCMS (1998), reported that 17% of rural households sold assets in order to cope with hunger. About 64% of Zambians reduced meal frequency in 1998 and another 62% reduced expenditure on other livelihood items.

The importance of social relations and entitlements has been highlighted by the hunger situation, but these have been tested to the limit as safety nets. Many coping strategies such as going back to 'slush and burn' cultivation, mining of building materials, over-fishing and poaching have the effect of worsening environmental sustainability. On the other hand, some adjustments, such as the growing of traditional crops that do not require chemical inputs, are positive. In urban areas, urban farming and backyard gardening have become common.

Box 3.1:
Indicators of Failing Livelihoods: A Summary of Trends and Changes

- *Livelihood security is perceived to have decreased across all study sites; the number of people living below the poverty line has increased throughout the 1990s.*
- *Agricultural production is widely perceived to have declined over the study period. The most frequently mentioned causes of this are drought, and the changes brought about by liberalization. The effects of these two events are seen to be compounded by lack of an effective extension service and inadequate infrastructure.*
- *Urban well-being is broadly perceived to have declined over the study period. This is seen as being due to a combination of rising costs, and reduced opportunities to gain adequate money to meet basic needs.*
- *Opportunities for formal, wage employment are seen to have decreased, and those that remain are seen as offering little or no security. Opportunities for low capital investment in informal economic activities are seen to have reduced due to a perceived saturation of the informal market.*

Source: Milimo, et. al., 2001

The role of family relations, church, NGOs and friendship has been enhanced as a way of investing in social entitlements. Attendance at church and funeral in expectation of reciprocal favours has become common. The Government social welfare scheme has become over-stretched and tested to the limit by the demand for their services. The Government has therefore moved into raising the capacity of vulnerable groups to produce or engage in gainful employment through imparting skills and resources. A number of causal factors contributing to failing livelihoods and coping strategies are explored below.

Poor performance of agriculture: The failure of agricultural policies to stimulate growth in the small-holder sector to levels that would make a significant impact on poverty and hunger has been described in **Chapter 2**. Positive outcomes during the implementation of ASIP, such as increased diversification of production and the rise in non-traditional exports, failed to have a positive enough impact on poverty and hunger as farm incomes declined.

Increasing famine and declining food

self-sufficiency: The food balance sheet (see **Table 3.15**) shows that Zambia faced cereal deficits in the 2001/2002 season. Only 2,033,000 metric tonnes of food were produced during the season, representing a domestic deficit of 397,000 metric tonnes based on its domestic utilisation demand of 2,430,000 metric tonnes. Emergency food aid was estimated at 174,000 metric tonnes.

At the peak of the maize/ fertilizer subsidies in 1988/89 season, the area under maize cultivation reached 1.02 million hectares, accounting for 70% of the total cropped area. About 1.7 million tonnes of maize were produced, a record unequalled to-date.

In the 2001/2002 season, the area under maize cultivation had reduced to 575,000 hectares, a decline of more than 40% from 1988, but maize still accounted for over 86% of the domestically consumed cereals and about 35% of the total staple food requirements in Zambia. This indicates a decline in the total food self-sufficiency in Zambia over the recent past as the country has failed to detach itself from high dependence on maize.

Table 3.15: Food Balance Sheet in thousand tonnes, as at 31st July 2002

Population 9.8 million	Maize	Rice	Sorghum/millet	Tubers	Wheat	Total
1. Domestic Availability	621.0	13.0	54.0	1,269.0	77.0	2,033.0
1.1 Opening Stocks	20.0	1.0	0.0	0.0	2.0	23.0
1.2 Production	601.0	12.0	54.0	1,269.0	75.0	2,010.0
2. Total Requirements	1,216.0	18.6	86.7	990.0	118.2	2,429.5
2.1 Domestic Consumption	1,011.0	17.0	83.0	952.0	111.0	2,174.0
2.2 Stockfeed	35.0	0.0	0.0	0.0	0.0	35.0
2.3 Exports	10.0	0.0	0.0	0.0	0.0	10.0
2.4 Food Reserve Stocks	15.0	0.0	0.0	0.0	0.0	15.0
2.5 Breweries	65.0	0.0	0.0	0.0	0.0	65.0
2.6 Seed	10.0	0.0	1.0	0.0	1.5	12.5
2.7 Losses	60.0	0.6	2.7	38.0	3.7	105.0
2.8 Closing Stocks	10.0	1.0	0.0	0.0	2.0	13.0
3. Domestic Shortfall	-595.0	-5.6	-32.7	279.0	-41.2	-395.5
4. Total Planned Imports	-575.0	-4.7	-33.0	0.0	-40.0	-652.7
4.1 Commercial	-300.0	-4.7	-33.0	0.0	-40.0	-377.7
4.2 Food Aid Required	-275.0	0.0	0.0	0.0	0.0	-275.0
5. Emergency	-174.0	0.0	0.0	0.0	0.0	-174.0
6. Uncovered Gap/Surplus	-20.0	-0.9	0.3	279.0	-1.2	257.2

Source: MACO-EWU and FAO/WFP, 2002

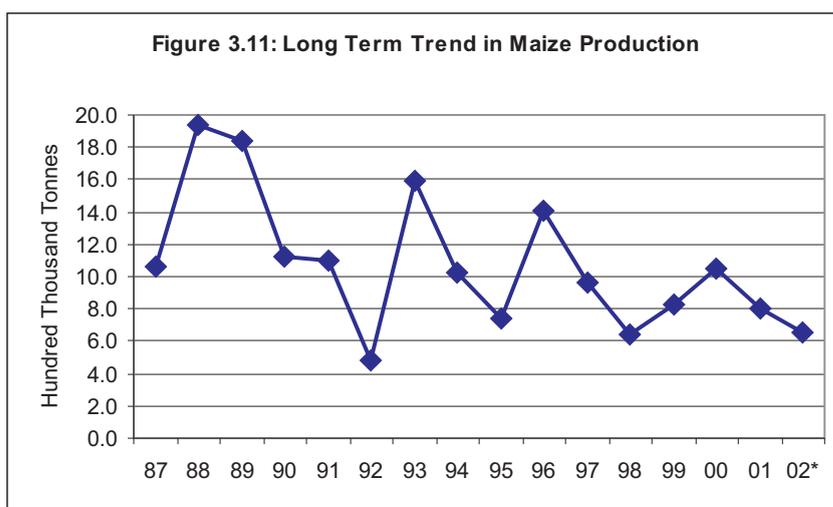
Currently, due to the high dependence on maize, its availability has a great effect on household and national level food security. In the last three seasons, maize production has been consistently falling, thus failing to meet national self-sufficiency. **Figure 3.11** shows the long-term trend of a consistent fall in the local production of maize.

The national level aggregate maize production has fallen. So has the per capita energy provision of maize from own production. Most small-holder farming systems and farmer categories in Zambia are now unable to meet self-sufficiency from own maize production as indicated in **Table 3.16**. The analysis of the current and potential maize self-sufficiency in different farm categories in Zambia shows that farm households are only meeting 3%, 15% and 72% of their

mentary staples, such as cassava, rice, potatoes, sorghum and millet.

The main explanation for the low maize self-sufficiency is the low yield of maize at farm level. The actual farm level maize yield when compared to the potential yield among smallholders and medium-scale farmer categories is less than 20% even where improved inputs are used. Such levels of productivity are too low and unsustainable.

The poor performance of Zambian farmers in meeting their maize self-sufficiency levels is reflected at national level as well. Thus, in the last three years, Zambia has seen a decline in its maize self-sufficiency from 100% in 2000 to 80% in 2001 and 60% in 2002. Zambia has also seen a decline in the per capita production of grain from 235 kg during



Source: Agric. Competitiveness study, 2002

calorific requirement from own maize production - given the current maize area cultivated - for subsistence, small-scale and medium-scale farmers, respectively. This shows that maize production is not a sustainable source of food to ensure food security; and a more sustainable approach to meeting food self-sufficiency needs to be found through promotion of supple

the 1985-89 period to 74.2 kg in 2002. On the other hand, the per capita consumption of maize has declined from 153.2 kg in 1990/91 to 123.3kg in 1997, an equivalent of 108 Kilo calories per capita per day. An adult requires 2,300 Kilo calories per day.

The decline in maize as a reliable staple crop for Zambia calls for a multi-pronged

Table 3.16: Maize Self-Sufficiency by Farmer Category

	Farmer Category		
	Subsistence	Small scale	Medium scale
Family size	8	7	6
Adults	4	4	3
Adult Equivalent	7	6.25	5.25
Mean cultivated area – Ha of maize	0.5	1.5	3.0
Maize yield(kg/ha)	1,000	1,500	3,000
Actual Production (kg)	500	2,250	9,000
Production per Adult (kg)	71	360	1,714
Kcal Equivalent per Adult	22,720	115,200	548,480
Annual Calorie Consumption per Adult (Kcal)	766,500	766,500	766,500
Self-sufficiency at current yields (%)	3	15	72
Self-sufficiency at double current yield (%)	6	40	191
Self-sufficiency at potential yield (%)	12	80	215

Source: MACO Statistical Bulletin, 2001

approach to increase food security. On one hand, maize cannot be ignored as a staple crop because most people rely on it for food. So it should continue to be promoted in areas where it can be produced more competitively. On the other, alternative food crops, like cassava and millet, should be promoted in rural and urban areas as crops that can fill the void in consumption and that can be produced more cost-effectively than maize. Further, more sustainable soil fertility enhancement methods should be promoted to grow maize in areas where it can be grown.

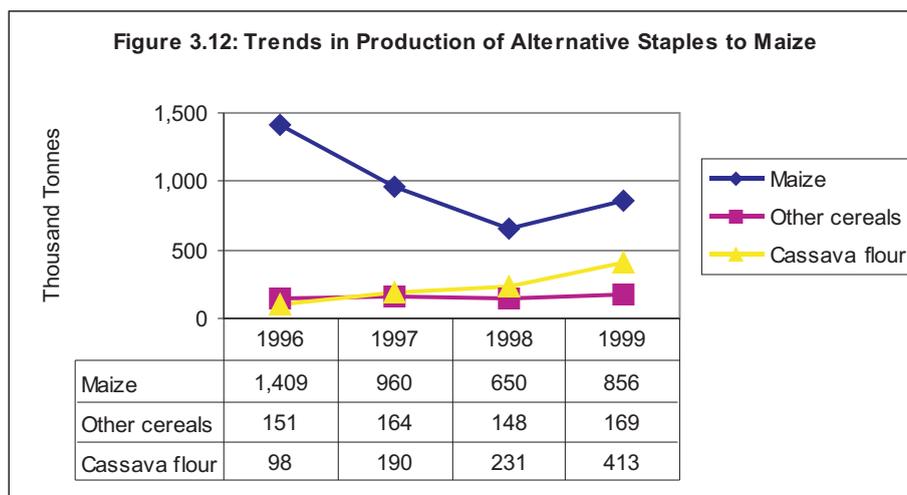
Alternative staple foods rising but inadequate to fill the hunger gap: The fall in maize underlines the need to diversify into other alternative food crops. **Figure 3.12** shows the trends in the production of alternative staple crops in Zambia.

Whereas maize production has fallen, the growth in alternative staple cereals (rice, wheat, sorghum and millet) has remained almost stagnant. Tubers significantly contribute to the food systems of the northern high rainfall region. But the rate of increase in the production and consumption of alternative staples has not

matched the food gap created by a reduction in maize production at national level. The challenge is to implement measures that will accelerate the filling of this void.

Rising cost of living in the face of rising unemployment: Zambia has seen a rising cost of living against a background of stagnated or shrinking incomes, leading to reduced quantities of food consumed. Salaries, wages and income have not kept up with the rising cost of living and inflation.

The number of people in formal employment reduced from 544,200 in 1990 to 465,000 in 1998 (CSO, 1998). This means that about 79,000 people lost their jobs, affecting the livelihoods of over 600,000 family members. Some job categories have been unable to guarantee livelihood security due to low salaries and incomes. Many lack any job security, with employers hiring and firing at will to avoid permanent commitments, such as pensions. Some people were not paid their benefits even after losing their jobs. The experience of Daniel Mulenga is illustrative of this case (see **Box 3.2**).



Source: MACO Statistical Bulletin, 2001

**Box 3.2:
Effect of Retrenchments on the life of Daniel**

Daniel, married with six children, in 1996 narrated to an Oxfam Basic Rights Tribunal the sad experience of how his whole family was thrown into destitution following his retrenchment when the state owned company he was working for closed down. Shortly afterwards Daniel fell sick and being the only bread winner, his family could no longer afford to buy food. Some of his children frequently got sick, while others dropped out of school due to lack of fees, uniforms and above all hunger.

Source: Campaign Against Poverty, 1998

Policy framework and institutional weaknesses: There is a wide gap between policies and implementation. Macro and sector policies, including agriculture, are widely perceived to be good. But these have failed to have a positive impact on hunger due to lack of effective implementation. This points to institutional weaknesses in delivering services to the people.

The profile of key institutions that have a stake in the agricultural and food sector shows that traditionally, this has been dominated by the public sector in planning and implementation of policies and projects. A Mid-term review of ASIP in 1998 noted that despite ASIP having been designed to foster the participation of all stakeholders in programme design and implementation, the core functions and comparative advantages of each

stakeholder had not been brought out and activities were still dominated by the public sector. The relative involvement and dominance of the Government, donors and beneficiaries in development projects determines the level of impact and sustainability.

Stakeholder consultation and participation in running a successful agriculture sector is a non-negotiable, if optimal productive capacity is to be achieved. Sector policies, programmes, projects and practices, no matter how well designed, only form the first step to developing the sector. What makes them more efficient and effective is the complementary involvement of the sector stakeholders along the programme development chain from policy formulation, programme design and project implementation through to ey

practices. Participation is thus more than simply bringing stakeholders on board, but also recognising that stakeholders are an essential part of the development process as they contribute experiences from their perspectives.

Comparing lessons learnt from the implementation of various projects at various phases of Zambia's development, the Social Forum on Poverty (2001) demonstrated that the higher the level of participation of all stakeholders, the more the projects addressed the felt needs of the community and consequently, the higher the impact and the more sustainable the project intervention (see **Table 3.17**). Zambia needs to draw useful lessons from previous experiences in poverty reduction institutional strategies and development projects. This underlines the importance of involving all stakeholders at all stages of projects and programmes. In Zambia, we are seeing greater effort by government to involve civil society at all stages of project and programmes formulation and implementation through several consultative fora.

Community involvement at all stages of the development process, community contribution in some way and community participation in decision making of the

development processes, have enhanced impact and poverty reduction. Other factors are availability of funds when required, availability of technical assistance and incorporation of cultural issues. Local people possess a lot of knowledge and skills that should be used as a foundation for development.

Realising the need for stakeholder consultation in agriculture, the Government has established the Agricultural Consultative Forum (ACF) and District Agricultural Committees (DACs) to widen participation in policy formulation and project implementation. Government is also trying to strengthen farmer organisations to improve their input and receiving mechanisms into agricultural development processes. Efforts have also intensified to incorporate participatory approaches to project design and implementation.

Crop and livestock diseases and pests:

Outbreaks of diseases of crops and livestock in recent years have set back efforts to develop agriculture and have restricted entry to broader global markets. In crops, serious outbreaks of the Larger Grain Borer (LGB) in maize in the mid-1990s led to heavy losses in storage. Cassava Mealy Bug and Cassava Mosaic

"I have no oxen, no chairs, no plates. The cattle I had when I came back to my home after my husband died have also died of corridor disease. To crown all this, I have just lost a daughter and a grandchild within one week. Hunger is also a problem. My problem is big: it stretches from heaven to earth"
(Lamentations of a Monze widow, World Bank, 1994)

Table 3.17: Poverty Reduction Matrix (CCJP, 2001)

Project	Stakeholders			Felt Needs	Poverty Impact	Sustainability
	GRZ	Donors	Community			
IDZ	high	Dominant	Passive	Not addressed	High so long project running	Zero
IRDP	High		Passive	Not addressed	High so long project running	Zero
LIRD	Very high		High	Not really	Fairly high	High
Coop 1	Little		Dominant	Very much addressed	Very high	High
Coop 2	Dominant		Passive	Not addressed directly	Very high so long as coop runs	Zero
RIF	High	High		Addressed very much	Very high	Very high
ZAMSIF / MPU	High	High		Addressed very much	Very high	Very high

Source: Social Forum on Poverty, 2001

Virus devastated cassava production in the 1990s, wiping out whole fields and reducing yields to almost zero in some cases. There have been serious diseases in soyabeans (frog eye) and sweet potatoes (weevils) in recent years.

The livestock sub-sector has not been spared, with outbreaks of corridor disease (East Coast Fever) being among the sad episodes that have been responsible for the failure of livelihoods in Southern Province. Some households have lost whole herds of cattle and its attendant benefits of manure, milk, draught power and meat. National cattle population reduced from 5.4 million in 1996 to 1.2 million in 2000. The effect on draught power and food security was devastating. Other serious cattle diseases have included Trypanosomiasis and Contagious Bovine Pleura Pneumonia. In the pig subsector, frequent outbreaks of swine fever have restricted the movement and marketability of pigs and pock products.

NATURAL FACTORS

Inadequate preparedness to changes in weather: The country has witnessed two major drought years in the last decade, 1991/92 and 1995/96. The 2000/01 and 2001/02 seasons were also beset with poor rainfall patterns of alternating dry spells and flooding. The effect on agricultural production has thus been cumulatively negative. It is noted that external shocks, such as droughts and floods, lead to the collapse of livelihood systems that are already weak due to poor policy implementation.

The major concern has been the inconsistency and inaccurate projections of the early warning systems on climatic conditions, as indicated in the projections for the 2001 season. There is need to improve the early warning capability in Zambia. There is also need to improve

drought preparedness, food security reserves, seed security, irrigated farming and water management to reduce susceptibility to the vagaries of the weather.

HUNGER AND THE BIOTECHNOLOGY DEBATE

The recent famine in Zambia ignited a serious national and international debate on whether genetically modified food obtained through biotechnology research is a viable and acceptable way to address the hunger situation. Zambia being part of the global community, is subject to the movement and diffusion of modern technology and needs to adapt to such situations. The reaction of Zambia to Genetically Modified Organisms (GMOs) did not impress some local and international stakeholders who felt that Zambia may have missed a chance to feed its people in the face of a life-threatening famine.

The rejection of the GMOs therefore attracted as much attention as the famine itself. About 2.9 million people in 48 districts required to be fed urgently before the next harvest. This required over 600,000 metric tonnes of emergency food. GMO proponents contended that such a scale of hunger can only be met if GMO food was supplied. They argued that GM food is safe and has been used for many years in developed countries. They were disappointed with the Zambian Government's position on GMOs as they contend that most GM foods currently on the international market have passed risk assessments and are unlikely to present risks for human health. No effects on human health have been shown as a result of consumption of GM foods by the general populations in the countries where they have been approved. In some other countries in the region faced with a similar hunger situation, GM maize has been milled before distribution to prevent people from planting it.

On the other hand, the Zambia Government in 2002 sent a fact-finding team of scientists to the USA, South Africa, The Netherlands, Belgium, Norway and the United Kingdom where they met a range of stakeholders and interest groups. In their report, they reiterated and supported the rejection of GM foods, arguing that the effects of GMOs have not been convincingly discounted scientifically and that Zambia was not prepared for any negative consequences of consuming or planting GMOs. Zambia reserved its right to apply

a 'Precautionary Principle' on GMOs. In particular, the team confirmed that health-related concerns in consumption of GM foods are in the potential manifestation of new food toxins, new allergens and antibiotic resistance. The team also confirmed the concern of erosion of genetic diversity of local farmers' maize varieties. Further, there was fear that Zambia's exports to Europe could suffer if it adopted GMOs. Above all, Zambia lacked a functional national bio-safety framework.

**Box 3.3
Is Biotechnology the Answer to Food Insecurity?**

Biotechnology covers many of the tools and techniques that are commonplace in agriculture and food production. It covers new DNA techniques, molecular biology, gene manipulation and gene transfer (or genetic engineering) and DNA typing and cloning of plants and animals. In genetic engineering, segments of DNA from one species are cut and inserted into the DNA of another species, allowing for the transfer of genetic material between species that would, under normal circumstances, never be able to breed in any natural setting. Genetic engineering therefore gives rise to Genetically Modified Organisms (GMOs). Biotechnology is "any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for any specific use".

The design of all the GM crops available on the international market today is based on one of the following traits: insect resistance, virus resistance and tolerance to certain herbicides (see below). All the genes were derived from micro-organisms. In Zambia the most common biotech products introduced on the food market through famine relief efforts is genetically modified maize for pest, disease and weed resistance. Insect resistance, for instance, is achieved by incorporating into the food plant the gene for toxin production from the bacterium *Bacillus Thuringiensis* (BT). GM crops that produce this toxin have been shown to require lower quantities of insecticide, especially where pest pressure is high.

GM Crops on the International Market

Crop	Trait	Countries with approval
Maize	Insect resistance	Argentina, Canada, RSA, USA, EU
	Herbicide tolerance	Argentina, Canada, USA, EU
Soyabean	Herbicide tolerance	Argentina, Canada, USA, RSA, EU (for processing)
Oilseed rape	Herbicide tolerance	Canada, USA
Chicory	Herbicide tolerance	EU (breeding purposes only)
Squash	Virus resistance	Canada, USA
Potato	Insect resistance	
	Herbicide tolerance	Canada, USA

Potential Benefits of GMOs

There are potential and actual benefits recorded from GMOs through the increased yield of major crops, livestock, forestry and fish species; improved nutritional value of agricultural products; reduced food losses; and reduced reliance on chemical use. GMOs can also be adapted to adverse conditions- drought, floods, salinity, and acidity; produce high value bio-chemicals, develop new treatment methods and vaccines for disease; prevent environmental degradation and, through gene mapping of organisms, allow for the transfer of 'useful' genes for conservation of natural resources.

Issues of Concern on GMOs

Food Security Argument: Biotechnology is likely to further consolidate control in the hands of a few large firms through intellectual property rights, and may deprive subsistence farmers of their seeds. The Bio-Safety Argument: Evidence shows that creating new allergenic compounds and toxins may lead to reduced nutritional quality and safety of foods; Antibiotic resistant genes may further exacerbate the medical dilemma and introduce new diseases. Genetic pollution through cross-pollination with genetically engineered crops is already polluting the DNA of crops of organic and non-genetically engineered farms. There are chances of creating super weeds and pathogens through out-crossing. Lastly, the Ethical and Religious Arguments Against GMOs state that the horizontal movement of genetic material across species boundaries raises ethical and religious concerns about the sanctity of human and natural life. The cloning of humans and the transfer of genes across life-forms of different species violates this holy norm. Tinkering with the genetic code in any way will upset the delicate balance between our physiology and the food we eat. This is highly dangerous and could lead to life extinction.

Source: WHO, 2002

Some of Zambia's supporters contend that the debate might not have arisen had Zambia been better prepared for the famine. There is no shortage of non-GM food in the region. Prior to this debate, Zambia had initiated a process in line with international agreements (Cartagena Protocol) to develop legal and institutional frameworks for the management of GMO technology. However, the process has been slow and the policy makers had been inadequately briefed, leading to the confusion that emanated from the unannounced inflow of GM maize into the country through the famine relief programme. The technical debates themselves were indicative of the problem at hand, with local stakeholders being split into two opposing camps.

The debates brought out the fact that advances in biotechnology could widen the opportunities for farming and improved food security. But technically, Zambia lacks any specific systems for rigorous evaluation of GM organisms and GM foods that relate to both human and environmental health. Zambia needs to be assisted by the WHO Food Safety Programme and the FAO to identify foods that should be a subject of risk assessment related to direct health risk (toxicity), allergenicity, stability of inserted gene, nutritional effects of the genetic modification and other unintended effects. Above all, the feasibility and methods for post-marketing, monitoring of GM food products, and the continued surveillance of the safety of GM food products need to be developed for Zambia. The safety of GM foods therefore needs to be assessed on a case by case basis and general statements on their effects are not valid.

Currently, Zambia lacks a bio-safety

regulatory mechanism and administration structures for application procedures of GMO technology. It needs to put in place such a regulatory framework to ensure that maximum benefits are derived from GMO technology without compromising bio-safety as a matter of priority.

Therefore, despite its potential benefits, whether biotechnology is the real solution is still subject to debate. By rejecting biotech maize, despite facing serious hunger, Zambia has raised the subject profile and contributed much to world debate on the issue. In the absence of a regulatory framework and administrative capability for the use of biotechnology, it would be unfair to impose any GM food on the Zambian population because the consequences of negative effects would have serious long-term repercussions.

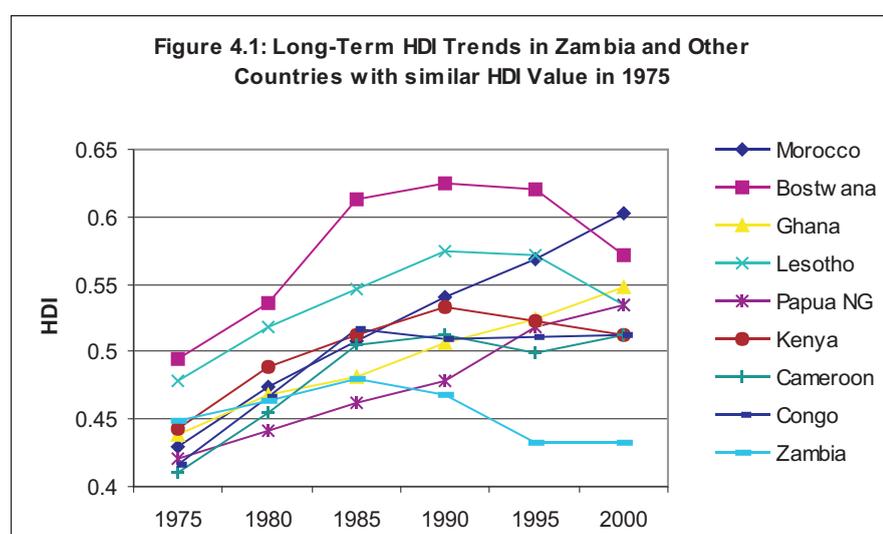
CONCLUSION

Analysis in this chapter shows that poverty and hunger are complex and multi-dimensional, with mutually reinforcing causes. The declining reliability of maize as a dependable main staple and the failure of alternative staple foods to fill the food gap are the main causes of the recurring hunger situation in the country. High levels of food insecurity directly translate into rising poverty because the two are closely linked. But attempts to address the poverty and hunger problems require innovative approaches that go beyond agricultural interventions and strengthen the coping mechanisms of poor people to avoid undermining livelihoods. Employment creation is the key. Biotechnology may provide part of the answer, but it requires careful analysis. These interventions should of necessity touch on a wide range of policy, institutional and social issues.

THE STATE OF HUMAN DEVELOPMENT IN ZAMBIA

Progress in human development, the process of expanding choices and opportunities that people highly value, is linked to poverty and hunger. These are a denial of some of the most basic of these human choices. The high levels of poverty and hunger in Zambia seen in **Chapter 3** are therefore a reflection of the deteriorating human development status of the country.

decline after 1985, with the other countries joining the trend later, between 1990 and 1995. The decline in HDI for Zambia has been so sharp that by 1995, it was lower than it was in 1975. Global Human Development Reports have consistently pointed out that Zambia has been the only country to suffer this kind of reversal among the 79 countries for which data is available to allow for a



Source: UNDP, 2002

This is confirmed by the long-term trends in human development (see **Figure 4.1**). There are marked differences between Zambia and the other eight countries whose Human Development Indices (HDI) were similar to that of Zambia in 1975, i.e. fell within the range of 0.4 and 0.5. All the nine countries, including Zambia, increased their HDI value between 1975 and 1985. However, it is noted that in the case of Zambia the rate at which the HDI value rose was slower than those of the other eight countries. The HDI has risen steadily in three countries: Papua New Guinea (the only non-African country included), Morocco, and Ghana.

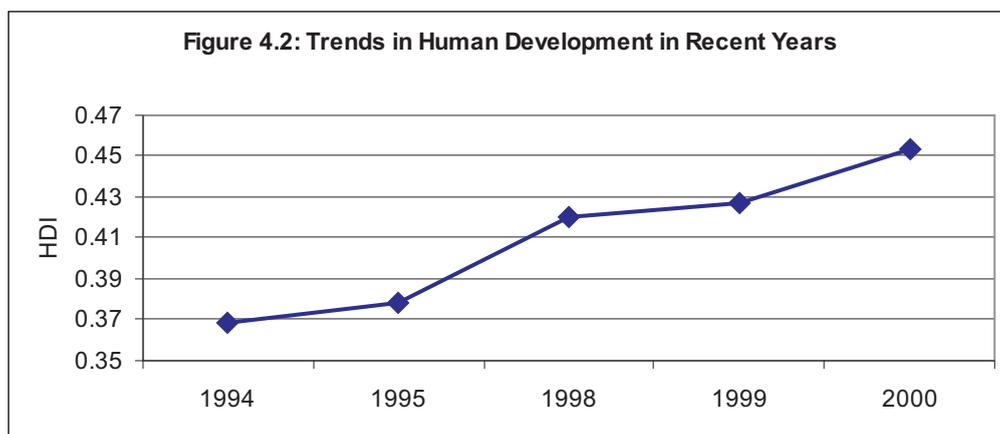
Among these countries, Zambia and Cameroon were the first to record a

construction of HDI series from 1975. Trends in various critical indicators discussed below, in addition to the evidence of high levels of poverty and hunger explain this sharp reversal in the human development status of the country.

However, the short-term trends indicate that there is cause for optimism. The HDI has been rising modestly since 1994 (see **Figure 4.2**). Zambia's HDI rose marginally from 0.424 in 1998 to 0.453 in 2000. This improvement suggests that the decline has bottomed out, and there is reason to believe that this may well be the case. The impact of HIV/AIDS on people's health status and their ability to pursue viable livelihoods options has been devastating, creating powerful underlying

devastating, creating powerful underlying factors that give rise to poverty and hunger and undermine human development.

the case of Luapula Province, the improvement occurred from a very low base, 0.336, which was the lowest HDI value in 1998 because in both years they



Source: UNDP, Human Development Reports, Various Issues

Table 4.1 show a modest improvement in Zambia's HDI value between 1998 and 2000. All the provinces in Zambia made progress in their HDI values except Eastern Province. Again, this indicates that the declining trend in the country's HDI may have now been reversed and Zambia could, with enhanced effort, anticipate a rising trend in the HDI value.

had the least HDI value.

The provinces along the line-of-rail, the strip of land that follows the railway line running from Livingstone to the Copperbelt, continue to take the first four positions of the HDI ranking. These are Lusaka, Copperbelt, Southern, and Central Provinces.

Table 4.1: HDI Values for Zambia and Provinces, 1996, 1998 and 2000

Province	HDI 1998	Rank 1998	HDI 2000	Rank 2000	HDI Difference 1998-2000
Central	0.465	4	0.468	4	0.003
Copperbelt	0.491	2	0.525	2	0.034
Eastern	0.391	9	0.364	9	-0.027
Luapula	0.336	8	0.401	6	0.065
Lusaka	0.511	1	0.532	1	0.021
Northern	0.372	6	0.391	7	0.019
Northwestern	0.419	5	0.449	5	0.030
Southern	0.472	3	0.475	3	0.003
Western	0.345	7	0.370	8	0.025
Zambia	0.424		0.453		0.029

Source: Appendix Table 4.1

However, this modest progress is not shared evenly. The highest increase in the HDI value between 1998 and 2000 occurred in Luapula, Copper Belt followed by North- Western Province. In

THREATS TO HUMAN DEVELOPMENT IN ZAMBIA

The goals, targets and indicators of the Millennium Development Goals s and

(MDGs), which deal with various areas that are important in making progress in human development, are a useful starting point for examining the new and persisting threats to human development in Zambia. Because human development is multi-dimensional, it is undermined by various and sometimes changing factors. This section explores how Zambia is fairing with respect to the MDGs, as a way of assessing the human development challenge the country faces.

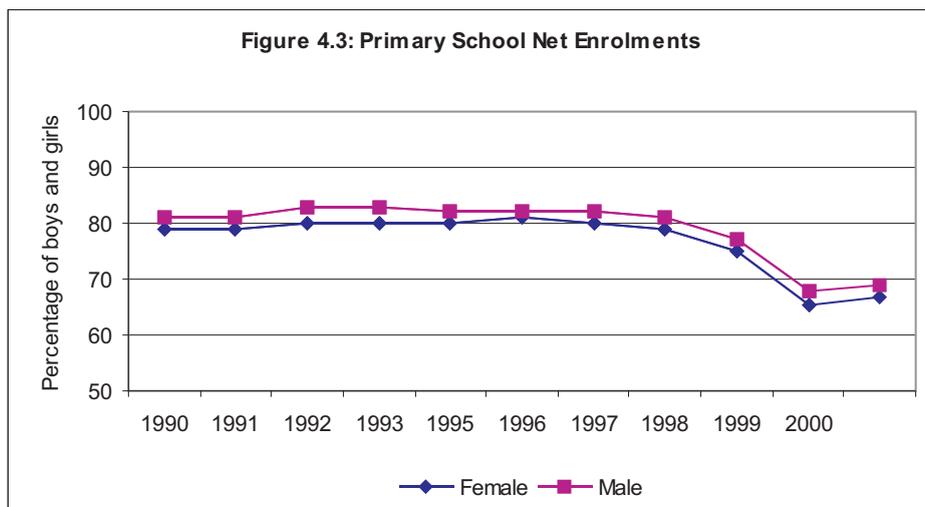
1. Extreme poverty and hunger: The high level of extreme poverty and hunger in Zambia demonstrated in **Chapter 3** seriously constrains the extent to which people can expand the essential choices of life. Poverty and hunger are a threat to human development because they limit the extent to which people can be empowered to lift themselves out of poverty and hunger. A wide range of factors that hamper their progress towards achieving the other MDGs afflicts the poor and hungry in Zambia. Gender inequality and declines in the nation's educational attainment, health status and environmental integrity are linked to poverty and hunger in a mutually reinforcing manner, and all these create a vicious circle of poverty and hunger and low human capabilities.

With 73% of the population living under poverty in 1998, Zambia lags behind in achieving the MDG of reducing the proportion of the population that lives in extreme poverty and hunger by half between 1990 and 2015. Achieving the MDG requires that this proportion, which was 58.2% in 1991, drops to 29.1% in 2015. Much needs to be done as the proportion of people living in extreme poverty stood at 57.9% in 1998. The difficulty in achieving the MDG has been

compounded by the fact that prospects for sustainable growth in the medium term have been lowered by among others, disinvestments taking place in the mining sector.

Similarly, halving the proportion of the population living in extreme hunger can be expected to be an uphill battle. The proportion of under-weight children, one of the two selected indicators, must drop from 23% in 1991 to 11.5%. The proportion was 25% in 1998. However, with good policy strategies and implementation -combining emergency relief, recovery, and initiating development in the agriculture sector - making progress towards the halving of extreme hunger can rapidly accelerate. Access to agricultural inputs can reverse hunger within a few seasons.

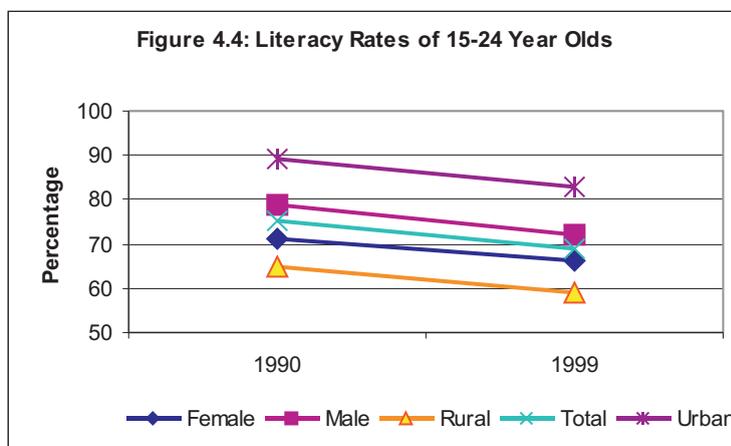
2. Educational status: Progress in human development is being hampered by reversals in educational attainment, undermining the population's capacity to participate in the information age that allows them to make informed choices for the livelihoods that they pursue. **Chapter 3** demonstrated that there is a very strong link between educational attainment and poverty and hunger. The probability for a household to fall into extreme poverty and hunger decreases with the increasing level of formal education of the head of household. This is because education is key in building people's capabilities in terms of skills and the ability to receive and process information for livelihood choices. Enhancing educational attainment is therefore a critical element in the fight against poverty and hunger as well as in improving the human development status of the country as a whole.



Source: MOE Management Information Systems 2003

There is a very big challenge for Zambia to improve the population's educational attainment, given the deterioration in the three indicators for measuring progress for the MDG on universal primary education.

- The primary school net enrolment ratio stood at about 80% in 1990 and remained around this level up to 1997 when it started falling to a low of 66.5% in 2000 but then increased to 67.86% in 2002 (see **Figure 4.3**).
- The percentage of the population aged 10-14 which is used as a proxy for children finishing at least five years of primary education increased from 66.3% in 1990 to 71.7% in 2000.
- A combination of factors, noted above has led to a decline in school enrolment, deterioration in quality of education, and growing illiteracy among Zambian youths. The literacy rate for 15-24 dropped from 74.8% in 1990 to 70.1 in 2000. This drop is experienced along both gender lines and area of residence. The literacy rate for males fell from 78.8% in 1990 to 75.4% in 2000 and that for females fell from 71.1% in 1990 to 65.5% in 2000. Similarly the urban literacy rate fell from 88.7% in 1990 to 86.1% in 2000 and that for rural dropped from 64.7% to 59.4% during the same period. (See **Fig.4.4**).



Source: 2000 Census Population Publication, CSO

Rural urban disparities are significant. It can be seen from above that significant disparities exist between rural-urban literacy rates. In 2000, more than 40% of the rural youth find themselves excluded from the world of information and unable to assimilate strategies to move themselves out of poverty.

The policy strategies already in place need to be refined and implementation enhanced. Some further refocusing on the achievement of universal primary education is required. Currently, strategies appear to be tilted towards the expansion of Grades 8 and 9 school-places, often at the expense of primary school places.

Trends in indicators set for the MDG on achieving universal primary education discussed above show that Zambia now needs to increase the net primary enrolment ratio by about 2% every year to meet this goal. It means accelerating the construction of new schools to increase school places, reducing distances to school, increasing class time and reducing class sizes. Special attention should be paid to rural areas where pupils cover very long distances to get to school. Accompanying this measure must be the training and motivating of teachers and increasing the supply of school materials. All these interventions require a substantial increase in resources.

The general decline in the quality of education should also be addressed by reversing the deterioration in physical assets including reconstruction of dilapidated buildings, providing schools with desks and other furniture, providing electricity and clean running water.

Zambia will have to reverse the decline in the number of teachers, which dropped from 40,488 in 1996 to 37,117 in 1999. The prevalence of HIV/AIDS which

adversely affect the teaching community as it did other professionals needs to be tackled.

3. Gender equality: Eliminating gender disparities in Zambia and empowering women should rank high on Zambia's development agenda because discrimination in whatever form undermines society's collective effort to improve prospects for reducing poverty and hunger and raises the human development status. It is impossible and a contradiction to expect that extreme poverty and hunger could be eliminated in Zambia while women are discriminated against in accessing opportunities to build their human capabilities. The task facing Zambia is to eliminate the gender imbalance that places a heavier burden of poverty on women at the household, community and national levels.

Gender disparities in education. Before the 1990s, progress was made in reducing the gap between the enrolment of boys at primary school level and that of girls. Therefore, the difference in the enrolment of boys and girls at primary school level was only 2% in 1990. It stood at 79% for girls and 81% for boys. By 2002 the enrolment ratio for boys had increased to 84.6% from 82.2% in 2000, whilst that for girls increased from 75.7% in 2000 to 77.9% in 2002. The difference between the enrolment ratios for boys and girls was 6.5% in 2000 which increased to 6.7% in 2002.

Although this is the case, it is noted that the prospect for equality in primary enrolment by 2005 remains tenable as the gender gap of 6.7% can be closed by 2015. This, nevertheless, requires that new enrolments are higher for girls than for boys until 2005 while at the same time increasing the chances of girls completing the full course of primary school education once they are enrolled.

Factors that have led to the deterioration in human development in Zambia are many and are mutually reinforcing. Only a multi-sectoral approach to development that has people at the centre will improve Zambia's human development.

Table 4.2: Basic School Attrition Rates

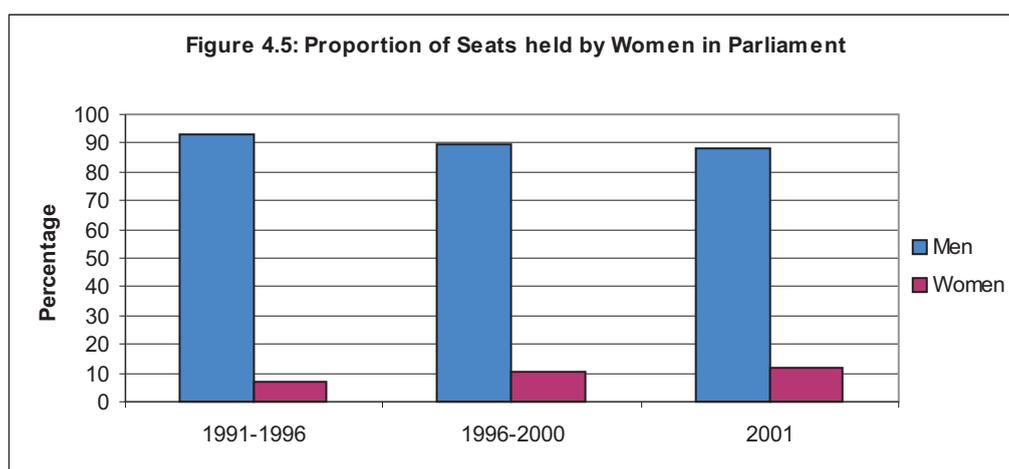
Drop-Out Grade	Male	Female
Grade 1	2.6	2.55
Grade 2	2.8	2.73
Grade 3	2.7	3.08
Grade 4	6.2	3.71
Grade 5	4.3	4.18
Grade 6	2.8	5.10
Grade 7	4.34	6.18

Source: MOE, Management Information Systems 2003

The female literacy rate of 15-24 year-olds has decreased from 71.1% in 1990 to 65.5% in 2000. The male literacy rate still remains higher at 75.4% though it also decreased from 78.8% in 2000. The low literacy rate among females can be explained by cultural practices that give preference to boys. Burdened with household chores, the girl-child is unable to compete fairly with her male counterpart. Female teachers are especially rare in rural schools which leaves the girl-child with few role models to inspire her (Kelly, 1994).

Gender disparities in decision making. Excluded from the world of learning and decent employment, women participate less in decision-making, as reflected in the

allocation of seats in the national parliament since independence. Following eight parliamentary election since 1964, only 5.7% of the cumulative total of 924 parliamentary seats were held by women. However improvement in this regard can be noted when the situation is analysed on election-by election basis rather than cumulatively. There has been some modest increase since 1991 when 6.7% of the seats were held by women (See Figure 4.5). The 2001 elections resulted in 11.9% of the seats going to women. The persisting concern is that the proportion of women parliamentarians in Zambia still falls far short of the 30% minimum demanded by SADC. However, the number of women councillors trebled after the 2001 elections.



Source: Zambia National Women's Lobby Group

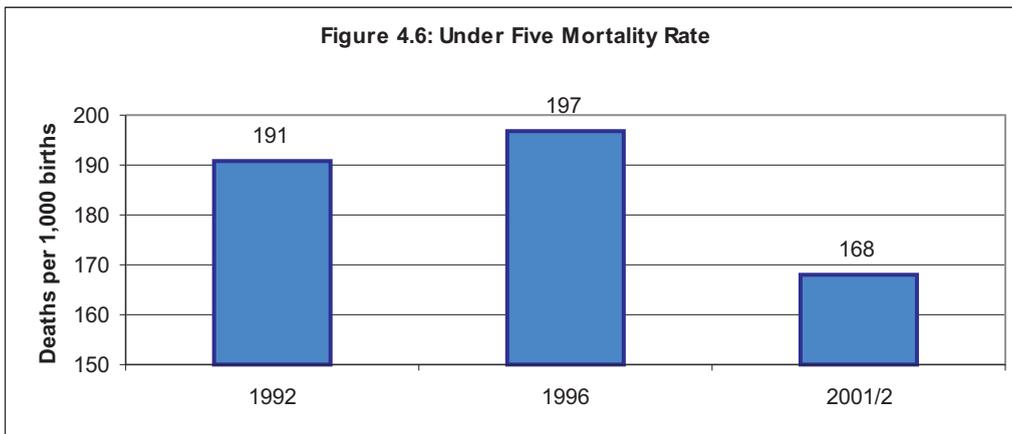
Concerned at persisting disparities, the Zambian Government has taken measures to mainstream gender issues in development. These include setting up a Gender in Development Division at Cabinet Office, creating gender focal points in all sector ministries, and adopting a national gender policy.

A number of strategies are currently being implemented. The legal framework has been improved upon. NGOs, on the other hand, have been active in the gender forum and this has resulted in some positive changes taking place. Gender training and sensitisation for both men and women has been at the top of the agenda, both in Government and the NGOs. The aim of this training is to transfer gender skills at individual level to ensure that gender responsiveness is enhanced.

more generally will have a significant impact on the improvement of childhood health and reduction of mortality.

Although the under-five mortality rate increased from 191 per 1,000 to 197 per 1,000 live births between 1992 and 1996, it fell to 168 per 1000 in 2001/02 according to Demographic and Household Survey 2001/02 of the CSO. On Table 4.3 it is shown that under-five mortality rates are highest in Luapula and Western Provinces, where approximately one in four and one in five children respectively do not live to see their fifth birthday. Again these two rank sixth and eighth position respectively with regards to HDIs as shown in Table 4.1.

Infant mortality increased from 107 per 1000 in 1992 to 109 per 1000 in 1996 but decreased to 95 per 1000 in 2001/02. The



Source: Source: Demographic and Household Survey 2001/02, CSO

4. Child health: The high levels of child malnutrition observed in **Chapter 3** manifests itself in the rising child mortality, pointing to the fact that reducing the large number of children who are chronically hungry can have a significant impact on child health. **Chapter 3** demonstrates that children in poor households are more likely to be under-nourished. This lowers their immunity and makes them susceptible to diseases. Fighting poverty and hunger

decline in childhood mortality in Zambia during the 2001/02 is attributable to several factors. One possible factor could be the good coverage of vitamin A supplements for two-thirds of children aged 6-59 months who were reported to have received the supplement in the six months prior to the 2001/02 demographic and household survey.

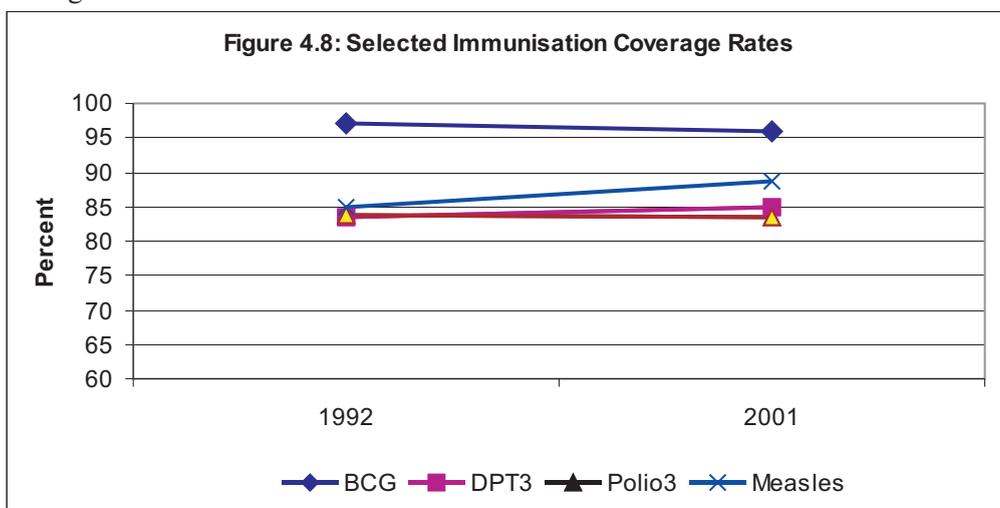
To achieve the MDG on child health, Zambia must reduce the under-five

mortality rate to 50 per 1,000 live births, using the 1990 figure of 151 per 1000 in the 2000 Census Publication from Central Statistics Office (CSO). This source is used because it reports statistics for variables for 1990 which makes comparisons with respect to MDGs more appropriate as opposed to the Demographic and Household survey which reports for the period 1987-1991, 1992-1996, 1997-2001.

Raising the child health status in Zambia

(iii) Socio-economic conditions:

High levels of poverty and hunger, which result in high malnutrition rates, make children susceptible to diseases and therefore more likely to succumb to an early death. The rural/urban disparities in childhood mortality shown above also point to the differences in the poverty and



Source: Demographic and Household Survey 2001/02, CSO

requires that attention be paid to five main factors.

(i) The coverage for immunisation against child diseases:

Immunisation against measles for children under the age of one, an indicator for making progress on the MDG on reducing child mortality, first rose from 84.9% in 1992 to 88.6% in 2001/02 (see Figure 4.7).

(ii) Access to health facilities:

As shown on Table 4.3 below Childhood mortality rates are higher in rural areas due to inadequate access to health services.

hunger situation between rural and urban areas.

(iv) Education of the mother:

The under-five mortality for children with mothers with no education was 198 per 1000 in 2001/02 compared to 177 per 1000 for those who had a primary school education and 121 per 1000 for mothers who had been to secondary school or further (see Table 4.3). This fact alone raises the urgency of ending gender disparities in education, as aimed for under Goal 3 of the MDGs, and expanding education prospects more generally, as provided for under Goal 2.

(v) **High prevalence rates of HIV/AIDS:** Reducing the high rates of HIV/AIDS prevalence will boost Zambia's child health status. The rising mother-to-child transmission of HIV, which makes babies born to mothers who are HIV positive vulnerable to contracting HIV/AIDS worsens childhood mortality. Paying particular attention to women in HIV/AIDS prevention programmes is important, as statistics indicate that women are 1.4 times more likely to contract HIV/AIDS than men.

5. Maternal health: Reducing maternal death should rank as a key priority because it is one of the clearest manifestations of unequal access to health services between men and women. It is impossible to fight poverty and hunger, and improve human development when the reproductive health of women is not generally secured.

Maternal mortality rate rose from 649 maternal deaths per 100,000 live births in 1996 compared to 729 per 100,000 live births in 2001/02 (See Fig. 4.8). At the same time, the proportion of births

attended by skilled health personnel is quite low, particularly in rural areas, adversely affecting the safety of both the mother and the baby. In 2001/02, only 43.4% of mothers were attended to by medically trained personnel, and 11.5% by traditional birth attendants at the time of delivery.

- Relatively few mothers are receiving proper care before, during and after birth. This is attributable to two factors. One factor is the inadequate access to maternal care. Long distances to health centres and user fees in an environment of escalating poverty reduced expectant mothers' access to adequate maternal health care. Poor quality of maternal health care services, inadequate medicines and health attendants are all factors responsible for the high maternal mortality rate.
- The level of education is a factor determining whether a woman gives birth at home or at a health institution. Just over 17% of uneducated mothers were attended to by a doctor, clinical

Table 4.3: Infant and Under-Five Mortality by Background Characteristics, 2001/2002

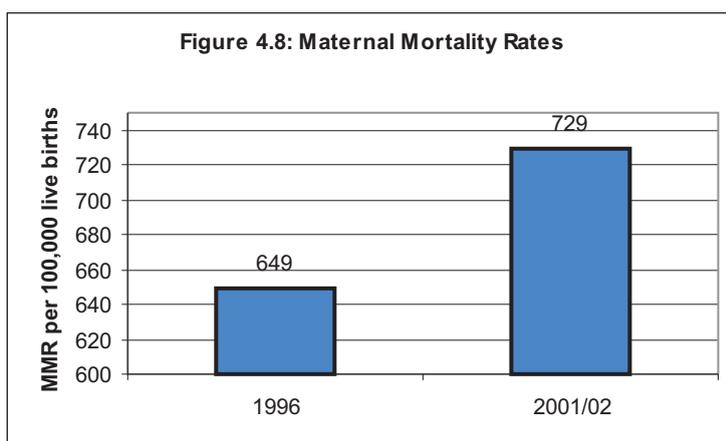
Background Characteristics	Infant Mortality per 1,000	Under-Five Mortality per 1,000
Residence		
Urban	77	140
Rural	103	182
Province		
Central	92	192
Copperbelt	68	134
Eastern	84	166
Luapula	154	248
Lusaka	70	137
Northern	113	187
North-Western	74	130
Southern	76	148
Western	139	201
Mother's education		
No education	108	198
Primary	99	177
Secondary	70	121

Source: Demographic and Household Survey 2001/02, CSO

- officer or nurse mid-wife in 2001/02, whereas 97.1% of mothers who had been to college and higher were attended to by the above health personnel.
- Early, frequent and improperly spaced pregnancies put women at risk who, in many cases, lack the education to realise the

needed to reach the MDG target of reducing maternal mortality by three quarters by 2015.

This figure is too high and Zambia does not have the capacity to mobilise the required resources to achieve the MDG. What is important, therefore, is that the urgency of the matter be recognised and measures speedily implemented. Putting



Source: 2001/2002 Demographic and Household Survey, CSO

danger they are exposing themselves to.

Maternal deaths often occur just prior, during and shortly after delivery. The challenge therefore is to introduce strategies that will curb the problem at these critical stages. Distances to health centres under difficult conditions (poor roads and lack of ambulances, for example) make it even more difficult for women to seek medical help during delivery.

To achieve the MDG with respect to improving maternal health, the maternal mortality ratio needs to fall to 162 deaths per 100,000 live births by 2015. Given that the ratio has actually increased during the past five years more concerted effort is

more funds in building health facilities to reduce distances to hospitals, training more health personnel to attend to births, increasing the adoption of modern birth control measures and better supply of medicines will all help to bring down maternal mortality. Raising the educational status of women is as important for reproductive health as improvements in the provision of health services.

Reproductive health has received some attention in the past 10 to 12 years in Zambia. The role of NGOs, such as the Planned Parenthood Association of Zambia and the Society for Family Health, has been significant in complementing Government efforts aimed at confronting threats to maternal

Table 4.4 HIV prevalence by selected background characteristics

Background Characteristics	Women		Men		Total	
	Percent HIV-positive	Number tested	HIV-positive	Number tested	Percent HIV-positive	Number tested
Age						
15-19	6.6	498	1.9	366	4.6	864
20-24	16.3	443	4.4	309	11.4	752
25-29	25.1	363	15	318	20.4	681
30-34	29.4	274	20.5	260	25.1	534
35-39	22.6	210	22.4	227	22.5	437
40-44	17.3	154	20.5	153	18.9	307
45-49	13.6	131	20.2	101	16.5	232
Residence						
Urban	26.3	808	19.2	676	23.1	1,484
Rural	12.4	1,265	8.9	1,058	10.8	2,323
Province						
Central	16.8	171	13.4	135	15.3	306
Copperbelt	22.1	423	17.3	352	19.9	775
Eastern	16.1	252	11	219	13.7	471
Luapula	13.3	167	8.6	133	11.2	299
Lusaka	25	296	18.7	263	22	559
Northern	10	283	6.2	234	8.3	517
North-Western	8.8	92	9.5	75	9.2	166
Southern	20.2	220	14.6	188	17.6	408
Western	16.9	169	8.3	136	13.1	306
Total	17.8	2,073	12.9	1,734	15.6	3,807

Source: 2001/02 Demographic and Household Survey, CSO

health. There is more sensitisation now compared to the pre-1990s period. Considering the shortage of health personnel in clinics, both Government and NGOs have been active in training traditional birth attendants, thereby providing basic skills to attend to births which take place at home.

6. HIV/AIDS and other major diseases:

To enjoy a long and healthy life is one of the essential human choices that constitute human development. It is also a key determinant as to whether an individual or household is able to pursue viable livelihoods and escape poverty and

hunger. Therefore, in the fight against poverty and hunger, raising the health status of the nation is as critical for the reduction of poverty and hunger as it is an end in itself.

Incidence of HIV/AIDS. Presently there are two sets of figures on the prevalence of HIV/AIDS in Zambia, Sentinel Survey Results and the Demographic and Household Survey. According to the latter, the prevalence rate for 15-49 is 15.6 %. Because the prevalence rate was not reported in the ZDHS 1996 a trend analysis for this statistic is not undertaken. For a cross sectional view of the incidence of HIV/AIDS see Table 4.4.

The table show that 15.6 percent of the individuals tested were found to be HIV-positive with women more likely to be HIV-positive than men. The infection rate is higher among female than male in the age category up to 35-39 age group but the pattern is reversed thereafter. Among all individuals tested, the proportion HIV-positive rises with age from a level of 5 percent among 15-19 year olds to 25 percent in the 30-34 age group, before falling to a level of 17 percent among those 45-59. There are also significant differences in HIV infection and prevalence rates with respect to area of residence. The HIV prevalence rate is twice higher in urban areas as in rural areas.

This high HIV/AIDS prevalence rate in Zambia is undermining effort to achieve progress in human development because it is closely linked to poverty and hunger.

HIV/AIDS is disabling people's capacity to lift themselves out of poverty and hunger. Loss of productive labour and income in a home due to sickness and death and the heavy burden of caring for the chronically sick, disproportionately borne by women, often results in households, once relatively secure, quickly descend into poverty. This may be compounded by the sale of productive assets to try and survive the crisis, making it even more difficult for households to come out of the grip of poverty and hunger. HIV/AIDS is also a threat to the economy more generally as the incidence is highest among the most productive segment of the population, making it much more difficult to achieve sustainable growth.

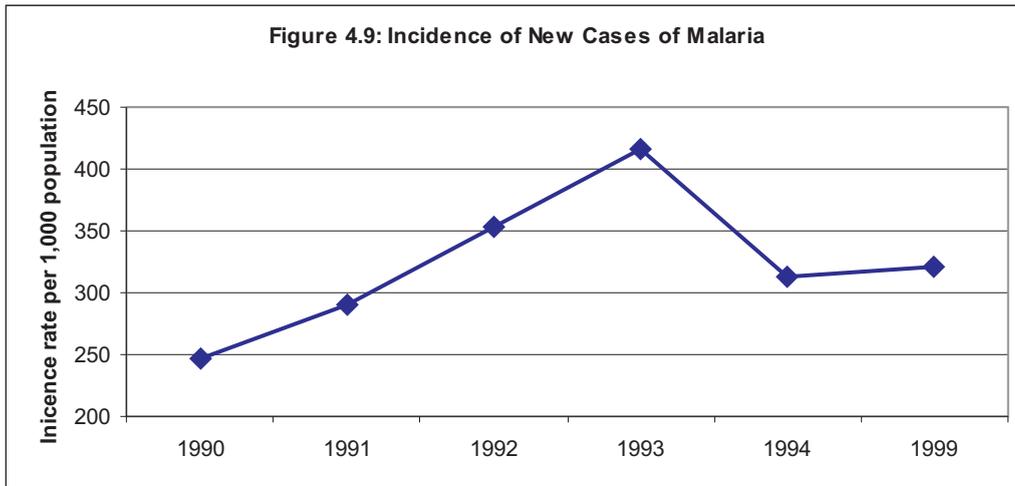
There are related HIV/AIDS problems such as orphans, female-headed households, medical expenses, school dropouts, and irregular school attendance to assist farming labour to raise income. Low agriculture productivity, loss of agriculture knowledge among young

people, low crop diversification and low income due to few income sources and labour shortages. There is limited knowledge to solve HIV/AIDS problems while families continue to lose productive assets due to illness and death. There is limited access to inputs and technologies while high food insecurity increases the risk of malnutrition. There is inadequate knowledge of nutritional needs of people living with HIV/AIDS and insufficient extension services.

To combat the HIV/AIDS epidemic, the Government of the Republic of Zambia has started obtaining anti-retroviral drugs for those already living with HIV/AIDS through public health institutions. However the cost associated with the procurement and distribution mean that a limited of eligible HIV/AIDS positive people has access to the programme. New developments at the global level, aimed at improving access to anti-retroviral drugs, brighten the chances of making these drugs available in Zambia.

Despite the improved prospects for fighting HIV/AIDS, the ancillary consequences of the scourge are likely to continue to increase and cause more *pressure on Zambia's social fabric*. The number of children orphaned by HIV/AIDS will remain high for sometime. UNAIDS estimated that the number of HIV/AIDS orphans was 620,000 in 2000 and is expected to rise to 974,000 in 2014 (MoH/CBoH, 1999, p.35). Tuberculosis, which currently infects 40,000 every year, is expected to rise by 10%, if measures to address it are not implemented, and will take sometime to come down even with the fall in HIV/AIDS prevalence rates.

And the challenges of dealing effectively with the impact of HIV/AIDS epidemic still remains. The lack of a vaccine and cure, early sexual activity, low condom use, low acceptance of voluntary counselling and testing (with few



knowing their HIV status), and the harsh stigma associated with having HIV/AIDS (which prevents people from talking openly about their HIV status) will all militate against tackling HIV/AIDS effectively.

Incidence of Malaria: Malaria tops the list of the disease burden in Zambia. Because it is much more prevalent during the rainy season when the demand for labour is at its highest, malaria has a particularly debilitating impact on agricultural output and consequently household food security and poverty.

Malaria cases rose from 121.5 per 1,000 in 1976 to 255 in 1990. By 1999, the incidence rate had increased to 321.4 per 1,000. There had been a drop from the highest rate of 415.5 per 1,000 reached in 1994. Consequently, the share of malaria cases in total health care and hospital outpatient morbidity increased from 16.8% in 1990 to 35.1% in 1999.

In 2001/02 of all the children who went to health facilities with fever/convulsions, 51.9% were treated with anti-malaria drugs. Of those from rural area 52.7% were treated with these drugs whilst 49.3% of those from urban areas were treated with the drug.

The most affected province is Northern-Western where the incidence rate in 1999 was 468.3 while Northern Province had the least incidence rate of 204. There are no designated malaria risk areas as the whole country is perceived to be at risk.

Insecticide Treated mosquito Nets (ITNs) are the principal strategy used for the prevention of malaria. However, ITN usage is very low. Data collected from 12 districts showed an ITN household usage rate for children at only 6.5% with higher than national average use in Northwestern, Luapula, Eastern and Copper Belt. With regards to usage by women, 7.6% slept under an ITN, whilst 7.9% of pregnant women did during 2001/02.

Nevertheless, prospects for reducing malaria prevalence have brightened with the putting in place of several structures to support the Roll Back Malaria effort. That the task force on the Roll Back Malaria reports to the Republican Vice President signifies high level political commitment to reducing the incidence of malaria. The package for rolling back malaria in the next ten years includes increased household use of ITNs, with special focus on under-five children, pregnant mothers and vulnerable groups.

7. Environmental sustainability: The ZHDR 1999/2000 discussed the country's vast endowment of natural resources and the potential of the resource base to support a wide range of livelihood activities. Zambia's ecosystems are varied and are able to support a variety of species providing a strong resource base for many livelihood systems, including agriculture, forestry and wood products, wildlife and tourism and fisheries. A full utilisation of this natural resource potential should result in viable livelihoods and enhanced food security and incomes.

The high levels of poverty and hunger observed in **Chapter 3** and the long-term deterioration in the human development status presented in this chapter are an indication of the failure to adequately utilise the country's vast natural resources. There are a number of constraints which stand in the way of effective utilisation of the natural resources for viable livelihoods. These include lack of and inappropriate policy instruments, inadequate access to appropriate technologies, poor infrastructure, and inadequate access to markets for natural resource-based producers. These need to be improved for the full potential of Zambia's resource base to be realised.

What is of great concern is that the deterioration of the resource base due to lack of effective policies and inadequate institutional structures. Therefore there is likelihood that in the long-term inadequate attention to the maintenance of ecological integrity will irreversibly debase the environment and undermine the potential for sustainable livelihoods. This will accentuate poverty and the low nutritional status.

Already there are signs that some livelihood systems are being negatively affected as a result of environmental deterioration. Soil fertility in some parts of the Agro-ecological Zone II, considered as the area of greatest st-based

agricultural potential, have been negatively affected due to the over-application of fertilisers. The fish stock in many lakes and rivers is now seriously depleted due to over-fishing and use of wrong fishing methods. The result has been a fall in the catch per unit of effort over time, and some species have been exploited to near extinction. Poaching is threatening the exploitation of the wildlife resource for tourism purposes. Increased deforestation means that the viability of most forest-based livelihood systems are under threat.

Environmental factors, such as a generally clean environment and the access of the population to safe water and sanitation, directly affect people's health and general well-being. The high incidence of eye and skin infections, together with diarrhoea and outbreaks of cholera in some areas, specifically point to the low access of households to safe water supply and adequate sanitation facilities. In 2000 of the 1.88 million households in Zambia, the proportion with access to safe water was 49.1%. By area of residence, of the 1.23 million rural households 29.5% had access to safe water whilst of the 0.65 million urban households, 86.1% had access to safe water. Male-headed household also tended to have more access to safe water than female-headed households.

The policies and strategies adopted in recent years in critical areas of environmental management should support the preservation of the environment if followed up with effective implementation. The water sector reforms aimed at increasing access to safe water and sanitation in both rural and urban areas, the growing acceptance of the role of local communities in the management of natural resources, the creation of the Zambia Wildlife Authority, and the increasing recognition of the need to integrate environmental issues in development initiatives point to the good

prospects for improving environmental management. However, Zambia needs to urgently improve the production of environmental data as information on various environmental indicators is outdated and makes it difficult to assess the extent to which progress in environmental management is being recorded.

CONCLUSION

What we see from the above discussion is the deepening human crisis: high levels of poverty and hunger and deterioration in nearly all areas of human development, as summed up by the long-term decline in the country's HDI. The great challenge now for Zambia is to reverse these declining trends. In the face of such deepening human crisis, Zambia should increase funding to areas of human priority concerns. These areas have been clearly identified in the PRSP and correspond to the framework provided in the MDGs at the international level.

The financing requirements for the MDGs are high and outstrip the current capacity of the country to generate resources. Taking into account the PRSP estimate of US\$1,200 million for fighting the eradication of poverty in the three-year period of its implementation, it is clear that the costs for achieving the MDGs will exceed this amount by far.

Domestic resources are clearly insufficient to fund the reversal of the deepening crisis. Gross domestic savings, as a percentage of GDP, is also among the lowest in the world declining from 16.5% in 1990 to 5.4% in 1998. Total investment, as a percentage of GDP, also fell, but less sharply, from 17.3% to 14.4% in the two respective years. Therefore, Zambia's resource gap widened thereby increasing the country's dependency on external assistance to maintain some level of investment.

Steps are therefore needed to ensure that there is a framework that supports resource mobilisation to fund the development challenge from both internal and external sources. However, it should be recognised that the primary responsibility for making progress in funding the eradication of poverty and hunger and achieving improvement in human development in general lies with the Government of the Republic of Zambia and her people with support from partners. The Government should create appropriate internal conditions based on sound economic and social policies, fair taxation, effective and transparent use of resources and implement policies that deliberately target the poor to ensure that they remain part of the country's economic progress.

AN AGENDA FOR REDUCING POVERTY AND HUNGER IN ZAMBIA

Zambia faces a great challenge to eradicate extreme poverty and hunger and improve the well being of her citizens. This is because not only have poverty and hunger been high, the poverty gap ratio, deepened in the 1990s. However, there is now more concerted effort to fight poverty and hunger at the global level. Poverty and hunger have been given very high priority in recent international conferences, especially the Millennium Summit in 2000 where this was articulated as the first Millennium Development Goal. Yet, despite the unity of purpose that now exists, the fight against poverty and hunger in Zambia will be challenging as many factors can be expected to militate against this, although the goal of eradicating extreme hunger is on the verge of being won.

- Poverty and hunger in Zambia, as elsewhere, are complex and multi-dimensional with many mutually reinforcing factors at play. They tend to be inter-related with one reinforcing the other and with multiple effects. An agenda that seeks to address poverty and hunger has to be based on a very clear understanding of who the poor and hungry people are, where they are and why they are in this situation. It should, of necessity, touch on a wide range of policy, institutional, governance and social issues that should be modified so that poverty and hunger can be realistically fought.
- Given that both poverty and hunger deepened in the 1990s, greater effort is required now to meet the MDG of halving poverty and hunger than was the case in the 1990s. Indicators for both poverty and hunger suggest a deepening incidence, with some social groups that had been relatively secure before the 1990s now falling

- vulnerable to the scourges. Although 69.7% of the population were classified as poor in 1991, the proportion rose to 72.9% in 1998. Of the poor, 57.9% were classified as extremely poor in 1998, up from 53.2% in 1996.

- Unfortunately for Zambia, the basis of human capabilities that empowers people to fight poverty have been seriously undermined in the 1990s, as reflected in the long-term decline in human development. Zambia's HDI declined rapidly between 1985 and 1995, falling lower than its value in 1975, the only country to be in this situation of the 79 countries for which a series from this time could be constructed. When compared to other countries with similar levels of HDI value in 1975, Zambia's HDI has fallen far much lower than the cluster of HDI values attained by these countries in 2000.

- Zambia is thus faced with a challenge to address the underlying factors responsible for the sluggish progress in HDI. Despite an improvement in the situation for some indicators compared to the 1990s, many more indicators have deteriorated such that the effort required to achieve the MDGs is much greater for Zambia than may have been anticipated at the time of the Millennium Declaration.

There has been some modest increase in the HDI value since 1994, indicating that the fall in the HDI may have bottomed up and, with effort, could now be assuming an upward trend. This optimism is supported by the fact that the HIV/AIDS prevalence rate has stabilised since 1994, according to the sentinel survey and there are indications that, with intensified

effort, these high levels of incidence can begin to fall within the next decade.

If this turns out to be the case, there will be a significant positive impact on human development and the achievement of MDGs. HIV/AIDS has had an adverse and devastating impact on life expectancy in general and poor outcomes in maternal and child mortality and the incidence of diseases such as Tuberculosis. HIV/AIDS has also contributed to failed livelihoods and hence to poverty and hunger.

A reversal in the HIV/AIDS prevalence rate is likely to lead to an upward trend in Zambia's HDI given that this factor significantly in the life expectancy component of the index. However, the forces that sent down Zambia's human development status remain strong. Relatively high levels of poverty and hunger, increasing maternal mortality ratios, the high incidence of other major diseases, loss of the country's ecological integrity, and the difficulties the nation faces in adequately funding poverty-reducing programmes still loom high as major threats to human development in Zambia.

It is commendable that there is renewed political commitment to fighting HIV/AIDS and the new Republican President is now a consistent advocate for this cause, including the need to have adequate access to anti-retroviral drugs to prolong the life of those already infected while at the same time allowing them to lead a reasonably normal life. The UN system along with NGOs and CBOs have played a significant role in anti-HIV/AIDS programmes and their efforts are being rewarded by the high political commitment. The efforts of the first Republican President, through his Kenneth Kaunda Children of Africa Foundation, have given a boost to the cause of fighting HIV/AIDS in Zambia.

BUILDING ON POSITIVE DEVELOPMENTS

Despite the problems tabulated above, Zambia is capable of launching a successful economic recovery as a first step towards enhancing human development and eradicating poverty. The starting point is to look at its natural resource base, of which it has abundance as demonstrated in the ZHDR 1999/2000.

This provides a sound base to launch a successful economic and social recovery, given appropriate economic policies and sustainable institutions, to ensure prosperity for its people. The current economic policies - centred around the reform of industry, commerce and the public sector; privatisation; improvement of rural infrastructure and development of the social sectors, if combined with appropriate institutional reforms and social safety nets for the poor, are appropriate and can provide a base for human development.

There are signs and examples in Zambia of situations where things are changing - areas of food deficit surrounded by areas of surplus production. Strategies to reduce poverty and hunger should seek to scale up these successful cases and find a way of moving food from areas of excess supply to pockets of excess demand. The key is to identify the prevailing conditions that have made them work. Looking at agriculture, which is the key instrument for reducing poverty and hunger in Zambia, we see three areas in which things are working, bringing out renewed hope that the fight against poverty and hunger can be successfully won.

1. Indigenous and appropriate technology is an important starting point

In the face of adversity, families in poor areas have adopted coping strategies that

Zambia is a country much endowed with a diverse and rich resource base that translates into great potential for human development. It has no business being poor or food insecure.

In Zambia, farming systems that depend on roots and tubers and other traditional staples have been less prone to hunger and food insecurity in the last two years than those that did not.

indicate potential for widening livelihood strategies. Thus, exposure to adversity has increased livestock off-take rates and trading activities in foods, handicrafts, and forestry products. The positive role of indigenous knowledge as a basis for the design of sustainable human development interventions is becoming more evident. For example, in the agricultural sector, farmers, having been frustrated with maize, have started to revert and diversify into traditional crops that require minimal use of chemical inputs and are less prone to the vagaries of the weather. Cassava has become a key contributor to food security.

Growth has also been recorded in the production of sweet potatoes, beans, groundnuts, millet, and other traditional crops.

These kinds of farming systems dynamics have been driven by economic policy shifts that characterised the last decade, notably the withdrawal of subsidised credit for maize, poor and erratic rainfall patterns, inefficient input delivery systems and high cost of fertilizer and seed for maize.

Conservation, organic and improved fallow farming methods are technologies that are grounded in traditional technology but have been improved, promoted and adopted by an increasing number of farmers to improve water and nutrient management, leading to more sustainable farming practices. In 2002, it was reported that farmers who used conservation farming in Southern Province were significantly less food insecure than those who used conventional methods, despite the drought (see **Box 2.2**). Farmers are also adopting small-scale irrigation and water management farming methods, such as dambos and wetlands, water diversion channels, residual moisture and water lifting devices to allow for dry season farming.

Some farmers, having been faced with diversity, are going beyond conventional practices of conservation farming taught by extension workers and are experimenting with different approaches of improving soil fertility and moisture conservation. The results have been impressive in some cases (see **Box 5.3**).

BOX 5.1

TAMING ADVERSITY: THE STORY OF RISING SMALL SCALE COMMERCIAL CASSAVA FARMING

Emmanuel Kafusha's farm, in Samfya district of Zambia, supports a household of six adults and four children. He began farming in 1980, planting half a lima of local cassava, 2 limas of maize, a lima of groundnuts and 2 limas of bambara groundnuts. With the demise of maize input subsidies in the region, he scaled back on maize production and expanded his cassava holding dramatically, from half a lima to 3 hectares (12 limas). He has also added 1 lima of soyabeans and one lima of sweet potatoes. He plants primarily the new Bangweulu variety of cassava in pure stands, rather than inter-cropping, since he finds the inter-crop reduces cassava yields.

Because of its high yield, early maturity and resistance to disease, many neighbours have asked to buy cuttings. So in addition to selling one third of his cassava roots, he sells cassava cuttings as well. With 3 hectares of improved cassava, he has become a small scale commercial supplier of cuttings in his district. This season, selling at 100 kwacha per cutting, he made K208,000 (US\$50) from cassava cuttings alone.

Source: IFPRI, 2002

Box 5.2**The Elias Mutale 'Songhai Model' for Sustainable Development**

Zambia has a bright future for sustainable human development, not only in terms of exploiting its own rich natural resources, but also its human resources, especially the youth who constitute about 68 percent of the population. Zambia is faced with serious challenges facing the youth to reduce HIV/AIDS rates, unemployment and environmental degradation, all of which exacerbate poverty and hunger. African youth are a dynamic force for social and economic change and cross-cut all development sectors. They need frameworks that enable them to channel their drive and enthusiasm in creative, productive ways, developing them into responsible citizens and community entrepreneurs.

Named after a famous Catholic Archbishop of Kasama, whose dream was to set up an agricultural skills training programme for youths, the **Elias Mutale 'Songhai Model' Training Centre for Sustainable Development** has been established to promote rural development and agricultural entrepreneurship among the youth. This was inspired by a tour in February 1999 by the UNDP Resident Representative, followed later by a study tour involving national stakeholders, to the Songhai Centre for Sustainable Development in Cotonou, Benin.

The Songhai Centre has over the years researched, trained and promoted the concept of 'zero entropy' the agricultural production process where nothing is wasted and everything gets transformed. For example animal waste (cow dung and poultry droppings) and plant waste are converted into compost, which is used as manure in crop production. Crops produced are fed to livestock, perpetuating the cycle.

In Zambia, a 400-hectare farm owned by the Catholic Church in Kasama was turned into a facility to train youth become community agricultural extension workers. The centre is equipped with dormitories, poultry houses, a piggery, a bare food laboratory, an orchard, a garden and water reservoirs. About 19 trainees have commenced an 18-month training course in agro-processing. The syllabus integrates and complements the three areas of agricultural production of crops, livestock and food processing. About 20 percent of the syllabus is theory-based, while the remaining 80 percent is practical. The curriculum is supplemented by training in human development, behaviour and attitudes.

Families of the trainees are expected to invest around K50,000 per month of the course' duration, which is given back to the student upon graduation as start-up cost for their new role in the community. Alternatively, gifts in kind are also accepted.

Source: United Nations Development Programme, Lusaka

In the area of fisheries and aquaculture, progress has been achieved by UNDP and FAO-supported projects involving Peace Corps in promoting sustainable fisheries.

2. Where critical skill gaps have been filled and accessibility provided, markets are working for the poor

Experience has indicated that given market opportunities, farmers have risen to the occasion to seek technologies to enable them respond to these opportunities and consequently increase supply, which in most cases results in excess supply thereby dampening prices. This seems to have been the case with

sweet potatoes, irish potatoes, vegetables, cassava chips, beans and groundnuts which have increasingly entered the markets from small-scale farmers. It has been observed that the distinction between food crops and cash crops is increasingly getting blurred.

Rural people have also responded well to business skills training to expand their livelihood strategies. In Fiwila (Mkushi Valley), Harvest Help reports of a good response to basic business training and micro-credit schemes in fish trading, cloth making, sunflower oil production, and seed production, among others.

BOX 5.3
INNOVATIVE PIT BEDS PAY DIVIDENDS

In the face of rising farm inputs, especially chemical fertilizer, reduced access to kraal manure due to cattle deaths, loss of active farm labour due to HIV/AIDS and poor rainfall patterns, farmer Petros Muzyamba of Monze district has successfully developed and used a technology called *Zilindi*, named after the shape of the compost pit. The basic principle that drove him to develop this is that soils should be fed. He has been using it since 1990 after he lost all his cattle due to corridor disease. This also meant he had lost access to draught power.

Zilindi involves digging circular pits 160 centimetre wide and 60 centimetre deep, spaced 2 metre from the centre of each. The pits are dug just after the rainy season and one person can dig 5 pits per day. The pit is filled with crop residues and grass, with top soil coming on top. Each pit can be planted with 20 plants of maize, while vegetables are planted in the dry season. Mr. Muzyamba has 1943 *zilindi*. 2800 *zilindi* makes one hectare. He has consistently yielded 5600kg/ha of maize, far above average farm yields in Zambia. Each *zilindi* is used for five years, after which the crop organic matter is replaced with new ones.

Source: Sitambuli, 2002

The project reviewer commented on the same initiative as follows: “...*The impact on the lives of beneficiaries has been impressive....they have been able to acquire household assets and, as women are now buying cash crops from local farmers for resale, this has enhanced money availability in the area*”. Repayment rates have been estimated at 90-100%. The CARE Rural Enterprise and Agri-Service Promotion (REAP) also points to the fact that small farmers can be organised to access markets more effectively (see **Box 5.4**).

In expanding the horizon for improved access to finance and markets, lessons can be drawn from the experiences of successful models of private sector-based initiatives, such as the *distributor model* that has developed viable and sustainable marketing and financial out-grower systems for small-holder farmers. The model offers a framework for raising motivation and credibility, through appropriate organisational structures, distribution and collection systems and a legal framework to ensure provision of commercial services to farmers in a sustainable manner. The system offers reliable and long-term markets and provides inputs and finances, extension

messages, transport, and pays cash (see **Figure 5.1**). Using this model, Dunavant Cotton, a Zambian out-grower company, has raised its loan recovery rate to over 90%. This should be contrasted to the general collapse of rural credit in the face of low repayments.

3. The rise in the export of agricultural products is ample evidence of the sector's potential to respond to a changed structure of incentives, offering opportunities for poverty and hunger reducing interventions.

Production of export crops has increased in Zambia in recent years, contributing to the growth in non-traditional exports (NTEs). Private sector supported out-grower support mechanisms for input supply and market assurance have led to an increase in the production of export crops such as flowers, spices, cotton, tobacco, coffee and sugar.

Cotton growing has benefited from the Dunavant Distributor model described above. This has raised loan recoveries to almost 100% while guaranteeing e

farmers inputs and a market for their produce. The challenge is to build upon this rise in agricultural exports so that it

becomes much more broad based and acts as the engine for the reduction of poverty and hunger.

Box. 5.4
The CARE Rural Enterprise and Agri-Service Promotion (REAP)

As part of the Structural Adjustment Program (SAP), Zambia's agricultural policy focussed on liberalizing and reforming markets to allow private sector based delivery of agri-business services. This is with a view to address the dynamic constraints of smallholder farmers to improve their livelihoods within a liberalized policy framework while promoting private sector growth. Within this policy framework, several NGOs and private sector companies have introduced market-oriented enterprise development programmes.

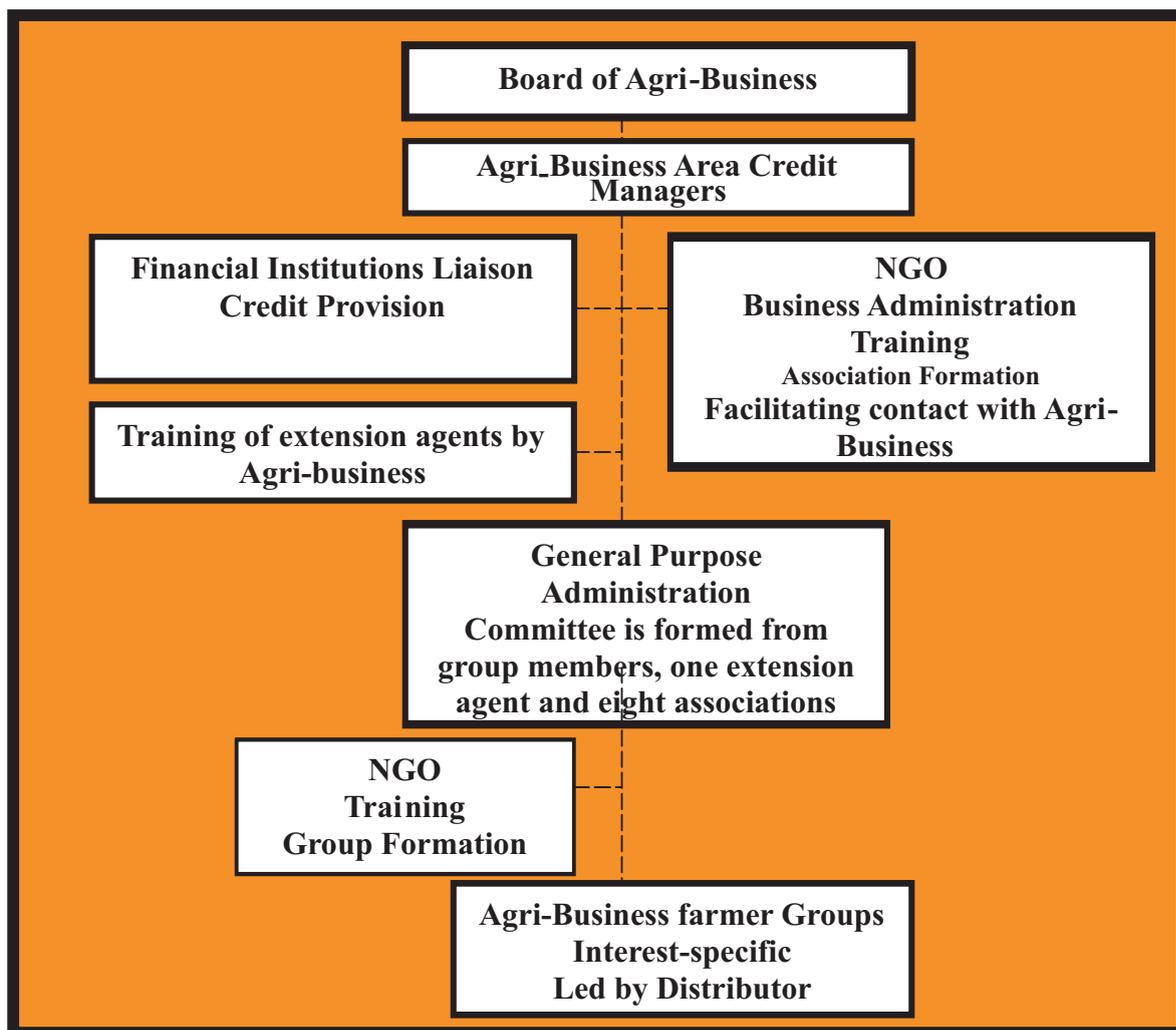
The CARE Rural Enterprise and Agri-Service Promotion (REAP) is a market-oriented enterprise program funded by the International Fund for Agricultural Development (IFAD) and designed to link large private sector agribusiness, manufacturers and distributors with farmers in rural areas. REAP activities are based in three pilot districts on the Copperbelt Province including Mpongwe, Masaiti and Lufwanyama. The focus of the programme is to lower transaction costs so that private sector increase their profits while providing service to geographically disadvantaged areas. The main objectives of REAP include: (i) Improve the accessibility to agricultural inputs and other products in rural areas; (ii) Reduce the opportunity and real costs of agricultural inputs for smallholder farmers in remote rural areas; (iii) Provide an efficient channel for dissemination of market information to smallholder farmers; and, (iv) Provide a viable mechanism for agricultural outputs marketing at fair prices.

The REAP approach has established networks of community based agri-traders/agents that provide agricultural services to small scale farmers. It also reduces transaction costs in order to attract the service providers to these areas leading to efficient economically self-sustaining services to the rural poor. Guided by the CARE core values of participation, accountability, learning orientation, integrity and pursuit of collective responsibility and in close partnership with government, REAP has striven to:

- o Create economies of scale attractive to major private sector agri-business companies through organizing and establishing networks of community based agri-traders or agents for inputs and outputs.
- o Bring inputs, at market prices, closer to the farmer: fertilizers, seeds, green label crop chemicals, farm implements, spare parts, cement, roofing sheets and other building materials and general household supplies
- o Provide market opportunities, especially for small scale farmers, through assisting agri-traders to organize and negotiate the bulk marketing of grains to millers and other buyers.
- o Minimize risks undertaken by agri-input providers and facilitate screening of credit-worthy traders or agents through a viable mechanism under which agri-businesses are allowed to stock consigned inventory up to a level that can be replaced when rolled over.
- o Emphasize job creation, transfer of organizational and business skills and formation of linkages to the private sector to guarantee sustainable services delivery. Thus, minimize private sector institutional development costs.

The basic minimum requirements for REAP Agents include: access to storage facility (owned/rented) with a minimum capacity of 100 x 50 kg bags; must be a local resident, must be sole proprietor, must possess entrepreneurial skills and verifiable business experience, must be literate and numerate and possess a farming background. The agent should also possess a social image, have a sound financial position (assets and liabilities) and be recommended by either a local extension staff, community leaders or a cooperative. At least 30% of the agents should be women.

Source: CARE, REAP Project



Source: Agri-Business Forum

Good models of business entrepreneurship have been used by Economic Expansion in Outlying Areas, CARE's REAP project in some communities, as well as the cooperative league of the USA. The Government-sponsored food security pack, implemented by PAM, has also proved quite useful and popular among the farming community. The production of livestock enterprises such as poultry, hides, eggs, leather and small ruminants, has increased in peri-urban farm plots.

These cases all point to the fact that the current policy environment can work for the poor if it is combined with at least three pre-conditions.

Accessibility: Infrastructure has played a critical role in ensuring success. Success has been confined to accessible areas. This emphasises the important role of information flow through good roads, telecommunication, and extension systems. Provinces that are difficult to access have lagged behind in development and account for much of the poverty. Simple interventions, such as a bridge or rural health centre, can help to reduce food insecurity or malnutrition.

Integrated technological package: The availability of technology such as good breeds or varieties, in combination with finance, marketing and extension have worked to the farmer's advantage. When

an optimal combination of these factors, such as through out-grower schemes, is met, farmers are bound to respond. On the other hand, partial fulfilment of these is a waste of time and resources. This implies proper targeting of whole packages at potential target groups or areas.

Decentralisation, empowerment and participation: Involvement of people in agri-business and community infrastructure decisions has ensured success. Learning from people-level institutions, such as community groups, and technology has helped to build confidence among rural communities. The involvement of rural institutions reduces on lengthy procedures in service delivery and improves implementation. Much of the success of the Dunavant Distributor model, described above, is attributed to its ability to raise farmer motivation and distributor credibility, through appropriate organisational structures, distribution and collection systems within a legal framework.

POLICIES AND ACTIONS FOR ERADICATION OF POVERTY AND HUNGER

The formulation of policies for the eradication of poverty and hunger and the effective implementation of policy actions are essential to move a country from a food crisis through recovery and

sustained economic growth. These policies and actions relate to those that assist a country to:

- come out of a food crisis;
- build an enabling environment;
- improve capacity for resource mobilization;
- promote appropriate resource conserving technology;
- reduce vulnerability to risks and provide safety nets;
- put in place a governance and institutional framework that works for the poor;
- provide strong advocacy and communications on poverty and hunger.

“Before we started business and loans, we never imagined that we would know the inside of a bank. We thought it was a place for the rich. This time we just walk confidently into the bank and do our business without fearing anything”.
 Woman beneficiary of CARE/DFID agri-business project.

The specifications are presented on Table 5.2.

COMING OUT OF A FOOD CRISIS

Zambia recently faced an acute shortage of food attributed to drought since 1998. However, the impact of this external factor would have been minimised if the country had appropriate policies put in place. Overcoming the crisis is not enough; there is need to prevent future famine. This lies in a spectrum ranging from immediate relief to initiating and sustaining development (IFPRI 2002). In this context, a four-step approach is proposed. The policy choices for relief, recovery, and initiating development are shown in **Table 5.1**.

Table 5.1: Policy Choices for Relief, Recovery and Initiating Development

Policy Area	PHASE		
	Relief	Recovery	Initiating Development
Production and supply	Food aid and imports	Public and private food-for-work employment programmes	Agricultural input delivery Macro-economic policies favouring staple crops Private sector input marketing Agricultural extension
Markets and accessibility	Macroeconomic policies (price Stabilization)	Public and private cash - for-work employment programmes Credit Public/private marketing partnerships	Credit systems for inputs and assets Public/private marketing partnerships
Human Capital	Investments in health services	Investments in health services	Agricultural extension

Source: IFPRI, 2002

Step 1: Take food to the hungry while also investing in health services.

During a famine, under-nutrition makes people more vulnerable to disease. It is therefore important that the Government invests in health services during famine and recovery period. This should include childcare, nutrition, water, sanitation, and means for coping with HIV/AIDS.

Within the most hit areas, the assistance should be targeted to the households that need it most and offered as quickly as possible. However, care should be taken to ensure that food aid does not have distortionary effects on the market. This is because households differ in size, composition, and coping abilities. Standardised and formal guidelines for distribution need to be used. Transparency and accountability should be an integral part of these procedures to ensure that the targeted households receive the aid, there is minimal abuse, and the limited resources are optimally used.

Step 2: Promote the recovery of vulnerable farm households by building their asset base using methods that reach these vulnerable groups.

This requires an extension of vulnerability assessment to all areas, promote labour-intensive employment programmes and public and private sector partnerships. Labour-intensive employment programmes provide income, act as insurance and improve the beneficiaries' asset base. In this regard, both the Emergency Drought Recovery Credit through Public Works Programme Safety Net under the National Roads Board and the FAO Emergency Programme supported by Norway, Sweden, The Netherlands and

the United Kingdom that ran in 2002 should be acknowledged. The programmes not only emphasise cash-for-work but also are also flexible to accommodate payment in the form of food, in cases where food prices are high. However, a good impact assessment during and after these programmes should be conducted. Inviting a consortium of NGOs to conduct the assessment is likely to provide useful guidelines for similar interventions in future.

Incentives also need to be provided to the private sector to become sustainable conduits for reaching the poor, not only during famine but also in the post-famine era. This is more so given the current policy of liberalisation in which the private sector forms the core force for driving agricultural development. In essence, there are business opportunities for the private sector even under famine conditions.

Lastly, public and private sector partnerships should in fact be strengthened in the endeavour to make food more available. The Government mobilises resources and the private sector supplies and distributes the food to the affected areas efficiently. To strengthen this partnership, the Government should invest in public goods, such as market infrastructure, and facilitate the provision of market information. This way public-private sector partnership can actually help prevent future famine.

Step 3: Jump-start agricultural development through the promotion of appropriate technology.

Conservation Farming (CF) addresses many constraints faced by farmers and should therefore be consolidated. There is also need to strengthen the service delivery institutions in extension, marketing of output and input, market

different requirements that need to be addressed to fully utilise their competencies and resources. Investment in good infrastructure, for enhanced commercial activities, should be targeted to attract complementary private sector capital in research, development, production and agribusiness. Zambia needs to continue creating incentives for diversifying the economy and increase the flow of resources into the growth sectors to create more employment opportunities.

The key actions required are to clearly define the roles and core functions of the state and to build appropriate partnerships between public and private sectors in delivering services. There is need to recognise the multiple providers of extension and research services, recognising the most efficient and appropriate providers in particular circumstances.

Private sector supply of inputs may not fulfil the needs of all rural people and may need to be complemented by the Government, NGOs and farmer organisations. This is the reality in the rural sector because of market failures reflected in price distortions. But blanket subsidy on inputs should be avoided because it is not sustainable. Improved infrastructure and simplified regulations on trade are the only sustainable recipes to competitive and diverse supply.

IMPROVING CAPACITY FOR RESOURCE MOBILISATION

This is part of building an enabling environment for fighting poverty. Substantial resources are required since the problem of poverty and hunger is deep and urgent. Based on the estimates provided in the PRSP, direct actions for fighting poverty and hunger would cost in the range of US\$6 billion. However,

there are other indirect ways that aim at improving the climate for poverty-reducing investments through employment creation.

Steps are therefore needed to put in place a framework that supports effective resource mobilisation. The Financing for Development Conference held in March 2002 in Mexico, which explored the ways for funding the MDGs, outlined such a framework. Zambia's position paper to the Monterrey Conference specified the domestic and international steps in each area of resource mobilisation of the Monterrey Conference necessary to realise the commitment of mobilising resources to fund development. Action in five areas was called for:

- Optimising revenue generation from domestic resources and improving expenditure management;
- Increasing the flow of Foreign Direct Investment (FDI);
- Diversifying away from a copper-based to a more broad-based export sector;
- Improving the effectiveness of Official Development Assistance (ODA);
- Moving the country to debt sustainability.

PROMOTING APPROPRIATE RESOURCE CONSERVING TECHNOLOGY

The pre-ASIP Agriculture Sector Performance Analysis stated that the sector needed a technological revolution that would address two basic constraints: (i) the labour shortages that farmers faced at critical times of the farming season; and, (ii) low land productivity. In promoting technologies, there is need to take into account the low resource base of farmers to

invest in productive assets. Farmers can significantly raise the land under cultivation even with simple tools by simply changing farming practices.

When given an opportunity, farm households usually exercise the choice remarkably wisely. In general, farmers choose in favour of diversity, low input costs, reasonable risks and reasonable returns to land and labour. In promoting technology, the good and bad elements of both new and traditional technology should be taken into account.

A combination of traditional techniques and newer innovations is required to improve and maintain productivity. Conservation farming approaches, mixing elements of agro-forestry, legumes, fallows, livestock, soil conservation, inorganic fertiliser and small-scale irrigation practices show much promise. Integrated pest management - involving chemical and biological control, breeding for resistance, natural pesticides, and improved storage - has proved useful in controlling diseases.

Focus in the sector should be placed on sustainable increase in the productivity of resources for the poor to boost their income. In Zambia, focus should be placed on re-allocating resources to diversify production. Services that enhance access to yield-enhancing technology - such as out-grower schemes, producers' associations, research and extension, input supply, marketing and rural finance - need to be strengthened.

Farmers also need to diversify into livestock, including smaller animals as a multi-faceted approach to livelihood security. In Zambia, improving health and nutrition conditions of livestock as well as market opportunities would

likely lead to better livelihoods.

Research and extension services should support access to technology and promote agri-business as well as sustainable management of resources. These should translate into incentives and means for increased productivity. Demand-driven research that supports the rural poor should receive priority and seek farmer participation at all stages.

In order to secure their access to sustainable livelihoods, farmer households need improved access to land and common property resources. There is need to support local level institutions to protect, manage and guarantee access to common resources.

Zambia, being part of the global community, should borrow and adapt good technology for ready application. The advances in biotechnology widen the opportunities for farming and improved food security. Zambia should develop and strengthen bio-safety regulatory mechanisms and administrative structures for application procedures and management of GMO technology.

REDUCING VULNERABILITY TO RISK AND PROVIDING SAFETY NETS FOR VULNERABLE GROUPS

When people have been exposed to shocks, such as hunger, proper strategies to move them from initial relief support to sustainable recovery through development-oriented interventions are required. The two strategies can compete or interact negatively if not handled properly. It is common for relief efforts to stifle long-term development. Reducing vulnerability to risk has at least four elements: strengthening family support systems; mitigating

“OECD countries provide a billion dollars a day in support to their own agriculture sector, six times more than all development assistance.” Furthermore, “the annual loss of income to developing countries from lack of market access exceeds US\$100 billion.” (WFSfyI, 2002).

HIV/AIDS; targeting interventions to rebuild livelihoods; and improving early warning.

Strengthening family support systems. The family support system remains the most viable and, in many cases, the only support system available to disadvantaged groups. The household is the basic unit of social organisation and consists of the primary family with some members of the extended family. This institution needs to be strengthened and rewarded with resources such as land and other services in order to improve upkeep of vulnerable groups like orphans and the elderly.

There is need to promote those values in traditional society which compelled people to look after their neighbours. The values of community service - through churches, community groups and service organisations should be promoted, and the entitlements related to family networks and obligations fostered. Children should take care of their parents in old age. Reciprocal relationships based on mutual assistance in times of need and crises should be promoted. Reciprocal relationships in sharing labour and other arduous tasks in the neighbourhood should be re-invented. People should share in happiness and in sorrow.

Zambia has a weak formal institutional capacity to take care of the increasing number of disadvantaged people. The social security system is weak and not endowed with resources to take care of all disadvantaged groups due to budgetary constraints. Emerging community-based organisations - such as church groups, associations and women's groups - also play a role in assisting disadvantaged groups.

The Government should improve

subventions to civil society that is active in taking care of disadvantaged groups through in-situ and ex-situ arrangements. Capacity should be built for these to impart life skills in their beneficiaries. There is a clear need of enhanced linkages between the Government, the private commercial sector, donors and NGOs so that interventions meant to help disadvantaged groups are increased and properly co-ordinated.

Mitigating HIV/AIDS. Zambia, as a nation, has mobilise to respond to the challenges posed by the HIV/AIDS epidemic and an emergency plan to prevent and control the disease exists, and prevalence rates are declining. Nevertheless, complacency cannot be entertained for the battle as well as the war has to be won. The resources raised should also go into awareness creation, counselling and provision of medical care, as well as intensify the fight against opportunistic infections such as TB and Malaria.

Targeted interventions to rebuild livelihoods. The dual nature of the agricultural sector and the existence of other external shocks, such as drought, floods and disease outbreaks, make it imperative that deliberate efforts are made by the Government to continue to support initiatives targeted at poor farmers through measures like the *Food Security Pack*. The support systems should be diverse enough to encompass all livelihoods, while building a phase-out regime to avoid the dependency syndrome.

Improving early warning. Zambia needs an efficient *Early Warning and Disaster Management Capability* to forecast and plan for risky exposures, such as drought, floods. Agricultural services should enable farmers to keep their enterprises diverse and to reduce

risk. Early information enables farmers to make timely decisions. Emergency relief should be designed to complement existing coping strategies, strengthen local institutions, and enable farmers to maintain and rebuild their livelihoods.

PUTTING IN PLACE A GOVERNANCE AND INSTITUTIONAL FRAMEWORK THAT WORKS FOR THE POOR

The poor must be given a strong voice to influence decisions concerning issues that affect them and keep their concerns high on the agenda of policy makers by creating structures that make leaders much more strongly accountable to the people. The voice of the poor is hard to hear. In Zambia, with 72.9% of the population classified as poor, a strong voice for the poor will ensure their issues remain high on the agenda. Actions are thus required in the following main areas: strengthening institutions of governance, strengthening central government, and moving towards a more democratic decentralisation governance system.

Strengthening governance institutions. This is with a view to making leaders at all levels more accountable to the people. The Government has laid ground through the adoption of the Capacity Building Programme for Good Governance (CBPGG). Some of the elements of the document have been integrated into the PRSP. It is necessary that these principles be revitalised and their implementation accelerated in the face of deepening poverty.

Good governance should rest on the principle of the separation of powers and strengthening of each of the three arms of Government: the executive, legislature and judiciary. A review of the constitution is needed to balance the

powers of the executive by strengthening the watchdog functions of parliament. The governance institutions, such as the Office of the Auditor General, Anti-Corruption Commission and Drug Enforcement Commission, should be much more imbedded into parliamentary structures.

The judiciary should be reformed and strengthened so that justice in general is dispensed speedily and fairly. In general, the fight against poverty and hunger should take place in an environment in which people feel secure and are able to go about freely as they pursue their livelihoods.

Strengthening central government. The aim is to build the capacity of central government so that it is able to conceive the right policies and come up with appropriate implementation frameworks. Zambia will need to take the following three major steps towards building a strong central government:

- ***Build the capacity of all central government agencies as envisaged in the Public Service Reform Programme launched in 1993.*** The implementation of the programme has been too slow for tangible results to show. Institutional reforms will always be difficult and require strong leadership and management to stay on course.
- ***Change the compensation structure of the civil service.*** This is needed to make personnel attach a meaningful value to their work, particularly routine functions that are important to the efficient operation of any organisation. Hence the need for the creation of an enabling environment through appropriate policies to this effect.

Undertake a wide-ranging core functional analysis to determine the role of government vis-à-vis that of other players, specifically civil society and the private sector. The public sector should focus instead on functions that cannot be done by other players, such as policy formulation, regulatory functions, monitoring and capacity building so that they take up their roles much more effectively.

Moving towards a more democratic decentralisation governance system.

This should devolve decision-making power to district and sub-district local governments. It is an essential step in ensuring accountability of leaders, participation of citizens in issues that affect them and producing decisions that meet the interests of the local population. Although no panacea for all constraints faced at district level, democratic decentralisation is important for both the reduction of poverty and hunger and making progress on other MDGs as it will:

- Expand opportunities for people's participation by creating a movement from facilitated to institutionalised participation. Current participation modalities such as area stakeholder project committees, which have responded to a dysfunctional local governance system should not necessarily disappear with democratic decentralisation.
- Make public sector officials more accountable to the people as structures will now be available for people to follow up issues where officials do not perform to satisfaction. This means producing decisions on development interventions that increasingly match the aspirations of the people on the ground.

- Facilitate the linking of traditional leadership systems to modern political systems as the former are well respected by the people and are thus key to mobilisation for transformation.
- Provide a framework for greater inter-sectoral co-ordination and help produce strategies that address the multiple influences of the identified problems.
- Facilitate the 'scaling-up' of successes in individual localities to the entire district as lessons are more generally shared and institutionalised.
- Eventually make the projects-/programmes more sustainable, partly due to greater participation and accountability, but also due to better planning as the flow of information between citizens and district officials increases.

PROVIDING STRONG ADVOCACY AND COMMUNICATIONS ON POVERTY AND HUNGER

Advocacy for the eventual eradication of extreme poverty and hunger should be enhanced. *First*, the consensus that has been achieved on the urgency to fight poverty and hunger, must be translated into a compact that will work for the poor.

Second, the poor and hungry often have little political voice and lack the necessary political organisation to ensure that their problems remain high on the agenda of policy makers. If the interests of the poor, the vast majority in Zambia, are to be sustained at the top of the development agenda, strong democratic institutions, in which the voice of all citizens count, should be built. This can

The fight against poverty and hunger is so important that it should never be allowed to move away from the top of the agenda.

only come about in the medium to long-term, as it is not just a matter of putting institutions in place. It entails changing the culture of both citizens and the institutions that represent them and building the capacity of all institutions of governance to demand the highest level of accountability of leaders to the people they lead.

In the short-term, influential voices have to be mobilised to continually advocate the reduction of poverty and hunger and ensure that it is not pushed on the side by the interests of the more privileged. A variety of advocates are needed because poverty and hunger are complex and multi-faceted in nature such that advocacy can mobilise the right response only if it is adequately and successfully mounted from different vantage points. In addition, different messages should be targeted at different actors who may make a difference.

Important groups who must be enlisted to advocate poverty and hunger reduction include civil society, members of parliament, traditional leaders and researchers. These are not the only ones, as the problem is so pervasive that everyone of influence from national to the local level should be part of the fight against poverty and hunger.

The **civil society**, which has already played a key role in advocating the reduction of poverty and hunger, particularly during the preparation of the PRSP, must continue giving the poor a voice. Zambia offers a very viable model to other countries in Africa and beyond in terms of how the civil society can represent the interests of the majority of the people and put pressure on government in the absence of strong representation of opposition parties in the national parliament, such as during

the 2001 third term debate. The creation of the Civil Society for Poverty Reduction now means that a structure that is particularly focused on poverty advocacy at national level has been developed. These structures need to be strengthened and become more widespread, moving from national to lower levels.

Parliament, a body of democratically elected representatives of the people, should consistently articulate the needs of the poor and hold the executive accountable on actions related to the reduction of poverty and hunger. This, in many ways, demands reforming parliament so that it is more visible to the citizens, parliamentarians have more contacts with the people they represent and have the resources to insist on accountability of the executive.

Traditional leaders, because they have very high legitimacy in the eyes of the people as their representatives, are critical in articulating the concerns of their communities on poverty. At the same time, traditional leaders are critical agents in the social mobilisation for economic transformation. There is therefore need to find ways of linking traditional leadership systems to modern governance systems. By decentralising political and economic decision-making power to districts, sub-districts and chiefs/traditional authorities, a framework could be formed for linking these two systems.

There should be stronger links between the **research community** and the Government (and other advocates of poverty reduction) because the former has the analytical frameworks to provide clear answers to the questions of whom, where and why of the poor and hungry. Academics have played very

useful roles in the design of programmes targeted at the eradication of poverty and hunger. As the implementation of the new framework on poverty reduction progresses, the academic community should play a critical part in bringing about adequate understanding as to what is working and why, and what useful modifications should be made in

order to keep the achievement of the envisaged targets within reach. In particular, government, the academic world, and development agencies should critically examine how information for monitoring progress in poverty reduction can be improved and made more accessible (see **Box 5.5**).

BOX 5.5

INVESTING IN MORE REGULAR AND CONSISTENT DATA FOR MONITORING PROGRESS IN MDGs AND HUMAN DEVELOPMENT

All the National Human Development Reports in Zambia have faced great difficulties in obtaining timely data to calculate the human development indices. This is a problem that is felt much more broadly with many other users indicating their frustration at the difficulties of getting data from the Central Statistical Office. Difficulties seem to lie in three main areas:

Long delays in the release of data. The time between the completion of field work for the survey/census and the time when data is finally released for use is normally too long. The problem is twofold. *First*, the quality of data from the field is poor such that it requires extensive cleaning before meaningful indicators can be obtained, raising questions of data reliability in the end. *Second*, there are processing capacity constraints, from both human and technology view points.

Irregular conduct of surveys. It is four years when the last Living Conditions Monitoring Survey was conducted. The understanding has been that CSO will carry out an LCMS every two years. Although the preoccupation with the Census in 2000 was understandable, a delay of a further two years arises from other factors.

Inconsistent presentation of variables. The CSO presents variables that impinge on a particular issue differently from one publication to another. This poses difficulties in constructing trends. The problem partly arises from the different emphasis that sponsors of surveys place on the given aspects of the results.

Given the human catastrophe that has taken place in the last decade, social and economic indicators provided timely and to the best of quality are needed much more now than ever before. Zambia as a signatory of the Millennium Declaration must be committed to ensure that data is available and make possible regular monitoring of progress in MDGs and human development. To improve the situation, actions in three areas are required.

1. Build capacity at the Central Statistical Office. To this end the Zambian Socio Economic Database is in the process of being developed supported by the U.N. country team.
2. Harmonise support to the CSO. Institutions supporting the CSO should consider putting funds in one basket and work with it to prioritise and harmonise the surveys to be conducted as well as agree on what information needs to be collected. Government should increase funding to the CSO as counterpart funding to the basket. The goal is to obtain a long-term agreement that will enable the country have data sets that remain consistent over time.
3. Restructure CSO to make the conducting of surveys more cost-effective. This may mean building greater capacity at provincial level so that staff can be deployed in the field and process data from there without having to rely too much on the CSO national office.

Mobilising all the different groups of actors to advocate the reduction of poverty and hunger is not enough. The tools for advocacy should be improved in three main areas. *First*, communication should carry a clear and simple narrative of the message and questions such as: What is the problem? What needs to be done? Who can do what? *Second*, is the need to foster a policy community in which ideas are shared and debated. Academics would obviously play a critical role in this, but should adopt formats that communicate beyond their circle. Forums such as provided by the Economics Association of Zambia will be important in this regard. *Third*, is to have a clear understanding of where the source of power lies to change things for each required action. This means that lobbying should be specific and targeted. Recipients of the message should not be overloaded.

Central government will be a major target of advocacy. Bureaucrats are important here because they conceive, clarify, and implement policy. In a decentralised governance system, *the local government*, because it becomes more dynamic in mobilising resources and carrying out development programmes, should be specially targeted.

Political leaders at all levels play a key role in fighting poverty and hunger and much of the advocacy should be aimed at them. Ministers who make policy, parliamentarians and councillors who are elected to speak for the people and party leaders and other political activists, both of the ruling and opposition parties, must be concerned with fighting

poverty and hunger so that it is the central theme of their political competition. Traditional leaders, who are well-respected representatives of the people, should also be advocates for the reduction of poverty and hunger. Advocacy in this sense will be aimed at sustaining their awareness so that their own advocacy is well informed.

CONCLUSION: UNITING TO FIGHT HUNGER AND POVERTY

It is a paradox that the people of Zambia, a land rich with abundant natural resources, are poor and hungry. This report carries two simple messages: (i) Zambia has undergone a deep human crisis manifested in rising poverty and deterioration in many aspects of human development over the long term; and, (ii) Poverty and hunger are not inevitable, nor are they irreversible. The fight against poverty and hunger is therefore urgent and must be accorded very high priority. Another message of this report is that everyone has a role to play in the fight against poverty and hunger.

Zambians have risen to the challenge of time before on a number of fronts: (i) a crusade against colonialism and apartheid in Southern Africa against all odds; (ii) staying at peace in a region of turmoil and war; (iii) the fight for the restoration of multi-party democracy achieved in 1991; (iv) resisting a serious assault on constitutionalism with the attempt to change the tenure of the presidency in 2001; and, (v) fighting high level corruption. With unity of will and purpose, the fight against poverty and hunger will be won. Zambia has no business staying poor.

Table 5.2: Required Actions to Deal with Poverty and Hunger

Broad Action Area	Specific Actions	Time Frame **	Key Players
<i>COMING OUT OF A FOOD CRISIS</i>			
Food Relief	Support the Zambia National Vulnerability Assessment Committee to carry out vulnerability mapping.	ST	VP Office, Civil Society (CS), FAO, MAC
	Strengthen health services to help cope with famine	ST/MT	MoH, Civil Society, MLGH
Recovery of farm households asset base	Labour intensive employment programmes	ST/MT	Roads Board, LG, Chiefs
	Enhanced Vulnerability mapping	ST	VP Office, PAM
	Integrating private sector in food relief during famine	ST/MT	ACF, MACO, ZNFU, ABF, VP Office
Appropriate Technology	Extend the promotion coverage of conservation farming	ST/MT	CFU, MACO, ABF
	Strengthen service provisioning to farmers (extension, input & output marketing, market information, rural finance)	MT/LT	MACO, ZNFU, MFIs
Policies for long - term food security	Infrastructure development	LT	MoFNP, MWS, Roads Board, LG, Traditional Rulers
	Environmental rehabilitation	LT	ECZ, CFU
	Improved access to markets	MT	MACO, ZNFU, ABF
<i>ENABLING ENVIRONMENT</i>			
International Economic Order	Establish an open, rule-based, predictable and non-discriminatory financial and trading system	LT	UN, WTO, World Bank, IMF, MoFNP
	Build Zambia's capacity to participate effectively in international bodies	MT	MoFNP, Donors
Macroeconomic Stability		ST	MoFNP, BoZ
Budget Reform and Improved Allocation to Rural Sector	Decentralisation of the budget processes with input from districts based on stakeholder-led district strategic plans	MT	MoFNP, LGs
	Develop/or rehabilitate infrastructure necessary for agricultural growth	LT	MoFNP, MACO, LG, MWS, ZAMSIF
	Targeted investments in areas with great growth potential	MT	ZIC, MoFNP
Poverty-focused rural finance	Promote formal and informal savings and credit schemes for the poor	MT	BoZ, MoFNP, MFIs
	Improved management, increased accountability and better appraisal skills for financial services	MT/LT	BoZ, MoFNP, MFIs
Role for Private Sector in Agri-Business Services	Clearly define roles and core functions of the state and build appropriate partnerships between public and private sector	MT/LT	Cabinet Office, MoFNP
	Actions to reduce transaction costs such as improving physical infrastructure and simplified regulations on trade	MT/LT	MoFNP, MAC, LG, MWS, ZAMSIF

** Short Term (ST), Medium Term (MT) and Long Term (LT)

Table 5.2 (continued): Required Actions to Deal with Poverty and Hunger

Broad Action Area	Specific Actions	Time Frame **	Key Players
<i>RESOURCE MOBILISATION FOR POVERTY REDUCTION</i>			
Domestic Resource Mobilisation	Putting in place supportive national policies, regulatory framework and institutions	ST/MT	MoFNP, BoZ, ZRA
	Improve financing of public expenditure through improved tax collection and monitoring	MT	ZRA, MoFNP
	Come up with management process that imposes discipline on overall expenditure	MT	MoFNP
	Restore credibility of the budget process by reducing gap between approved and executed budget	ST	MoFNP
	Strengthening the financial sector, including measures to stimulate long-term lending and micro-financing	MT	MoFNP, BoZ
Foreign Direct Investment	Stepped up actions to fight corruption	ST/MT	ACC, CS, Parliament, MoFNP, Auditor General (AG)
	Building consistent positive image in the international media	ST/MT	IC
	Investment promotion activities realigned with the priority sectors identified in the PRSP	MT	IC
International Trade	Trade promotion to tap export potential in the region	ST	EBZ, ZACCI
	Accelerate through regional co-operation implementation of Growth Triangle	ST/MT	MCTI
Official Development Assistance	Improved ODA co-ordination by moving away from project to Sector-Wide Approach and budgetary support	ST/MT	Donors, MoFNP, CS
	Re-orient ODA and make it more targeted at poverty-reducing interventions	ST/MT	MoFNP, CS
	Support to local implementation institutions	ST/MT	Donors, MoFNP
	Reduction of Technical Assistance to minimum levels	MT/LT	Donors, MoFNP
Debt Sustainability	Join with other progressive forces to campaign for total debt cancellation	ST/MT	CS, MoFNP, Donors
	Up-grade national capacity to monitor and manage external aid flows and debt liabilities	MT	MoFNP, Donors

** Short Term (ST), Medium Term (MT) and Long Term (LT)

Table 5.2 (continued): Required Actions to Deal with Poverty and Hunger

Broad Action Area	Specific Actions	Time Frame **	Key Players
<i>PROMOTING APPROPRIATE RESOURCE CONSERVING TECHNOLOGIES</i>			
Diversification and Conservation Enhancing Technologies	Widen coverage for promotion of Conservation Farming through study tours, radio, publications etc	ST/MT	CFU, MACO
	Continue to fine tune CF methods to suit diverse farming systems and ecological environments	ST/MT/LT	CFU, MACO
	Enhance access to yield-enhancing technology services	MT	MACO, ABF, CS
	Diversification into livestock, including small animals	MT/LT	MACO, CS
	Demand-driven research		MACO, CS
	Improve access to land and common property resources	MT/LT	MOL, MTENR, CS
	Develop and strengthen bio-safety regulatory mechanisms and administrative structures for application and management of GMO technology	ST	MACO, ACF, ZNFU, ABF, CS
<i>REDUCING VULNERABILITY TO RISK</i>			
Family Support Systems	Promote entitlements related to family networks and obligations	MT	CS
	Promote values of community services through community groups and service organisations	MT	CS
Social Security System	Improve subventions to civil society active in taking care of disadvantaged groups	ST	MoFNP, CS
	Improve co-ordination of institutions taking care of disadvantaged	MT	MCDSS
HIV/AIDS Mitigation	Declare HIV/AIDS a national disaster	ST	AIDS Council, State House
	Put in place an emergency plan to prevent and control the disease	ST	AIDS Council, MoH, CS
	Step up awareness creation, counselling and provision of medical care through affordable drugs	ST	MoH, CS
Rebuilding Rural Livelihoods	Initiatives targeted at very poor farmers with clearly spelt out strategies to move from relief and recovery to sustainable development	ST/MT/LT	Office of VP, MACO, CS
Early Warning	Enhance efficiency of the Early Warning and Disaster Management systems	MT	Office of VP, MACO, FAO
Urban Informal Sector	Raise ability of informal sector operators to relocate to more profitable ventures	MT	SEDB, ILO,
	Enhance entrepreneurship development, timely access to finance, access to information on appropriate technology, development of skills for processing activities and collaborative efforts among small and micro-enterprises	MT	MBT, BOZ, MoFNP, UNIDO, SEDB

** Short Term (ST), Medium Term (MT) and Long Term (LT)

Table 5.2 (continued): Required Actions to Deal with Poverty and Hunger

Broad Action Area	Specific Actions	Time Frame **	Key Players
<i>PRO-POOR GOVERNANCE AND INSTITUTIONAL FRAMEWORK</i>			
Accountability of Leaders	Review the constitution to strengthen the watchdog functions of Parliament over the executive	MT	MoLA, Parliament, CS
	Strengthen other critical institutions of governance	MT	MoLA, Parliament, CS
Central Government	Accelerate capacity building of central government as envisaged under the Public Service Reform Programme	MT	Cabinet Office
	Increase civil service salaries, replace per diem with imprest system and eliminate/reduce sitting allowance for attending meetings/workshops	MT	MoFNP, Cabinet Office
	Undertake core function analysis to rationalise role of Government, civil society, private sector and traditional leaders	ST	Cabinet Office
Democratic Decentralisation	Accelerate the adoption of the decentralisation policy	ST	MoFNP, MoLGH,
	Adopt legislative framework that creates legally elected or delegated sub-district structures	MT	MoFNP, MoLGH, MoLA
	Specify mandatory functions and powers of councils and councillors	MT	MoFNP, MoLGH, MoLA
	Lay down predictable funding mechanisms	MT	MoFNP, MoLGH, MoLA
<i>ADVOCACY AND COMMUNICATIONS ON POVERTY AND HUNGER</i>			
	Mobilise different actors including civil society, Parliament, traditional leaders and research community to advocate the reduction of poverty	ST/MT	CS, Parliament, Traditional Leaders, Researchers
	Develop specific and targeted messages for different groups	ST/MT	CS, Parliament, Traditional Leaders, Researchers

** Short Term (ST), Medium Term (MT) and Long Term (LT)

POST-SCRIPT

Coming out of a food crisis - Zambia has produced enough food

The food situation described in this national report, which aptly motivated its theme, reflect the situation when the report was started. Since then government has responded to the crisis with a coordinated campaign to rid itself of the food insecurity and these efforts have now been rewarded.

According to a press release from the Ministry of Agriculture and Cooperatives on July 15th 2003, the results of a crops forecast conducted by officials of the Ministry and the Central Statistics Office, indicate that total maize production for this year is estimated to be 1.2 million metric tonnes which is more than double total output last year. When added to maize carry-over stock of 100,156 metric tonnes from last year's imports as well as from winter maize production, then total maize available for consumption comes to about 1.3 million metric tonnes. This notwithstanding, there are pockets of food deficit in the Southern province and government is working on moving food from other provinces. Subtracting from the total available for consumption, the amount estimated for domestic consumption leaves a surplus of about 120,000 metric tonnes, which can be exported, to neighboring countries such as Zimbabwe. However, the Ministry has indicated that these exports will be tightly regulated.

This good harvest is attributed to favorable weather conditions in most parts of the country, an early and effective input

distribution programme by government and civil society, and the positive response of farmers to government's call for increased production. This response by farmers is also manifested in increased production of other crops such as cassava whose production increased from 850,626 metric tonnes to over 958,000 metric tonnes in flour equivalent, while output for millet and sorghum increased by 2% from last year. However this could have been achieved at the expense of rice production, which dropped by 8% from last year.

The economic impact of such good crop harvest at this time is to dampen pressure on the inflation rate because the excess maize results in relatively lower prices. This means that there would be reduced food-price pressures.

The turn around of events on the food emergency in Zambia is a manifestation of good agricultural and management policies and good rains. What remains now is the consolidation of these gains to prevent the recurrence of future food crisis and government is already working on putting in place the appropriate mechanisms. The contents of this report are expected to contribute to the dialogue that can help in this consolidation.

A GLOSSARY OF HUMAN DEVELOPMENT AND THE MILLENNIUM DEVELOPMENT GOALS

Human development. The process of expanding the choices and opportunities that people highly value through enhancing their capabilities and functionings. Three choices and opportunities are considered essential: having a long and healthy life; acquiring knowledge and becoming part of a world of information; and, enjoying a decent standard of living. Other choices are recognised, however, as important for human development including political, economic and social freedom, guaranteed human rights as well as the attainment of dignity and self-respect and attaining a sense of belonging to the community.

The state of poverty and hunger - by exposing people to misery, undermining their health and making it difficult for them to be educated and become knowledgeable - is a denial of the essential choices of life and thus undermines human development. Reduction of poverty and hunger, especially the eradication of the extreme form, will improve human development because it will enhance people's capabilities and functionings.

Human poverty. Deprivations in the multiple elements that constitute human development or simply a denial in opportunities and choices that are most basic to human development. Human poverty is different from **income poverty**, which is defined as a lack of minimally adequate income or expenditure, because building on the concept of human development, inadequate income does not constitute the sum total of people's deprivations.

Functionings, capabilities and freedom. The valuable things that the person can do or be (such as being well nourished, living long and taking part in the life of a community). The capability of a person stands for different combinations of

functionings the person can achieve. Capabilities thus reflect the freedom to achieve functionings. In that sense, human development is freedom.

Human development index (HDI). The HDI measures the average achievements in a country in three basic dimensions of human development a long and healthy life, knowledge, and a decent standard of living. A composite index, the HDI thus contains three variables life expectancy at birth, educational attainment (adult literacy and the combined gross primary, secondary and tertiary enrolment ratio) and GDP per capita (PPP US\$). Income enters the HDI as a proxy for decent standard of living and as a surrogate for all human choices not reflected in the other two dimensions.

Gender-related development index (GDI). The GDI measures the achievements in the same dimensions and using the same variables as the HDI does, but takes into account inequality in achievement between women and men. The greater the gender disparity in basic human development, the lower the country's GDI compared with its HDI. The GDI is simply the HDI discounted, or adjusted downwards, for gender inequality.

Gender empowerment measure (GEM). The GEM indicates whether women are able to actively participate in economic and political life. It measures gender inequality in key areas of economic and political participation and decision-making. The GEM, focusing on women's opportunities in economic and political arenas, thus differs from the GDI, an indicator of gender inequality in basic capabilities.

Millennium Declaration. The declaration signed by 147 Heads of State and Government and 44 representatives attending the United Nations Millennium Summit in September 2000. The declaration outlines the intent of the international community to take steps to combat the

deprivations to which a big part of the world population is still exposed.

declaration signed by 147 Heads of State and Government and 44 representatives attending the United Nations Millennium Summit in September 2000. The declaration outlines the intent of the international community to take steps to combat the deprivations to which a big part of the world population is still exposed.

Millennium Development Goals (MDGs). A set of eight mutually reinforcing development goals contained in the Millennium Declaration and subsequently connected to other internationally agreed goals and targets. Millennium Development Goals were adopted to help implement the shared values of the international community in the 21st Century. The eight Millennium Development Goals are:

- Eradication of *extreme poverty and hunger*
- Achievement of *universal primary education*
- Promotion of *gender equality and empowerment of women*
- Reduction of *child mortality*
- Improvement of *maternal health*
- Combating *HIV/AIDS, malaria and other diseases*
- Ensuring *environmental sustainability*
- Developing *global partnerships for development*

The United Nations Development Group, in collaboration with other institutions, has developed quantitative targets and corresponding indicators (see **Appendix Table 1**). Monitoring mechanisms at the international and country levels have been discussed and are being put in place.

Universal primary education. The state attained when children everywhere are able to finish a full course of primary education. A movement towards the achievement of universal primary

education will be monitored through the ratio of children of primary school going age actually enrolled in primary school, de 1 who reach Grade 5 and the literacy rate of 15-24 year olds.

the proportion of those starting Grade 1 who reach Grade 5 and the literacy rate of 15-24 year olds.

Gender empowerment. Enhancing the functionings and capabilities of women so that they are able to participate in the economic, social and decision-making life of the country. In the context of Millennium Development Goals, this refers to granting women equal opportunities for education, wage employment in the non-agricultural sector and participation in decision-making as reflected by, although not exclusively, the share of the number of seats of women members of parliament.

Infant mortality. The death of babies between birth and exactly one year. The infant mortality rate is the number of babies who die out of 1,000 live births.

Under-five mortality. The death of children aged between birth and exactly five years. The under five mortality rate is the number of children in this age range who die every year out of every 1,000 live births.

Maternal mortality. The death of women from pregnancy-related causes. The maternal mortality ratio is thus the proportion of women who die from such causes annually out of every 100,000 live births.

Environmental sustainability. Maintaining ecological integrity by ensuring that the activities of people, including the pursuit of livelihoods, do not irreversibly degrade natural resources within a given ecosystem. Within the context of Millennium Development Goals, the requirement is that country policies and programmes integrate the

principles of sustainable development aiming at reversing the loss of environmental resources. Therefore, land area protected to maintain biological diversity is considered one of the appropriate indicators for monitoring environmental sustainability.

Global partnership for development.

International cooperation aimed at forging development in developing countries. In the context of the Millennium Development Goals, this admits that although much will depend on the domestic policies and actions of developing countries themselves, the support of the international community is critical for these countries to make progress, given their resource constraints. Actions in three areas are considered critical for global partnership for development: (i) substantially increasing Official Development Assistance and taking measures to improve its effectiveness; (ii) dealing comprehensively with the debt problems of developing countries to make their debt sustainable in the long term; and, (iii) enhancing the access of developing countries to global markets, including through the reduction of agriculture subsidies in developed countries.

Under-weight. This indicates child malnourishment if it has low weight for its age. A child can be under-weight because of poor linear growth or because of poor growth in body mass or because of both. The prevalence of under-weight children under five years of age has been adopted as one of the two indicators that will be used to assess the Millennium Development Goal of halving the 1990 level of hunger by 2015.

In this report, two other child measures for hunger are discussed. The *first* is **stunting**, which refers to low height for age, indicating poor linear growth in children. Stunting reflects long-term and chronic periods of low food intake. The second is **wasting**, low weight for age or thinness due to an acute and short-term severe

infection or food deprivation as takes place during a famine. A child is said to be wasted if its weight is low in relation to its height.

Extreme hunger. The inability to meet minimum levels of food consumption. The call in the Millennium Development

Goals is to halve, between 1990 and 2015, the proportion of people who suffer from hunger. Measuring of progress will be done through two indicators: (i) prevalence of under-weight children under five years of age; and, (ii) proportion of the population below minimum level of dietary energy consumption.

Full expenditure. An indication of total expenditure of a household or individual on food and non-food items that are purchased and also items that are not purchased but nevertheless produced and consumed by the household. This is therefore linked to consumption as a measure of wealth. From full expenditure, the **food poverty line (FPL)** is derived as a measure of food insecurity but also indicating poverty levels. It refers to the proportion of people below the minimum level of dietary energy consumption.

Extreme poverty. Indigence or destitution usually specified as the inability to satisfy even minimal food needs. Progress towards the eradication of extreme poverty will be measured through three indicators: (i) proportion of the population below \$1 per day in PPP-values; (ii) poverty gap ratio (incidence x depth of poverty); and, (iii) share of poorest quintile in national consumption.

Chronic food insecurity. A state of continuous inadequate diet precipitated by the inability to acquire food. In this case, households are persistently failing to produce enough or/and buy food. Chronic food insecurity is different from **transitory food insecurity** which is a temporary inability to access adequate food in terms of quantity and quality.

Variations in seasonality of food availability are common for rural farm producers. Lack of access to inputs, drought, flooding and pest/disease outbreaks can cause temporary set-backs to the supply or access to food. In urban areas, the collapse of a business or loss of jobs has often caused transitory food insecurity that leads to chronic food insecurity if no livelihoods were found. Such food insecurity is measured as the '*proportion of households below the average monthly income expenditure*'. Per capita food consumption can also be indicative of vulnerability to food insecurity.

areas, the collapse of a business or loss of jobs has often caused transitory food insecurity that leads to chronic food insecurity if no livelihoods were found. Such food insecurity is measured as the '*proportion of households below the average monthly income expenditure*'. Per capita food consumption can also be indicative of vulnerability to food insecurity.

Overall poverty. The inability to satisfy essential non-food as well as food needs. Definition of essential non-food needs can vary significantly across countries.

Relative poverty. Poverty by standards is

that can change across countries or over time. An example is a poverty line set at one half of the mean per capita income. This means the line can rise along with income. Often this term is used loosely to mean overall poverty.

Absolute poverty. Defined by a fixed standard. An example is the international one-dollar a day poverty line which is designed to compare the extent of poverty across different countries. Another example is the poverty line whose real value stays the same over time so as to determine changes in poverty in one country. Often this term is used loosely to denote extreme poverty.

A Sector-Wide Approach (SWAp). A national programme for a country's public expenditures for a given sector, e.g. agriculture. It is based on coherent macro-economic and sectoral policies, appropriate institutional framework, and focuses on priority activities resulting from detailed public expenditure review. Its key features are thus: sector-wide in scope; coherent sector policy framework; local stakeholders in charge; all donors sign on and are encouraged to collaborate; common implementation arrangements; and minimum foreign technical assistance.

APPENDIX TABLES

Appendix Table 1: Millennium Development Goals (MDGs)

Goals and Targets		Indicators
Goal 1: Eradicate extreme poverty and hunger		
Target 1	Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1. Proportion of population below \$1 per day (PPP-values) 2. Poverty gap ratio [incidence x depth of poverty] 3. Share of poorest quintile in national consumption
Target 2	Halve, between 1990 and 2015, the proportion of people who suffer from hunger	4. Prevalence of under-weight children (under five years of age) 5. Proportion of population below minimum level of dietary energy consumption
Goal 2: Achieve universal primary education		
Target 3	Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	6. Net enrolment ratio in primary education 7. Proportion of pupils starting Grade 1 who reach Grade 5 8. Literacy rate of 15-24 year olds
Goal 3: Promote gender equality and empower women		
Target 4	Eliminate gender disparity in primary and secondary education, preferably by 2005, and to all levels of education no later than 2015	9. Ratio of girls to boys in primary, secondary and tertiary education 10. Ratio of literate females to males of 15-24 year age group 11. Share of women in wage employment in the non-agricultural sector 12. Proportion of seats held by women in national parliament
Goal 4: Reduce child mortality		
Target 5	Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	13. Under-five mortality rate 14. Infant mortality rate 15. Proportion of 1-year old children immunised against measles
Goal 5: Improve maternal health		
Target 6	Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	16. Maternal mortality ratio 17. Proportion of births attended to by skilled health personnel
Goal 6: Combat HIV/AIDS, Malaria and other diseases		
Target 7	Have halted by 2015, and begun to reverse, the spread of HIV/AIDS	18. HIV prevalence among 15-24 year old pregnant women 19. Contraceptive prevalence rate 20. Number of children orphaned by HIV/AIDS
Target 8	Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases	21. Prevalence and death rate associated with malaria 22. Proportion of population in malaria risk areas using effective malaria prevention and treatment measures 23. Prevalence and death rates associated with Tuberculosis 24. Proportion of TB cases detected and cured under DOTS (Directly Observed Treatment Short Course)

Appendix Table 1: Millennium Development Goals (MDGs)

Goals and Targets		Indicators
Goal 7: Ensure environmental sustainability		
Target 9	Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	1. Proportion of land area covered by forest 2. Land area protected to maintain biological diversity 3. GDP per unit of energy (as proxy for energy efficiency) 4. Carbon dioxide emissions (per capita) [plus two figures of global atmospheric pollution: ozone depletion and the accumulation of global warming gases]
Target 10	Half, by 2015, the proportion of people without sustainable access to safe drinking water	5. Proportion of population with sustainable access to an improved water source
Target 11	By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	6. Proportion of people with access to improved sanitation 7. Proportion of people with access to secure tenure [urban/rural disaggregation of several of the above indicators may be relevant for monitoring improvement in the lives of slum dwellers]
Goal 8: Develop a global partnership for development		
Target 12	Develop further an open, rule-based, predictable, non-discriminatory financial and trading system [includes a commitment to good governance, development and poverty reduction-both nationally and internationally]	<u>Official Development Assistance</u> 8. Net ODA as percentage of DAC donors' GNI (targets of 0.7% in total and 0.15% for LDCs) 9. Proportion of ODA to basic social services (basic education, primary health care, nutrition, safe water and sanitation) 10. Proportion of ODA that is untied 11. Proportion of ODA for environment in small island developing states 12. Proportion of ODA for transport sector in land-locked countries
Target 13	Address the special needs of the least developed countries [includes tariff and quota free access for LDC exports; enhanced programme of debt relief for HIPC and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction]	<u>Market Access</u> 13. Proportion of exports (by value and excluding arms) 14. Average tariffs and quotas on agricultural products and textiles and clothing 15. Domestic and export agricultural subsidies in OECD countries 16. Proportion of ODA provided to help build trade capacity
Target 14	Address the special needs of land-locked countries and small island developing states [through Barbados Programme and 22 nd General Assembly provisions]	<u>Debt Sustainability</u> 17. Promotion of official bilateral HIPC debt cancellation 18. Debt service as a percentage of exports of goods and services 19. Proportion of ODA provided as debt relief 20. Number of countries reaching HIPC decision and completion points
Target 15	Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	
Target 16	In conjunction with developing countries, develop and implement strategies for decent and productive work for youth	21. Unemployment rate of 15-24 year olds
Target 17	In co-operation with pharmaceutical companies, provide access to affordable and essential drugs in developing countries	22. Proportion of population with access to affordable essential drugs on a sustainable basis
Target 18	In co-operation with the private sector, make available the benefits of new technologies, especially information and communications	23. Telephone lines per 1000 people 24. Personal computers per 1000 people

Appendix Table 2: Composition of the Minimum Food Basket

Food item	Quantity	Food item	Quantity
Roller meal	90kg	Dry fish	1kg
Fresh milk	2kg	Beans	2kg
Groundnuts	3kg	Salt	1kg
Cooking oil	2.5 Ltr	Tomatoes	4kg
Kapenta	2kg	Onions	4kg
		Vegetables	7.5kg

Appendix Table 3: Levels of Poverty by Province and District, Zambia, 1998

PROVINCE AND DISTRICT	POVERTY LEVELS		
	% Extremely Poor	% Moderately Poor	% Not Poor
Central			
Chibombo	79	9	12
Kabwe	44	19	37
Kapiri Mposhi	55	18	27
Mkushi	65	20	15
Mumbwa	66	12	23
Serenje	75	9	17
Copperbelt			
Chililabombwe	40	21	39
Chingola	32	20	48
Kalulushi	60	14	26
Kitwe	43	17	40
Luanshya	37	18	45
Lufwanyama	76	8	16
Masaiti	73	11	16
Mpongwe	59	19	22
Mufulira	55	19	27
Ndola	47	19	33
Eastern			
Chadiza	76	12	12
Chama	74	10	16
Chipata	65	13	22
Katete	74	9	17
Lundazi	54	18	28
Mambwe	63	7	30
Nyimba	53	17	30
Petauke	72	20	9
Luapula			
Chiengi	48	21	31
Kawambwa	63	15	22
Mansa	62	12	27
Milengi	79	16	5
Mwense	80	13	7
Nchelenge	63	9	27
Samfya	82	10	7
Lusaka			
Chongwe	56	13	30
Kafue	62	12	26
Luangwa	84	10	6
Lusaka	27	19	54
Northern			
Chilubi	82	9	9
Chinsali	61	13	26
Isoka	77	15	8
Kaputa	76	11	14
Kasama	64	15	21
Luwingu	67	20	13
Mbala	71	19	11
Mpika	53	17	30
Mporokoso	66	9	24
Mpulungu	58	16	27
Mungwi	70	18	11
Nakonde	66	14	21

Appendix Table3.2: Levels of Poverty by Province and District, Zambia,1998 (continued)

PROVINCE AND DISTRICT	POVERTY LEVELS		
	% Extremely Poor	% Moderately Poor	% Not Poor
North Western			
Chavuma	88	8	4
Kabompo	56	16	28
Kasempa	77	12	12
Mufumbwe	61	12	27
Mwinilunga	57	11	32
Solwezi	60	14	26
Zambezi	71	12	17
Southern			
Choma	56	16	27
Gwembe	81	8	12
Itezhi-tezhi	73	14	13
Kalomo	57	15	28
Kazungula	74	12	15
Livingstone	41	20	39
Mazabuka	65	12	23
Monze	58	17	25
Namwala	60	23	17
Siavonga	69	10	20
Sinazongwe	55	16	28
Western			
Kalabo	66	18	17
Kaoma	76	12	12
Lukulu	97	1	2
Mongu	77	9	13
Senanga	80	11	8
Sesheke	76	17	7
Shangombo	90	4	6

Appendix Table 4a: Percent Distribution Of The Poor By District, Central Province, 1998

ALL PROVINCE	POVERTY LEVELS		
	Extremely Poor	Moderately Poo	All poor
Chibombo	25	13	23
Kabwe	15	29	18
Kapiri Mposhi	13	19	14
Mkushi	11	15	11
Mumbwa	19	15	19
Serenje	17	9	15
Total	100	100	100

Appendix Table 4b: Percent Distribution Of The Poor By District, Copperbelt Province, 1998

ALL PROVINCE	POVERTY LEVELS		
	Extremely Poor	Moderately Poo	All poor
Chililabombwe	4	5	4
Chingola	8	13	9
Kalulushi	6	4	6
Kitwe	21	24	22
Luanshya	8	10	8
Lufwanyama	6	2	5
Masaiti	9	4	7
Mpongwe	3	3	3
Mufulira	13	12	12
Ndola	23	25	23
Total	100	100	100

Appendix Table 4c: Percent Distribution Of The Poor By District, Eastern Province, 1998

ALL PROVINCE	POVERTY LEVELS		
	Extremely Poor	Moderately Poo	All poor
Chadiza	8	6	7
Chama	6	4	6
Chipata	26	24	26
Katete	15	9	14
Lundazi	14	22	16
Mambwe	4	2	3
Nyimba	5	7	5
Petauke	22	27	23
Total	100	100	100

Appendix Table 4d: Percent Distribution Of The Poor By District, Luapula Province, 1998

ALL PROVINCE	POVERTY LEVELS		
	Extremely Poor	Moderately Poo	All poor
Chilengi	6	14	7
Kawambwa	13	17	14
Mansa	22	22	22
Milengi	4	5	4
Mwense	17	15	12
Nchelenge	12	10	17
Samfya	25	17	24
Total	100	100	100

Appendix Table 4e: Percent Distribution Of The Poor By District, Lusaka Province, 1998

ALL PROVINCE	POVERTY LEVELS		
	Extremely Poor	Moderately Poo	All poor
Chongwe	16	7	13
Kafue	21	8	17
Luangwa	4	1	3
Lusaka	59	83	67
Total	100	100	100

Appendix Table 4f: Percent Distribution Of The Poor By District, Northern Province, 1998

ALL PROVINCE	POVERTY LEVELS		
	Extremely Poor	Moderately Poo	All poor
Chilubi	6	3	5
Chinsali	9	8	8
Isoka	10	9	10
Kaputa	6	4	6
Kasama	13	14	13
Luwingu	8	10	8
Mbala	13	15	13
Mpika	11	15	12
Mporokoso	6	4	5
Mpulungu	4	5	6
Mungwi	8	10	9
Nakonde	5	5	5
Total	100	100	100

Appendix Table 4g: Percent Distribution Of The Poor By District, North-Western Province, 1998

ALL PROVINCE	POVERTY LEVELS		
	Extremely Poor	Moderately Poo	All poor
Chavuma	8	4	7
Kabompo	11	15	12
Kasempa	12	10	12
Mufumbwe	6	6	6
Mwinilunga	19	19	19
Solwezi	31	36	32
Zambezi	12	10	12
Total	100	100	100

Appendix Table 4h: Percent Distribution Of The Poor By District, Southern Province, 1998

ALL PROVINCE	POVERTY LEVELS		
	Extremely Poor	Moderately Poo	All poor
Choma	17	19	18
Gwembe	6	2	5
Itezhi tezhi	4	3	3
Kalomo	13	14	14
Kazungula	6	3	5
Livingstone	6	12	7
Mazabuka	18	13	17
Monze	13	15	14
Namwala	6	9	6
Siavonga	4	2	4
Sinazongwe	7	8	7
Total	100	100	100

Appendix Table 4i: Percent Distribution of the Poor by District, Western Province, 1998

ALL PROVINCE	POVERTY LEVELS		
	Extremely Poor	Moderately Poo	All poor
Kalabo	66	18	17
Kaoma	76	12	12
Lukulu	96	1	2
Mongu	77	9	13
Senanga	80	11	8
Sesheke	76	17	7
Shangombo	90	4	6
Total	100	100	100

Appendix Table 5: Poverty Status by Gender and Province of Head of Household

Province and Sex of Head of Household	Poverty Levels		
	% Extremely Poor	% Moderately Poor	% Not Poor
Central:			
Male Headed	61.5	15.3	23.2
Female Headed	69.3	10.1	20.6
Copperbelt:			
Male Headed	45.2	18.5	36.3
Female Headed	60.0	12.5	27.5
Eastern:			
Male Headed	63.3	16.3	20.4
Female Headed	75.8	8.2	16.0
Luapula:			
Male Headed	67.7	13.4	18.9
Female Headed	72.9	9.5	17.5
Lusaka:			
Male Headed	33.8	17.9	48.4
Female Headed	39.9	17.3	42.8
Northern:			
Male Headed	64.9	15.9	19.3
Female Headed	73.3	12.2	14.5
North-Western:			
Male Headed	64.1	12.5	23.4
Female Headed	61.1	13.3	25.6
Southern:			
Male Headed	57.6	16.0	26.4
Female Headed	67.7	13.1	19.2
Western:			
Male Headed	75.8	12.3	11.9
Female Headed	85.2	7.6	7.2
ZAMBIA:	58	15	27
Male Headed	55.9	16.1	28.0
Female Headed	66.2	11.7	22.1

Appendix Table 6: Incidence of Poverty and size of Household by Province, Zambia, 1998

Province and Household size	Poverty Status		
	Extremely Poor	Moderately Poor	Not Poor
Central:	63	14	23
One Member	30	10	60
Two to Three	51	16	32
Four to six	58	15	27
Seven to Nine	66	15	19
Ten to Twelve	72	14	14
Thirteen to Fifteen	79	4	16
Sixteen and above	75	20	5
Copperbelt:	47	18	35
One Member	16	10	73
Two to Three	29	16	55
Four to six	44	18	38
Seven to Nine	52	17	31
Ten to Twelve	55	19	25
Thirteen to Fifteen	57	24	18
Sixteen and above	.	20	80
Eastern:	66	15	20
One Member	35	16	49
Two to Three	53	15	33
Four to six	67	12	21
Seven to Nine	77	11	12
Ten to Twelve	68	12	19
Thirteen to Fifteen	9	82	10
Sixteen and above	66	10	24
Luapula:	69	13	19
One Member	54	12	34
Two to Three	56	16	28
Four to six	70	12	18
Seven to Nine	73	11	15
Ten to Twelve	67	8	25
Thirteen to Fifteen	70	23	7
Sixteen and above	72	28	.
Lusaka	35	18	47
One meMember	7	5	88
Two to Three	14	15	72
Four to Six	24	19	57
Seven to Nine	41	18	41
Ten to Twelve	50	21	28
Thirteen to Fifteen	44	22	34
Sixteen and above	83	5	13
Northern:	66	15	18
One Member	27	13	60
Two to Three	58	14	27
Four to six	66	15	19
Seven to Nine	70	13	18
Ten to Twelve	69	22	9
Thirteen to Fifteen	63	33	4
Sixteen and above	91	.	9
North-Western:	64	13	24
One Member	33	7	60
Two to Three	45	14	41
Four to six	59	14	27
Seven to Nine	67	13	20
Ten to Twelve	86	10	4
Thirteen to Fifteen	72	9	18
Sixteen and above	96	.	4
Southern:	59	16	25
One Member	28	12	59

Appendix Table 7: Quintile Expenditure Distribution in Zambia 1991

	Per Adult Equivalent Expenditure	Per Adult Equivalent Food Expenditure	
	Mean	Mean	% of total Expenditure
First Quintile	1900.3	1426.0	75.0
Second Quintile	7895.4	5780.1	73.2
Third Quintile	16391.0	11500.0	70.2
Fourth Quintile	30094.7	20211.4	67.2
Fifth Quintile	96654.0	53046.3	54.9
All	30490.8	18340.3	60.2

Appendix Table 8: Quintile Expenditure Distribution in Zambia, 1996

Quintiles Zambia	Per Adult Equivalent Expenditure	Per Adult Equivalent Food Expenditure	
	Mean	Mean	% of total expenditure
First Quintile	11,788	11,443,271,051	3.93
Second Quintile	21,432	22,817,540,562	7.83
Third Quintile	31,272	36,057,135,702	12.38
Fourth Quintile	46,602	57,537,395,545	19.75
Fifth Quintile	120,278	163,467,101,884	56.11
All	46,226	291,322,444,743	100.00

Appendix Table 9: Poverty Status by Nutritional Status, Zambia 1998

Nutrition Status	Poverty Status		
	% Extremely Poor	% Moderately Poor	% Non Poor
Stunted	56	52	47
Underweight	27	20	19
Wasted	6	5	4

Appendix Table 10: Poverty by Type of Energy for Lighting, Zambia 1998

Type of Energy for lighting	Poverty Levels		
	% Extremely Poor	% Moderately Poor	% Not Poor
Kerosene/ paraffin	68	14	18
Electricity	25	19	56
Candle	31	22	47
Open fire	87	6	7
Torch	94	.	6
Diesel	66	14	19
Other	65	8	28
None	87	4	9
ZAMBIA	58	15	27

Appendix Table 11: Poverty by Type of Energy for Cooking, Zambia, 1998

Type of Energy	Poverty Levels		
	%Extremely Poor	%Moderately Poor	%Not Poor
Collected Firewood	73	12	15
Purchased Firewood	45	22	34
Charcoal Own Produced	67	13	20
Charcoal Purchased	46	21	33
Kerosene/Paraffin	49	20	31
Gas	29	.	71
Electricity	21	18	61
Crop/livestock residues	58	30	12
Other	9	.	91

Appendix Table 12: Household Access to Social Amenities by Poverty Status, Zambia 1998

Facility and Distance	Poverty Status		
	% Extremely Poor	% Moderately Poor	% Not Poor
Bank:			
0-5Km	31	18	52
6+Km	64	13	23
Food Market:			
0-5Km	43	16	41
6+Km	69	12	19
Health clinic/hospital:			
0-5Km	47	15	38
6+Km	67	13	20
Input market:			
0-5Km	40	17	44
6+Km	62	13	25
Hammer mill:			
0-5Km	52	15	33
6+Km	61	12	27
Police station/ post:			
0-5Km	37	17	46
6+Km	68	13	20
Primary school:			
0-5Km	38	16	45
6+Km	64	13	23
Bus/boat/ taxi service:			
0-5Km	52	15	23
6+Km	67	13	20

Appendix Table 13: Population Living Under \$1 Per Day by Rural-Urban Residence, Gender and Province, Zambia, 1998

Provinces	Incidence of Poverty		Poverty Gap Ratio		Severity of Poverty	
	Index	% Dist.	Index	% Dist.	Index	% Dist.
Zambia	0.822	100.0	0.599	100.0	0.420	100.0
Rural	0.898	68.2	0.654	74.5	0.481	78.2
Urban	0.697	31.8	0.480	25.5	0.288	21.8
Male Headed	0.815	80.7	0.587	79.0	0.406	77.9
Female Headed	0.855	19.3	0.649	21.0	0.480	22.1
Central	0.847	10.3	0.631	10.9	0.458	11.2
Copperbelt	0.766	16.9	0.541	15.3	0.353	14.2
Eastern	0.882	13.7	0.631	14.4	0.455	14.8
Luapula	0.878	7.3	0.643	7.8	0.466	8.1
Lusaka	0.672	12.3	0.478	9.8	0.292	8.6
Northern	0.885	12.8	0.626	13.3	0.447	13.6
North Western	0.843	5.7	0.606	5.8	0.420	5.7
Southern	0.840	12.6	0.608	12.8	0.433	12.9
Western	0.934	8.5	0.699	9.9	0.539	10.9

Appendix Table 14: Poverty Indices in Zambia by Stratum 1998

Province	Incidence of Poverty		Poverty Gap Ratio	Severity of Poverty
	Index	Distribution	Index	Index
Zambia	0.731	100.0	0.548	0.366
Small Scale	0.843	63.1	0.599	0.417
Medium Scale	0.718	2.5	0.538	0.354
Large Scale	0.168	0.0	0.637	0.482
Non-Agric	0.791	5.5	0.612	0.442
Low Cost	0.613	22.9	0.439	0.251
Medium Cost	0.509	3.7	0.382	0.202
High Cost	0.339	2.2	0.366	0.190

Appendix Table 15: Percent contribution of various strata to Poverty, Zambia, 1998

Stratum	Poverty Levels		
	Extremely Poor	Moderately Poor	Not Poor
Zambia	100	100	100
Small Scale	68	45	32
Medium Scale	2	3	3
Large Scale	0	0	0
Non Agric	6	4	4
Low Cost	20	36	39
Medium cost	3	7	10
High cost	2	5	12

Appendix Table 16: Poverty by Education Level of Head of Household - 1998

Education Level of Head of Household	Poverty Levels		
	% Extremely Poor	% Moderately Poor	% Not Poor
No Education	78	11	12
Grades 1 to 4	74	11	15
Grades 5 to 7	66	15	19
Grades 8 to 9	51	18	31
Grades 10 to 12	37	19	43
Grade 12 GCE (A) / College/ Undergraduate	22	19	58
Bachelor Degree and above	14	6	80
ZAMBIA	58	15	27

Appendix Table 17: Poverty by Employment Sector of Head of Household - 1998

Employment Sector of Head of Household	Poverty Levels		
	% Extremely Poor	% Moderately Poor	% Not Poor
Agric. Forestry	72	12	16
Fishing	67	16	18
Mining and Quarrying	24	24	52
Manufacturing	45	18	37
Electricity, Gas	26	20	54
Construction	52	17	31
Wholesale and Retail	40	16	44
Hotel and Restaurants	33	28	40
Transport and Communication	23	23	54
Financial Institutions	19	20	61
Real Estate	32	16	52
Public Administration	29	23	48
Education	34	24	42
Health and Social Work	34	20	46
Other Community Services	37	20	44
Private Households	59	15	26
Extra-territorial Org.	49	21	31
Unemployed	62	14	24
Inactive	65	13	22
Not Stated	64	11	25

Appendix Table 18: Poverty by Employment Status of Head of Household - 1998

Employment Status of Head of Household	Poverty Levels		
	% Extremely Poor	% Moderately Poor	% Not Poor
Self-Employed	67	13	20
Central Gov. Employee	31	22	47
Local Gov. Employee	47	26	27
Parastatal Employee	23	23	54
Private Sector Employee	37	21	42
Int. /Embassy Employee	40	18	42
Employer/Partner	25	30	45
Unpaid Family Worker	70	15	15
Other	42	22	35
Unemployed	62	13	25
Inactive	61	13	26
Not Stated	64	14	22

Appendix Table 19: Poverty Status by Age of Head of Household, Zambia, 1998

Age Group of Head of Household	Poverty Status		
	Extremely Poor %	Moderately Poor %	Not Poor %
12 - 19	35	17	48
20 - 29	45	17	39
30 - 39	49	17	34
40 - 49	59	16	25
50	72	12	16
Zambia	58	15	27

Source: Derived from 1998 LCMS

Appendix Table 20: Percentage contribution of Age group of Head of Household to Poverty 1998

Age group	Poverty Level	
	All Poor	Not Poor
12 - 19	0.2	0.4
20 - 29	12.0	20.7
30 - 39	27.2	37.6
40 - 49	33.6	24.1
50	33.6	17.2
Zambia	100.0	100.0

Appendix Table 21: Poverty by Educational Level of Head of Household, Zambia, 1998

Age Group of Head of Household	Poverty Status		
	Extremely Poor %	Moderately Poor %	Not Poor %
No Education	78	11	12
Grade 1 to 4	74	11	15
Grade 5 to 7	66	15	19
Grade 8 to 9	51	18	31
Grade 10 to 12	37	19	43
Grade 12 GCE (A)	22	19	58
College/Undergraduate			
Bachelors Degree and above	14	6	80
Zambia	58	15	27

Appendix Table 22: Food Insecurity (HFns) Status in Zambia (2001)

District	Farm HH	HFns Farmers (%)	FnS Farmers
Chibombo	20,088	66	13,258
Kabwe Urban	1,794	66	1,184
Kapiri Mposhi	10,482	49	5,136
Mkushi	14,035	75	10,526
Mumbwa	14,945	70	10,462
Serenje	18,892	86	16,247
Central	80,236	69	56,813
Chililabombwe	1,320	52	687
Chingola	2,282	42	959
Kalulushi	2,658	54	1,435
Kitwe	928	42	390
Luanshya	2,809	36	1,011
Lufwanyama	7,810	83	6,483
Masaiti	11,322	83	9,397
Mpongwe	6,721	83	5,578
Mufulira	2,752	49	1,348
Ndola Urban	6,550	40	2,620
Copperbelt	45,152	56	29,908
Chadiza	12,568	74	9,300
Chama	12,338	86	10,611
Chipata N.	21,427	66	14,142
Chipata S.	36,827	66	24,306
Katete	31,114	78	24,269
Lundazi	28,287	74	20,933
Mambwe	30,871	66	20,375
Nyimba	13,335	84	11,202
Petauke	37,250	84	31,290
Eastern	224,017	75	166,428
Chiengi	9,586	72	9,300
Kawambwa	16,335	79	12,904
Mansa	20,998	60	12,599
Milenge	4,110	58	2,384
Mwense	16,809	77	12,943
Nchelenge	17,173	72	12,365
Samfya	35,255	72	25,384
Luapula	120,266	70	85,481

Appendix Table 22: Food Insecurity (HFNS) Status in Zambia (2001)

District	Farm HH	HFNS Farmers (%)	HFNS Farmers
Chongwe	9,455	62	5,862
Kafue	4,637	62	2,875
Luangwa	4,572	74	3,383
Lusaka Urban	1,705	29	494
Lusaka	20,369	57	12,614
Chilubi	10,387	80	8,310
Chinsali	16,210	78	12,644
Isoka	12,409	84	10,424
Kaputa	13,251	56	7,421
Kasama	16,720	63	10,534
Luwingu	14,102	82	11,564
Mbala	20,042	73	14,631
Mpika	16,267	72	11,713
Mporokoso	8,531	57	4,863
Mpulungu	5,549	60	3,329
Mungwi	17,058	63	10,746
Nakonde	10,802	84	9,074
Northern	161,328	71	115,253
Chavuma	3,725	82	3,055
Kabompo	5,690	76	4,324
Kasempa	5,590	80	4,472
Mufumbwe	2,034	84	1,709
Mwinilunga	16,498	78	12,868
Solwezi	10,727	73	7,831
Zambezi	13,010	82	10,668
North-Western	57,274	79	44,927
Choma	20,180	78	15,740
Gwembe	4,175	84	3,507
Ithezithezi	5,345	78	4,169
Kalomo	17,528	66	11,568
Kazungula	11,000	53	5,830
Livingstone	1,000	72	720
Mazabuka	20,519	54	11,080
Monze	19,090	70	13,363
Namwala	6,812	73	4,973
Siavonga	2,359	69	1,627
Sinazongwe	12,000	67	8,040
Southern	120,008	69	80,617
Kalabo	12,626	82	10,353
Kaoma	23,994	72	17,275
Lukulu	8,750	83	7,263
Mongu	17,613	71	12,506
Senanga	13,410	84	11,264
Sesheke	10,561	80	8,449
Shangombo	9,631	84	8,090
Western	96,585	79	75,200
Total	925,236	67	667,238

Source: PAM, 2001

Appendix Table 23: Variables For Human Development Index

	Life expectancy at birth (Years)	Adult literacy Rate (15 years and over) (%)	Combined primary, secondary, and tertiary gross enrolment ratio (%)	GDP per capita (PPP USD)
1998				
Zambia Total	45.1	71.0	45.0	719
Central Province	48.0	78.0	50.0	697
Copperbelt Province	48.0	85.0	51.0	834
Eastern Province	39.9	48.0	32.0	546
Luapula Province	36.8	65.0	40.0	430
Lusaka Province	49.6	83.0	48.0	1,172
Northern Province	40.9	65.0	43.0	518
North-Western Province	48.3	60.0	47.0	654
Southern Province	52.7	71.0	49.0	676
Western Province	39.8	61.0	42.0	424
2000				
Zambia Total	46.1	68	42	780
Central Province	50	68	47	760
Copperbelt Province	50	84	47	906
Eastern Province	41.9	49	30	592
Luapula Province	38.8	65	39	581
Lusaka Province	51.6	77	42	1271
Northern Province	42.9	68	44	561
North-Western Province	50.0	49	36	710
Southern Province	54.7	69	45	733
Western Province	41.8	57	38	463

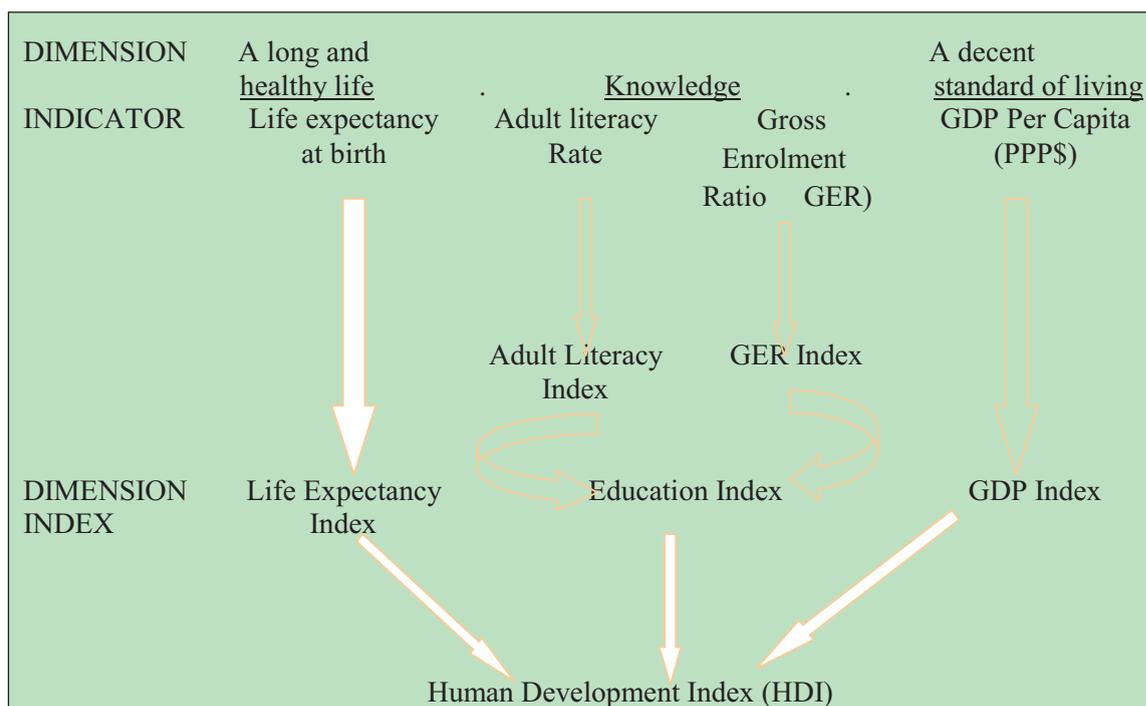
Appendix Table 24: Human Development Index

	Life Expectancy Index	Education Index	GDP Index	Human Development Index (HDI) Value
1998				
Zambia Total	0.34	0.62	0.33	0.424
Central Province	0.38	0.69	0.32	0.465
Copperbelt Province	0.38	0.74	0.35	0.491
Eastern Province	0.25	0.43	0.28	0.319
Luapula Province	0.20	0.57	0.24	0.336
Lusaka Province	0.41	0.71	0.41	0.511
Northern Province	0.27	0.58	0.27	0.372
North-Western Province	0.39	0.56	0.31	0.419
Southern Province	0.46	0.64	0.32	0.472
Western Province	0.25	0.55	0.24	0.345
2000				
Zambia Total	0,42	0,59	0,34	0,451
Central Province	0,48	0,61	0,34	0,476
Copperbelt Province	0,48	0,72	0,37	0,520
Eastern Province	0,34	0,43	0,30	0,355
Luapula Province	0,30	0,56	0,29	0,385
Lusaka Province	0,50	0,65	0,42	0,526
Northern Province	0,37	0,60	0,29	0,419
North-Western Province	0,49	0,45	0,33	0,420
Southern Province	0,54	0,61	0,33	0,494
Western Province	0,35	0,51	0,26	0,371

TECHNICAL ANNEX FOR THE CALCULATION OF THE HUMAN DEVELOPMENT INDEX IN ZAMBIA

The Human Development Index measures three dimensions of human development: (i) a long and healthy life; (ii) to be knowledgeable; and, (iii) a decent

standard of living. It is thus a composite of three indices as represented in the figure below.



For each indicator, the maximum and minimum goal posts have been established as shown below:

Indicator	Minimum Value	Maximum Value
Life Expectancy	25 years	85 years
Adult literacy	0%	100%
Gross enrolment	0%	100%
GDP per capita	US\$100	US\$40,000

Each of the three indices is therefore calculated using the following formula:

$$Index = \frac{Actual\ Value - Minimum\ Goal\ Post}{Maximum\ Goal\ Post - Minimum\ Goal\ Post}$$

Each of the three indices are then calculated for Zambia to derive the 2000 HDI using the values of the four parameters given below:

Life expectancy at birth (Years)	Adult Literacy Rate (% age 15 and above)	Combined Gross Enrolment Ratio	GDP Per Capita (PPP US\$)
50	67.2	45.0	780

1. Life Expectancy Index $\frac{50 - 25}{85 - 25}$ 0.417

2. Education Index is a composite index of the adult literacy and gross enrolment indices with two-thirds weight given to literacy.

$$\frac{2}{3} \frac{67}{100} \frac{0}{0} + \frac{1}{3} \frac{45}{100} \frac{0}{0} = 0.598$$

3. Increases in income are assumed to have a greater impact at lower levels because achieving a respectable level of human development does not require unlimited income. Therefore, to derive the needed adjustment, the logarithm of income is used.

$$\frac{\frac{\text{Log}(780) - \text{Log}(100)}{\text{Log}(40,000) - \text{Log}(100)}}{0.343}$$

4. After calculating the dimension indices, the Human Development Index is taken as a simple average of the three indices:

$$\frac{0.417 + 0.593 + 0.343}{3} = 0.453$$

Explanation on Data and Sources

Past Zambia Human Development Reports have relied on the Living Conditions Monitoring Survey, conducted every two years by CSO, to calculate the human development indices. However, this survey was not conducted for the year 2000 because of the 2000 Census of Population.

At the beginning of the drafting of the ZHDR 2003 in 2002, the plan was to calculate the HDI using 1990 Census as well as 2000 Census that changes in the HDI value could be more comparable. However, difficulties in finalising the Census data for dissemination in time militated against this. Hence, use was made of the *End of Decade Survey* carried

out in 1999 and sponsored by the International Labour Organisation. It focused on child labour but had observations from which it was possible to derive the adult literacy rate and the combined enrolment ratio. Life expectancy at birth for the year 2000 was obtained from the Central Statistical Office's Demographic Projections 1990-2015. Of the three scenario's used in the projections for life expectancy, the intermediate case scenario which projected a declining fall in the life expectancy was adopted.

Rather than use the 1998 HDI from the ZHDR 1999/2000, these were recalculated as well so that the variables used between the two years are as consistent as possible. The problems of

obtaining consistent comparisons from one year to another due to data problems are highlighted in **Chapter 5** (see **Box 5.9**). Nevertheless, for the variables obtained, there are enough consistencies in the way that CSO handled them to allow us to make such a comparison.

Life Expectancy at Birth: This is based on demographic projections based on three mortality assumptions based on three mortality assumptions by the Central Statistical Office using 1990 Census. Calculation of the life expectancy index used the intermediate assumption which projected that life expectancy would be falling at a declining rate. Given that the prevalence rate for HIV/AIDS, which has had a very significant impact on life expectancy, has been falling, the intermediate assumption was found more realistic.

Gross Enrolment Ratio: Derived using

the gross attendance rate as a proxy derived from the Living Conditions Monitoring Survey 1998 and Child Labour Survey 1999.

Per Capita GDP (US\$PPP): National GDP per capita derived from the global HDR 2002. For provinces the respective GDP per capita were calculated as follows:

1. HDR derived GDP per capita is multiplied by total population.
2. Total GDP (PPP\$) is then distributed across provinces according to the distribution pattern established by the Living Conditions Monitoring Survey 1998. This assumes that the distribution pattern remained the same between 1998 and 2000.
3. Provincial GDP per capita (PPP\$) is derived using the ratio of province totals to total population of the province.

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